

EVALUATING MANAGEMENT STANDARDS: empirical research into the Scottish Quality Management System (SQMS)

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Doctor of Philosophy**

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Acknowledgements

This research project was undertaken on a part-time basis in the full expectation that it would be completed in three years. However, a number of people have been accredited with saying that: “Life is what happens while you're busy making other plans” and life certainly kept getting in the way of my plans. The research finally took seven years and in that time a number of people helped and influenced me and the contribution that some of them made may have faded from my memory. If so, I apologise, but if I have missed anyone out, then I trust that I had the courtesy to thank them at the time.

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Abstract

Managers today are faced with a bewildering choice of Management Standards that are being promoted to improve personal and organisational performance by a wide range of Standards-setting bodies. Standards-based management is a well-researched field, but all the research concentrates on individual Standards such as ISO 9000 and 14000 without identifying the influences of other Management Standards. This research seeks to extend the debate about Standards-based management and to encourage other researchers to consider it as both an entity and a phenomenon and to note its divergence from other management theories.

A taxonomy of Management Standards is presented to enable the principal Standards to be categorised and a definition of a Management Standard is proposed to enable the distillation of the considerable body of literature into more manageable proportions. A chronology of Management Standards development is tabled and compared with the evolution of Quality Management and Total Quality Management (TQM) and the possible future development of Management Standards is examined. The literature research confirmed that Standards-based management approaches had increased very significantly, despite a lack of empirical research to show that this method of management yielded uniform improvements. It identified a trend for integrating Management Standards and creating a “super” Management Standard that would incorporate all the functions of management within an organisation.

The Scottish Quality Management System (SQMS) is an integrated Management Standard that incorporates many of the key functions of management within an audited Management Standards framework that its architects claim is based on the principles of TQM. While originally developed for the Scottish training provider network in 1993, it has spread internationally and is currently in use by circa 600 organisations in several countries. It is the only example of a Management Standard of this kind, and despite its longevity, extensive coverage and significant public investment, it has not attracted any previous research interest.

The SQMS project was ambitious, seeking to impose a major new Standard on a diverse and predominately unsophisticated population of organisations within a tight time frame. The field research surveyed the entire SQMS registered organisation population using a questionnaire that was based upon the principles of ISO 9004: 1994 and some preliminary research.

The questionnaire was designed to examine attitudes and motivation, as well as gauging the effectiveness of the SQMS Standard as determined by an analysis of the improvements that could be directly associated with its implementation.

The survey achieved over 70% response rate and the resulting data set was comprehensive and the analysis robust. An additional element of the research compared the results of the questionnaire response analysis with the perceptions of the SQMS Auditors who had audited a majority of the respondent organisations. The field research showed that the SQMS population was very experienced and had been working with SQMS for well over three years. This is a period that the literature research indicated was the minimum time required for the benefits of quality improvement initiatives to become measurable. In the absence of any clear published objectives for the implementation of SQMS, a number of likely objectives were postulated and these objectives were measured against the results of the research.

The results of the research suggest an attitude of compliance, rather than improvement as the underlying mind-set of the SQMS organisations and an absence of quality improvement planning or measurement of key performance indicators. This attitude was no different among organisations that had also adopted ISO 9000 and IiP. SQMS accreditation had not shown to provide any marketing or promotional benefit in the same way as ISO 9000 and it had not led to increased market share or profitability. Few of the possible benefits of applying a Standard of this nature had been realised by the majority of organisations and there was little evidence of tangible organisational improvement. The Standard could not be deemed to have met its proposed objectives and a comparison with an accepted model of TQM did not find sufficient compatibility to designate SQMS as a tool for TQM implementation.

The interviews with SQMS Auditors identified major discrepancies between their perceptions and the views of the organisations that they audited. The admission by over half of the respondent organisations that they produced evidence purely to satisfy audits raised questions about the effectiveness of the Standard and its audits and the competence of auditors to audit “super” Standards.

The novelty of the research is examined and suggestions for future research proposed.

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Chapter 1 Introduction

1.01 Chapter Synopsis

All managers, no matter what their discipline or type of organisation, are increasingly challenged to adopt a range of Management Standards that set out the best way to manage. Over the past two decades the number and scope of these Standards has increased exponentially and some Standards are considered as being mandatory in some sectors. There is now a Management Standard for virtually every aspect of management, either devised by professional management organisations as best practice for practicing managers in their particular field of influence, or management system Standards which specify management processes within an organisation and are independent of the individual.

A number of these Management Standards have an aspect of compulsion attached to them, particularly where dominant buyers in a market insist upon compliance as a prerequisite of doing business. Sometimes the pressure is overt, such as when particular Standards are promoted by governments, but more often the compulsion is implied on the 'everyone else is doing it' basis. Joseph Juran, one of the leading exponents of quality management aptly illustrated this position when he said:

“The standards (*ISO9000 series*) are voluntary: they are not a legal prerequisite to selling products in Europe. They have been so cleverly marketed however, that whoever hopes to sell products in Europe must become registered as meeting the criteria of ISO 9000. Registration to ISO 9000 has become a *de facto* licence to market in Europe.” (Juran, 1994).

The Management Standards landscape, particularly in the UK, has become quite crowded with a confusing range of Standards-setting bodies devising and imposing Management Standards at will. There is no agreed format for the design of Management Standards or indeed the parameters for any particular management discipline and the resultant menu of Management Standards is diverse and inconclusive. Partly in response to the auditing and bureaucratic burdens imposed on organisations by multiple Standards, the integration of some Standards is being advocated with some calls for a “super” Standard to be developed that would incorporate all the key management functions within an organisation.

There is an abundance of research into Management Standards, but the vast majority concentrates on the Quality Management Standard ISO 9000 and the Environmental Standard ISO 14000. There is no research into Management Standards as a phenomenon or

any that has clearly defined what a Management Standard is. A definition is proposed and then used to identify those Standards that should be included in the research.

The aims of the research are specified and the scope and methodology briefly outlined. The limitations of the research are noted.

1.02 The Management Standards Phenomenon

If the term *Management Standards* is entered into any appropriate academic database or search engine it will result in many thousands of references from almost every corner of the world. This is perhaps not a particularly scientific way of gauging the extent of the penetration of management standards worldwide, but a simple way of illustrating what Karapetrovic, (2003, p 4) describes as “an avalanche of management system standards” and Jonker and Karapetrovic, (2004, p 608) describe as “a multibillion-dollar industry”.

Anyone who has been involved in management for any reasonable period will have witnessed an increasing trend for a range of management activities to be subjected to Standards and heralded as the 'one best way' to manage. The point at which this phenomenon started is subjective, but it can be argued that it took two separate paths. On the one hand, 'quality' led the way when wartime munitions factories needed some way to ensure that ammunition and other combustible hardware remained stable until it arrived at its delivery point. On the other hand, the “competency movement” that began in America in the 1960s must certainly be at the forefront of contenders (Tate, 1995). Competence and competency have a number of meanings, but according to Lucia and Lepsinger (1999) a competency model is a descriptive tool that identifies the knowledge, skills, abilities, and behaviour needed to perform effectively in an organization. To some extent this movement was high jacked by the Government in the UK in the early 1980s with the publication of a White Paper that led to the introduction of National Occupational Standards of competence linked to a National Vocational Qualification Framework (Department of Employment, 1981).

This White Paper established “Lead Industry Bodies” charged with producing occupational standards for their “industry” and the Management Charter Initiative (MCI), an employer-led body established to actively improve the standard of British management, successfully tendered to become the Lead Industry Body for management in 1988 and set about

establishing National Standards for Management that would apply across all industry and commercial sectors and these were first published in 1989.

That was followed by the Department of Trade and Industry's national initiative for the promulgation and adoption of the National Standard BS5750 (Department of Trade and Industry, 1990); closely followed by the Investor in People Standard (Department of Employment 1991), Environmental Management Standards (BSI, 1992), Health and Safety Standards (BSI, 1996) and many more in prospect.

Against this background of the ubiquity of Management Standards development and implementation over almost two decades, the Council for Excellence in Management & Leadership (CEML) has concluded after two years of researching the state of management in the UK "that we are facing a pervasive problem" (CEML, 2002 p 1). Therefore, whilst the literature abounds with positive endorsements of the improvements that some Management Standards have brought about in organisations, this thesis questions their overall effectiveness.

1.03 A Taxonomy of Management Standards

There does not appear to be a standard Standard for Management Standards, due in part to the fact that Standards can be developed and published by a wide range of organisations that are subject to varying degrees of control. Management Standards can be classified in a number of ways and are not always clearly identifiable as distinctly management in nature. A good example of the difficulties in classifying Management Standards exists in the UK farming industry – an industry not usually featured in the literature on Standards-based management. The British Farm Standard, launched in 2000 and managed by Assured Food Standards (AFS) and perhaps better recognised by the "little red tractor" symbol, essentially consists of a suite of six Management System Standards. If we look at just one, Assured Produce (Assured Food Standards, 2006), it refers to no less than 26 designated management responsibilities and includes a considerable number of other management activities, such as Audit and Health and Safety. Notwithstanding these fairly onerous requirements; in order to qualify for payments under the European Common Agricultural Policy, farmers must fulfil the Statutory Management Requirements (SMR) that requires compliance with a small number of articles from 19 (3 are due to be applied from 2007) EC Directives/Regulations that address environmental, public, animal and plant health and animal welfare (DEFRA,

2006). Although many of these Directives and Regulations are existing requirements within the AFS, the specified articles of the Regulations and Directives have been transposed into English law. This is perhaps a good example of how Standards can become Regulations that bear legal consequences when they are not met.

Figure 1.1 Hierarchical Model of Management Standards

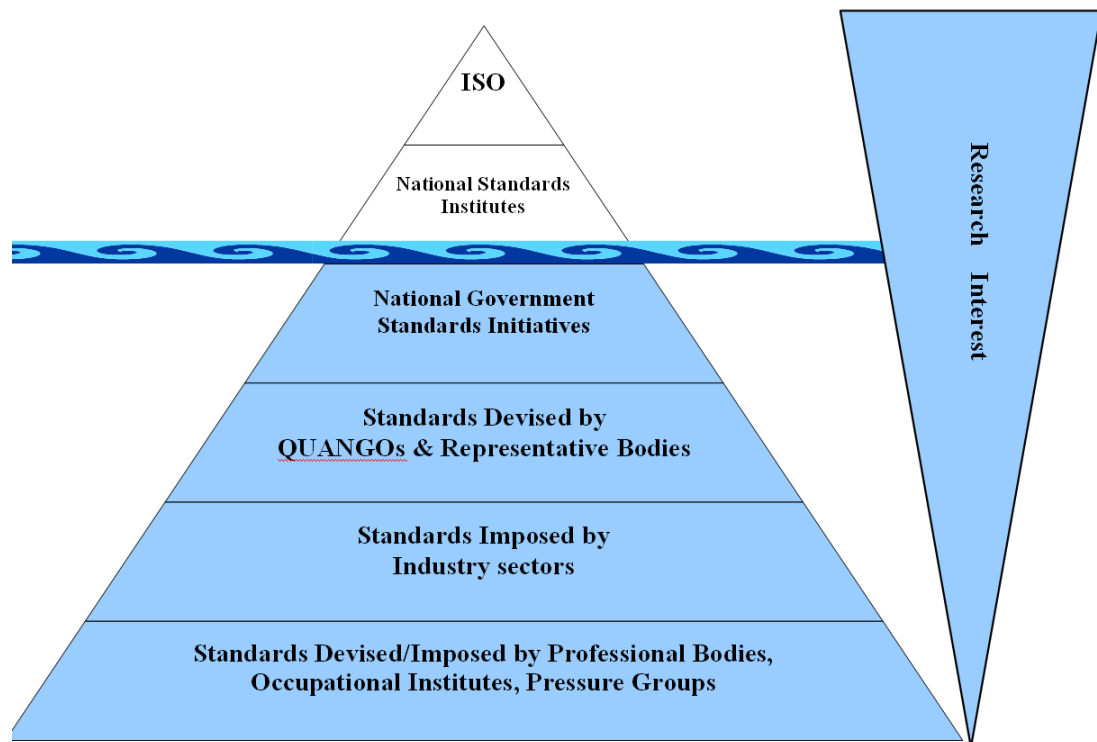


Figure 1.1 portrays a hierarchical model of Management Standards depicted as a pyramid to illustrate the various levels at which Standards can be developed and imposed. The pyramid form was selected as the most appropriate visual interpretation of the hierarchical nature of Standards, but also as the classical iceberg model to exemplify an inverse hierarchy of research into Management Standards. Not all of the organisations depicted produce Management Standards *per se*, but the Standards that they do produce impact on management practices in many ways.

The top stratum represents the international Standard-setting organisations such as the International Organization for Standardization (ISO), The International Electrotechnical Commission (IEC), The International Telecommunication Union (ITU) and the United Nations Economic Commission for Europe (UNECE). The best known Management

Standards at this level are the ISO9000 and 14000 series of Standards that will be explored in depth later in this thesis.

The second Stratum consists of National Standards devised by the National Standard-setting Bodies of various countries. For example, the British Standards Institute (BSI) is one of 156 national standards institutes that currently constitute the ISO and its best known Management Standard is BS5750.

The third stratum consists of initiatives backed and promoted by governments and include Standards that are devised to clarify duties under statute, for example the Australian Disability Standards for Education 2005. They also include Standards devised by organisations created specifically for that purpose, such as Investors in People (IiP) and the Management Charter Initiative (MCI) in Britain.

The fourth stratum consists of Standard-setting organisations representing activities or sectors. Some are established by government, such as Sector Skills Councils, Local e-Government Standards Body and the Engineering Construction Industry Training Board (ECITB), but most represent specific sectors, such as: Accountancy Occupational Standards Group (AOSG), Small Firms Enterprise and Development Initiative (SFEDI), Association of British Pharmaceuticals Industry (ABPI) and Ports Skills and Safety Ltd (PSSL).

The fifth stratum covers a diverse range of Management Standards that apply to specific industry sectors. These vary from fairly obscure niche markets where the Standards are adopted through consensus; to situations where a dominant buyer or group of buyers, proclaims that a Standard will be arbitrarily applied (Grundström and Wilkinson, 2004). Probably the best known are QS 9000 (and ISO/TS 16949 from 2002) that apply to the global automotive industry whereby companies that supply the major vehicle manufacturers are obliged to comply with these Standards as a prerequisite of doing business. (Bramorski, *et al* 2000, Hoyle 1996). Other examples exist in the social care, food, hospitality, banking, finance and transport sectors, with a significant and growing number in health care (Ogden and Grigg, 2003; Badham, *et al* 2006).

The sixth stratum consists of Standards devised by vested interest groups, such as professional occupational institutes and industry trade organisations that devise Standards for membership/examination/professional development and similar reasons. The scope of this final stratum is not to be underestimated, as there are approximately 5 million professionally qualified people in the UK working population, of which some 45% have managerial responsibilities (CEML, 2002, p 23). As the total number of managers in the UK is estimated as circa 4.5 million (CEML, 2002), this is a significant figure. The diversity of

organisations in this category can be illustrated by the following few examples of Standards-setting bodies: Chartered Institute for Purchasing and Supply (CIPS), Institute of Customer Service (ICS), Marketing and Sales Standards Setting Body (MSSSB), Scottish Council for Voluntary Organisations (SCVO), Wales Council for Voluntary Action (WCVA), Seafishing Industry Association, (SFIA) and the Confederation of Paper Industries (CPI). Standards in this category include: Service Management, Human Resources Management, Facilities Management, Project Management, etc. Although pressure groups are not usually directly responsible for developing Management Standards, their lobbying can lead to the development and often imposition of Management Standards by others. Examples of this category include; Amnesty International (Bhopal), Trades Unions (Piper Alpha), Greenpeace (Brent Spar).

Despite this very broad scope of Management Standards availability and application across the general workforce, research into Management Standards shows the inverse relationship depicted in Figure 1.1. Research into Management Standards is overwhelmingly concentrated on the Management Standards ISO 9000 and ISO 14000, with very little research into the other Standards that are in use. A good example of this exists with the Investor in People Standard which Investors in People UK (IiP) claims had penetrated 37.4% of the working population, or some 39,000 organisations within the UK by 31 March 2005 (IiP, 2005). However, as Down and Smith, (1996) highlighted, the literature relating to IiP falls into four broad areas, viz. “how to” literature which does not attempt any sophisticated analysis of the standard’s impact; research commissioned by IiP UK that provides useful statistical information regarding the impact of the standard; work which analyses largely quantitative data from large scale surveys; and a limited amount of qualitative analytical and independent research. That situation still exists today and independent research that is available often casts doubt on that produced by IiP. For example, the

PricewaterhouseCoopers 2006 annual survey of 500 senior managers in the UK concluded:

“The results of PwC’s most recent Business Insights review of CEOs and FDs highlight the mismatch between rhetoric and reality when it comes to managing and developing their people” (PWC, 2006).

There is no research that has examined Management Standards as a phenomenon, or has questioned the seemingly unstoppable growth of Management Standards, particularly in the UK. This research draws attention to this gap and seeks to widen the debate from a concentration on quality and related Standards to include more generally applied Standards.

Obviously, it is not possible to study the entire field of Management Standards and a mechanism to identify the most appropriate Standards for the research is required.

1.04 Categorising Management Standards

The delineation between the various sections of the strata in Figure 1.1 is not precise and there can be considerable overlap between the strata depending upon the Standard. However, what is indicated by the model is that Standards can be categorised into three basic types that are not necessarily confined to a single stratum in the model:

De Jure – Standards that have been encapsulated into the legal system of the country in which they apply and can include Codes of Practice devised by agencies of government. These may or may not be endorsed by the four international Standards-setting bodies. The organisations and individuals affected by these Standards have no choice in their application and the penalty for non-compliance is legal sanction providing little substance for research.

Discretionary – Standards developed by a wide range of Standards-setting organisations that may well be persuasive in their arguments for adoption, but which have no sanctions attaching to them. Again, this can be an area of considerable overlap and confusion that is best illustrated by example. The British Board of Agrément (BBA) is an organisation linked to Government that provides authoritative and independent information on the performance of building products and construction methods. The BBA is the UK member of the European Union of Agrément (UEA^{tc}), represents the UK in the European Organisation for Technical Approvals, and is responsible for the issue of European Technical Approvals in the UK, enabling products - manufactured under an appropriate Attestation of Conformity procedure - to achieve the commercially vital CE mark. Every Agrément Certificate contains data on durability, installation and compliance with the various Building Regulations in England, Wales, Scotland and Northern Ireland. Therefore, many of the BBA's Standards could be considered to be *de jure* where they are incorporated into building regulations. However, the BBA also operates "Approved Installer" schemes in certain key product areas and its Test Services section can carry out a wide range of tests against the requirements of British, European or international standards, as well as trade and industry specifications. These installer schemes are entirely voluntary and installers who are not BBA approved are not necessarily precluded from operating in the industry (BBA, 2005). The scope of discretionary Standards is very wide and provides minimal scope for research.

De Facto – Standards which are neither discretionary nor compulsory but, because of common usage, the domination of major buyers or other organisations that dominate an industry or sector, influence the competitive advantage of adopters in their chosen market place. An example of this category is the Standard that is the focus of this thesis, the Scottish Quality Management System (SQMS) that was devised by an agency of government and then imposed as a condition of doing business in any area where the agency had financial influence. The sanction of non-conformance was losing the ability to trade. The “compulsion” does not necessarily have to be overt and ISO9000 has often been cited as a *de facto* condition of doing business in Europe (Avery, 1994 & 1996; Juran, 1994; Kartha, 2004; Reilly, 1995; Zuckermann, 1994 & 1997a.). It is this category of Standard that dominates the Management Standards landscape and will form the basis of the research.

Confining the research field to *de facto* Standards is not sufficient as this category will include Standards with limited applicability. Therefore, faced with such a plethora of Standards and Standards-setting bodies it is necessary to narrow the field of research still further in order to make it manageable and any subsequent analysis meaningful. This distillation process is dependent upon a working definition of Management Standards that has proven to be illusive. As can be seen in Figure 1.1 above, Standards can be *sectoral* covering various economic and institutional sectors, or *functional* covering the range of management activities within these sectors. Jonker and Karapetrovic, (2004) argue that not a single Management System Standard is currently based on a systems perspective or model and give the following examples:

“the “sustainability” standards, including ISO 14001 for environmental and OHSAS 18001 for occupational health and safety, are based on the plan-do-check-act approach, which, although similar to the systems perspective, only provides a process for continual improvement. The standards from the “customer-focused” or “product quality” group are all based on the so-called “process approach”, which fosters running an organization as a set of interdependent processes. This group includes, for instance, the following MSS: ISO 9001 (quality), ISO 10012 (metrology), ISO 10018 (complaints handling), as well as IEC 60300 (dependability)” (p 610).

Other Standards such as the Health & Safety Executive’s Standards for Managing Stress specify a series of behaviours that are measured in outcomes. Often the outcome can be achieved by different processes with a considerable amount of discretion given to the assessor or auditor. Indeed, although the Investors in People Standard is also loosely based

on the plan-do-check-act approach it eschews processes in favour of “principles”, “indicators” and “evidence requirements”.

The National Management Standards are even more complex, combining a process approach with specified outcomes and behaviours beneath an umbrella of knowledge and understanding. The philosophy behind this approach centres on the competence of the individual within an organisation and is fundamentally different from that of the systems approach which concentrates upon the competence of the organisation and to a large extent is independent of the individual. For example, it is argued that incompetent managers can operate effectively in a ‘competent’ organisation which has comprehensive management systems in place without fully understanding why they act in the way that they do. However, if these managers then move to an ‘incompetent’ organisation with little or no management systems, they would lack the essential knowledge and understanding to operate effectively (Currie and Darby, 1995). Therefore, while the type of evidence of performance to the National Management Standards is the same as that demanded in an audit of other management Standards, it is not sufficient to demonstrate that the manager is competent. The individual must also demonstrate the necessary knowledge and understanding of the underpinning theories behind the management processes to which the evidence refers and that they possess and apply the personal competencies that are identified in the model that forms an integral part of the Standards (Boyatzis, 1982).

The BSI gives a very straightforward definition of a Standard as: “An agreed way of doing something” (BSI, 2005), whereas the IEEE defines a Standard as:

“A published document, established by consensus and approved by a recognized body, that sets out specifications and procedures to ensure that a material, product, method or service meets its purpose and consistently performs to its intended use.” (IEEE, 2005)

In describing its principal Management Standards the ISO gives the following explanation:

“... the standards that have earned the ISO 9000 and ISO 14000 families a worldwide reputation are known as "generic management system standards". "Generic" means that the same standards can be applied to any organization, large or small, whatever its product - including whether its "product" is actually a service - in any sector of activity, and whether it is a business enterprise, a public administration, or a government department. "Management system" refers to what the organization does to manage its processes, or activities...Management system standards provide the organization with a model to follow in setting up and operating the management system. This model incorporates the features on which experts in the field have reached a consensus as representing the international state of the art. A management system which follows the model - or "conforms to the standard" - is built on a firm foundation of state-of-the-art practices.” (ISO, 2005)

This definition is not as helpful as it first appears, as a number of Standards claim to be “generic” in the sense of; *“can be applied to any organization, large or small, whatever its product - including whether its "product" is actually a service - in any sector of activity, and whether it is a business enterprise, a public administration, or a government department.”* However, while this criterion is relatively straightforward to achieve, the second criterion; *“which experts in the field have reached a consensus as representing the international state of the art. A management system which follows the model - or "conforms to the standard" - is built on a firm foundation of state-of-the-art practices”*, is not so straightforward. A number of examples of generic Standards that have not reached a consensus abound. The task-based approach to the MCI National Management Standards received wide criticism (for example see Currie and Darby, 1995; Everard, 1993; Hyland, 1994; Littlefield, 1994; Smithers, 1993). Perhaps the best example of contentious Standards exists in the Standards for Managing Stress, which were launched by the Health & Safety Executive with the following acknowledgement; *“Some academics have argued that stress is an almost meaningless term and does not exist”* (HSE, 2003). Patmore, (2006) claims to have collected 650 definitions of stress and argues that only the engineering definition has any degree of agreement. She draws attention to the absurdity of the HSE use of the term as a response, while ‘science’ takes the opposite view and uses the term as a stimulus. Despite the absence of even a semblance of ‘experts in the field reaching a consensus’, these Standards were generally well received.

Standards can also change radically over time as a result of market research and market resistance. A good example of this is the Investors in People Standard that has gone

through three incarnations since its launch in 1991. Critics argue that it has become 'easier' following lobbying from organisations like the CBI about its bureaucracy (Rana, 1999 & 2000). Therefore, 'consensus' can be a nebulous concept.

It is perhaps an irony that there is no standard Standard for Management Standards, with various standards-setting bodies adopting their own approach to the content and format of their Standards. Some attempts are being made to address this at an international level (Karapetrovic, 2004), but only in the context of future Management Standards produced by the ISO, such as those for CSR. This research draws attention to a situation where a government-backed Management Standard continues to be imposed on a major commercial sector - and promoted internationally - despite the absence of any empirical evidence to confirm its effectiveness.

1.05 Defining Management Standards

Although the Management Standards canvas is a very broad one as illustrated above, it is dominated by research centred on quality management and the Standards pertinent to that subject. As an example of the scale of this interest, Martinez-Lorente, *et al*, (1998: p380) provide an analysis of the ABI-INFORM database that includes brief summaries of business articles published since 1986. The number of references with the terms TQM, Quality Management and Total Quality rose from a total of 58 in 1986 to a peak of 1,430 in 1993 and totalling 6,627 within the decade to 1996. A similar growth pattern is likely during the following decade. Flett, (2001) draws on research by Wilkinson and Wilmot, (1995) that suggests that leading advocates of quality management are not inclined to reference anything outside of the quality management field and concludes that:

“quality management is on the whole a self-serving discipline, which does not integrate well with other management fields “(p4).

This may go some way to account for the fact that research into Quality Management Standards has overshadowed the development of other Management Standards and explain why a clear definition of precisely what a management standard is appears to be elusive. For the purposes of this research it is necessary to have a clear understanding of what constitutes a Management Standard in order to overcome the differences between the various types outlined above.

Therefore, a Management Standard should be:

A Model – which if adopted by organisations or individuals will lead to consistent and predictable organisational performance.

Management oriented – this may seem an obvious criterion, but some management Standards are too narrowly functional to be classed as managerial in the full sense of the term. The Standard can apply either to systems of management within an organisation, or to the practice of general management by individuals,

Generic – the ISO definition of generic quoted above is a useful definition to use here, where generic means that the same standards can be applied to any organization, large or small, whatever its product - including whether its “product” is actually a service - in any sector of activity, and whether it is a business enterprise, a public administration, or a government department.

Egalitarian – achievement of the measures set out in the Standard is not dependent upon a predetermined level of sophistication and fulfilment of the management criteria that the Standard sets out will be sufficient to gain compliance.

Beneficial – in the sense of there being a very compelling argument for adopting the Standard and clear business benefits or failure costs.

Authoritative – with so many Standard-setting bodies in existence, this criterion will confine research to those Standards that are government-led or have the support of National and International business communities.

Assessed – some assessment by a third party of evidence of compliance with the Standard must take place, except where non-compliance with the Standard could result in legal sanction.

The combination of all these components leads one to the following definition of a Management Standard as:

An International, National or government-backed autonomous model of generic organisational management behaviours or systems that delivers consistent, competent managerial or organisational performance to the criteria set by the Standard and substantiated by third party assessment.

This is the definition that will guide the selection of Management Standards for the subsequent research.

If we now apply this definition to the Standards depicted in Figure 1.1 above, the following emerge as being worthy of further research:

In the top stratum the ISO 9000 and 14000 Standards are obvious candidates. In the second stratum only BS 7850 and OHSAS18001 come into the Management Standards category. In the third stratum Investors in People and the National Management Standards are current government initiatives in the UK. The fourth stratum contains the social responsibility Standards AA1000 and SA 8000; the Scottish Quality Management System and the HSE Standards for Managing Stress. It could also be argued that the business excellence models, EFQM and MBNQA should be included here also, but as McDonald, *et al*, (2002) have shown the very close similarities between both models, only the EFQM model has been included. None of the Standards in the final two strata fit the criteria and they have been excluded.

Points have been awarded against each criterion on a very simple Likert-type scale where 1 means does not meet the criterion and 5 means fully meets the criterion. The researcher accepts that the process for awarding the points is subjective, but as Gobbels and Jonker, (2003, p 56) point out, there is no recognised methodology for comparing Standards and it serves to provide some meaningful flexibility to the definition. It seems reasonable to apply an 85% threshold for compliance and therefore only those Standards that score in excess of 30 points are deemed to have met the specification for detailed research. The results of this exercise are shown in tabular form in Table 1.1.

Some explanation may be necessary where less than full points have been awarded.

BS 7850 –is intended to build upon a quality management system standard. There are no clear benefits to be gained from its adoption when more widely acceptable models are available, such as the EFQM. It is not being actively promoted by any major body.

OHSAS18001 - There are no clear benefits to be gained from its adoption in countries such as the UK, which has very heavily legislated in all areas of health and safety. There is limited pressure on organisations to adopt it.

IiP – there have been three versions of the IiP Standard since its launch and each has been more flexible than its predecessor. As this research took place when the second incarnation was current, it has been given a mid-point score. Similarly, at one time organisations like the CBI called for large organisations to insist upon IiP recognition throughout their supply chains, but have since become somewhat disenchanted (Rana, 1999 & 2000).

National Standards – the business benefits of applying these Standards have still to be proven, particularly as they have recently undergone major change. Although a major

government initiative when they were launched, they have fallen out of favour until a recent re-launch which should see renewed government pressure.

AA 1000 – although in principle not limited to any industry, it is intended to facilitate stakeholder dialogue and is not applicable in all situations. The business benefits of applying the Standard are not clear; it has no strong government or sector backing and is purely voluntary.

SA 8000 – excludes certain industries, such as agriculture. The business benefits of applying the standard are not clear and it has no strong government or sector backing.

SQMS – the Standard presupposes a quality management system, but is not prescriptive on what that system should be and accepts whatever is in place.

HSE Stress – although this Standard is not assessed by a third party, it is widely expected to be cited in any stress-related legal action, thereby stimulating the need for regular review (CIPD, 2004; Javaid, 2004).

EFQM – the model operates on a scoring system and varying levels of achievement. While it appears to apply to any organisation, only organisations that are well advanced in quality management issues can apply the model successfully. The business benefits to adopters are not clear and, while it is authoritative in the sense of having prestigious organisations behind it, the demand for its adoption is at a relatively low level. The third party assessment process is complex incorporating a five stage approach which is aspirational. Arguably, compliance can only be achieved by award winners.

Table 1.1 Applying the Definition of Management Standards

| Criterion | ISO 9000 | ISO 14000 | BS 7850 | OHSAS 18001 | Iip | Nat Stds | AA 1000 | SA 8000 | SQMS | HSE Stress | EFQM |
|------------------------|-----------|-----------|-----------|-------------|-----------|-----------|-----------|-----------|-----------|------------|-----------|
| A Model | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Management orientation | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Generic | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 5 | 5 | 5 |
| Egalitarian | 5 | 5 | 1 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 1 |
| Beneficial | 5 | 5 | 1 | 1 | 3 | 1 | 1 | 1 | 5 | 5 | 3 |
| Authoritative | 5 | 5 | 1 | 1 | 5 | 4 | 2 | 2 | 5 | 5 | 3 |
| Assessed | 5 | 5 | 5 | 5 | 5 | 5 | 1 | 5 | 5 | 1 | 3 |
| Total points | 35 | 35 | 23 | 27 | 33 | 30 | 22 | 26 | 34 | 31 | 25 |

While the research concentrates upon the Management Standards that meet the criteria, the other Standards are included for context and where their exclusion would detract from the understanding or interpretation of the other research.

1.06 Developing Trends in Management Standards

Faced with an ever increasing number of Management Standards, it is not surprising that there are calls to reduce the number that managers have to deal with. Karapetrovic, (2003) uses an amusing analogy with Alfred Hitchcock's film 'The Birds' that aptly illustrates the way in which the debate is moving when he says:

“This is the world of mushrooming management system standards (MSS), where for each such stakeholder there is at least one MSS covering the minimum requirements for assuring a good relationship with that stakeholder. This is the world where the only way to survive this onslaught of MSS birds is not to run away from them or deal with them one by one, but to tame them. In other words, integrate.” (p 5)

There has been some acceleration in the debate for the integration of Management Standards and also suggestions that a “super” management Standard should be developed to incorporate the generic functions of management. Arguments to integrate ISO 14000 and ISO 9000 are persuasive, (Aboulnaga, 1998; Chin and Lau, 1999; Karapetrovic and Willborn, 1998; Renzi and Cappelli, 2000; Johnson, 2000), as is the argument to extend integration to include the health and safety Standard OHSAS18001 (Husband and Mandal, 1999; Mackau, 2003; Pun, *et al*, 1999 Pun and Hui, 2002; Scipioni, *et al*, 2001; vonAhsen and Funck, 2001; Wilkinson and Dale, 1998, 1999, 2001, 2002; Winder, 2000). However, the decision of the ISO not to introduce an international occupational health and safety management standard has undermined this movement to some extent (Zuckerman, 1997).

The suggestion of a "super" management standard that will incorporate the generic functions of management in addition to those of quality, environment and health and safety is not a new concept (Uzumeri, 1997; Wilkinson and Dale, 1999), but is gathering momentum (Cicmil, 2001; Ho and Donnelly, 2001; Karapetrovic, 2001, 2002, Matias & Coelho, 2002; Pun, & Hui, 2002). It is worth noting that the 6th International Conference on ISO 9000 and TQM used “Integrated Management” as its main theme and the prize-winning paper called for:

“A single and truly generic management system standard (GMSS), possibly covering all disciplines and functions within an organisation.” (Karapetrovic, 2001).

The decision by the ISO Committee on Consumer Policy (ISO/COPOLCO) to explore the feasibility of a Management System Standard for Corporate Social Responsibility (CSR) has

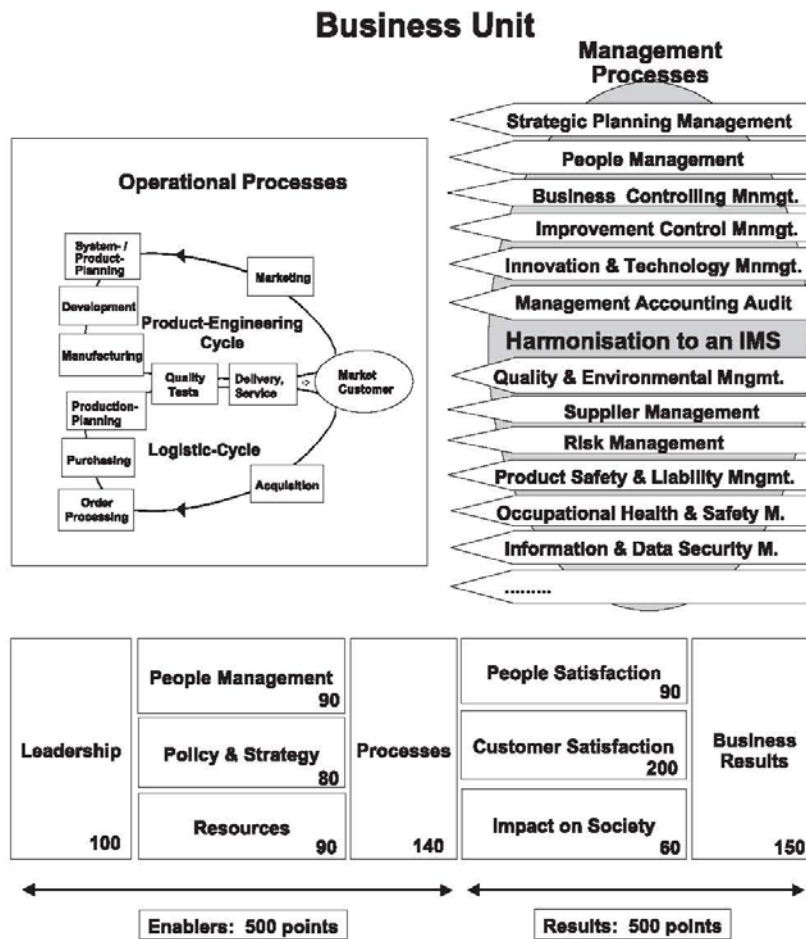
widened the debate still further, with the suggestion that integration could include CSR (Castka, *et al*, 2004).

In their comprehensive survey of the theory, principles and practice surrounding the integration debate, Wilkinson and Dale, (1999) suggest that the MBNQA and EFQM models for business excellence perhaps provide a foundation upon which an integrated management system could be constructed and point out that Bemowski (1996) and Uzumeri (1997) “both see the models as standards” (p 100). Dale, *et al*, (2000) suggest that:

“The way in which the model [EQA] is used by some organizations (in the form of a “tick-box” mentality) is resulting in an almost standard method of managing quality and its improvement” (p8).

They are supported by Seghezzi, (2001), and Mangelsdorf, (1999) suggests an integrated management systems model based on the EFQM framework that is reproduced as figure 1.2.

Figure 1.2 On the way to an integrated management system (IMS)



Source: Mangelsdorf, 1999, p 422

Karapetrovic, (2002) builds upon Wilkinson and Dale’s, (1999) extensive review of the issues and difficulties of integrating the main ISO Management Standards by addressing

some of the auditing and certification difficulties that they highlighted, but the difficulties remain considerable and there is therefore a temptation to look for an alternative.

The focus of the integration debate and the suggestions that the excellence models form the basis of a “super” Standard is from the perspective of organisations that have already embraced the existing individual Standards, wish to reduce auditing and other burdens, and organisations that have committed to continuous improvement. Dale and Lascelles, (1997) have produced a six-level positioning model of TQM in which they position excellence award winners at level five and suggest that even their level 1 “*uncommitted*” organisations are likely to have already achieved ISO 9000, even if they haven’t embraced the underlying quality management concepts. This illustrates the impracticality of proposing excellence models as a generic or “super” Management Standard “covering all disciplines and functions within an organisation”, as to do so would create an elite Standard that only organisations with sophisticated management structures and processes could achieve. Unsophisticated organisations with no previous track record of management improvement activity would have an immense mountain to climb and are unlikely to even take the first step.

1.07 Aims of the Research

The literature upon which this thesis is based confirms that Standards-based management has increased very significantly over the past twenty years and continues to do so. It also reveals the growth in the application of Standards to areas of management like CSR that a few years ago did not even feature in the management lexicon. However, the literature also reveals that previous researchers have been very selective in their choice of Management Standards to study and have concentrated on a small selection of what is a very wide assortment with the potential to impose onerous burdens on those organisations that may be required to apply a number of them. The overwhelming body of research centres on the two most successful Management Standards and the scale of the research, which it must be said has been largely positive, will undoubtedly have helped to promote and perpetuate the Standards in question.

The literature shows that there is a growing movement for the integration of Management Standards and calls for the creation of a “super” Standard incorporating all the key functions of management. Some of the proponents of a “super” Standard advocate an integrated Standard based upon the excellence models, but it is argued above that this could create an

elite Standard, only achievable by organisations that had already accomplished very high levels of competent management. If a Standard is to be successful as an organisational improvement tool, it needs to be widely acceptable and achievable by those organisations that want and need to improve. However, there is a consensus among these advocates that such a “super” Standard is not currently in prospect and will be a long time in development.

There is no clear definition of what constitutes a “super” Standard, apart from the requirement that it embraces the key functions of management. Karapetrovic, (2002, p 62) suggests that a truly generic management system standard would possibly cover “*all disciplines and functions within an organisation*” A Standard does exist that encompasses many of the key functions of management and its architects claim is based upon the principle of Total Quality Management. The Scottish Quality Management System was launched in 1993 and is now in use in every part of the UK, in Ireland, Poland, Turkey, South Africa, Australia; forms part of the curriculum of the MSc in Industrial Engineering and Management at the University of Mauritius and has influenced the quality management systems in vocational education and training (VET) in a number of other countries. Blom and Meyers, (2003) claim that the Australian Quality Training Framework (and also several other national quality systems) was, in part, modelled upon the Scottish Quality Management System and, according to a report to the National Assessment of Vocational Education U.S. Department of Education, the Board that was responsible for the concept development of the Danish Strategy for a Systematic Quality Development and Assessment of Results within the Sector of Vocational Education (Q-concept) conducted a study tour to Scotland to become familiar with the SQMS system and Scottish experiences with quality matters. Thereafter, it based its strategy on the Scottish Quality Management System (U.S. Department of Education 2001, p 74). SQMS has therefore secured an impressive international foothold.

Gunning, (1998) claimed at an international conference in Ankara that:

“The Scottish Quality Management System has been so successful that interest in pursuing ISO 9000 certification has declined in Scotland’s VET organisations, and several agencies outside the VET sector have adopted and adapted it for their own quality assurance purposes”

This is a very bold claim, but it is not based upon any independent research because, despite this level of penetration by the Scottish Quality Management System, it has not received any research interest at all and therefore there is no empirical data upon which to base an opinion

on the reasons for its success or its effectiveness. This important gap in the research into Management Standards forms the basis of the research that this thesis records.

The questions raised about Standards-based management in this introduction have formed the basis for the aims of this research. Whilst it is recognised that some Standards-based approaches have yielded significant improvements, previous research has been myopic and has tended to ignore the panoply of Management Standards which face managers today. The overall aim of this research is to provide a foundation upon which others might construct more appropriate methodologies for generic Management Standards that encompass the key functions of management, but which can be applied to organisations with varying levels of sophistication. Therefore, summarising the primary objectives of this research: looking to see if there is any evidence that standards deliver tangible improvement.

1. To investigate the growth and development of the main Management Standards and to investigate whether there is any evidence that they deliver tangible business improvements in compliant organisations.
2. To explore the possible future direction that the Management Standard's 'market' will take in relation to the creation of new Management Standards or the consolidation of existing Standards
3. To undertake research into the Scottish Quality Management System to determine its ability to bring about organisational improvements and its suitability as a tool to implement the principles of TQM.
4. To examine the extent to which SQMS Auditors perceive the Standard to have delivered organisational improvements.

1.08 Scope of the Research

Zane, *et al*, (2001) acknowledge the difficulties that all students face in trying to balance their very limited resources against the time that is available and the reader will recognise the impossibility of devising, implementing and field testing a research project that would address the issues detailed above. There is no evidence yet of the integration of the various standards into a "super" standard and the development of this concept is very much at the embryo stage. Consequently, there is no empirical research to which one can refer and no identified national or international programmes that have attempted the integration of a range of management activities into one Standard.

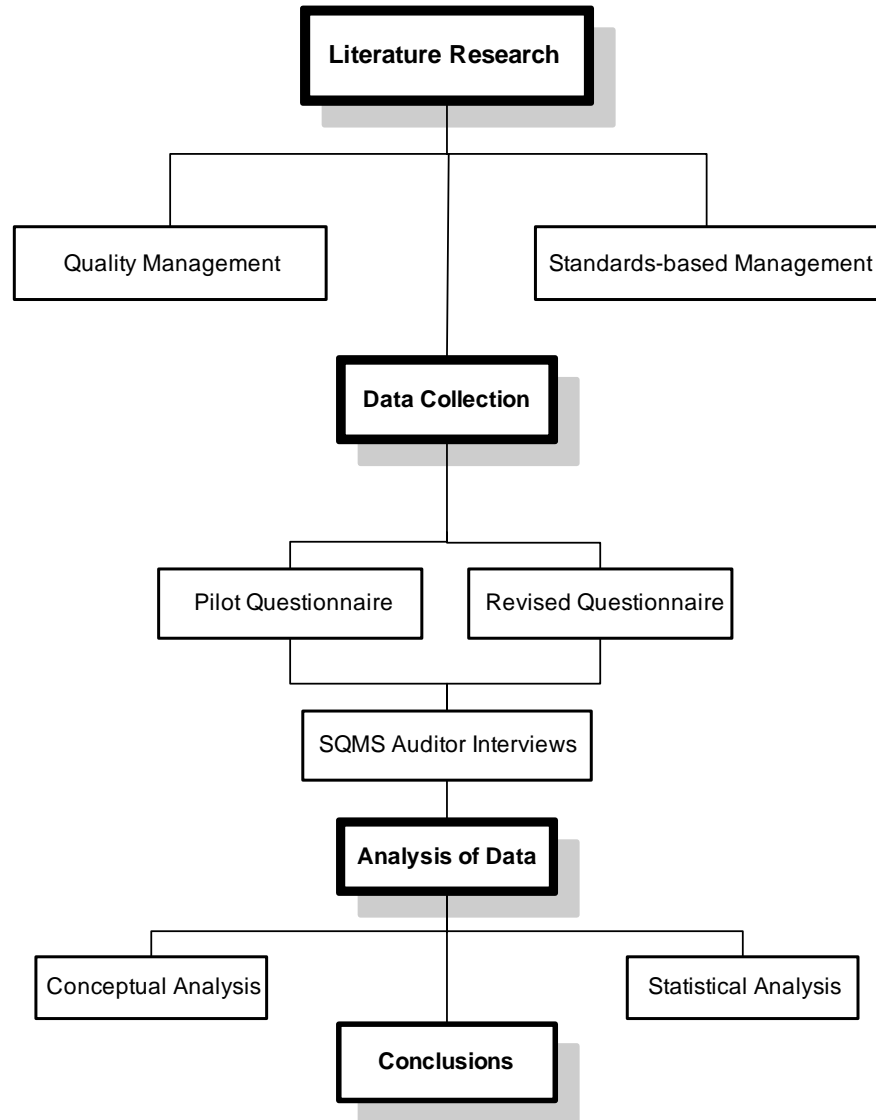
There are a number of examples where major organisations have insisted that their supplier base adopts a Standard-based management system as a prerequisite of continuing as a supplier. Examples of these exist in the care, food, hospitality, transport and other sectors, but these are either derivatives of ISO 9000, or too sector-specific to have general applicability and have been ignored for the purposes of this research. There are fewer examples of such compulsion within the service sector or among less sophisticated organisations on a scale that would provide meaningful research material. There are still fewer examples of any sectors where the implementation of Standards-based management techniques have been made compulsory and are then systematically audited.

There is no existing published research into SQMS and it provides a unique opportunity to study the implementation and operation of a generic Management Standard, imposed upon an unsophisticated population of diverse organisations. The principal objective of the research was to determine how successful the imposition of an integrated management standard has been within the training sector in Scotland and to identify if there are any parallels that could be drawn between the experiences of these organisations over a prolonged period that could inform subsequent research.

The conduct of the research is illustrated in Figure 1.3, which begins a review of the literature covering the chronology and development of Management Standards during the latter part of the twentieth century.

The development of Management Standards is closely linked to Total Quality Management (TQM) and a proper understanding of Management Standards is not possible without some examination of TQM. Therefore, a brief analysis of TQM is presented to support the research into Management Standards. The main body of research was undertaken using a detailed questionnaire, complemented by a series of post-questionnaire interviews with system auditors to contrast their perceptions with those of the main population. These are developed in more detail in Chapter 2.

Figure 1.3 Research Framework



A number of statistical techniques were employed to explore and explain the data. These included, Cronbach's Coefficient Alpha, frequency tests, histograms, cross-tabulations, Chi-square tests, Kruskal-Wallis Tests, Factor analysis, Kaiser-Meyer-Olkin Measure of Sampling Adequacy, and Bartlett's Tests of Sphericity. These are developed in more detail in Chapters 4 and 5.1.09 Limitations of the Research.

The research had limitations. The vast amounts of available pertinent literature had to be distilled down to manageable proportions, while at the same time remaining relevant and up to date during the prolonged period from the inception of the research until the final report was finished. This necessitated many arbitrary decisions on what to include and inevitably those decisions were subjective.

The section of the research questionnaire that dealt with the time spent on quality matters could have benefited from better design and these results have therefore been discounted. However, the piloting process followed accepted practice and it is unlikely that more extensive piloting would have changed the final result that only appeared anomalous when a large sample was examined.

The relatively few participants that were made available for the research interviews with SQMS auditors was disappointing and the dangers of relying too heavily on the results is highlighted. However, their collective experience was extensive and their views are relevant.

The research into the SQMS Standard was undertaken exclusively in Scotland within a population engaged in very similar activities and largely dependent upon maintaining their positive assessment against the Standard for their continued existence. Therefore, while the wider extrapolation of the results of the research is constrained by this parameter and the conclusions drawn are indicative, the size and nature of the sample, together with the rate of response still renders this to be an important piece of research upon which further hypotheses can be based.

Finally, the researcher has highlighted that the results of this research appear to conflict with a range of other research into SQMS commissioned by Scottish Enterprise (SE) and this thesis would have benefited from an analysis of the differences. However, the copy correspondence that forms Appendix 1 illustrates the efforts that were made to work with SE and the hostile reaction that they caused. Discussions with other SE personnel since have not shed any light on the mystery.

1.10 Conclusions

This Chapter laid the foundations for this thesis. It introduced the concept of Management Standards as a phenomenon instead of as a group of individual Standards that has typified the research approach to date. It set out a taxonomy of Management Standards and highlighted the range of Standards-setting bodies that can and do devise Management Standards with little control over their content, structure or approach. Management Standards were categorised and then a definition of Management Standards was offered. The trends in Management Standard's development were explored and their likely impact on future developments was assessed. Previous research was summarised to indicate where the

research gap existed and the research was then justified. The aims of the research were identified and the scope of the research defined. The thesis can therefore proceed on these foundations.

Chapter 2 Background to the Research

2.01 Chapter Synopsis

As a direct consequence of the relentless increase in the widespread adoption of Standards-based management, there are a number of examples where major organisations have insisted that their supplier base adopts a Standard-based management system as a prerequisite of continuing as a supplier. QS 9000 is a typical example, as it applies to companies providing components in car manufacturing that are likely to be able to easily meet the requirements being imposed. There are fewer examples of such compulsion within the service sector or among less sophisticated organisations on a scale that would provide meaningful research material. There are still fewer examples of any sectors where the implementation of TQM techniques have been made compulsory and are then systematically audited. Therefore, SQMS has the potential to fill a significant gap in the existing research.

SQMS has been in operation since 1993 and, at the time of the research, had been imposed upon circa 400 organisations, yet it did not evolve from previous quality initiatives as one might expect, but from a requirement to satisfy a statutory duty imposed on Scottish Enterprise and the concerns of qualifications awarding bodies that needed some system to give accreditation to an increasing number of training providers which did not have a pedagogical pedigree. In order to fully appreciate the research that follows in other chapters and the discussions that are examined in the main body of the research, it is necessary to understand how SQMS was developed and what it set out to achieve. This Chapter traces the origins of SQMS and the factors that led to its development. It attempts to identify the key objectives behind the creation of SQMS - which do not appear to have been clearly articulated - and provide an overview of the Standard. The influence of other Standards is examined and the links to Total Quality Management are explored. This is particularly relevant, as it is claimed that SQMS incorporates much of the philosophy of TQM within its framework.

Also included in this Chapter is a discussion on the background and experience of the researcher within the industry to be researched to identify and address any questions of potential bias that previous exposure to SQMS could generate. Gummesson's, (2000) concept of "preunderstanding" is examined and the importance of this expertise recognised as a valuable contribution to the research. However, a brief discussion on a small case study that was undertaken as preliminary research to establish a benchmark for the main body of research and as a cathartic exercise is also described.

2.02 The Scottish Quality Management System (SQMS)

2.02.1 History

There is almost a complete absence of literature that describes the background to the development of SQMS and a significant part of the history that follows hereunder is result of discussions with some of the individuals who were involved and the researcher's personal knowledge and experience.

In 1983 the Government, through the Manpower Services Commission, launched two major initiatives in response to unprecedented high levels of unemployment. The Youth Training Scheme and the Community Programme were targeted to place young people into structured training and long-term unemployed adults into work of community benefit. The infrastructure necessary to deliver these programmes developed in tandem with them and this led to the creation of a number of organisations that were wholly dependent on such programmes for their existence. A number of these organisations were community based and were formed out of altruistic intent, rather than from any distinct business plan. Both programmes suffered from a bad reputation created by bad press and in 1988 the Community Programme became Employment Training, introducing a requirement that participants pursue a vocational qualification.

This meant that the companies and organisations that had been delivering the work experience programmes had to become training organisations very rapidly if they wished to continue with what was their core and in many cases only source of revenue.

The Manpower Services Commission later became the Training Commission and eventually the Training Agency and oversaw this transition and introduced a system whereby participating organisations were required to become “Approved Training Organisations” (ATO). (Training Agency, 1990) This necessitated meeting seven criteria that were a combination of contractual requirements and best practice. Organisations were "audited" against these criteria by Training Agency staff that, by and large, had no background or experience in quality management systems or auditing. There are no records to show whether or not any organisation failed this test, although bad publicity continued involving organisations that had achieved ATO status.

In 1991 the Training Agency in central and South Scotland and the Scottish Development Agency were amalgamated to become Scottish Enterprise, while the Training Agency in the Highland region and the Highlands and Islands Development Board became Highlands &

Islands Enterprise. These organisations took over the training and economic development responsibilities of their predecessors and sought to deliver their targets through a network of quasi-independent Local Enterprise Companies (LECs). The training supplier base that had previously contracted with the Training Agency transferred in its entirety to the new LECs that were staffed by the former civil servants who had previously administered the ATO system. Of course, as LECs were 'independent' organisations, there was no infrastructure to enable the continuation of the ATO system. Some LECs looked to develop their own systems for monitoring training provider performance and the Employment Department funded the Wales Quality Centre to develop a self-appraisal pack for training providers that was published in 1992. This pack encapsulated the criteria of the ATO system, but with a far greater emphasis on health and safety matters. This "Welsh Pack" filled the vacuum and was "tartanised" by three LECs in Scotland, viz Dunbartonshire, Renfrewshire and Fife Enterprise.

2.02.2 Standards Development

These developments took place against a background of the promotion of BS 5750, Investors in People and the introduction of performance management into further education (SOED, 1990) and a government-backed movement to improve standards of training provision (Training Standards Advisory Service, 1990). The Scottish Vocational Education Council (SCOTVEC) also produced a quality policy document at this time (SCOTVEC, 1991), whereas the National Accreditation Council for Certification Bodies produced various documents relating to quality schemes for further education and training and interpretation of BS 5750 during 1990-2.

It is perhaps inevitable that an attempt would be made to rationalise these quality initiatives and in 1991 SE, Highlands & Islands Enterprise and the Scottish Vocational Education Council published a joint statement of intent to co-operate closely to ensure that organisations involved in the delivery of vocational education and training were working towards a national quality framework. However, SE had a statutory duty that it also had to address. Section 3 of the Enterprise and New Towns Act 1990 placed the following requirement on SE to monitor the quality of training provided by its agents as under:

“Where the functions of Scottish Enterprise.... mentioned in section 2(3) (a) or (b) of this Act are carried out through an agent or are delegated to any person, the body.... shall have the duty (which shall not itself be delegated) of keeping under continuous review the suitability and adequacy of any training provided by that agent, or as the case may be that person (or his agent), in discharging those functions”.

The Scottish Further Education Unit (SFEU) was commissioned to develop an appropriate quality management framework for “Scottish education and training organisations operating under various funding arrangements” (SQMS, 1993), although it is not clear to what extent – if at all – the remit given to the SFEU incorporated this statutory duty. The resulting framework was called the Scottish Quality Management System (SQMS) and was subsequently launched in 1993.

The name ‘Scottish Quality Management System’ infers a general national applicability, rather than the very small section of the business community in Scotland that it was originally designed for. There is no doubt that the Scottish Quality Management System set out to be an integrated management system. The introduction to SQMS states;

"It harmonises the quality requirements of a number of key national agencies - Scottish Enterprise, Highlands & Islands Enterprise, the Scottish Qualifications Authority, and the Scottish Office Education and Industry Department - and provides indicators to the national Standard for Investors in People and to BS EN ISO 9000." (SQMS, 1993, p 3).

The document also confirms a belief in the rigour of the SQMS auditing system when it states;

"SQMS Standards and pointers cover the interests and requirements of the range of agencies noted earlier. This implies that if the organisation has all the suggested lines of evidence, or equivalent evidence, for all the standards and pointers in a form which satisfies external auditors as to its substance and quality then it will be in a strong position to go forward for approval by an awarding body such as the Scottish Qualifications Authority, for an Investors in People award, or BS EN ISO 9000." (p 9).

There are three separate versions of SQMS within this “national” Standard, one for organisations with training as a core business, one for companies where training is peripheral to the core business and one for the Careers Service (now Careers Scotland). The system is based on 14 Standards that describe quality features or characteristics of management systems and education and training services, viz: ⁽¹⁾

| | | |
|----------------------|----------------------------------|--------------------|
| Strategic Management | Equal Opportunities | Guidance Services |
| Quality Management | Health and Safety | Programme Design |
| Marketing | Premises and Equipment | Programme Delivery |
| Staffing | Communication and Administration | Assessment for |
| Staff Development | Financial Management | Certification |

⁽¹⁾ SQMS was revised during 2001 and a new Standard issued to take effect from April 2002. As this revision was implemented after the research had been completed and the basic structure of the Standard has remained the same, the revisions have not been taken into consideration. Piloting of a self-assessment process was introduced in the autumn of 2004 and given wider application in 2005.

These units are further sub-divided into an “overview” that describes the Standard and “pointers” that are used for audit purposes. These are detailed below with the overview followed by the pointers:

STRATEGIC MANAGEMENT

The organisation has a clear sense of purpose and direction.

- a. Is there a business plan covering all key areas of organizational activity?
- b. Does strategic planning and policy making involve all key people and bodies?
- c. Are responsibilities for strategic planning and policy making clearly and appropriately allocated?
- d. Are the business plans and policies systematically reviewed and findings acted upon?

QUALITY MANAGEMENT

A quality system ensures that clients, learners and staff needs are met.

- a. Is there a written description of the quality system which the organisation operates?
- b. Are all appropriate teams and people kept up to date with the quality policy, procedures, and standards?
- c. Is there up to date information on the education and training performance of the organisation and its learners?
- d. Are responsibilities for management of quality clearly and appropriately allocated?
- e. Is the quality system systematically reviewed and findings acted upon?

MARKETING

The needs of the organisation's clients and learners are identified; its education and training services are effectively promoted.

- a. Is strategic planning assisted by accurate analysis of target markets and in nine and organisational capabilities?
- b. Are there plans for identifying education and training needs and expectations of target markets?
- c. Is the organisation's portfolio of programmes aligned with the identified needs of clients and learners?
- d. Is there effective promotion of the organisation's services and customer care?
- e. Are marketing responsibilities clearly and appropriately allocated?
- f. Are marketing arrangements systematically reviewed and findings acted upon?

STAFFING

The structure, level, and type of staffing is appropriate for the education and training services provided.

- a. Is there a system for ensuring that the structure and level of staffing enable the organisation's objectives to be achieved?
- b. Are competent staff deployed in the delivery and assessment of each programme?
- c. Are there appropriate recruitment, selection, and job allocation criteria and procedures and clear job descriptions and remits for all grades of staff?
- d. Are responsibilities for staffing clearly and appropriately allocated?
- e. Are staffing arrangements systematically reviewed and findings acted upon?

STAFF DEVELOPMENT

Staff development provision meets organisational and individual development needs.

- a. Are there clear statements of values, principles, plans, and priorities for staff development so that staff are clear about the kind of support available?
- b. Is there a system of regular reviews of staff development needs?
- c. Are competences of all staff progressively developed in line with the organisation's business plan?
- d. Are responsibilities for staff development clearly and appropriately allocated?
- e. Are arrangements for staff development systematically reviewed and findings acted upon?

EQUAL OPPORTUNITIES

Equal opportunities are ensured for all clients, learners and staff.

- a. Does the organisation ensure in that everyone eligible has an equal chance of benefiting from the services it provides?
- b. Are responsibilities for equal opportunities clearly and appropriately allocated?
- c. Are equal opportunities arrangements systematically reviewed and findings acted upon?

HEALTH AND SAFETY

There is a safe and healthy environment for all learners, staff and visitors.

- a. Does the organisation correctly implement up-to-date health and safety guidance and regulations for premises?
- b. Does the organization correctly implement up-to-date health and safety guidance and regulations for equipment and materials?
- c. Are premises correctly registered as required by the health and safety executive or local authority environmental health department?

- d. Are staff, learners, and visitors covered by insurance as appropriate?
- e. Are responsibilities for health and safety clearly and appropriately allocated?
- f. Are health and safety arrangements systematically reviewed and findings acted upon?

PREMISES AND EQUIPMENT

Premises, facilities, equipment and materials are appropriate to the education and training services provided.

- a. Does the organisation have a system thrown for ensuring that premises, facilities, equipment, and materials are suitable for the range and number of learners, staff, and visitors and the education and training services?
- b. Is there appropriate access to premises and facilities?
- c. Are suitable premises, facilities, equipment, and materials allocated to and available for each programme?
- d. Is there provision for security of equipment, materials, and personal belongings?
- e. Are responsibilities for the management of premises, facilities, equipment, and materials clearly and appropriately allocated?
- f. Is the management of premises, facilities, equipment, and materials systematically reviewed and findings acted upon?

COMMUNICATION AND ADMINISTRATION

Communication and administrative arrangements meet the needs of external bodies, clients, learners and staff.

- a. Does the organisation have an effective communication system both internally and with all key bodies?
- b. Is there an adequate management information system to support the organisation's activities?
- c. Are sub-contracted services adequately managed?
- d. Is record-keeping appropriate to the education and training services and the management requirements?
- e. Is document control appropriate to the services?
- f. Are purchasing procedures appropriate to the services?
- g. Are responsibilities for the management of communication and administration functions clearly and appropriately allocated?
- h. Are communication and administration arrangements systematically reviewed and findings acted upon?

FINANCIAL MANAGEMENT

The organisation is financially sound and can make a reliable provision.

- a. Are financial operations and control appropriate to the provision?
- b. Is there a system of financial record keeping which meets the organisation's own internal needs and which complies with standard accounting practice?
- c. Are there effective budgetary control, monitoring, and reporting mechanisms?
- d. Are there appropriate arrangements for processing the payroll?
- e. Are funds from external sources used for the purposes for which they were provided?
- f. Is income from commercial activity used in ways consistent with the organisation's mission?
- g. Are responsibilities for management of finance clearly and appropriately allocated?
- h. Are financial operations systematically reviewed and findings acted upon?

GUIDANCE SERVICES

The needs of individual learners are identified, action plans/personal training plans are formulated, progress is reviewed, and support is provided where needed.

- a. Do learners have the opportunity through systematic initial assessment to discuss their starting points and possible goals and relate these to learning opportunities through action plans/personal training plans?
- b. Are learners' prior achievements taken into account?
- c. Is induction into the organisation and programme provided for all learners?
- d. Do all learners have regular opportunities during programmes to review their individual progress and goals and replan their programme where necessary?
- e. Are learners referred to specialist services if reviews show that this is needed?
- f. Is pre-exit guidance provided to support post-programme progression?
- g. Are responsibilities for guidance services clearly and appropriately allocated?
- h. Is the operation of the guidance system systematically reviewed and findings acted upon?

PROGRAMME DESIGN

Outcomes and content of programmes are relevant; form and structure encourage access and are responsive to needs; learning and assessment methods are appropriate to the aims and purposes of the programmes.

- a. Are the purposes of each programme clearly related to the needs of clients and learners?
- b. Are the components of each programme relevant to its purposes and clients and learners?

- c. Where an organisation wishes to design new units, modules, and group awards (because suitable awards are not offered by an awarding body) and wishes to have them validated as SQA awards, do the proposals comply with SQA validation criteria?
- d. Does the planned mode of delivery for each programme (times, places, and methods) help clients and learners access the programme?
- e. Is the planned sequence and organisation of delivery of each programme effective?
- f. Are the planned training, teaching and assessment methods for each programme appropriate to its purposes and learners?
- g. Are relevant guidelines and support materials available for staff use?
- h. Are responsibilities for the management of programme design allocated clearly and appropriately?
- i. Are programme design arrangements reviewed systematically and findings acted upon?

PROGRAMME DELIVERY

Training and teaching is purposeful and there is attention to the needs of individuals; the methods used are appropriate, emphasis activity and responsibility, and are varied.

- a. Is teaching and training in each programme characterised by a sense of purpose and organisation and a concern for learners as individuals?
- b. Are the planned learning, training, and teaching methods for each programme delivered effectively?
- c. Wherever possible, is learning active and are learners given responsibility for their own learning?
- d. Are responsibilities for programme delivery clearly and appropriately allocated?
- e. Is the delivery of each programme systematically reviewed and findings acted upon?

ASSESSMENT FOR CERTIFICATION

Assessment instruments allow evidence of all candidates' sustained competence to be gathered; the evidence conforms with the standards required by the awarding body for the award; assessment is internally verified; awarding body requirements for external verification are met; there is an appeals system.

- a. Has the organisation awarding body approval to run all the awards it offers?
- b. Do the planned assessment instruments for programmes leading to awards conform to awarding body requirements?
- c. Are the planned instruments correctly implemented for all candidates for all outcomes and performance criteria?

- d. Is the evidence of candidates' work accurately judged by assessors against the awarding body standards required for the award?
- e. Are the evidence of candidates' work and records of assessors' judgments of it retained in accordance with awarding body requirements?
- f. Is there an effective and accessible system of appeals?
- g. Are responsibilities for assessments and internal verification clearly and appropriately allocated?
- h. Is the operation of the assessment system systematically reviewed and findings acted upon?

There were differences in the way that SE and Highlands and Islands Enterprise interpret the Standard at the time that the research was undertaken. For example, Highlands & Islands Enterprise applied all 14 standards to training providers within its area, whereas SE only applied 13 Standards to training providers within its area, omitting the Finance Standard. There were other differences, particularly in the Health and Safety Standard that resulted in an organisation that had contracted with local enterprise companies in the different geographical regions being audited differently against the same Standard. The version for employers was reduced to seven standards by withdrawing strategic management, marketing and financial management, and incorporating training programme design, delivery and assessment within one Standard. The version that was applied to the Careers Service had a significantly expanded guidance services section.

The 14 standards within the system have been mapped against ISO9000, iIP and the quality requirements of the Scottish Qualifications Authority (formerly SCOTVEC) and the Scottish Office Education Department. If an organisation applying for SQMS can demonstrate that it is already accredited to ISO 9000, then credit transfer for that accreditation is possible. However, none of the accreditation bodies for ISO 9000 will accept similar credit transfer for organisations that are accredited to SQMS who are applying for accreditation to ISO 9000.

2.02.3 Links to TQM

The application of BS 5750 within education and training was not widespread at this time. The British Standards Institute issued guidance notes in February 1991 (BSI Quality Assurance, 1991), but these were controversial and it was not until a revised edition was issued in July 1992 that any serious thought was given to the application of the Standard

within education and training. Therefore, when SQMS was launched in 1993 it was imposed upon an industry with almost no exposure to quality management systems. As the industry was an amalgam of voluntary organisations, community-based organisations, further education colleges, private training providers and various employers, it contained a significant number of organisations that did not have a background in sophisticated management.

The absence of any knowledge or experience of quality management systems among training providers was mirrored by a similar lack of knowledge and experience among the LEC staff who were charged with implementing and auditing the system. Each LEC was given the responsibility to manage the implementation of SQMS for its own training supplier base, although organisations contracting with a number of LECs were allowed to undergo most of the elements of SQMS through a "lead" LEC. It should be remembered that the LEC network consisted of a number of private companies, barely two years old, staffed largely with ex civil servants still developing their own systems, procedures and management practices.

The parallels between SQMS and other quality models, such as EFQM, confirm its intention to be a TQM system as underlined in the SQMS manual by the statement:

"TQM is centred on valuing and supporting the contributions of all staff towards meeting or exceeding clients' expectations. This goes beyond a quality management system and is more an approach to organisational management. SQMS draws on TQM thinking across the audit as a whole."(The Scottish Quality Management System, 1993).

It should also be noted that SQMS anticipates that the organisation will be operating a quality management system in addition to SQMS. Immediately following its launch, SQMS became mandatory for any organisation wishing to contract with the LEC network for training. It remains the case that any organisation wishing to receive funding from the LEC network for training must be assessed against the SQMS Standard within 12 months of contracting.

The SQMS concept was a hugely ambitious project. It sought to move a very unsophisticated industry from a nil base of quality knowledge and management to a position where every organisation had implemented a quality management system and could demonstrate that elements of total quality management were being practised - all within a 12 month period. There is a general acknowledgement that two to three years of TQM activity

are required before tangible benefits will be evident, (Thiagarajan and Zairi, 1997) and the implementation of quality management system such as ISO 9000 also requires a significant period of time. It should be noted that SQMS is mapped against every element of ISO 9001 and, although a quality management system is not prescribed, there is the inference that ISO 9001 is the preferred model. The advice, implementation and auditing of the system was to be undertaken by a body of individuals that required to be trained, again from a nil base, to achieve this objective.

It is not clear from any of the literature published at the time if any specific objectives were set for SQMS by the sponsoring organisations. The SQMS manuals are comprehensive in their coverage of the organisations that contributed to the SQMS process that it sought to rationalise. However, they do not specify any objectives, or explain how the success and effectiveness of SQMS was to be measured. The only Guidance that is available is contained within the introduction to the SQMS manual that states:

"It [SQMS] should reduce administrative complexity for organisations and help to guide and support quality developments" (SQMS, 1993):

and in a later publication:

"We are fully committed to the on-going development of SQMS as a key means of ensuring continuous quality improvement in the supply of vocational education and training to meet the needs of business and individual learners." (SQMS, 1998)

In a publication to mark the tenth anniversary of the introduction of the Standard, SQMS Scotland Ltd suggested the following rationale for the development of SQMS:

"With the introduction of Scottish Enterprise, Highlands and Islands Enterprise and the Local Enterprise Networks, it was recognised that there was a need for coherence between the different agencies at the time. To achieve this, objectives were set to develop a quality system that would reduce overlap with, and complement, other Quality Assurance systems, alleviate excessive demands on education and training providers and, thereby, remove confusion.....The quality system that was devised incorporated the ideals, principles and good practices contained in other systems, including Total Quality Management (TQM)." (SQMS Scotland, 2003b)

It is perhaps significant that this statement, after some ten years of SQMS experience, confirms that the underpinning objective of SQMS was to implement TQM and continuous quality improvement and the inference is that this objective has been achieved.

2.02.4 Previous Research

As SQMS was developed using public finances and with the intention of applying it widely within the training and education sector, it would be reasonable to assume that it would have attracted the attention of a number of researchers with an interest in at least determining if it represented value for money. However, no research on SQMS could be found. The SQMS documentation makes reference to a research project undertaken in 1996 by SE when they commissioned research by consultants into the effectiveness of SQMS. The details of this “Early Impact Review” remain unpublished, but subsequently the SQMS documentation claimed that this research:

"Highlights its [SQMS] great strength as a quality development framework for providers of vocational education and training and points the way towards establishing SQMS as a truly national and potentially international standard". (Scottish Enterprise, 1996)

The second edition of the SQMS manual refers to this research and states that:

"we are confident that SQMS will continue to make a valuable contribution to the prosperity of Scotland". (SQMS, 1998)

The only published reference to the results of this research that the researcher could find appeared in a SE consultative document that contained the following quote:

"An Early Impact Review of SQMS conducted on behalf of SE and HIE in 1996 concluded that SQMS was working well as a tool for quality improvement but identified a number of weakness's (sic) in consistency of audit practice, credit transfer and external identification". The key recommendation was to set up an independent SQMS unit to increase the authority and autonomy at the centre. Following a tendering exercise, in February 1999 Babcock International was awarded the contract to run the SQMS Central Unit. An SQMS Standards Council will be established soon to take ownership of the SQMS standards, and will be responsible for developing, maintaining and reviewing those standards." (SE, 1999)

The cumulative impression given by these few references to the Early Impact Review was that SQMS was successful as an integrated management standard and its weaknesses were more procedural than structural. It appeared therefore that SQMS had the potential to prove to be a model for an integrated management standard with potential for wider implementation.

The researcher considered that the research commissioned by SE represented a valuable resource upon which to base subsequent data collection and analysis. He was therefore anxious to gain access to the research to examine its methodology to determine if it had sufficient rigour to qualify as a basis upon which to found further work. It was both

surprising and very disappointing that SE refused the researcher's request for access to this research, which was old and had been widely promulgated throughout the LEC network. At the time when the request to SE was made, it had commissioned further research by consultants into SQMS and the researcher expressed some concern about possible duplication compromising that research. However, not only was the researcher's request to have some involvement in its latest research refused, the consultants involved were given strict instructions by SE that they were not to discuss any aspect of the research with the researcher. This rather hostile reaction from SE had the effect of requiring the researcher to undertake his research in isolation and with a sense of "reinventing the wheel". (See Appendix 1)

2.02.5 The Adoption of SQMS

The Scottish Education Act of 1696, heralded the first National system of education in the World since ancient Sparta and it would appear that the Scottish system of education has been heralded as being superior to other countries ever since. The Scottish Qualifications Authority works extensively in a number of countries which have adopted the Scottish qualifications framework, such as Africa and China. The interest in SQMS from other countries around the World that was discussed in Chapter 1 should therefore not be surprising, as it is likely to benefit from the interest in Scottish educational institutions generally. However, SQMS has not been adopted by its next-door neighbour, England, despite the fact that the majority of training activity in both countries has been for National programmes sponsored by the U K Government, such as Employment Training, Modern Apprenticeships, Training for Work, New Deal and others and run by TECs in England and LECs in Scotland.

A Training Standards Council was established by the UK Government in 1997 to oversee the activities of an Inspectorate for England and Wales to "drive up the standards of training provision funded by TECs". It very quickly published an inspection framework in February 1998 that it proposed to apply to training providers and colleges in England and Wales. The framework was very different from SQMS, relying very much on inspection rather than the audit process that underpins SQMS. This difference is more than an exercise in semantics and the Inspectorate, as an independent body set up under Statute, enjoyed considerable authority that was enhanced by the publication of all their inspection reports on the internet.

The Training Standards Council was disbanded when the Learning and Skills Act 2000 established the Adult Learning Inspectorate (ALI).

When the Training Standards Council first published its inspection framework document, the researcher contacted its Chief Inspector, David Sherlock, in an attempt to determine if SQMS had been considered as an option. The specific questions asked of the Council were:

- If the aims and objectives of the Council differed in any way from those of SQMS.
- If SQMS was considered in detail for possible adoption by the Council.
- If it was not considered, why not?
- If it was considered and rejected, what were the reasons for this decision?

The Council confirmed that SQMS had been considered for possible adoption by the inspectorate, but they had determined that it was “not appropriate”. Further attempts to discover the reasons for this decision were not successful.

An analysis of the differences between SQMS and the ALI “Common Inspection Framework” was outside the scope of this research. However, as the populations and their training activities are to all intents and purposes identical, such analysis would greatly improve our understanding of the effectiveness of SQMS. Also, in view of the chronology of Quality Management that is contained in Chapter 4, an examination of the different approaches North (enlightened?) and South (Dark Ages?) of the Border should prove to be informative.

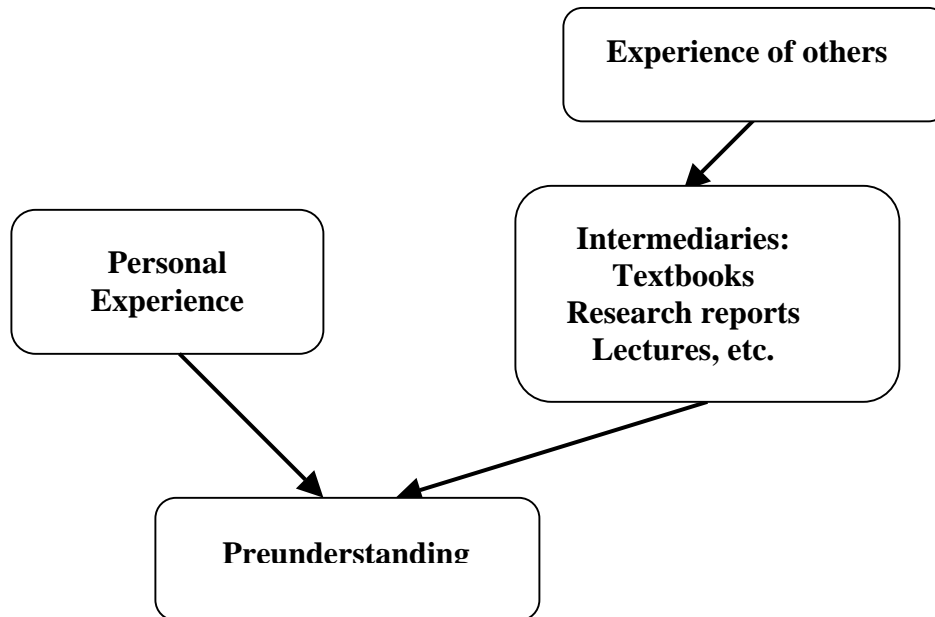
2.03 The Role of Preunderstanding

Schein, (1992) contends that the culture of organisations operates at three levels. Level one consists of the visible and physical symbols of what the organisation is like, such as open-plan offices. Level two is shaped by the espoused values of the organisation, some of which may be found in mission statements. However, Schein argues that research will not be correctly interpreted unless the researcher has uncovered the third level that consists of the underlying assumptions of which group members are often unaware but which usually influence strongly how they perceive, think and feel about issues. There is an important concept within Schein's argument that needed to be taken into consideration within the proposed research. The key aspect of Schein's third level that he considers to be particularly important for researchers to recognise is "of which group members are often unaware". If Schein's argument is inverted and considered from the perspective that the researcher is part

of the culture to be researched, then it follows that aspects of the culture of which he is unaware may well influence the researcher.

Gummesson, (2000) takes a different view and argues the personal experience and knowledge of the subject of the research is a necessary condition of good research. He describes this combination of previous study and personal experience as "preunderstanding" and contends that personal knowledge and experience is an essential part of the gathering and interpretation of information. The formulation of Gummesson's preunderstanding is illustrated in Figure 2.1 and he argues that the effectiveness of this preunderstanding is increased if the researcher or consultant has had experience of "decision making" and "responsibility" in the area to be studied.

Figure 2.1 Sources of Preunderstanding



Source: Gummesson, (2000, p 67)

The researcher's previous experience with a wide range of Standards and management activities over a long period represented a significant body of preunderstanding that would assist in capturing and interpreting the data. However, he considered it prudent to undertake some preliminary research in an entirely different environment as a cathartic exercise and one that might serve to sensitise him to possible areas of bias in the main research project. A number of options were considered and eventually a decision was taken to undertake preliminary research in an entirely different industry, but one that had an environment synonymous with a quality culture and familiarity with quality management systems and TQM.

The secondary objective of this preliminary research was an attempt to identify attitudes and best practice within a "quality" organisation that would provide a pointer for the subsequent SQMS research. This "practice run" would be used to gain an insight into the research process and would provide a model to inform the research into the SQMS organisations and to identify possible areas where research should be concentrated.

Having taken the decision to conduct this preliminary research it remained to identify an appropriate organisation to use as the subject. As SQMS has a quality management Standard at its core based upon the principles of ISO 9000 with elements of TQM bolted on, an organisation with a similar track record was required. Chapter 4 identified that ISO 9000 has its antecedents in Ministry of Defence (MoD) Standards and it seemed appropriate to examine the implementation and development of ISO 9000 and TQM within the MoD. Scotland is well served by MoD establishments and the researcher was particularly fortunate to gain the support of the senior management of one of these bases. For obvious reasons, this base will not be specifically identified, save to say that it is one of the 11 Royal Naval support depots in Scotland maintained by Naval Support Command. The quality management experience of the depot in question was very close to that of the SQMS organisations that were subsequently to be surveyed, insofar as it had achieved ISO 9000 Registration in 1993/94, being the year that most organisations had achieved SQMS. It was also pursuing a TQM policy and was actively working towards recognition as an Investor in People. It was therefore deemed to be suitable as a vehicle to identify areas of good practice and to identify where benefits had accrued from the quality programmes.

2.04 The Preliminary Research Case Study

In his seminal work on case study research, Yin, (1994) suggests that case studies should be used when one needs to answer "how" and "why" questions; when one has little control over behavioural events; or when the focus is on contemporary as opposed to historical events. He reminds us to always ask the question "what is this a case of?" If we apply the Yin's test and answer the last question first, the MoD example is a case of an organisation steeped in a history of Standards-based quality management seeking formal registration to ISO 9000. It is pointed out in the literature review that the MoD was largely instrumental in the creation of BS 5750 and, if the "how" and "why" questions can be answered, it was reasonable to expect them to provide a benchmark of best-practice against which organisations without such a pedigree could be measured.

The decision was taken to restrict the research to structured interviews with the Depot's Managing Director and Quality Manager and a framework for the interviews and the subjects to be covered had to be determined. It was important to ensure that, although the contexts were entirely different, the lessons learned from the research undertaken in the case study were capable of being transferred to the main study project. It was important therefore to frame the questions for the structured interviews in such a way that they would have transferability at a later date. The framing of the questions therefore had to take into account the particular circumstances applying at the Depot and those applying to SQMS organisations. The researcher identified the key areas for research as encompassing the motivation for adopting a quality management system, the benefits that had accrued from adopting a system, and perhaps most importantly, how those benefits were quantified and measured.

The ISO 9000 series contains an explanatory document, "BS EN ISO 9004-1:1994 Part 1 Guidelines" that sets out the things to be considered when contemplating and implementing a quality management system. This document was selected to form the basis of the structured interview questions for two reasons. First, it should have formed the basis for the implementation of ISO 9000 within the Depot and second, the recommendations contained therein could be used as a generic framework for the implementation of any quality management system, such as SQMS. Yin, (1994) contends that the first skill in case-study research is the ability to ask the right questions and of the content and structure of the questions was given considerable thought. Foddy, (1995) reminds us that;

"A necessary precursor to a successful question-answer cycle is that both researcher and respondent have a shared understanding of the topic under investigation" (p 36).

To ensure that there was a common understanding of the questions and what lay behind them, a narrative supplemented each question setting out the rationale behind the question and the issues that should be addressed in the answer. This was intended to ensure that there was no ambiguity within the questions and that they could not be deliberately or inadvertently misconstrued or misinterpreted.

One of the most surprising results of the preliminary research was the apparent absence of any belief in the underlying principles of quality management specified within the standards and specifically referred to within the questions. Little attempt appeared to have been made

to identify quality improvement objectives, or to measure any changes in process or performance as a result of the introduction of the Standard.

There was obvious discomfort and difficulty in answering questions related to quality plans and improvement objectives and this suggested to the researcher that this was the first time that these issues had been raised. This in turn raised questions about the effectiveness of the auditing system, when the Depot had succeeded in gaining registration to ISO 9002 without being able to meet these important criteria that one assumes would have been audited as a part of the registration process. At the time that the interviews took place the Depot had been subsequently audited on a number of occasions without any remedial actions related to these areas. As improvement is also one of the underpinning tenets of SQMS, this result reinforced the importance of probing the underlying approach to quality displayed by the organisations pursuing SQMS. It also sowed the initial seeds that led to interviewing SQMS auditors at a later date

Overall the preliminary research served to identify the key issues to be addressed in the subsequent SQMS research and, by completely changing the environment to a manufacturing and bureaucratic organisation addressing an entirely different Standard, avoided any predisposition on the approach to be adopted in the SQMS research. It also helped to put into perspective Gummesson's preunderstanding, when the researcher's previous knowledge and experience of ISO9000, proved invaluable in undertaking the case study and provided greater confidence in the positive contribution that this preunderstanding would make to the SQMS research activity.

2.05 Conclusions

There is no doubt that SQMS was an ambitious project, but despite this, the key objectives of the system do not appear to have been clearly defined. The judgement that the scant available literature invites is that there were two key objectives: to improve and sustain the standard of training delivery and to improve the management of the training organisations that were responsible for that delivery. This is very much a supply-side perspective and the SQMS Standard is more concerned with inputs and processes to ensure that a 'quality' service is being provided. This approach contrasts with that of the Adult Learning Inspectorate (ALI) that fulfils a similar function in England and Wales, but does so from the perspective of the individual learning experience. The ALI has developed a "Common

Inspection Framework”, which focuses on the experience of the individual learner. ALI inspectors gain evidence by observing learning as it takes place; interviewing significant numbers of learners and staff; and by examining learners' work and other documents relating to training, assessment, verification and qualifications (LMI, 2005). Conversely, SQMS auditors gain evidence by examining the management processes and verifying them through interviews with small sample of learners.

The history of SQMS that has been detailed in this chapter helps to explain the drivers behind its development and gives pointers to what it set out to achieve. The attitude of Scottish Enterprise to the researcher's attempts to get access to previous research suggests sensitivity to critical assessment of the Standard that is not in keeping with SE's role and continues to perplex. The researcher's familiarity with, and participation in, the industry in which the research was to be conducted and the possibility of unintentional bias through cultural conditioning may not seem important to the reader, but in view of the hostile reaction to the researcher from SE, which was the originator and custodian of SQMS, it was considered prudent to address this issue in case failure to do so would attract criticism. The concept of preunderstanding linked to the researcher's previous experience of Management Standards and of SQMS is also an important factor, as some may argue that personal experience is not a valid source for doctoral study. Gummesson, (2000) alerts us to the value of personal experience in research and the decision to undertake preliminary research in an attempt to overcome any potential bias served to maintain consciousness of the potential hazard that this previous experience could present. The way in which the preliminary research underpinned the subsequent research by identifying issues in a parallel environment was extremely useful in the subsequent design of the main research activity.

Chapter 3 Research Methodology

3.01 Chapter Synopsis

Philips and Pugh, (1996) provide a simple but insightful definition of a researcher when they say,

"The classic position of a researcher is not that of one who knows the right answers but of one who was struggling to find out what the right questions might be!" (p 48).

Saunders, *et al*, (2000 p 84) depict the research process as an "onion" to illustrate the issues underlying the choice of data collection methods. They claim that that there are important layers of the onion that need to be peeled away before the researcher can concentrate upon data collection methods. The process to be adopted in the research is driven by a number of factors that include the philosophy behind the research and any ethical and political considerations that may be necessary. These are explained and linked to some of the tensions described in the previous chapter. There were a number of aspects to the research that could not be incorporated into one research strategy, or research instrument. The importance of developing a research framework and testing the research instruments cannot be over-emphasised and this is explored in detail. The research population was large and the research instrument relatively complex necessitating a compromise between the aspirations of the researcher and the resources that were available. These tensions are explored and the resultant methodology for the collection of the data, the design of the instruments to be used and the implementation process is described and defended. Finally, a synopsis of the statistical processes used in the final analysis is set out.

3.02 The Research Process

3.02.1 Research Philosophy

Easterby-Smith, *et al*, (1996) suggest that there is a long-standing debate in the social sciences about the most appropriate philosophical position from which research methods should be derived. They suggest that two philosophical approaches have emerged, viz, positivism and phenomenology and these two views about the research process certainly dominate the literature. A summary of the principal differences between the two schools of thought is presented in Figure 3.1. Saunders, *et al*, (2000) extend the debate and examine what they describe as "deductive" and "inductive" research that they loosely align with the

positivist and phenomenological positions. They also alert us to the dangers of falling into the trap of thinking that one approach is better than another or that research will neatly fall into the positivist or phenomenological camps. It is certainly the case that the research described in this thesis do not neatly fit into either of these categories and the resources available will also be one of the drivers in the decision-making process.

Figure 3.1: Positivist versus Phenomenological Paradigms

| | <i>Positivist Paradigm</i> | <i>Phenomenological Paradigm</i> |
|------------------------------------------|--------------------------------------------------------|------------------------------------------------------------------|
| <i>Basic Beliefs:</i> | The world is external and objective | The world is socially constructed and subjective |
| | Observer is independent | Observer is part of what is observed |
| | Science is value-free | Science is driven by human interests |
| <i>Researcher should:</i> | focus on facts | focus on meanings |
| | look for causality and fundamental laws | try to understand what is happening |
| | reduce phenomena to simplest elements | look at the totality of each situation |
| | formulate hypotheses and then test them | develop ideas through induction from data |
| <i>Preferred methods include:</i> | operationalising concepts so that they can be measured | using multiple methods to establish different views of phenomena |
| | taking large samples | small samples investigated in depth or over time |

Figure 3.1 Source: Easterby-Smith, *et al*, (1996) p27

Easterby-Smith, *et al*, (1996) identify the strengths and weaknesses of each of these positions and the researcher believed that it was appropriate to combine the strengths of each of these positions in determining the philosophy to be followed for the research. The nature of the SQMS population and the nature of the questions to be answered suggested that a quantitative study of a large sample would provide the best data for subsequent analysis and the possible formulation of hypotheses, whereas qualitative data was required in order to reach an understanding of the quantitative information. Notwithstanding the advice given by Easterby-Smith, *et al*, (2000) to:

"be wary of glibly mixing methods simply for the sake of getting a slightly richer picture" (p 32);

the philosophy adopted was an amalgamation of the positivist and phenomenological approaches.

3.02.2 Political and Ethical Considerations

Easterby-Smith, *et al*, (1996) highlight the political nature of management research and alert us to some of the difficulties that this may present to the researcher. This was a significant factor in determining the research strategy, as the size of the SQMS sample would be dictated by the ease of gaining access to a database of organisations that were registered to SQMS. The initial response from SE to the researcher's request for access to their previous research as detailed in Chapter 2 was not encouraging and there was no reason to assume that this position would improve. The co-operation of SE in accessing the population was not critical to the research, but co-operation from SE would considerably reduce the amount of time necessary to compile the population database.

Easterby-Smith, *et al*, (1996) also draw our attention to the ethical considerations inherent in management research. One ethical issue that arose during the research raised questions of deception. Because of the researcher's position within the training industry he was well known to a number of organisations within the population and may also have been known to other members of the population, all of whom were competitors of the researcher's own organisation. The possibility that this relationship with members of the population could have an effect upon the reliability of the data collected had to be taken into consideration. A number of options were considered to overcome this potential bias in the data:

1. Employ a research assistant to "front" the research.
2. Undertake the research using a pseudonym.
3. Be as candid and open as possible with all stakeholders.

The first two options were discounted on the grounds that they were not ethically acceptable and would only add to any mistrust if this subterfuge were subsequently discovered. As it was the researcher's intention to publish aspects of the research at some stage any deception would immediately have been apparent and potentially controversial. The third option was therefore considered to be the only viable one and it was pursued. However, subsequent analysis of the responses from individuals known to the researcher was undertaken to determine if there were any significant differences between them and other respondents.

3.03 The Research Strategy

A number of researchers have described the various research strategies separately, while emphasising that they are not mutually exclusive and the success of the research depends on the way in which primary data are collected, analysed and produced (c.f. Churchill, 1995;

Easterby-Smith, *et al*, 1996; Ghauri, *et al*, 1995; Gill, *et al*, 1997; Philips and Pugh, 1996; Saunders, *et al*, 2000). These strategies are generally identified as:

- experiment;
- survey;
- case study;
- grounded theory;
- ethnography;
- action research;
- cross-sectional and longitudinal studies;
- exploratory, descriptive and exploratory studies.

Bell, (1993) submits that the researcher should make an informed choice of the approach to be used by studying the advantages and disadvantages of each approach as it is applied to the research questions. Wilson, (1996) reinforces this by reminding us that the aim of the method is to collect valid and reliable data and therefore no single method can be considered the best. The research was divided into three distinct elements, viz, the preliminary research; research into the SQMS population; and triangulation of the research. Each of these elements required a different research strategy.

The preliminary research was a one-off undertaking that lent itself to the adoption of an exploratory case-study approach, albeit somewhat limited in scope. This research was to be conducted through structured interviews with key personnel, addressing detailed questions for which prior notice had been given. This was considered sufficient to provide the "flavour" that was required.

The main study project necessitated a cross-sectional survey in order to allow sampling of the entire population across a wide geographical area. While the preliminary research provided a form of triangulation as a result of the similarities between the case study organisation and the SQMS population, more detailed triangulation while not essential would provide a useful counterbalance. This was attempted by conducting a series a structured, telephone interviews with a selection of the auditors who had been auditing the SQMS registered organisations in the population against the SQMS Standard. The intention behind this element of the research was to gauge opinions and perceptions of the performance of the population that could only be achieved through structured discussion.

3.04 Research into SQMS

3.04.1 Survey Research

The population of SQMS registered organisations was estimated to be circa 400, spread throughout the whole of Scotland with some in England. It was the intention to survey the entire population and the only way that this could realistically be done was through the medium of a self-administered, postal questionnaire. Fink, (1995a) defines a survey as:

“a system for collecting information to describe, compare or explain knowledge, attitudes, and behaviour”

and this very closely fits the requirements of the research in question. A number of researchers advocate the use of surveys to determine the characteristics of a large population in an inexpensive and reliable way. They contend that properly constructed questionnaires containing open or closed questions provide a powerful tool for researchers providing standardised data that is authoritative and can be compared with other sources of data. It also allows the researcher to control the research and not have to rely on other sources of data (see for example Babbie, 1998; Easterby-Smith, *et al*, 1996; Gill and Johnson, 1997; Saunders, *et al*, 2000; Wilson, 1996). These researchers also draw our attention to the criticisms and weaknesses of the survey approach, but on balance assert that the advantages far outweigh the disadvantages in many circumstances.

3.04.2 Questionnaire Design

Bickman and Rog, (1997) represent the weight of opinion expressed within the literature when they caution:

"no matter how big and representative the sample, no matter how much money is spent on data collection and what the response rate is, the quality of the resulting data from a survey will be no better than the questions that are asked."

Indeed there is a general consensus in the literature that the success of a survey will be determined to a very large extent by the amount of care taken in designing and compiling the questionnaire (see for example Belson, 1981; Foddy, 1995; Lodge and Tursky, 1981; Molenaar, 1982 ;).

The Early Impact Review undertaken by SE to determine the effectiveness of SQMS referred to in the previous chapter must have used some criterion on which to base its research, but there is no evidence to demonstrate what this may have been. This is unfortunate, as it would have given an indication what SE perceived to be the objectives of SQMS, which is not clear from the literature that is available. The broad objective of the research project was to

determine if SQMS had improved organisational performance. If so, what were the benefits and what were the disadvantages? Also, at the time the survey was being undertaken, SQMS was moving from a position of having been provided free of charge by the LEC network, to a system whereby charges were being levied on a commercial basis by a private organisation. Therefore questions regarding perceptions of value to the industry needed to be included.

Much of the literature on questionnaire design contains more advice on what not to put in to a questionnaire than advice on what to put in (see for example Alreck and Settle, 1995; Babbie, 1998; Bell, 1993; Churchill, 1995; Fink, 1995b; Rummel and Ballaine, 1963; Sheatsley, 1983). Belson, (1981p 24-27) provides a good example of this approach. He analysed 2,140 questions from 24 researchers and identified 16 categories of difficult questions generally recognised to generate response problems:

- Two in one
- Lot of meaningful words
- Include qualifying phrases or clauses
- Multiple ideas or subjects
- Difficult or information words
- Contain one or more instructions
- That start with words that are meant to soften them
- Difficult phrases
- Hypothetical questions
- Depend on prior questions for meaning
- Negative elements
- Inverted
- Including either "if any" or "if at all"
- Too long
- Include present and past tense

This advice and similar generic advice from Converse and Presser, (1986), Churchill, (1995) and Bourque and Fielder, (1995) was taken into consideration in designing the questionnaire for the SQMS research to ensure that it followed a format that was logical, simple to understand, avoided possible misinterpretation, and facilitated statistical analysis of the results. Specific advice on the design and content of questionnaires for surveys into quality issues was obtained from Grandzol and Gershon, (1998) and Madu, (1998) and a selection of questionnaires featured in the literature referred to in Chapter 3 were analysed and

compared. However, notwithstanding the advice of many researchers to adopt or adapt questions used in other questionnaires (see for example Saunders, *et al*, 2000 p 290), this technique did not prove to be very satisfactory and the questions that were included in the research were all designed by the researcher.

3.04.3 Questionnaire Format

One area where there does not appear to be a consensus in the literature is on the question of the length of the questionnaire. For example Adams and Gale, (1982) compared surveys with one page versus three pages versus five pages. They found no difference in response rates between one and three-page surveys, but did find a lower response rate for five-page surveys. Conversely, Saunders, *et al*, (2000) contend:

"The more specialised the population and the more relevant the topic the longer your questionnaire can be. Although the general rule is to keep questionnaires as short as possible, we have found that for within-organisation self-administered questionnaires an optimal length is six to eight A4 pages."

The researcher therefore considered that a questionnaire of some four A4 pages to a specialised population on a relevant topic struck a balance between the need to gather data and those who were likely to be put off by the length of the questionnaire.

The questionnaire was in double-sided, A3 format covering four full pages and was divided into thirteen sections. The first section was voluntary and sought details of the person completing the questionnaire. The second section sought details of the organisation, its size, turnover geographical area etc. The third section was only to be completed by organisations accredited ISO 9000 or Investors in People. The fourth section sought to establish the primary motivation for seeking accreditation to SQMS, and the fifth section sought to identify the respondent's general approach to quality. The sixth section tried to identify the starting point and the approach to gaining accreditation and the seventh section asked for experiences of the audit process. The eighth and ninth sections related to potential benefits that may have accrued since adopting the Standard, whereas the tenth section explored possible disadvantages. The eleventh section tried to determine the amount of time spent on quality related matters and twelfth section sought opinions on the overall value of the process. The final section invited additional comments on any matter.

3.04.4 Question Coding and Scaling

In view of the scale of the data being collected, it was the intention to utilise the computer program SPSS to analyse the data and it was therefore necessary to include some form of coding within the questionnaire design. Where opinions were sought, a Likert-types scale was used. Anderson, *et al*, (1983) suggest that the Likert scale has a number of advantages beyond the relative ease with which it can be applied. It is in widespread use and is therefore generally accepted by respondents and can be evaluated through standard techniques of item analysis, factor analysis and reliability analysis.

Bickman and Rog, 1997 p 359) argue that:

"in fact, 5 to 7 categories are probably as many categories as most respondents can use meaningfully for most rating scales."

The Likert scale that was finally used consisted of five categories: 1 strongly disagree, 2 disagree, 3 neither agree nor disagree, 4 agree, 5 strongly agree. This legend was repeated for every section where it applied. Where open questions were asked multiple-choice, pre-coded answers were provided in the form of tick boxes. The only un-coded question was in the final section where "any additional comments" were invited. A coding system was devised that was applied to this section retrospectively.

3.04.5 Pilot Testing

All the researchers cited in this chapter emphasise the need to pilot test any survey instrument to quite simply ensure that it does what is intended to do. The purpose of the pilot tests is to refine the questionnaire so that respondents will have no problems in answering the questions and there will be no difficulty in recording the data. It also provides an opportunity to make an assessment of the questions' validity and the likely reliability of the data that would result. A draft questionnaire was given to four people within training organisations accredited to SQMS for their comments on the structure and content. Two of the people were at a senior level and two were at an operational level and their observations were extremely helpful. A second draft was submitted to the researcher's supervisors at the University of Stirling and further changes were made to take account of their comments. A third draft was sent to 12 organisations within the training industry for their input and further changes were made. The fourth and final version was the one that was subsequently used and is attached as Appendix 3.

3.04.6 The Research Population

A number of studies have shown that one of the benefits of accreditation to ISO 9000 is the marketing benefit that derives from the Accreditation. (Buttle, 1996, Atwater and Discenza, 1993 and Haug, 1994) Many companies have reported increased business purely from being able to advertise the ISO 9000 logo. It is therefore surprising that no mechanism exists to identify organisations that are accredited to SQMS. Enquiries at SE elicited the response that they did not maintain a database of SQMS accredited organisations and, even if they did, the Data Protection Act would prevent them from revealing the organisations that it contained. Enquiries at individual LECs were not that much more fruitful. Five LECs in total were approached, none of which could provide comprehensive details of the training organisations in their area that were accredited to SQMS. The responsibility for the auditing of SQMS was passed in 1999 to SQMS Scotland Ltd, a commercial organisation, and an application was made to them for access to the database. Their initial response was also very guarded, as they claimed not have the authority to release information on SQMS accredited organisations. Eventually, they applied to SE for permission, which was subsequently granted subject to a number of conditions.

This contrasts with the efforts made by ISO accreditation bodies to ensure that ISO 9000 accredited organisation details are widely available.

The SQMS database was provided as hard copy and the data that it contained had to be input into a computer database as the basis of a mail merge. The final database contained 418 contacts that were described as registered to or actively working towards registration to SQMS. It was not possible to obtain an exact classification of the status of the organisations on the database, but a fairly accurate breakdown is as follows:

Table 3.1: Population Profile

| Classification | Database %age |
|----------------------------|----------------------|
| Company | 19.5 |
| College | 12.6 |
| Council | 8.7 |
| Voluntary Organisation | 11.3 |
| Careers Service | 2.0 |
| Local Training Provider | 31.5 |
| National Training Provider | 7.2 |
| Enterprise Trusts etc | 7.2 |

3.04.7 Questionnaire Administration

A number of researchers have highlighted the degree to which response rates can be influenced by the methods adopted to administer the questionnaire distribution. For example, Saunders, *et al*, (2000 p 308) review six techniques used in postal surveys that can raise response rates. These are:

| | |
|------------------------------|--------------|
| Prior notification | +19% |
| Pre-paid monetary incentives | +15% to +26% |
| Non-monetary incentives | +12% to +15% |
| Stamps on return envelopes | + 7% |
| Anonymity | +10% to +20% |
| Follow-up questionnaires | +12% |

The first of three options were not feasible for this research, but the last three options were. Bickman and Rog, (1997) are quite prescriptive in terms of the covering letter that should accompany any questionnaire. They urge researchers to;

"Keep to one page... and printed on professionally produced letterhead. This makes it clear who is sending out the survey and what the supporting institution is."

Consequently, 418 questionnaires were sent out, together with a comprehensive covering letter that guaranteed anonymity and a stamped return envelope to all the organisations on the SQMS database on 14 February 2000. Bickman and Rog, (1997 p 406) contend that:

"Even under the best of circumstances, you will not achieve acceptable levels of return if you do not send out any reminders".

A second batch of questionnaires was sent out on 6 March 2000 in an attempt to maximise the return. The covering letters were sent on University of Stirling headed paper and the return addressed envelopes were similarly addressed to the University of Stirling.

It was considered that this would lend more credibility to the research and help to dispel any concerns about the researcher's motivation as referred to above. As a last attempt to improve the response rate, a third and final letter was sent to those organisations that had not responded on 10 April 2000. This letter was very informal and unashamedly pleading. The last response was received on 17 July 2000. Examples of these letters form Appendix 2.

One of a number of conditions imposed by SE in providing access to the SQMS database was that Local Enterprise Companies were advised when the questionnaire was distributed. Consequently, an explanatory letter was sent to the 22 LECs in Scotland advising them of the research and inviting them to make further enquiries. Only two LECs responded to the letter and one (Glasgow Development Agency) requested a copy of the questionnaire and the

covering letter. The researcher received two telephone calls from respondents expressing concern that the local LEC representative had advised them not to complete the questionnaire. However, when they were given additional reassurance of the confidentiality of the information that they provided, they were content to complete the questionnaire. Copies of this correspondence forms Appendix 1.

3.04.8 Responses to the Questionnaire

Most researchers are quite vague on the subject of the rate of response that could normally be expected from postal questionnaires. This is understandable as the response rate will be subject to a number of variables, such as the nature of the population, the subject matter, the design of the questionnaire etc. Saunders, *et al*, (2000) refer to various research, including their own, and give examples of 15 – 20% response rates for postal questionnaires that they suggest could be the result of "questionnaire fatigue" and some with as high as 100% responses. However, they suggest that a 30% response for postal surveys is "reasonable" and concluded that 50% is "average" (p 158). A cursory examination of a number of studies that have been carried out in the area of quality management suggests the response rates below 40% are quite common (see for example Buttle, 1996 28%; Hareton, *et al*, 1999 37%). It would follow therefore; that any response rates above 50% would be considered good and anything over 60% would be considered to be very good.

Saunders, *et al*, (2000) suggest a formula for calculating the response rate from a survey of a sample. This is:

$$\text{Response rate} = \frac{\text{Total number of responses}}{\text{Total number in sample} - (\text{ineligible} + \text{unreachable})}$$

Of the original database, 25 organisations proved not to be working towards or registered to SQMS and were therefore ineligible and were discounted leaving a population of 393. A total of 283 responses were received of which 5 were unusable and 1 refused leaving 277 usable questionnaires for analysis.

This equates to a response rate of 70.5%. The statistics are detailed in Table 3.2.

Table 3.2 Questionnaire response rate statistics

| Questionnaire statistics | Number of cases | %age of cases |
|-----------------------------------------------|-----------------|---------------|
| Organisations Registered/working towards SQMS | 393 | 100.0 |
| Questionnaires returned from first mailshot | 77 | 19.6 |
| Questionnaires returned after second mailshot | 112 | 28.5 |
| Questionnaires returned after reminder letter | 94 | 23.9 |
| Total questionnaires received | 283 | 72.0 |
| Unusable questionnaires | 6 | 2.2 |
| Usable questionnaires | 277 | 70.5 |

Table 3.3 shows the very close correlation between the profile of the responses and the profile of the original population:

Table 3.3 Comparison of respondents to population

| Classification | Population %age | Response %age |
|----------------------------|-----------------|---------------|
| Company | 19.5 | 16.7 |
| College | 12.6 | 13.0 |
| Council | 8.7 | 10.8 |
| Voluntary Organisation | 11.3 | 10.8 |
| Careers Service | 2.0 | 1.8 |
| Local Training Provider | 31.5 | 31.4 |
| National Training Provider | 7.2 | 7.9 |
| Enterprise Trusts etc | 7.2 | 7.6 |

With the exception of the response from companies, which is slightly lower and councils, which is slightly higher, the responses fairly accurately reflect the composition of the population.

3.05 Alternative Method of Data Collection

3.05.1 Triangulation

Most researchers advocate the collection of data by more than one method as a means of ensuring its validity (see for example Babbie, 1998; Easterby-Smith, *et al*, 1996; Gill and Johnson, 1997; Saunders, *et al*, 2000; Wilson, 1996). Another advantage of using multi-method data collection is that it enables triangulation to take place. Triangulation refers to the use of different data collection methods within one study in order to ensure what Saunders, *et al*, (2000 p 99) describe as, "that the data are telling you what you think they are telling you". Bickman and Rog, (1997 p xviii) advocate triangulation in the following way;

"One method of enhancing validity is to develop converging lines of evidence... a clear hallmark of applied research is the triangulation of methods and measures to

compensate for the fallibility of any single method or measure. The validity of both qualitative and quantitative applied research is bolstered by triangulation in data collection".

In view of the fact that it was the intention to survey the entire population, strictly speaking triangulation would only be required if the response rate was particularly low. However, for reasons of good practice it was decided to triangulate if possible.

Deciding on an alternative method of data collection presented some difficulty in this research. As stated previously, the initial research provided a certain degree of triangulation, but it could attract criticism for being too superficial. Applying a different method of data collection to the SQMS population also presented difficulties, insofar as the entire population had been contacted in an attempt to gain their co-operation in the survey. The preferred alternative method would have been to arrange structured interviews with a selection of the population that did not respond in order to compare the results from the sample with those of the main survey. However, this also presented some difficulties insofar as the 30% of organisations that did not respond had ignored three separate attempts to persuade them to participate. They had therefore shown their unwillingness and, if they were pressed further into participating, this may have had an impact upon their attitude to the survey and subsequently on the responses that they gave. This option was therefore discounted.

The questionnaire included a question on the willingness of respondents to be subsequently interviewed in anticipation of undertaking some form of structured interview. While a significant majority agreed to be interviewed, the resources available to the researcher precluded undertaking much more than a 10% sample of respondents. In these circumstances it was unlikely that such an exercise would have formed a robust method of triangulation and this option was also discounted.

3.05.2 Selecting the Sample

The background to SQMS contained in the previous chapter explained the process by which organisations are audited against the Standard. A team of auditors contracted to SQMS Scotland Ltd undertake these audits as required. This "team" consists of a diverse group of individuals, consisting on the one hand of some who derive their entire income from SQMS audits, to others who undertake occasional audits from time to time. The collective experience that this group has of the evolution of the population going through the SQMS

process presented a valuable opportunity to contrast and compare their opinions with those of the respondents to the questionnaire. However, there was also the possibility that these opinions could contradict the results of the survey and not provide the triangulation required. If this proved to be the case it would highlight an additional dimension of the research that could prove valuable in its own right and validate the triangulation attempt. The preliminary research had also raised questions about the efficacy of audits when the MoD Depot appeared to have passed a number of audits against ISO 9002 without having espoused the principles and practice of ISO 9004. It therefore seemed prudent to examine the assessment process from the auditor's perspective if this proved to be possible. A decision was therefore taken to attempt structured interviews with a sample of SQMS auditors.

An approach was made to SQMS Scotland Ltd seeking their co-operation in persuading a selection of SQMS auditors to participate in structured interviews. Eventually SQMS Scotland Ltd advised the researcher that they had contacted all the auditors on their register and submitted details of 20 auditors who they claimed had agreed to participate. These details were compared to the database of SQMS registered organisations and it revealed that eight of the twenty auditors were attached to organisations that had participated in the original survey. It was not deemed appropriate to include these auditors in the interview process and their details were deleted from the list.

The auditors selected for interview were widely dispersed across Scotland and resources dictated that the interviews would have to be conducted by telephone. When contrasting the effectiveness of telephone interviews with that of face-to-face interviews, Groves, *et al*, (1998 p 430) argue that

"...research in the past two decades has suggested that there are few consistent differences in data quality between the two modes; and whatever differences may have once existed appear to be getting smaller over time."

Saunders, *et al*, (2000) contend that telephone interviews are perfectly acceptable in certain circumstances. They suggest that,

"It may also be appropriate where access would otherwise be prohibited because of long distances and you have been able to establish your credibility through prior contact, perhaps through correspondence, and made clear that your requirements are reasonable and guided by ethical principles." (p 268)

These criteria were met in a letter explaining the background to the research and seeking participation in a structured telephone interview that was sent to the remaining 12 auditors

on 26 November 2001. In addition to explaining the purpose of the interviews, the auditors were asked to prepare in advance statistics on the number and type of organisations that they had audited (as opposed to the number of audits undertaken). The purpose behind this question was to determine the level of experience of the auditors who participated. The initial response was very disappointing with only five auditors responding, but those who did participate pointed out that November and December were the two busiest months for SQMS audits. Consequently, a follow-up letter was sent to those remaining on 21 January 2002 to try and improve upon the response. By the end of February 2002 only one other auditor had responded, but one of the auditors who had responded offered to "gee-up" her colleagues to try and improve further on the response. However, this did not prove to be successful and ultimately only six auditors participated. Although this was a relatively small sample, the six auditors that participated claimed to have collectively audited some 269 SQMS registered organisations, which represents circa 64% of the population surveyed. It was therefore considered that their views and perceptions were relevant.

3.05.3 Structuring the Interviews

In order to achieve direct comparability between the data collected through the medium of the questionnaire and that collected by structured interviews with the auditors, it was essential to ensure that a very similar format was presented. The questionnaire had relied heavily upon a Likert-type scale between 1 and 5 to gauge respondents' perceptions of their own experiences. It was considered to be too difficult and confusing to apply the same process to the auditors who were being asked for their opinions and perceptions of the performance and actions of all the organisations that they audited. Bickman and Rog, (1997) suggest that; "When long, complex scales are presented by telephone, sometimes it is found that this produces bias simply because respondents cannot remember the categories well. Using scales defined by numbers can increase the reliability of a rating task performed on the telephone if numerous response alternatives are to be provided." Consequently, a Likert-type scaling was only applied to one category of questions and elsewhere options were confined to a "Yes" or "No". In order to apply the auditor's answers to all the organisations that they had audited, where appropriate they were asked to estimate the percentage of organisations to which their answer applied. For example, the answer to the question "Do organisations that you audit seek your advice on training and related issues?" had to be qualified with an estimate of the percentage of organisations that did or did not display this behaviour. Some may consider this to be a fairly blunt instrument of measurement, but a more accurate measure could not be identified that was compatible with the resources available.

The resulting interview structure very closely followed that of the original questionnaire, beginning with general information about the Auditor and then asking questions on the same themes as those asked of the SQMS organisations. An example of the questions asked is attached as Appendix 4.

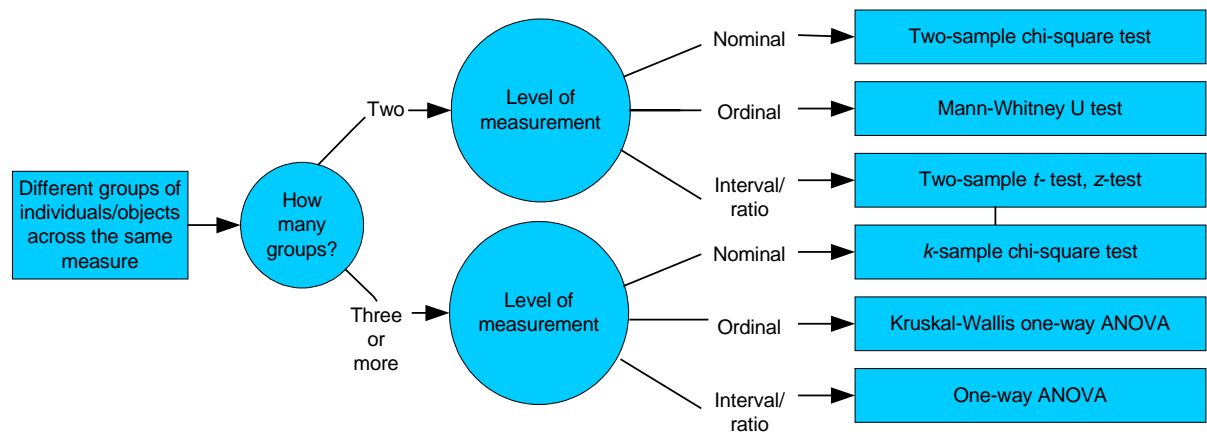
3.06 Analysing the Data

With some 60,000 pieces of information to analyse it was necessary to employ computerised techniques for data analysis and SPSS for Windows, Version 11 was used. This presented a formidable data input task that took some months to complete. When the initial input was complete the database and questionnaires were given to a third party to enable the input accuracy to be validated. Any errors that were highlighted in this exercise were subsequently rectified. As a result, there is a very high degree of confidence in the accuracy of the database on which all subsequent analysis was based.

Several statistical techniques were used to assist in interpreting the data collected through the questionnaires. These were mainly descriptive statistical techniques intended to quantify associations between various questions asked and variations in the data. The descriptive statistical tools used included mean, standard deviations and frequencies.

Cross-tabulations were used to compare and contrast the association of a number of variables throughout the questionnaire and these comparisons were subjected to appropriate statistical tests. Diamantopoulos and Schlegelmilch, (1997) offer a model of the most important and widely used techniques that is reproduced below and this model was used by the researcher to guide the selection of tests.

Figure 3.2 Statistical techniques for making comparisons



Source: Diamantopoulos and Schlegelmilch, (1997), P 174

3.06.1 Validity and Reliability

Notwithstanding the sophistication of the statistical techniques that are applied to any data set, the results of any data analysis will only be as good as the consistency of the data upon which it is based. Therefore, issues of reliability and validity are very important aspects of survey design to ensure that the research instrument achieves the set objectives. Babbie, (1998) contends that a research instrument would be valid if it can be shown to measure what it is supposed to measure and it will be reliable when it yields the same responses over time when administered to the same subjects. Easterby-Smith, *et al*, (1996) extend this question to incorporate generalisability and set out the considerations for the positivist and phenomenological viewpoints as indicated table 3.4 below.

Table 3.4 Issues of Reliability, Validity and Generalisability

| | <u>Positivist viewpoint</u> | <u>Phenomenological viewpoint</u> |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Validity | Does an instrument measure what it is supposed to measure? | Has the researcher gained full access to the knowledge and meanings of informants? |
| Reliability | Will the measure yield the same results on different occasions (assuming no real change in what is to be measured)? | Will similar observations be made by different researchers on different occasions? |
| Generalisability | What is the probability that patterns observed in a sample will also be present in the wider population from which the sample is drawn? | How likely is it that ideas and theories generated in one setting will also apply in other settings? |

Source: Easterby-Smith, *et al*, (1996) p 41

3.06.1.1 Validity

While acknowledging the importance attached to ensuring validity when gathering quantitative data, Easterby-Smith, *et al*, (1996) also recognise the difficulties associated with the task and cite a useful definition of validity by George Kelly as "the capacity of a test to tell us what we already know" (p 121). They go on to suggest three ways of estimating validity, but Litwin, (1995) extends this to four, viz: face, content, criteria and construct, where face validity refers to general plausibility; content validity refers to review by experts; criterion validity refers to confirmation by comparison with other similar instruments and construct validity is a theoretical longitudinal evaluation of the survey instrument undertaken to determine its effectiveness over time. The research instrument in this study was subjected to a combination of these factors in its design, evolution and analysis. It followed a comprehensive literature review that examined similar research instruments and it was subjected to extensive review by supervisors at the University of Stirling. It then passed through a rigorous pilot process before the final version was approved. In the researcher's opinion, the tests of validity that were applied were the most reasonable in the

circumstances. In addition factor analysis was used as a data reduction technique to identify underlying factors in key areas of the questionnaire. This also served to test construct validity.

3.06.1.2 Reliability

Litwin, (1995) suggests three methods for assessing reliability, viz: test-retest; alternate-form and internal consistency. Neither of the first two options was feasible in view of the nature of the study and the resources available to the researcher. Easterby-Smith, *et al*, (1996) point out that, in either of the first two options, no one can be sure that the individual, and other factors, have not changed between the two occasions when the data are gathered. Therefore, they advocate a similar approach to Litwin's third option that they describe as "equivalence reliability" or the extent to which different items intended to measure the same thing correlate with each other. One of the most widely used estimators of reliability for a set of questions and available in SPSS is Cronbach's Coefficient Alpha and this was used to determine the internal reliability of the questionnaire.

Cronbach, (1990) and Easterby-Smith, *et al*, (1996) suggest that a reliability coefficient of 0.5 to 0.6 is sufficient for achieving reliability and the higher the value, the higher the reliability. Cronbach's alpha test was applied initially at the pilot questionnaire stage as illustrated in Table 3.5 below. The Alpha scores are all in the range 0.74 to 0.97 with a mean alpha score of 0.84. These high alpha results suggest that the pilot research instrument was very reliable. Following the changes made as a result of the pilot process, Cronbach's alpha test was again applied to the final questionnaire as depicted in Table 3.6 and yielded alpha scores in the range of 0.70 to 0.99 with a mean of 0.85 suggesting that the questions contained in the final research instrument were highly correlated and the results of the data analysis should be reliable.

Table 3.5 Results of Cronbach's alpha for the pilot questionnaire (n=12)

| Section | Subject | No. of questions | Coefficient alpha |
|---------|------------------------|------------------|-------------------|
| 3 | Reasons why | 8 | 0.81 |
| 4 | Approach to quality | 11 | 0.79 |
| 5 | The starting point | 8 | 0.74 |
| 6 | The process | 8 | 0.78 |
| 7 | Potential benefits | 20 | 0.95 |
| 8 | Benefits Measurement | 20 | 0.97 |
| 9 | Possible disadvantages | 16 | 0.82 |
| | Mean | | 0.84 |

Table 3.6 Results of Cronbach's alpha for the research questionnaire (n=277)

| Section | Subject | No. of questions | Coefficient alpha |
|---------|------------------------|------------------|-------------------|
| 3 | Reasons why | 8 | 0.74 |
| 4 | Approach to quality | 11 | 0.70 |
| 5 | The starting point | 9 | 0.90 |
| 6 | The process | 8 | 0.84 |
| 7 | Potential benefits | 20 | 0.94 |
| 8 | Benefits Measurement | 20 | 0.99 |
| 9 | Possible disadvantages | 17 | 0.85 |
| | Mean | | 0.85 |

3.06.2 Other Statistical Techniques

A number of other statistical tests were applied to the data in order to better explain the significance of the results of the survey. The detail and results of these techniques are contained within Chapter 7 where the bulk of the analysis of the results of the research is reported. The researcher believes that the facility to relate the technique directly to the analysis will facilitate a better understanding of the results.

3.07 Conclusions

The old adage 'if you don't know where you're going any road will take you there' suggests that if you do know one clear route will be immediately identifiable. However, this chapter has demonstrated that navigating a research route is not quite so straightforward, requiring the consideration of a host of philosophical, strategic, political and ethical aspects. When these are determined, there remains the reality of the limited resources that are available to the researcher to undertake the research and the constraints that this imposes. Therefore, the choices of methodology, the design of the research instruments and even the tone adopted in the communications with prospective respondents combine to influence the quality of the responses and the final data upon which all the conclusions are based. Any research project reflects a compromise between these opposing influences and the 'trick' is to strike the right balance that will ensure a robust result that will be meaningful and translate to other situations. The decision-making process that underpinned this research followed a logical sequence that is described in this chapter and forms the foundation upon which the main research project is built. The design of the questionnaire, its complexity, the nature of the population and the overall administration of the data gathering process were determined through an analysis of the management research literature and informed decisions made on that basis. This demanded a significant degree of faith in the knowledge that there was only

“one bite of the cherry” and, if the decisions proved to be wrong, then the results were unlikely to be conclusive and the entire project would be compromised.

The results of the data gathering initiative were successful well beyond expectations, returning a response rate in excess of 70%, which was as unusual as it was welcome. This validated the decisions taken, increased the credibility of the data analysis and increased the level of confidence with which the results could be presented. The strength provided by the high response rate precluded the necessity for triangulating the results and the original intention to seek the views of SQMS auditors to support the findings was probably unnecessary. However, the preliminary research had stimulated a curiosity in the audit process and some work had already been undertaken on the design of the research process for this aspect of the research. Therefore, a decision was taken to proceed with this additional element, the results of which are examined in Chapter 7. This subsequently uncovered another dimension of the research that is probably worthy of further research activity.

Chapter 4 Quality Management and Standards

4.01 Chapter Synopsis

The main purpose of this thesis and the research that it records is to draw attention to the spread of Management Standards and to gauge the effectiveness of SQMS as the only identified example of an integrated Management Standard in the sense of incorporating the key functions of management. The reader may wonder therefore why prominence has been given to Quality Management and to Total Quality Management within this thesis, but not to the extent that it is covered as comprehensively as this important subject deserves. The answer is simply that Management Standards and Quality Management are inextricably linked, with some dimensions of the subject developing in tandem and others in parallel. SQMS, the main focus of this research, is considered by the architects of the system to be, *inter alia*, a TQM implementation tool. Therefore, no proper understanding of Management Standards development or SQMS can be achieved without examining Quality Management and Total Quality Management.

One of the inherent difficulties associated with discussing Quality Management and Total Quality Management is trying to condense what is probably the largest body of modern management research into something meaningful that encapsulates the essence of the subject, while at the same time conveying sufficient understanding to enable readers to appreciate its significance to Standards development and also to SQMS. The approach that has been adopted in this chapter is to look first of all at trying to define Quality Management and Total Quality Management and then identifying the “gurus” or “founders” upon which the analysis is based. A similar problem exists with the choice of Standards, which as detailed in Chapter 1, have proliferated in recent years. A chronological table of the emergence of Standards and Quality Management as they have evolved in the UK, the USA and Japan was chosen as the best way of illustrating the phenomenon, but it must be recognised that only a small sample of Standards has been included in this analysis, but hopefully enough to illustrate the relationship between the two.

4.02 The Emergence of “Quality”

4.02.1 The Evolution of Quality and Standards

The term ‘evolution’ means: the gradual development of something into a more complex or better form and this is particularly apposite in describing Quality Management and Management Standards which evolved from much simpler attempts to control the quality of manufactured products. The history of Management Standards is also to a large extent the history of quality management and it is from this perspective that the review must begin.

Views on the origins of quality are as diverse as those on its meaning, ranging from 3000 BC (Juran, 1995) to the 1980s (Lau and Anderson, 1998) with a variety of other dates in between. Feigenbaum, (1991) suggests that the evolution of quality was cyclical, with different eras changing within periods of circa 20 years. He suggests that this began with quality control at the beginning of the century, culminating in "total quality control organization-wide and total quality management" by the end of the century. A number of commentators have refined this approach into four such eras, viz. inspection, (statistical) quality control, quality assurance and total/strategic quality management (see Garvin, 1988, Dale, *et al*, 1990, Bounds, *et al*, 1994 and Dahlgaard, *et al*, 1998). Dahlgaard, (1999) notes that:

"The majority of quality theoreticians except Garvin's model of the quality evolution history, which consists of four different stages: inspection, statistical quality control, quality assurance and strategic quality management"

However, he points out that the quality evolution history varies from country to country.

The 1990s will be remembered as the decade of "quality". Martinez-Lorente, *et al*, (1998: p380) provide an analysis of the ABI-INFORM database that includes brief summaries of business articles published since 1986. The number of references with the terms TQM, Quality Management and Total Quality rose from a total of 58 in 1986 to a peak of 1,430 in 1993 and totalling 6,627 within the decade to 1996. This represents a phenomenal interest that extends around the world leading to headlines such as Industry Week's:

"If ISO 9000 were a disease, it would qualify as an epidemic" (Kinni, 1994).

The sheer volume of published works on the subject of quality precludes a pedantic rumination of the bulk of this literature, but necessitates a filtering and funnelling-down into more manageable proportions, while still maintaining the essentials of the subject matter.

This has proved to be a formidable task, not least because of the difficulties in establishing concise criteria as a mechanism for filtering out peripheral literature.

The growth of the quality movement has been so significant and the approach of its proponents so passionate that many writers have likened it to a religion and the strength of its support to religious zeal. For example, McDonald, (1998) suggests:

“The customer is seen as having made a declared act of faith in both the product and the supplier (or guru). Such an environment encourages a religious fervour in which many of the brethren become zealots blind to any doubts. This is exactly what happened in the quality movement.”

This religious metaphor is a useful mechanism for describing the quality movement, which has developed a number of denominations and has its share of apostles and false prophets. While there are undoubtedly disciples of quality who do not question its commandments, there are also a number of doubting Thomases that have attacked it vociferously and relentlessly and see little to commend it to the masses. However, as Edmund Burke is reputed to have said "Man is by his constitution a religious animal" and there are many who seek a 'one best way' of life.

4.02.2 Defining Quality

Such a high level of interest and application would lead one to believe that "quality" would be a very clearly defined concept and one that defied ambiguity. However, this does not appear to be the case and there is no clear understanding of what quality is or what it should be. Munro, (1995) suggests:

"Quality's elusiveness to definition appears to be part of its resources" (p 130).

Dalrymple & Drew, (2000) seek to extend the meaning of quality to include total quality management, self-assessment excellence models, the term 'excellence', defect levels and quality of features, products or services. Therefore, to many people "quality" is becoming an all-encompassing term for management.

The elusiveness of the definition for quality as a generic term arises from the application of the word to aspects of quality control, quality assurance, total quality control, total quality management, quality management systems and business excellence. It follows therefore that the definition will to a large extent be dependent upon the category of quality being discussed. For example, Martinez-Lorente, *et al*, (1990: P 378) contend that, in the case of

total quality, almost every writer on the subject has their own definition that has been devised to suit their own beliefs, prejudices and business and academic experiences. They suggest that this difficulty extends to those organisations that have introduced TQM approaches, leading to a proliferation of unique definitions which confound comparison. They argue that there is ample evidence that writers and researchers do not stick to the international definition of quality in ISO 8402 (1994), but create their own unique offerings. Watson and Korukonda, (1995) conclude that, "Quality certainly seems to mean different things to different people depending on their expectations and background" (p 100). They then go on to identify seven different interpretations of quality proposed in the literature and make the point that this is only a selection.

An example of a need for a pluralistic definition of quality can be seen in the definition of quality provided by the Institute of Quality Assurance, (2001),

"In its broadest sense, quality is a degree of excellence: the extent to which something is fit for its purpose. In the narrow sense, product or service quality is defined as conformance with requirement, freedom from defects or contamination, or simply a degree of customer satisfaction. In quality management, quality is defined as the totality of characteristics of a product or service that bears on its ability to satisfy stated and implied needs. Quality is also rapidly embracing the nature or degree of impact an organization has on its stakeholders, environment and society."

Reeves and Bednar, (1994) explore four definitions of quality: excellence, value, conformance to specifications and meeting and/or exceeding expectations. They also undertook a useful analysis of the strengths and weaknesses of each of these definitions that is reproduced below in Table 4.1. and concluded that a global definition of quality does not exist and that different definitions are appropriate in different circumstances.

4.02.3 The Language of Quality

Whatever the difficulties of definition may be, there is a consensus among the various commentators that the central tenet of quality and its definition is the customer. Juran (1988a: 3.2) emphasises the importance of the customer and defines quality in two ways. First, that "quality consists of those product features which meet the needs of the customers and thereby provide product satisfaction" and, "quality consists of freedom from deficiencies".

Table 4.1 The strengths and weaknesses of quality definitions

| Definition | Strengths | Weaknesses |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Excellence | Strong marketing and human resource benefits Universally recognisable - mark of uncompromising standards and high achievement | Provides little practical guidance to practitioners Measurement difficulties Attributes of excellence may change dramatically and rapidly Sufficient numbers of customers must be willing to pay for excellence |
| Value | Concept of value incorporates multiple attributes Focuses attention on a firm's internal efficiency and external effectiveness Allows for comparisons across disparate objects and experiences | Difficulty extracting individual components of a value judgment Questionable inclusiveness Quality and value are different constructs |
| Conformance to Specifications | Facilitates precise measurement Leads to increased efficiency Necessary for global strategy Should force disaggregation of consumer needs Most parsimonious and appropriate definition for some customers | Consumers do not know or care about internal specifications Inappropriate for services Potentially reduces organisational adaptability Specifications may quickly become obsolete in rapidly changing markets Internally focused |
| Meeting and/or Exceeding Expectations | Evaluates from customer's perspective Applicable across industries Responsive to market changes All-encompassing definition | Most complex definition Difficult to measure Customers may not know expectations Idiosyncratic reactions Pre-purchase attitudes affect subsequent judgments Short-term and long-term evaluations may differ Confusion between customer service and customer satisfaction |

Source: Reeves and Bednar (1994 p 442)

Similarly, Ishikawa, (1985) identifies the customer's central role in quality control when he says:

"to practise quality control is to develop, design, produce and service a quality product which is most economical, most useful, and always satisfactory to the customer" (p 44).

Feigenbaum, (1991) adds his voice to the others when he defines quality as "the total composite product and service characteristics of marketing, engineering, manufacture, and maintenance through which the products and service in use will meet the expectations of customers" (p 7). Bergman and Klesfsjo, (1994) define the quality of a product as ability to satisfy the needs and expectations of the customers through its reliability, durability, safety, faultlessness, ascetics, environmental friendliness, serviceability, and performance. Finally, Oakland, (1996) should be congratulated on his brevity when he contends that:

"quality is simply meeting the customer's requirements" (p 4).

The customer is therefore the foundation upon which most accepted definitions of quality have been constructed.

Reeves and Bednar, (1994) draw attention to the manufacturing origins of quality and how this has affected the definitions advanced by the various Gurus. They identify the difficulties of applying the various definitions of quality to services and highlight changes in the way the most prominent thinkers defined and approached quality over four decades from 1950 to 1990. They correlate these changes with the increased importance of services during the same period. (See for example Dale, *et al* 1997).

The question of language is vitally important, as the absence of clarity in a language must inevitably lead to misunderstanding of the concept and to criticism from detractors.

Kelemen, (2000) argues that the use of language is central to the 'production' and 'consumption' of TQM practices and that the interpretation put on TQM language by employees is impossible to predict. McLachlan, (1998) suggests that,

"The fault, for indeed fault it is, lies not with the standard but with the interpretation and implementation of the requirements of the standard".

Seddon, (1997), illustrates this point quite vividly when he criticises "defenders" of ISO 9000 who contend that, "It's OK if you do it properly" (p 45).

He suggests that this is the favoured argument of those who make their living from ISO 9000 who would have us believe that there are good and bad ways of "doing ISO". He contends:

"It is a terrible argument. How many good ways? How many bad? How will we know? Who can we trust to tell us? How many have suffered at the hands of bad advice or misguided interpretation and what has this already done to competitive performance? How is a manager to make a choice? How can it be a decision based on the confidence that one can predict an improvement in performance? Should managers just soldier on in the hope that they hit on the right answer or find the right advice? How many sources of advice should they tap before they are satisfied that the one they choose to follow is that the right thing to do for their business?".

While quality remains the “slippery construct” that Watson and Korukonda (1995) allege, these questions will prove difficult to answer. However, for reasons of contextual uniformity and clarity of expression, the single word quality is used throughout this thesis in the way that Dalrymple and Drew, (2000) suggest to describe the various approaches that have a basis in quality control, quality assurance, quality management, total quality management and business excellence.

4.02.4 The Theory Underpinning the Management of Quality

In the plethora of published works on quality and total quality there has been relatively little published on theory development. The bulk of published works are the result of a special issue of the Academy of Management Review in July 1994 in what was described by Dean and Bowen, (1994) as a “Theory-Development Forum”. In this special issue Reeves and Bednar, (1994) explored the various ways in which quality was conceptualised in the literature and offered advantages and disadvantages for each. Spencer, (1994) highlighted similarities between Total Quality and a diverse array of theoretical perspectives and discussed the similarities and differences between three models of organisation, viz; mechanistic, organismic and cultural. Waldman, (1994) considered a system-focused perspective based on an integration of the total quality perspective and management theory and research. Sitkin, Sutcliffe and Schroeder, (1994) argued that there are two approaches to TQM, viz “total quality control” and “total quality learning”. They proposed a “Contingency Model of TQM Effectiveness” which they argued:

“stresses the importance not only of the shared precepts that bind different TQM approaches together, but also of the fundamentally different principles and practices that distinguish TQC and TQL and make them complementary”.

Deming, (1986) expressed the view that his “Principles for Transformation of Western Management” constituted the definitive management theory. He stated:

“There is now a theory of management for improvement of quality, productivity, and competitive position. No one can ever again claim that there is nothing in management to teach.... Experience alone, without theory, teaches management nothing about what to do to improve quality and competitive position, nor how to do it.... The theory in hand need not be elaborate. It may only be a hunch, or a statement of principles. It may turn out to be a wrong hunch” (p 19).

A number of researchers have undertaken conceptual syntheses of Deming’s management methods as outlined in his writings and other literature on the Deming management methods. From these analyses, they propose a theory to underpin TQM (Gartner and Naughton, 1988,

Handfield and Melnyk, 1998, Hillmer and Karney, 1997& 2001, Rungtusanatham and Schroeder, 1994, Rungtusanatham, *et al* 1998).

All these researchers examined the relationship between total quality and existing management theory and identified areas in which management theory and total quality were essentially identical, areas in which management theory could improve the practice of total quality, and areas of total quality which required further research.

Apart from Boaden, (1996) who questioned if TQM was really unique or just recycled management techniques from other sources and Leonard and McAdam, (2001) who advocated a grounded theory methodology for TQM research, the debate did not advance much until revisited by Dale, *et al*, (2001). While concentrating purely on TQM, they analysed the contribution made by the seven main quality "experts", viz. Crosby, Deming, Feigenbaum, Juran, Ishikawa, Shingo and Taguchi and concluded:

"The quality experts have provided a range of frameworks for the introduction and development of TQM and various approaches for managing and improving quality. This work has provided the basis for the development of TQM theory, however, more empirical data and testing are necessary if TQM theory is to be developed and if TQM is to become accepted as an academic subject in its own right." (p446)

They argue that TQM comes from a different background from most management theory, originating from the practice of management that looks at organisations as "holistic" systems. They point out that all the internationally recognised TQM experts largely agree on best practice - in spite of major cultural differences in their backgrounds and practical experiences. They invite us to consider the premise that TQM is unique in two ways. First, accepted best practice has been used as the basis of a number of assessment instruments leading to quality awards; and second, participants in the award processes over the years have contributed to a very significant body of knowledge that could inform the theory-building process. They further suggest that TQM "is breaking the mould" by promoting experimentation through "action research".

4.02.5 TQM and Classical Theory

Having laid down this foundation for an embryo TQM theory, Dale, *et al*, (2001) then present us with a table that they suggest demonstrates "the contribution which TQM has

made with respect to the classical theories of management". This table is reproduced below as Table 4.2.

Table 4.2. Contribution of TQM with respect to the classical theories of management

| Theory originator | Description | TQM contribution |
|--------------------------|--------------------------------------------------------|----------------------------------------------------------------------|
| Frederick Taylor | Scientific management | Management by facts, tools and techniques of TQM and problem-solving |
| Henri Fayol | Planning and organization | Business process management |
| Max Weber | Theory of social and economic organization | Leadership, empowerment and performance management |
| Alfred Sloan | Decentralized multi-divisional organization | Business process management |
| Elton Mayo | Hawthorne experiments | business process re-engineering |
| Douglas McGregor | The human side of enterprise | Motivation and employee satisfaction |
| Peter Drucker | Decentralization, management leading, focus on results | Employee motivation, empowerment, involvement and participation |
| Meredith Belbin | Team characteristics | Leadership, goal deployment and process-focus |
| Charles Handy | Internal culture | Team dynamics and team work |
| John Adair | Leadership | Culture, values and communication |
| Henry Mintzberg | Leadership, strategic planning and management | Leadership and commitment |
| | | Leadership, vision, mission and policy deployment |

Source: Dale, *et al*, (2001)

Despite the obvious correlation that exists between many of the principles of TQM and the key concepts expressed in the theories they highlight, there are also a great number of irreconcilable differences. For example, Dale *et al*, (2001) refer in their table to the works of Mintzberg and infer a close correlation with his approach and that of TQM. However, Mintzberg, (1973) argued that the manager's job can be described in terms of the various roles, or organised sets of behaviours identified with the position. He categorised these roles as interpersonal, information and decision, and claimed that they were inter-linked and flow from the formal authority and status that is a prerequisite of the managerial role. Mintzberg, (1975) went on to identify what he claimed to be "four myths about the manager's job that do

not withstand careful scrutiny of the facts. He described as "folklore" that:

1. The manager is a reflective, systematic planner;
2. The effective manager has no regular duties to perform;
3. The senior manager needs aggregated information, which a formal management-information system best provides;
4. Management is, or at least is quickly becoming, a science and a profession. (pp 50-56)

A detailed analysis of the differences between TQM and the body of management theory is outside the scope of this thesis, but a brief synopsis of the theories that should militate against the adoption of Standards-based approaches are worthy of mention.

The belief that there is 'one best way' to manage organisations has existed for a long time (Smith, 1776; Taylor, 1911; Fayol, 1949) and tended to hold sway until the 1960s when researchers identified other dimensions of organisational dynamics (Burns and Stalker, 1961; Fox, 1966; Lawrence and Lorsh, 1967; Perrow, 1970; Woodward, 1970; Child, 1972; Peters and Waterman, 1982; Mintzberg, 1973; Gross and Etzioni, 1985; Handy, 1986; Mullins, 1993; Hofstede, 1994; Kanter, 1997). The theme of revolutionary organisational change, largely fuelled by rapid technological advance, has been a feature of the literature of the last quarter of the 20th century (Toffler, 1970; Bennis, 1973; Peters, 1989) pointing more towards a contingency approach to management and a general acceptance that organisations differ and that these differences, particularly of technology and environment, would be reflected in the structures that evolved through the strategic choices of the stakeholders.

Other researchers have asked 'what do managers do?' (Stewart, 1963, 1967, 1975, 1976, 1981, 1988, 1991, 1992; Mintzberg, 1973; Stewart and Marshall 1981a, 1981b), whereas others asked 'how do they do it?' (Kotter, 1982; Mangham and Silver, 1986; Tate, 1995) and concluded that

- Managing is less predictable than claimed.
- Managers have little free time to think, plan and organise themselves.
- Managers are not strategic, reflective or proactive, and seem to prefer live action and interacting with others at a fast, non-stop pace.
- Managing is a highly interactive, flowing process, not a neat structure of cause and effect.

- The success of managing depends more on the individual person than on the tasks performed.
- The manager's job is primarily oral and most information is stored in the head.
- There are wide differences in the manager's job as practised and required.
- Influences are the industry, the company, the environment, current situations and temporary issues.

Kruger, (2001) is one of a number of researchers who argue that the main quality gurus adopted much of Taylor's scientific management approach and Juran, (1988) agrees that Taylorism resulted in the separation of the quality function from the work and credits the Japanese quality superiority in the post-war period to their delegation of authority for quality to the individual worker or team (p 106). However, Taylor's scientific management approach is certainly inherent in the Standards-based approach to management and is therefore in conflict with the theories summarised above. Mintzberg's research and that of others mentioned above suggested that generally managers do not work according to procedures prescribed by scientific analysis and that management scientists and their methods have had little impact on how well managers actually work. Mintzberg advocated the improvement of individual managers and their skills base, whereas it is this and other researcher's view that TQM, like Taylorism, requires and presupposes a high level of skill and individual management expertise (Beer, 2003).

4.03 Total Quality Management

4.03.1 What is TQM?

Watson and Korukonda, (1995: p 101) offer a useful starting point for any analysis of the literature on TQM when they observe:

"It can be seen at once that the deluge of implementation and exhortation on TQM without much thought to the building of a sound theoretical foundation has led to a state of confusion, ambiguity, and uncertainty."

Macadam, (2000: p 316) suggests that the reason for much of the confusion in TQM discourse is the failure to observe pedagogy within the field:

"Thus, reference to TQM may be to a philosophy, theory, implementation framework or simply tools and techniques."

However, he asserts that the continual rapid change in TQM and the emphasis on applications has resulted in theoretical analysis of the historical and discursive elements being neglected. Chiles and Choi, (2000: p 185) support this view when they say:

"Born out of management practice, the principles of TQM have had a profound and unparalleled impact on modern business history. However, as a body of practical knowledge, TQM has been largely atheoretical. As a consequence, this important management philosophy has remained amorphous and shrouded in considerable conceptual haziness and ambiguity."

This difficulty is succinctly described by Hackman & Wageman, (1995) in their analysis of TQM when they assert that:

"Had we attempted to organize our thoughts around contemporary TQM practice rather than use the philosophy and prescriptions of the TQM founders as our point of departure, it [their paper] would have been impossible to write" (p 338).

The filtering process is further complicated by the different ways that quality has developed, with differences between countries and ideologies. Particularly within the United Kingdom, quality assurance, as exemplified by ISO 9000, has a more solid historical base than total quality management (TQM). At first it would appear that these two evolutionary lines are converging with ISO 9000 often being advocated as a building block of TQM. (See for example MacDonald, 1997; van der Wiele, *et al*, 1997). However, like railway lines, which at first glance appear to meet in the distance, the closer one tries to get to the point at which they converge, that convergence is seen to be an illusion and it turns out that they are in fact parallel lines that, perhaps, will never meet. (cf Corrigan, 1994; Taylor, 1995b; Kanji, 1996; Grint, 1997; Seddon, 1997; van der Wiele and Brown, 1997; Bryde and Slocock, 1998; Conti, 1999; Laszlo, 2000; Russell, 2000; Dwyer and Keating, 2001)

There is a small number of "gurus" or "founders" (Hackman and Wageman, 1995) that are universally accredited with having 'invented' TQM. The irony of this acknowledgement is that none of the Gurus used the term and it was not used during the first decade of what has been described as the "Western Quality Revolution" (MacDonald, 1998). In addition to having not used the term, Deming in particular has been quite scathing about its use and meaning. He said:

"The trouble with total quality management, the failure of TQM, you can call it, is that there is no such thing. It is a buzzword. I have never used the term, as it carries no meaning". (Deming, 1994, p 22).

Senge, (1992) quotes Deming as saying

"The term is counter-productive. My work is about a transformation in management and about the profound knowledge needed for the transformation. Total quality stops people from thinking".

Juran, (1994b) held a similar view, although he was prepared to give the term meaning when he said,

"It is astounding how the term TQM is tossed about without defining what it means. To me, TQM consists of those actions needed to get to world-class quality. Right now, the most comprehensive list of those actions is contained in the Baldrige Award criteria..." (p 32).

There is also little agreement on when the term was first used. Feigenbaum is given the credit by some researchers on the strength of his work on Total Quality Control (Bendell, 1991, Stevens 1994 and Morehouse, 1996). However, a cursory examination of Ishikawa's work suggests that his philosophy is closer to the current TQM framework. MacDonald, (1998) claims that the Department of Trade and Industry in the UK was the first to use the term in 1983 with the launch of their national quality initiative. No matter where the term originated, Martinez-Lorente, *et al*, (1998) claim that the term became common in literature in the late 1980s peaking in 1993.

4.03.2 Defining TQM

The definition of total quality management is a far more complex matter than the definition of quality. Watson and Korukonda, (1995: p 101) articulate a view that occurs frequently in the literature when they say:

"If quality is such a slippery construct, not surprisingly, TQM seems to be a close cousin. Definitions and descriptions of TQM abound in the literature and probably there are as many of them as the number of authors or the number of organizations that have implemented it".

Lau and Anderson, (1998) observe:

"One of the most striking features of TQM literature is the absence of any uniform definition of total quality management... Constructing a universal definition of TQM is impossible since definitions are affected by a particular managerial situation or problem. For example, the July 1995 special issue of *Quality Progress* presents 13 articles on TQM and 12 of them give different definitions of TQM" (p 86).

Dean and Bowen, (1994) comment:

"Despite thousands of articles in the business and trade press, total quality remains a hazy, ambiguous concept." (p 393).

One would expect a more uniform approach to be available in the various quality standards.

However, BS 8402(1994: p 6) defines TQM as:

"a management approach to organization, centred on quality, based on the participation of all its members and aiming at long-term success through customer satisfaction, and benefits to all members of the organisation and to society".

BS 7850 (1992: p 6) offers us the following definition of TQM:

"Management philosophy and company practices that aim to harness the human and material resources of an organization in the most effective way to achieve the objectives of the organization".

ISO 9000:2000(2001) defines TQM as "quality management of an organisation comprising the entire organisation". This definition is further amplified through notes.

The special issue in 1994 of *The Academy of Management Review* made a significant contribution to refining definitions of TQM (Anderson, *et al*, 1994; Dean and Bowen, 1994; Sitkin, *et al*, 1994; Spencer, 1994). Hackman and Wageman, (1995) undertook an extensive analysis of the components of TQM by reverting to the philosophies of whom they described as the "founders" of the movement. Martinez-Lorente, *et al*, (1998) make reference to several writers who have tried to define the different dimensions that shape TQM. Whilst acknowledging the differences between the development and application of TQM between countries and cultures, they suggest that increasing globalisation is eroding these differences.

4.04 The Gurus Compared

While the general thrust of the gurus' message is reasonably consistent, there are significant differences in their approaches. These differences have been widely commented upon and Chatterjee and Yilmaz, (1993) express a widely held view when they say:

"The evidence of contradictory advice abounds. Consider the following prescriptions of four of the leading gurus mentioned above: Juran advocates setting quality objectives and managing the quality plan according to those objectives. On the other hand, Deming is strongly opposed to management by objectives as well as the use of merit ratings and slogans to achieve objectives. Peters favours rallies, slogans, and rewards to promote excellence. Crosby is against material rewards but recommends recognizing contributions toward the quality effort. He also recommends zero defects as a quality objective, whereas Juran and Deming are against this because the inherent variability in all processes renders such an objective unrealistic."

Flood, (1993) undertook a useful analysis of the strengths and weaknesses of the main messages and this is reproduced below as Table 4.3.

As an introduction to the question of the origins of the theory underpinning the management of quality, it may be sufficient at this stage to leave the final comment to MacDonald, (1993):

"mindlessly following a guru is a recipe for disaster. Gurus, consultants, and practitioners can never be more than facilitators to assist organizations to think and then develop approaches that best fit the organizational culture.... In reality,

the concepts of the quality gurus were neither revolutionary nor even particularly new. They represent a return to common sense in the management of business. The real contribution of the gurus has been to refocus the eyes of management and light up areas that had become hidden by previous periods of mindless management”.

Table 4.3 The relative strengths and weaknesses of some of the quality gurus

| Guru | Strengths of approach | Weaknesses of approach |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Feigenbaum | Provides a total approach to quality control Places the emphasis on the importance of management Includes socio-technical systems thinking Participation by all staff is promoted | Does not discriminate between different kinds of quality context Does not bring together the different management theories into one coherent whole |
| Deming | Provides a systematic and functional logic which identifies stages in quality improvement Stresses that management comes before technology Leadership and motivation are recognized as important Emphasizes role of statistical and quantitative methods Recognizes the different contexts of Japan and North America | Action plan and methodological principles are sometimes vague The approach to leadership and motivation is seen by some as idiosyncratic Does not treat situations which are political or coercive |
| Juran | Emphasizes the need to move away from quality hype and slogans Stresses the role of the customer both internal and external Management involvement and commitment are stressed | Does not relate to other work on leadership and motivation Seen by some as undervaluing the contribution of the worker by rejecting bottom-up initiatives Seen as being stronger on control systems than the human dimension in organisations |
| Ishikawa | Strong emphasis on the importance of people and participation in the problem-solving process A blend of statistical and people-oriented techniques Introduces the idea of quality control circles | Some of his problem-solving methods seen as simplistic Does not deal adequately with moving quality circles from ideas to action |
| Taguchi | Approach pulls quality back to the design stage Recognizes quality as a societal issue as well as an organisational one Methods are developed for practising engineers rather than theoretical statisticians Strong on process control | Difficult to apply where performance is difficult to measure (e.g. in the service sector) Quality is seen as primarily controlled by specialists rather than managers and workers Regarded as generally weak on motivation and people management issues |
| Crosby | Provides clear methods which are easy to follow Worker participation is recognized as important Strong on explaining the realities of quality and motivating people to start the quality process | Seen by some as implying that workers are to blame for quality problems Seen by some as emphasizing slogans and platitudes rather than recognizing genuine difficulties Zero defects sometimes seen as risk avoidance Insufficient stress given to statistical methods |

Source: Based on the analysis of Flood, R.L. (1993)

4.05 A Chronology of Quality Management and Standards

4.05.1 Evolution

Table 4.4 is an attempt to chronicle the notable milestones in the development of quality and Standards from an analysis of the literature that included, Morrison, (1985), Garvin, (1988), Dale, *et al*, (1990), Oakland, (1990). Feigenbaum, (1991), Bounds, *et al*, (1994), Bregman and Klefsjo, (1994), Watson and Korukonda, (1995), Blackiston, (1996), Burgess, (1996), Calingo, (1996), Kanji and Asher, (1996), Thiagarajan and Zari, (1997 a, b & c), Dahlgard, *et al*, (1998), Lau and Anderson, (1998), Martinez-Lorente, *et al*, (1998), McDonald, (1998), Dahlgard, (1999), Dewhurst, *et al*, (1999), Petersen, (1999), Chiles and Chow, (2000), Hellsten and Klefsjo, (2000), McAdam, (2000), Porter, *et al*, (2000). The approach adopted in Table 4.4 is intended to reflect the differences between the evolution of quality in the major influencing countries and to identify the different rates and direction of that evolution.

While Table 4.4 is not intended to be entirely representative of the evolution of quality across the three countries, it is nevertheless a useful, if simplistic, lens through which to view the quality eras referred to above and to contrast the differences in the evolutionary processes. Gaps in the table should not necessarily be construed as indicative of prolonged periods of inactivity, but perhaps a manifestation of the researcher's choice of and access to relevant literature. However, the three major gaps that appear in the table require some explanation:

(1) Pre-War Japan – Dahlgard, (1999) traces the Japanese cultural tradition from the 7th century and contends that the evolutionary pattern of quality in Japan begins from the mid-1940s to the early 1960s during a phase he describes as "importing/adoption/learning". The researcher also considered that the extent of devastation in Japan was sufficient to have negated any pre-war significant developments that may have occurred.

(2) Britain 1940s/1950s - during most of this period a significant proportion of production within Britain was overseen by the military directly, or through various organisations such as the Aeronautical Inspection Department, the Assistant Master General of the Ordnance, the Ministry of Aviation, the Inspectorate of Armaments, Inspectorate of Fighting Vehicles and Mechanical Equipment, the Chemical Inspectorate and the Electrical Inspection Directorate on behalf of the War Office. The 6/49 Conditions of Contract that applied to approved suppliers during this period eventually became the defence standards referred to in the table.

Table 4.4 A Chronology of the evolution of Quality and Standards-based Management

| | United Kingdom | USA | Japan |
|------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1904 | Rolls-Royce partnership form English School of Statisticians. | | |
| 1911 | | Frederick Taylor publishes scientific management theory | |
| 1919 | Technical Inspection Association formed (TIA) | | |
| 1922 | TIA becomes the Institution of Engineering Inspection. | | |
| 1924 | | Shewart invents control charts and Dodge begins statistically based acceptance sampling plans. | |
| 1925 | Tippet began work with the British Cotton Industry Research Association. | | |
| 1926 | | Bell Telephone apply statistical control methods | |
| 1931 | Tippet publishes. <i>"The Methods of Statistics"</i> | Shewart publishes <i>"Economic Control of Quality Manufactured Products"</i> | |
| 1932 | Formation of the Industrial and Agricultural Section of the Royal Statistical Society | Shewart lectures at University of London. | |
| 1935 | BSI publish first standard on Quality Control. BS600 SR17 statistical advisory unit of the Ministry of Supply formed. | Elton Mayo begins Hawthome experiments | |
| 1941 | | | Translation of BS600. |
| 1942 | | Deming sets-up courses to teach Shewart's methods To industrialists | Ishikawa develops first Cause-and-Effect or Fishbone Diagram. |
| 1946 | | American Society for Quality Control formed. | Bell Labs send quality team under Assist program |
| 1948 | | | Quality Control Research Group formed within the Union of Japanese Scientists and Engineers (JUSE). |
| 1949 | | | JUSE initiate a long Quality Control seminar. |
| 1950 | | | First visit of Deming invited to return and present an 8-day seminar: Taguchi joins the Electrical Communications Laboratory of the Nippon Telephone Telegraph Co and begins to develop his methods. |
| 1951 | | Feigenbaum publishes <i>"Quality Control: Principals and Administration"</i> | Deming returns to lecture Deming Prize for quality established. |
| 1952 | | | Deming returns to lecture |
| 1954 | | | JUSE invite Juran to Japan |
| 1955 | | | Shingo took charge of Industrial Engineering and Factory Improvement Training at Toyota |
| 1956 | | | Shingo Instigates major changes in shipbuilding with Mitsubishi Heavy Industries. |
| 1957 | Britain becomes a founding member of the European Organisation for Quality Control (EOQC) | | Taguci publishes <i>Design of Experiments</i> . |
| 1958 | | | MIL-Q9858 QA program established |
| 1961 | National Council for Quality and Reliability (NCQR) formed as part of British Productivity Council. | Feigenbaum publishes "Total Quality Control" | Shingo Develops "Poke-Yoke, mistake proofing" or "Defects-0" concepts. |

Table 4.4 (Continued)

| | United Kingdom | USA | Japan |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1962 | | | First Quality Circle registered with the Nippon Corporation |
| 1966 | National Quality and Reliability year. | | |
| 1968 | | | NATO adopt AQAP Standards |
| 1970 | Raby Committee recommendations implemented | | Taguchi Develops "Quality Loss Function" concept |
| 1972 | The Institution of Engineering Inspection becomes Institute of Quality Assurance (IQA). BS 4891 <i>A Guide to Quality Assurance</i> published. | | QFD developed at Mitsubishi's Kolb shipyard JIT systems emerge |
| 1974 | AQAP Defence Standards introduced | Quality Circles established at Lockheed | |
| 1978 | IQA/Government/industry meeting - followed by consultative document from the Department of Prices and Consumer Protection. | | |
| 1979 | BS 5750 Quality Systems) first published. Rolls Royce establish Quality Circles | Crosby publishes " <i>Quality is Free</i> " Peters & Waterman start "excellence" research | |
| 1980 | | NBC cites Deming as key to Japanese miracle | |
| 1981 | British Quality Association (BQA) formed. Government White Paper "A New Training Initiative" introduces standards-based qualifications. | | Ouchi's Z Theory |
| 1982 | Advisory Council for Applied Research and Development (ACARD) published report on quality. Government white Paper. " <i>Standards, Quality and International Competitiveness</i> ": Cmnd 8621. | Deming publishes " <i>Quality, Productivity and Competitive Position</i> " Peters & Waterman publish " <i>In search of excellence</i> " | Taguchi becomes advisor at the Japanese Standards Association. |
| 1983 | National Quality Campaign launched. | Garvin publishes " <i>Quality on the Line</i> " | Taguchi featured in Harvard Business Review |
| 1985 | NACCB and NAMAS formed | Motorola roll out Six Sigma Rank Xerox refine Benchmarking | |
| 1987 | BS 5750 Quality Systems harmonised with European and International Quality Standards EN 29000 and ISO 9000 | | |
| 1989 | BS 7229 Auditing first published. MCI Management Standards published | Baldrige Award established. | |
| 1990 | Investors in People formed | | |
| 1991 | BS 7229 harmonised with ISO 10111 | | |
| 1992 | DTI consult on British Quality Award | Kaplan & Norton launch "The Balanced Scorecard" in <i>Harvard Business Review</i> | |
| 1993 | DTI accept EFQM model | Hammer & Champy publish " <i>Reengineering the Corporation</i> " | |
| 1996 | Launch of ISO 14000 Environmental Standard | Launch of ISO 14000 Environmental Standard | Launch of ISO 14000 Environmental Standard |
| 1996 | Launch of BS 8800 Health & Safety Standard | | |
| 1997 | | | |
| 1998 | First draft of ISO 9000:2000 issued | First draft of ISO 9000:2000 issued | First draft of ISO 9000:2000 issued |
| 1999 | Launch of OHSAS 88001 Health & Safety Standard | | |
| 2004 | Launch of HSE Management Standards for Stress | | |

(3) Post-War USA - conversely America enjoyed a boom in the post-war era that saw its influence spread on a global basis. The various aid programmes that were in place in the war zones provided a conduit for American companies to introduce their products into new markets. The absence of any effective competition provided boom conditions for American industry and little incentive to pursue quality issues.

4.05.2 Inspection Era

Epitomised by the formation of the Technical Inspection Association in 1919, this is the period where quality activities centred almost exclusively on post-production inspection of finished product. Dale, *et al*, (1991) contend that this type of activity was not concerned with taking preventative measures, but existed solely to screen out defective product before it reached the customer. There was no involvement of either customers or suppliers in this control process. Bregman, *et al*, (1994) point out that the methods used for quality control were largely visual, involving sorting, counting and grading. Quality was not perceived to be a problem that had to be addressed by the organisation as a whole, but was almost exclusively the responsibility of the Inspection Department.

4.05.3 Quality Control Era

Garvin, (1988) and Dahlgaard, *et al*, (1998) refer to this era as the period of "statistical" quality control due to the introduction and growing acceptance of the use of sampling, control charts and other statistical techniques. This is marked by the introduction by the BSI of the first standard for quality control in the UK and the work of Shewart in the USA and his lectures in London. Bregman, *et al*, (1994) note the continuing emphasis on product uniformity, but with a reduction on direct inspection in favour of statistical tools and techniques. They suggest that the responsibility for quality control began to widen within organisations with manufacturing and engineering departments taking on more responsibility for quality, while inspection departments adopted a "trouble-shooting" role based on the results of the statistical methods in use. Dale, *et al*, (1990) note the growth of techniques such as self-inspection, product quality planning, document control and the introduction of procedural manuals in an attempt to standardise activities and outputs.

4.05.4 Quality Assurance Era

This is the period during which the idea of managing a quality process began to gain momentum. The introduction of suppliers into the process became common, with third party supplier assessments becoming widespread (Dale, *et al*, 1990). Juran, (1995) illustrates some of the absurdities that this created,

“The defense standards required that every supplier conduct audits of each of its suppliers irrespective of the possibility that its suppliers may have already been audited satisfactorily by someone else to the same requirements. For example, in one case known to the researcher of this chapter, a company that supplied pipe fittings claimed to have been audited by no fewer than 80 audit teams in the first six months of 1978. This became known as the problem of multiple assessment and became so severe that an inquiry was set up” (p. 469).

This of course led to the creation of BS 5750 with its third-party assessment to try and obviate these problems. Bregman, *et al*, (1994) suggest that this era can be categorised by the emergence of such concepts as quality costs, total quality control, zero defects and reliability engineering, with a greater array of statistical tools in place, such as a failure mode and effect analysis, systems audits and quality planning.

4.05.5 Total Quality Management Era

Garvin, (1988) referred to this as the "strategic quality management era" which perhaps better describes the elevation of quality management to be a central driving force in those organisations that have adopted the TQM mantra. There seems to the researcher to be less delineation between this period and the preceding period. Indeed, if the principal defining characteristic of the quality assurance era was quality management system standards, then there is no indication that this era has come to an end, or indeed that the total quality management (or strategic) period has reached its maturity. Juran, (1995) points towards some impediments to the strict chronological classification of quality developments when he says:

“However, during the 1980s many companies limited their quality initiative to SPC, assuming it to be the panacea claimed by its advocates. Those companies lost precious years before learning that quality leadership comes from a mixture of strategies none of which is a panacea. In retrospect, the results of the quality initiatives of the 1980s were deeply disappointing. Most of the initiatives fell well short of their goals. Some achieved negative results the companies lost several years of potential progress. The disappointing results were due mainly to poor choice of strategies and to poor execution of valid strategies. In turn these were largely traceable to the limitations of leadership by upper managers who lacked training and experience in managing for quality. In the minds of some observers, the lessons learned during the 1980s were chiefly lessons in what not to do.” (p586).

4.05.6 The Excellence Era

There is evidence that another era began to emerge in the mid-1990s when a number of larger companies sought to extend the boundaries of TQM. Dale, *et al*, (2000) support this when they say:

"since the early 1990s there have been signs that quality and TQM are perceived by some commentators to be out-of-date and fallen by the wayside."
However, they contend that major trends such as Six Sigma give a clear signal that "old style quality is a coming back".

These issues are dealt with in a more detail in the following Chapter.

4.06 Conclusions

Which came first; the chicken or the egg? This old conundrum could equally apply to the subject of Standards and Quality Management, quite possibly with a host of opposing researchers lining up on each side. The answer is not as important as the observation that, to a large extent, despite the linkages and common genetic make-up, each has ploughed its own furrow in the field of management development. This chapter is based on a very comprehensive literature review that has provided an overview of Quality Management from its origins in inspection to its zenith of excellence, which in anthropological terms, charts the evolution from the Stone Age to the present. This draws attention to the interesting difference between the ALI approach to assessing the quality of training provision in England and Wales and SQMS that was highlighted in Chapter 2 and is worthy of further research.

The research attention that Quality Management and Total Quality Management have received has enabled each to be defined and, in the case of TQM, the main components that most experts agree are essential to the process have been identified. The importance of this will be more apparent in Chapter 6 when the claim that SQMS is a TQM implementation tool is examined in more detail. The contributions that the main "gurus" of quality have made has been widely researched and documented elsewhere and therefore it has not been necessary to repeat them here. However, that is not intended to detract from their importance or relevance to the evolution of Total Quality Management, despite the fact that they may not agree with the terminology. A selection from a surfeit of research into TQM implementation and its impact on organizational performance was presented to provide a basis of understanding of the principles and concepts against which SQMS can later be compared. Similarly, a selection of research into "business excellence" was presented to

show its role as possible progression from or an alternative to TQM to provide an understanding of the advocacy by some researchers as a “super” Standard.

Despite only concentrating on the most popular and “mainstream” Standards in the chronology presented, what is clear from the contents of this chapter is that Standards-based management has increased significantly in recent years and seems set to continue to do so. Whilst the point has been made regarding the seeming preponderance of Standards in the UK, resources did not permit detailed research of the various strata in Figure 1.1 in Chapter 1 in other countries and similar growth of Standards may well exist in countries outwith the scope of this research. Standards with UK origins are examined in Chapter 5.

Chapter 5 Management Standards

5.01 Chapter Synopsis

The phenomenon that is the ISO 9000 series of Standards is an incredible success story without precedent anywhere in the world and, as a result, it has tended to eclipse other Management Standards. It has therefore been given prominence in this chapter for that reason, but also because it has raised the profile of Standards generally if not stimulated the Management Standard's market. However, the volume of research literature on this Standard is unmanageable and this chapter refers to a small cross-section of the research that is available. Figure 1.1 in Chapter 1 was used to illustrate the inverse relationship of research into Standards and the point was made that there has been no research into Management Standards as an entity. This chapter addresses that gap by looking in detail at a selection of Management Standards that meet the criteria set out in Chapter 1 and have been allowed to mature over time. The approach in this chapter is to look critically at each of the Standards that have been selected and to provide an analysis of the literature to predict the direction in which Standards-based management is likely to go in the future. The integration of existing Standards, the use of excellence models and emerging Standards are examined.

5.02 Standards-based Management: a UK Preoccupation?

Even a casual observer of Table 4.4 in the previous Chapter would note the preponderance of references to standards in the column that refers to the United Kingdom. The most widely publicised development in this area is of course BS 5750 that became the ISO 9000 series and it will be given the prominence that its worldwide spread deserves. However, ISO 9000 is certainly not the only standard that organisations are faced with. ISO 14000 for the management of the environment; Investors in People for personnel management; and occupational standards for personal management. All of the bodies that control these various standards have aspirations to make them international standards, although ISO 14000 is the only one to have emerged in an international arena. Researchers have largely ignored the significance of these other standards, but the researcher believes that they have an important influence on the style and development of management in an increasingly global, competitive environment.

5.03 Standards-based Quality Management

5.03.1 The Origins of Quality Management Standards

Although most quality practitioners claim that quality management standards originated with BS 5750, the debt that is owed to BS 4891 Guide to Quality Assurance issued in 1972 is worth noting. BS 4891 is not a Standard in the same way as BS 5750; it is a guide that addresses how to manage a quality system and contains much that would later be described as total quality management. It takes account of the AQAP standards that were prevalent at that time and accentuates the role of management to bring about a change in attitude among the workforce to prevention rather than cure. In addition to the motivational content of the guide, it also covers areas such as management objectives, principles of control, safety, reliability, design reviews, value engineering, processing capability, marketing and servicing, defect failure analysis and economics of quality assurance. Being less prescriptive and more wide-ranging than BS 5750, it is, in the researcher's opinion, an easier framework for quality management.

There would appear to be some controversy regarding the origin of ISO 9000 depending upon which side of the Atlantic that the researcher resides. A number of British writers (e.g. Rogers, 1987, McDonald, 1998) claim that it was based almost exclusively on BS 5750, whereas a number of American writers (e.g. Fox, (1994), Pitkin, (1995), Marquardt, (1997)) claim that it is largely based on the US MIL-Q9858 quality programme. On the other hand, Dargie, (1999) mentions several international standards as a base for ISO 9000. In the researcher's opinion, a resolution of this controversy would achieve little and for ease the British position will be advanced.

Rogers, (1987: pp 27- 30) reminds us that, prior to the introduction of ISO 9000, industry had to deal with a number of very similar standards viz, BS 5750 part 1, 2, 3, DEF STAN05- 21, 24, 29, and AQAP 1, 4,9,13. These standards were supplemented by 11 second party certifiers, viz. British Gas Corporation, British Nuclear Fuels Ltd, British Railways Board, British Steel Corporation, British Telecommunications, Cable and Wireless plc, General Electricity Generating Board, London Transport Executive, Ministry of Defence (Procurement Executive), British Coal, and Pressure Vessels Quality Board Assurance. It is not hard to see how this led to the multiple assessments referred to above. Juran, (1995: p 471) points out that, while there was widespread agreement on the need for mutual acceptance of assessment approvals the difficulty was to agree the basis of those approvals. The defence standards were not the only ones in operation and some industry standards had been in existence far longer than the Ministry of Defence requirements and

most of these bodies were reluctant to subordinate their own arrangements in favour of some other plan. However, the breakthrough came when the Ministry of Defence agreed to adopt BS 5750 and, while to many BS 5750 was nothing more than the Defence Standards in a BSI cover, the possibility of passing responsibility for assessment to a third-party proved irresistible.

In 1987 BS 5750 was amended to bring it into line with ISO 9000 and the ISO 9000 family of Standards was globally implemented at that time. After a period of evaluation, ISO 9000 was amended in 1994 and has grown to the extent that the latest International Organisation for Standardisation ISO 9000 and ISO14001 Survey (ISO, 2004) claims the following:

- Up to the end of December 2003, at least 500,125 certificates to the ISO 9001:2000 quality management system standard had been issued in 149 countries and economies.
- The 2003 total represents an increase of 332,915 (+ 200 %) over 2002, when the total was 167,210 in 134 countries and economies.
- The 2003 total represents an increase of 455,737 (more than ten times higher) over 2001, the first year for which the survey recorded ISO 9001:2000 certifications, when the total was 44,388 in 98 countries and economies.

There are a number of reasons for this phenomenal growth, but an important reason has to be the "compulsion" that attaches to the Standard. While it is certainly true that many larger organisations and government departments insist upon their suppliers becoming registered to ISO 9000, a significant aspect of the compulsion is anecdotal and market-driven. Juran articulated a widely held view when he said:

“The standards (*ISO9000 series*) are voluntary: they are not a legal prerequisite to selling products in Europe. They have been so cleverly marketed however, that whoever hopes to sell products in Europe must become registered as meeting the criteria of ISO 9000. Registration to ISO 9000 has become a *de facto* licence to market in Europe.” (Juran, 1994).

Further analysis of the ISO Survey figures undertaken by Vanguard Consulting perhaps illustrates Juran's point. Figure 3.1 and 3.2 below tell two stories: registrations in 'mature' countries are falling – for example the combined rate of growth in the UK, France and Germany is minus 21%, but in the new economies such as Russia, China, Romania and others, registrations account for the very high growth reported in the Survey.

ISO explains the overall reduction in two ways: first, is the evolution from multiple, single-site certificates to single, multiple-site certificates: and two, that several major global

industries are implementing quality management system requirements that incorporate ISO 9001:2000 in sector-specific certification.

Further comments on these data are included in the following sections.

Figure 5.1 ISO 9000 Registrations in “Mature” Markets

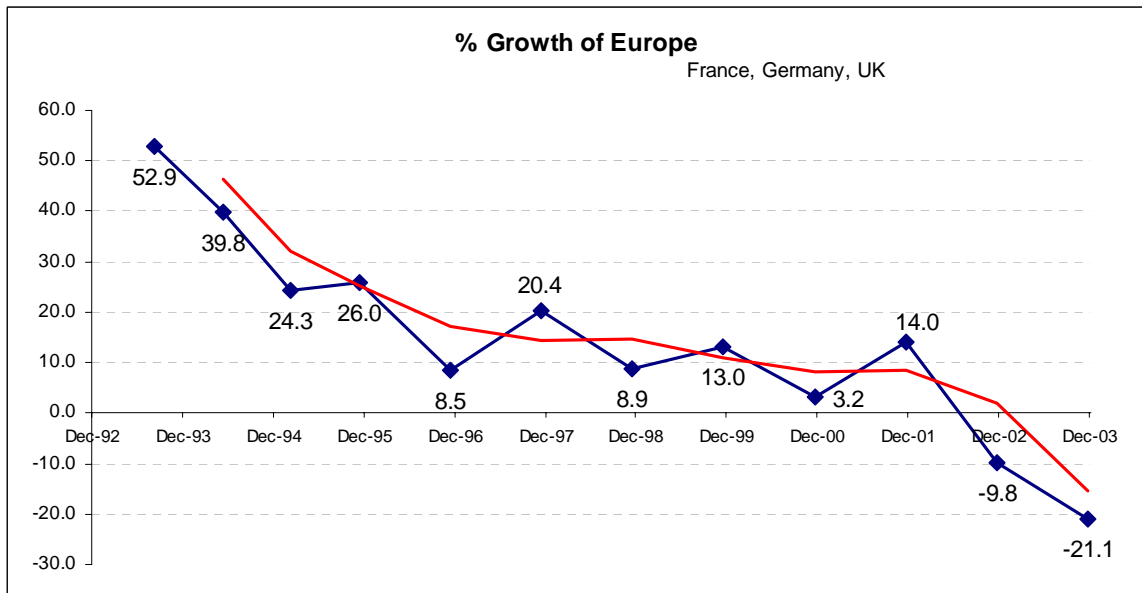
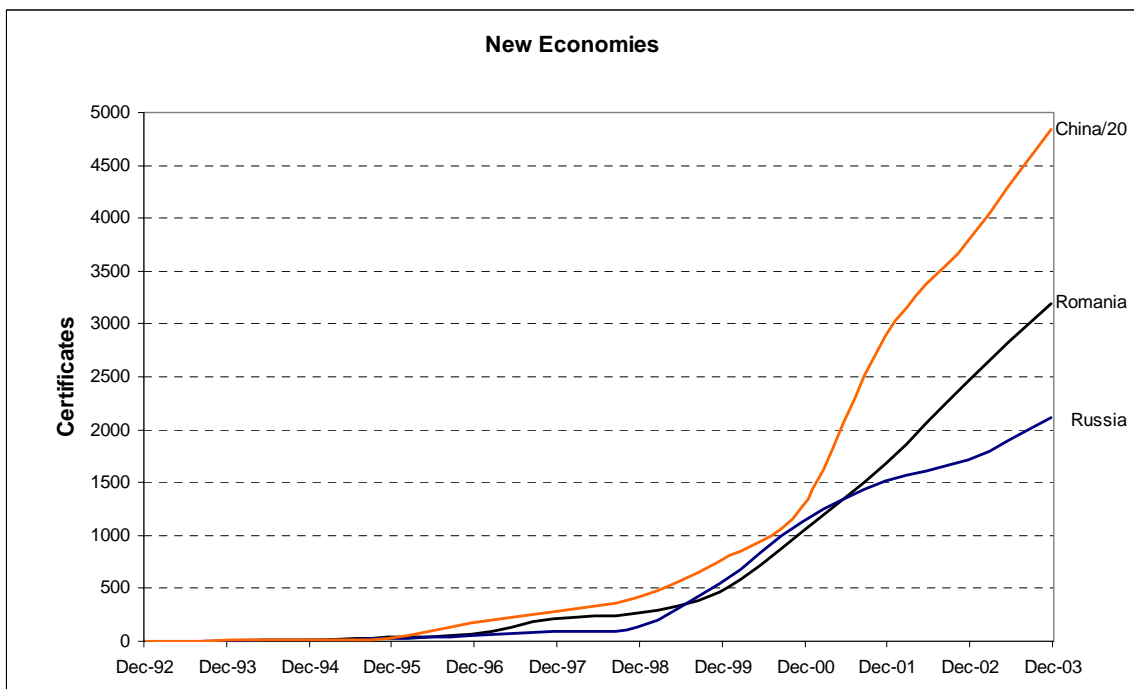


Figure 5.2 ISO 9000 Registrations in New Economies



Source: Vanguard Consulting Ltd

5.03.2 ISO 9001: 2000 Series

While a detailed analysis of ISO 9000 is beyond the scope of this Thesis and has been widely documented elsewhere, the revisions to the standard published in December 2000 and which became mandatory in December 2003 are worth summarising, as a number of

commentators have argued that they represent a significant move towards the principals of TQM. (See Conti, 1999, Larsen and Haversjo, 2000, Larsson, 2000, Laszlo, 2000, Russell, 2000). The following synopsis has been condensed from those given by Lloyds Register, (2001) and Ketola & Roberts, (2001). However, a final comment from Juran on this subject:

"American companies, having endured the chief impact of Japanese competition, are now scaling up at a pace faster than that of their European counterparts, who have become preoccupied with getting certified as meeting the criteria of the ISO 9000 series of standards. The European lag in improvement is likely to continue through the 1990s". (Juran, 1995: p 640)

The changes to the Standard were based on consultation with a sample of 350,000 users.

The main results of the research suggested that ISO 9000:1994:

- was increasingly being used in the service sector
- was not particularly "user friendly"
- was not compatible with the ISO 14000 series.

The revised series comprises of:

- ISO 9000 Quality Management Systems - Fundamentals and vocabulary (this superseded ISO 8402 and ISO 9000 - 1)
- ISO 9001 Quality Management Systems - Requirements
- ISO 9004 Quality Management Systems - Guidelines for performance improvement (this superseded ISO 9004 - 1)
- ISO 19011 Guidelines on auditing quality and environmental management systems

The following points summarise the differences that the new standard introduced:

- ISO 9002 disappeared; all needs were met by 9001
- ISO 9003 discontinued; there was no equivalent model
- the new standard was based on a process model

The New Standard consisted of an introduction and the following eight clauses:

1. Scope
2. Normative references
3. Terms and definitions
4. QMS requirements
5. Management responsibility
6. Resource management
7. Product and/or service realisation
8. Measurement, analysis and improvement

Clauses 4 to 8 formed the basis of the documented quality management system and reflect the Deming cycle of “Plan, Do, Check, Act”.

The key differences between the 1994 version and the 2000 version are:

- ISO 9000: 2000 is business process oriented
- ISO 9000: 2000 includes a requirement for Continuous Improvement
- ISO 9000: 2000 has a quality planning requirement with policy, objectives and quantifiable targets
- ISO 9000: 2000 requires a level procedure for competency

The standard is underpinned by the following eight principles of quality management:

1. Customer-focused organisation
2. Leadership
3. Involvement of People
4. Process Approach
5. System Approach to Management
6. Continual Improvement
7. Factual Approach to Decision Making
8. Mutually Beneficial Supplier Relationships

Although ISO 9000: 2000 still requires organisations to have a quality manual that includes the documented procedures or references to them, overall, the effect of the requirements of the Standard is to reduce the instances where documented procedures are mandatory to allow the organisation the freedom to determine the type and extent of documentation needed to support the operation of the processes that make up the quality management system. ISO 9000: 2000 recognises that not all its requirements will be relevant to all organisations and accordingly has included provision for “Permissible Exclusions”. The Standard seeks a greater involvement and commitment from top management at a number of levels and requires data gathering of customer perceptions. One interesting change is the requirement for the competence of employees to be tested, rather than providing training that is not evaluated. This is likely to expose far greater numbers to Standards-based activities through the vocational qualifications framework, which is the easiest demonstrable, third party endorsed system for assessing competence.

5.03.3 ISO 9000 – Positive and Negative Factors

The literature that exists and is referred to below is in respect of the “old” Standards unless stated otherwise, as there has been insufficient time for ISO 9000: 2000 to be widely adopted and researched.

5.03.3.1 Benefits

With the worldwide proliferation of ISO 9000 it would be surprising if there was not a wealth of literature extolling the virtues of the Standard and this is indeed the case. For those organisations that have embraced the ISO 9000 standard, a number of benefits have been recorded in the literature. Among the benefits identified are efficiency of the quality system and consistency in the quality of products and services through preventive action (van der Wiele, 1995; Arora, 1997; Erel and Ghosh, 1997; Lee, et al, 1999). Improved customer perception of the organisation's culture and performance as a result of being registered to the standard leading to greater customer loyalty (Arora, 1996; Kanji and Asher, 1996; Laszlo, 1996). A reduction in the number of third party audits (Juran, 1995; Johnson, 1997). However, the most significant benefit highlighted by most researchers (notably Buttle, 1996) is the marketing advantages that ISO 9000 registered companies have over their competitors. It is also argued that ISO registration could open up new international markets and provide additional competitive advantage (Arora, 1996; Huarng, 1998; Johnson, 1997).

Notwithstanding the costs of ISO registration overall, Leung and Chan, (1999) contend that the cost savings that result exceed the costs of registration. Others claim that implementing the ISO 9000 system should reduce costs through improved efficiency, less scrap and rework (Fox, 1994; Arora, 1996; Huarng, 1998; Yung, 1997). ISO 9000 registration is also credited with less tangible benefits such as, improved morale and communication among employees (Arora, 1996; Beattie and Sohal, 1999), improved quality awareness among employees (Erel and Ghosh, 1997; Yung, 1997). Lee, *et al*, (1999) identified improved team spirit as a separate feature of improved morale.

The marketing benefits of registration to ISO 9000 have been documented by a number of researchers, (Buttle, 1996, Atwater and Discenza, 1993 and Haug, 1994) and it is alleged that many companies have reported increased business purely from being able to advertise the ISO 9000 logo. However, in a study of 4,421 companies, Chittenden, *et al*, (1998) concluded that:

“Both historic business growth percentage and projected sales growth percentage reported by users and non-users of ISO 9000 tend to suggest that there is no association between adoption of ISO 9000 and sales performance”.

Similarly, in a study of the wider business benefits of a quality orientation, Schilit, (1994) stated that:

“The quality of a firm’s output does not appear to be positively correlated with its stock price. Stock prices are more sensitive to earnings data than to perceived quality. In the Jan 88-Jan 93 period, the stock in many quality-oriented firms performed poorly, especially in the high-tech sector.”

This is supported in a study by Terziovski, *et al*, (1995) that found no positive relationship between ISO 9000 registration and customer satisfaction in a survey of over 1300 New Zealand and Australian firms.

A good example of the controversy that attaches to claims regarding the ability of ISO 9000 to improve profitability occurred on 20 May 2004 when Stevan Breeze (2005), Chief Executive of the British Standards Institute, wrote in the Daily Telegraph that:

“European research calculated the average profitability from 1994 to 1998 of 400 registered [to ISO9000] firms against that of 400 that were not. The conclusion: the registered firms were measurably more profitable than those that were not.”

However, one of the authors of the quoted research, Dr Gavin Dick of Staffordshire University Business School, responded to the Telegraph on 15 July 2004 and pointed out that their research paper had concluded with the statement:

“...we have found no evidence that certification has any significant influence on profitability or sales growth.”

This example shows that the hyperbole that can attach to the Standard knows no boundaries.

5.03.3.2 Criticisms

ISO 9000 has its share of critics some of whom can be particularly strident. The Standard has limitations and one of the major criticisms is that it does not guarantee that the quality of a product will be any better from an ISO registered organisation. (Iizuka, 1996). Singels, *et al*, (2001) contend that the function of using ISO certification as a mechanism for the evaluation of the goods and services of suppliers becomes seriously threatened by the outcomes of their research. Shaw, (1998) provided a colourful example of this criticism when he said:

“The standard was originally developed to prevent bombs going off in factories and, despite being revised, it remains essentially the same.”

As professor Malcolm McDonald of Cranfield has commented,

“Because ISO9000 does not address the effectiveness of the product, it has become a measurement for making crap perfectly”

While reduced costs is one of the benefits highlighted above, the costs of the registration process and its reliance upon consultants generates a considerable amount of criticism. Spiers, (1998) makes reference to the major DTI initiative of the 1980s that provided 15 days' free consultancy to organisations wishing to pursue BS 5750 registration. While this initiative certainly accounted to a large extent for the unprecedented growth of the Standard, it also contributed to many of the problems to which the critics now refer. He suggests that:

"The early 1990s were the boom years for the certification industry. New certification bodies were mushrooming and existing ones were enjoying considerable growth. It became time to change when the DTI grants were withdrawn in 1994, marking the end of the major growth years".

The element of compulsion that attaches to the standard has been described as a "new tax" on small businesses (Ferguson, 1994), while the average total cost for organisations in America that are obliged to become registered in order to trade in Europe has been put as high as \$245,200 (Barnes, 1998).

Manoochehr and Kehoe, (2000) summarise the main criticisms of the ISO 9000 series as:

- It is frequently mistaken as a guarantee for quality.
- The cost is high.
- Certification generates excessive paperwork.
- There is undue pressure on suppliers to become certified.
- The accreditation system is poor.
- The ISO 9000 series are generic and represent minimum requirements for an effective quality system.
- The ISO 9000 series does not mention or make provision for continuous improvement.
- The ISO series does not include a strong focus on customer satisfaction.

They noted that there was "positive feedback from 20 companies for every company with a negative experience", but concluded;

"Overall the review of literature on the implementation of ISO 9000 indicated that while certification has been seen to produce a number of both qualitative and quantitative business benefits it does not in itself lead to continuous improvement or indeed promote a customer orientated culture" (p 229).

5.03.3.3 Anti-Competitive

A number of commentators have suggested that the imposition of standards that emanate from Europe are in effect a trade barrier and a way of protecting those organisations that are already registered (Avery, 1994 & 1996; Zuckermann, 1994 & 1997a). Reilly, (1995) illustrates this approach and perhaps sounds a warning to advocates of an integrated management standard referred to previously when he says:

"Some EU members have been accused of stalling standardization talks in an effort to retain the last bits of control over foreign imports. Italy, France, and Spain have

been consistently disagreeable when talks focus on automotive safety standards that would allow cars to be sold freely throughout Europe. Blatant attempts to use standards to block competition help enforce the stereotype of "Fortress Europe," in which American products are not welcome. Many European standards, notably in health and safety, are criticized for being over ambitious with no foreseeable benefits. Some products have had to undergo expensive design changes that do not improve - and may even hinder - product performance. The price of making major changes that have not been demanded by customers may be so high that producers will be discouraged from the European market".

Zuckermann, (1997a) adds to these sentiments when she says:

"Over the last few years, it seemed as though every time the European Union (EU) sneezed, out popped another standard or testing practice that became mandatory for doing business across the Atlantic."

5.03.3.4 Compulsion

The concept of compulsion in the area of quality is receiving attention. (Jones, *et al*, 1997, Brown, *et al*, 1998, Leung, *et al*, 1999, van der Wiele, *et al*, 1997, van der Wiele, *et al*, 2000c and Seddon, 2000) There is now a body of research developing to underpin the view that organisations that are forced to adopt quality management standards such as ISO 9000 are unlikely to derive the same benefits as those organisations that embark upon the process with the aim of improving their performance. Grint, (1997) sums up the basic argument competently and dramatically when he says:

"This does not merely limit individual employees but whole companies, which are required to register for ISO 9000 or the equivalent by those firms to which they subcontract. In short, if commitment is best secured through ownership, then a system of externally imposed standards, however necessary, cannot be the vehicle for securing this commitment. Subordinates may comply with requirements but this does not mean they are committed to them and if commitment is a necessary feature then this is a drowning signal not a waving signal".

Others have indicated that similar negatives will be encountered for organisations that are "pressured" into adopting TQM. (van der Wiele, *et al*, 2000; Withers and Ebrahimpour, (1999, 2000 & 2001)

5.03.3.5 Sub-Optimisation of Performance

By far the most damaging criticisms of ISO 9000 are not so much about its limitations, but the accusation that it actually makes things worse for the organisations that pursue registration and for the customers of those organisations. For example, Shaw, (1998) claims that quality departments have taken over measurements of customer reactions that should be a marketing activity. As a result he suggests that they are not being undertaken properly and measuring the wrong things. He argues that:

“quality is a measurement target that suffers from poor marketing input. ISO9000 is a particularly bad offender, as it encourages organisations to act in ways that can make things worse for their customers”.

Similar sentiments often appear in management literature. For example, Owen, 2002 argues:

"quality bureaucracy could be tolerable if it was relevant. But the quality process becomes an end in its own right. Certification becomes the goal, not making a profit or serving the business. In its extreme form it is a way of ensuring that you take far too long to get exactly the wrong product out to the wrong market at the wrong time. But at least you will know that you were wrong in exactly the right way. You should be able to buy the quality certificates from your liquidators at a knock down price." (p170)

One of the most vociferous critics of ISO 9000 is John Seddon who has written a number of articles and books in which he presents a structured and comprehensive critique of the standard (Seddon, 1994, 1997 & 2000). He sets out 10 arguments against ISO 9000 (Seddon, 2000 pp 29- 43), which are:

1. ISO 9000 encourages organisations to act in ways which make things worse for their customers.
2. Quality by inspection is not quality.
3. ISO 9000 starts from the flawed presumption that work is best controlled by specifying and controlling procedures.
4. The typical method of implementation is bound to cause sub-optimisation of performance.
5. The standard relies too much on people's and, in particular, assessor's interpretation of quality.
6. When people are subjected to external controls, they will be inclined to pay attention only to those things which are affected by the controls.
7. ISO 9000 has discouraged managers from learning about the theory of a system and the theory of variation.
8. ISO 9000 has failed to foster good customer-supplier relations.
9. Coercion does not foster learning.
10. As an intervention, ISO 9000 has not encouraged managers to think differently.

Seddon's central argument is that the command and control ethos that pervades the ISO 9000 way of thinking - an inflexible compliance to a rigid set of written rules - leads to the "sub-optimisation" of the organisation.

He argues that organisations should be viewed as an entire system and espouses views very similar to those of Deming, particularly in terms of understanding and eliminating variation.

While Seddon's critique of ISO 9000 is more structured than most, he is not alone in his position that the management of quality should be a total quality management approach and he believes that ISO 9000 is an impediment to the achievement of that goal. He argues against the imposition of the standard on organisations and the achievement of the standard for its own sake. Reavill, (1998) echoes these sentiments when he comments:

“Thus acquisition of quality accreditation is for its own sake, an attempt to obtain a "seal of approval", rather than for any value that the adoption of TQM might give. There is another problem associated with accreditation to a quality standard. Though the basis of the quality management philosophy is a fundamental change in the culture of the organisation concerned, accreditation schemes concentrate heavily on adherence to procedures. There is a concentration on the protocols rather than on the culture”.

5.03.3.6 ISO 9000 and TQM

Hind, (1996) extends the debate on what constitutes an appropriate culture for quality. He claims that there are three forces within the culture of an organisation, viz: customer management; staff management; and process management and claims that all three need to be in balance for TQM. He suggests that ISO9000 leads to a strong process culture that militates against TQM and argues that ISO9000 can be too "strong" a foundation upon which to build TQM. He summarises his argument as:

"Herein lies the crux of the argument. It is not possible to be both highly structured and highly flexible; highly innovative and highly controlling; strongly internal and externally focused. The process of moving in one direction reduces the pull from the opposite direction”.

Dale and Oakland, (1998), provide an interesting illustration of the tensions that exist between these two cultures. A statement on page 1 of their book claims that:

"it is interesting to note that the world-class organisations are now talking about 'delighting the customers' and 'winning customers."

However, on page 61 under the sub-heading Marketing, it is stated that:

"the marketing department has a considerable influence on the customer's use of national and international standards. They should attempt to persuade customers to purchase standard products or options that are already in production and not be too willing to accept orders for special features or non-standard products - standardisation facilitates product and service quality."

It is difficult to see how these two statements can be reconciled.

van der Wiele, *et al*, (1997) perhaps identify one of the key differences between the two approaches. They argue that one of the essential differences between ISO 9000 and TQM has to do with process rather than content. They suggest that the ISO 9000 registration is

often the responsibility of the quality manager who writes manuals and procedures for other managers who afterwards just confirm and approve them without necessarily understanding them. Senior management is not personally involved, nor are any of the lower level employees. They claim that TQM, on the other hand, is diametrically opposed to this approach and believe that:

“It cannot be done by the quality manager. It has to be led by management and involve all members of the organization. So getting ISO 9000 series certification is in a way a disadvantage. An organization has first to “unlearn” the way of getting quality before they can start towards TQM”.

Their view is shared by Binney, (1992) who does not believe it is possible or advisable to try to move from ISO registration to TQM.

5.03.3.7 ISO 9000 as a route to TQM

Notwithstanding these comments, there are a significant number of writers who advocate ISO 9000 as a route to TQM (e.g. Bradley, 1994; Ho, 1994, 1995b, 1996, 1999, 2000; Taylor, 1995; Brown and van der Wiele, 1996; Tsiotras and Gotzmani, 1996; Tummala and Tang, 1996; Quazi, and Padibjo, 1997; Rao, *et al*, 1997; van der Wiele, *et al*, 1997; Williams, 1997; Chong, 1998; Huarng, 1998; Krystyna, 1998; MacDonald, 1998; Lamprecht, 1999; Sun, 1999 & 2000; Cicmil, 2001, Magd, & Curry, 2003; Sun, *et al*, 2004). Brown and van der Wiele, (1996) presented a picture of the TQM journey of organisations in Australia. They found, on the basis of survey research, that organizations fell into three major groups. First, there was a small group who had been working actively towards TQM before they attempted to be registered to ISO 9000. A second small group registered to ISO 9000 as part of their plans for the introduction and development of TQM. But by far the largest group of companies surveyed registered first for ISO 9000 before attempting further steps towards TQM, sometimes seeing these as two discrete steps. Brown and van der Wiele distinguished between those companies who had been forced to register for ISO 9000 and those who had volunteered for registration without being pressurized. Of those who were pressurized 85% went no further along the quality route once they had achieved ISO 9000. 15% did proceed further towards TQM although their ISO 9000 registration had been forced. Of those who had all voluntarily registered for ISO 9000, the great majority were then committed to continuing further towards TQM.

The final word in this debate is left to Juran, (1995)

“Compliance with ISO 9000 is voluntary. There is no legal requirement that companies must be certified as complying with the ISO criteria before they are

allowed to sell their products in Europe. However, any company which lacks a certificate of compliance may be at a significant marketing disadvantage if its competitors do have such certificates. Such is the belief of most heads of companies, including those in the United States. As a result there has been a rush to become certified.

The ISO standards have a degree of merit. The criteria define a comprehensive quality control system. The certification process may well get rid of the plague of multiple assessments that have burdened suppliers in the past. However, the criteria fail to include some of the essentials needed to attain world-class quality, such as personal leadership by the upper managers; training the hierarchy in managing for quality; quality goals in the business plan; maintaining a revolutionary rate of quality improvement; participation and empowerment of the workforce.

All in all, there is a risk that European companies are in for a massive let down. They are getting certified to ISO 9000, but this alone will not enable them to attain quality leadership." (p 594)

5.03.3.8 ISO 9001: 2000

It must be emphasised that the research regarding ISO 9000 referred to in this chapter is almost exclusively in respect of ISO 9000:1994 and, as mentioned above, ISO 9001:2000 is substantially different. ISO 9000 registered organisations were given until December 2003 to make the transition to the new version of the Standard, but take up – particularly in the UK - has been very slow. As the deadline approached and there was no acceleration of organisations coming forward, UK accreditation organisations and institutions representing quality began to become concerned. By mid 2002 organisations like the IQA were forecasting a “crisis” when the number of firms requiring to change exceeded the capacity of the industry to assess and register them. Oldfield, (2003) suggested that:

“Industry executives prophesy that between 15 and 25 per cent of companies with ISO 9000:1994 will not make the transition to ISO 9001:2000 on time. This means that by the end of 2003 potentially 20,000 UK organisations face deregistration. Although overseas customers are more enthusiastic about the product, the UK seems to be too preoccupied or unwilling to make the changeover.”

Research undertaken by ISO as at December 2002 suggested that some 6,000 UK firms had formally confirmed that they would not be changing to ISO9001: 2000 and, presumably intended to let the ISO 9000 registration lapse. This is far from an endorsement of ISO 9001:2000 and will be of concern to advocates of the Standard. What is perhaps more concerning is the statistic that, of the 61,000 ISO 9000 registered organisations remaining, only 16% (as of Dec 2002) had achieved recognition to the new Standard. That means that the remaining 84% (51,250 firms) had to make the change before the end of 2003 or lose their ISO9000 certification altogether. This equates to a rate of assessment of some 200

organisations every single working day of 2003 and raises concerns regarding the rigour that could be applied in such circumstances. A joint communiqué from the IAF, ISO/TC 176 and ISO/CASCO in September 2003 confirmed that the ISO 9001:2000 transition deadline of the 15 December 2003 still stood. This brought an end to speculation that accreditation bodies might extend the time limit for companies to transfer to the new standard. It will take some time to evaluate the overall impact on the reputation and popularity of ISO 9001 that this unsatisfactory transition will have.

5.04 Standards-based Environment Management

5.04.1 ISO 14000

An additional layer of standards-based management was introduced in September 1996 with the launch of the ISO 14000 Environmental Management System suite of standards. ISO 14000 is composed of two groups of standards. The first group consists of ISO 14001 and ISO 14004 and establish guidelines and principles for the management of environmental matters by organisations through the establishment and operation of environmental management systems (EMS) (ISO, 1996a and 1996b). The remaining three standards, ISO 14010, ISO 14011 and ISO 14012, are guidelines for environmental auditing that deal with analysing and characterising the environmental attributes of products (ISO, 1996c, 1996d, 1996e). These standards are intended to enable organisations to develop and implement a formal management process and evaluate the effectiveness of their activities, operations, products and services to improve environmental and safety performance (Kuhre, 1995). The core elements of ISO 14001 EMS owe much to those of the ISO 9000 series, such as management by objectives, organisational development models, and continuous improvement to measure, review, perform root-cause analysis and take corrective action. It provides a management framework for planning, developing and implementing strategies and related programmes in an organisation. The ISO 14000 series stresses continual improvement and dynamic "plan-do-check-act" process, and requires organisations to evaluate their current and potential environmental exposures in terms of impact and compliance with legislation (Kuhre, 1995; Wever, 1996; ISO, 1996a).

5.04.2 ISO 14000 in Operation

There has been little critical research into ISO 14000, beyond individual case studies into its implementation. However, a number of researchers have examined aspects of the integration of ISO 9000 and ISO 14000 (cf. Aboulmaga, 1998, Chin & Lau, 1999, Pun, *et al*,

1999, Wilkinson & Dale, 1999, Renzi & Cappelli, 2000) Indeed, any debates about integrated management, or the creation of a generic all-encompassing management systems standard, generally include ISO 14000 as an integral part. (For example, Karapetrovic, 2001). The International Organisation for Standardisation ISO 9000 and ISO14001 Survey (ISO, 2004) makes the following claims:

- Up to the end of December 2003, at least 66,070 certificates to ISO 14001 had been issued in 113 countries and economies.
- The increase in the number of certificates in 2003 to the ISO 14001 environmental management system standard is the largest so far recorded in the nine surveys in which ISO 14001 has been included.
- The 2003 total represents an increase of 16,621 (+ 34 %) over 2002, when the total was 49,449 in 117 countries and economies.

In a world that is becoming more environmentally aware, that growth rate may accelerate still further and reflect the growth of Corporate Social Responsibility outlined above.

5.05 Standards based Health and Safety Management

The UK has some of the most comprehensive occupational health and safety legislation of anywhere in the world and has been at the forefront of efforts to establish an international standard similar to ISO 9000 and ISO 14000. The publication of BS 8800:1996 Guide to Health & Safety Management Systems has not led to the widespread adoption of the standard. This could well be due to the fact that BS 8800 reflects a comprehensive legislative framework, whereas the other two standards substitute for a legislative framework. Following a period of consultation the ISO rejected a common standard for health and safety management and this contributed to the apparent lack of interest in a formal, audited health and safety management system. However, a number of standards and certification bodies, together with specialist consultancies, have developed a Occupational Health & Safety Management Systems Specification OHSAS 18001:1999.

This standard would seem to gain more coverage from proposals for its inclusion in an integrated management systems standard than it would appear to warrant on its own merit. This issue is addressed in more detail below.

5.06 Standards-based Personnel Management

5.06.1 Investors in People UK

Investors in People UK (IiP) are a UK government initiative aimed at improving the training and development of the UK's employed workforce. It was developed in 1990 by the National Training Task Force in partnership with leading national business, personnel, professional and employee organisations such as the Confederation of British Industry, Trades Union Congress and the Institute of Personnel and Development. It was the responsibility of the Department for Education and Employment (DfEE) and was administered by them until 1993 when the section became Investors in People UK. (A sister organisation, Investors in People (Scotland) is responsible to the Scottish Executive).

Investors in People claims that: "The Standard provides a national framework for improving business performance and competitiveness, through a planned approach to setting and communicating business objectives and developing people to meet these objectives." It boldly states that the practical benefits of working towards and achieving the Standard include:

- Improved earnings, productivity and profitability.
- Enhanced quality.
- Improved motivation.
- Customer satisfaction.
- Public recognition.
- Competitive advantage through improved performance.

In setting out its aspirations to become an international standard IiP states;

"Many organisations have successfully used Investors in People as a platform to achieve other international quality, sectoral, occupational health and safety and environmental management standards (such as the ISO 9000 and 14000 series). The good practice of the Investors in People Standard is also highly complementary to the European Quality Model (EQM), developed by the European Foundation for Quality." (Investors in People, 2002)

5.06.2 The IiP Standard

Organisations achieve recognition through a process involving documentary and auditing assessment, originally by their local Training Enterprise Council and since April 2001 by the local Learning and Skills Councils in England and Wales (Local Enterprise Companies in Scotland). The standard is based on four key principles of commitment, planning, action and evaluation as outlined in Table 5.1⁽⁵⁾.

(5) The Standard was revised again in 2004, but these changes are too recent to be reflected in this research.

5.06.3 IiP Research

Down and Smith, (1996) highlighted that the literature relating to IiP falls into four broad areas, viz. “how to” literature which does not attempt any sophisticated analysis of the standard’s impact; research commissioned by IiP UK that provides useful statistical information regarding the impact of the standard; work which analyses largely quantitative data from large scale surveys and a limited amount of qualitative analytical and independent research. This remains very much the case. Down and Smith, (1996) cautioned against reliance on large-scale quantitative surveys of measurable benefits clearly understood and quantified by the organisations themselves. They assert:

“Almost all the organisations interviewed for this work had not quantified the benefits and in some cases had severe difficulties in even attempting to do so.” (p 144).

Rix, *et al.* (1994) suggest that the exact nature of business benefit is perhaps the most intriguing issue, and believes that a much clearer picture needs to emerge in terms of what is a business benefit and how it is measured. The “practical benefits” claimed by IiP UK are subjective and hard to quantify. Analysis of the efficacy of the standard was further complicated by a major revision to the Standard that took place in April 2000 in response to growing criticism from major employers and the CBI that many “recognised” organisations had achieved the standard to get “a plaque on the wall” and were not delivering customer service (Rana, 1999 & 2000). The revised standard reduced the bureaucracy involved in achieving the standard, and gave both companies and assessors greater flexibility in the way that evidence of an investment in people was provided and assessed. Assessors were re-trained to take on a “business consultancy” role, helping firms to achieve the standard rather than simply passing or failing them.

The changes to the standard were substantial and included:

- Indicators of compliance were reduced from 23 to 12.
- Assessors were to seek evidence of results, not processes.
- The language of the standard was changed to “plain English”.
- An explicit commitment to equal opportunities was included.
- The requirement to provide “evidence” was given a more flexible interpretation.
- Assessors were required to give more feedback.
- Recognised companies can chose a yearly audit or re-recognition every 3 years.

The requirement to produce paperwork for assessments was reduced.

A further revision was implemented in January 2005 that resulted in the structure of the Standard and Profile being brought into line. In addition, the links between Evaluation and

Planning were strengthened and the cultural aspects of the Standard were enhanced. Leadership and management capabilities were also made more explicit. The revised Standard was subject to a transition period to the end of 2005.

The numbers of organisations that are “recognised” is considerable. Statistics produced by IIP UK claim that 36,380 organisations were recognised as at 30 April 2004, representing 7,262,816 employees, or 28.88% of the workforce (Investors in People 2005). However, IIP UK has a novel way of measuring its success by including “commitments” - those organisations that have given a written undertaking to their TEC/LEC that they will pursue recognition. This group accounts for a further 22,798 organisations representing a further 2,360,729 employees that raises the percentage to 38.26%, which is the headline figure that is usually used. However, recognitions to the Standard have shown a marked decline in recent years from a peak of 5,560 recognitions in 2002, 3,732 recognitions in 2003 and 2,235 recognitions in 2004⁽⁶⁾. The underlying reason for this substantial reduction is not clear.

IiP UK used the occasion of its tenth birthday to try and raise its profile through the publication of a specially commissioned report by NOP World that claimed;

“undertaking to attain Investors in People recognition does provide significant benefits to organisations and to people, and specifically to the productivity of people and organisations. The benefits to business, regardless of size, sector or location, of increased productivity are clear. The benefits to employees are equally clear.” (IiP UK 2001, p 35).

This research coincided with a number of reports of research carried out by the Institute of Directors, Warwick Business School, Open University Business School and Industrial Relations Services (IRS) that suggested that the use of IiP couldn't be linked to profitability or productivity (Mahony, 2000; Nelson, 2001; Hammond, 2001).

The absence of substantive academic research into the effectiveness of IiP is surprising when 37.4% of the UK workforce is involved in some way. However, the increased subjectivity of the assessment process introduced in 2000, together with the ambiguity surrounding “business benefits” may render definitive research impossible.

IiP has also produced its own Leadership and Management Model that has no connection with the National Management Standards referred to below.

⁽⁶⁾ IiP UK Ltd revised their statistical measuring system later in 2005 and revised these figure to 37.4% of the working population, or some 39,000 organisations within the UK by 31 March 2005 (IiP, 2005).

Table 5.1 The Investors in People Standard

| Principles | Indicators | Evidence |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Commitment An Investor in People is fully committed to developing its people in order to achieve its aims and objectives | 1 The organisation is committed to supporting the development of its people | Top management can describe strategies that they have put in place to support the development of people in order to improve the organisation's performance Managers can describe specific actions that they have taken and are currently taking to support the development of people People can confirm that the specific strategies and actions described by top management and managers take place People believe the organisation is genuinely committed to supporting their development |
| | 2 People are encouraged to improve their own and other people's performance | People can give examples of how they have been encouraged to improve their own performance People can give examples of how they have been encouraged to improve other people's performance |
| | 3 People believe their contribution to the organisation is recognised | People can describe how their contribution to the organisation is recognised People believe that their contribution to the organisation is recognised People receive appropriate and constructive feedback on a timely and regular basis |
| | 4 The organisation is committed to ensuring equality of opportunity in the development of its people | Top management can describe strategies that they have put in place to ensure equality of opportunity in the development of people Managers can describe specific actions that they have taken and are currently taking to ensure equality of opportunity in the development of people People confirm that the specific strategies and actions described by top management and managers take place and recognise the needs of different groups People believe the organisation is genuinely committed to ensuring equality of opportunity in the development of people |
| Planning An Investor in People is clear about its aims and its objectives and what its people need to do to achieve them | 5 The organisation has a plan with clear aims and objectives which are understood by everyone | The organisation has a plan with clear aims and objectives People can consistently explain the aims and objectives of the organisation at a level appropriate to their role Representative groups are consulted about the organisation's aims and objectives |
| | 6 The development of people is in line with the organisation's aims and objectives | The organisation has clear priorities which link the development of people to its aims and objectives at organisation, team and individual level People clearly understand what their development activities should achieve, both for them and the organisation |
| | 7 People understand how they contribute to achieving the organisation's aims and objectives | People can explain how they contribute to achieving the organisation's aims and objectives |
| Action An Investor in People develops its people effectively in order to improve its performance | 8 Managers are effective in supporting the development of people | The organisation makes sure that managers have the knowledge and skills they need to develop their people Managers at all levels understand what they need to do to support the development of people People understand what their manager should be doing to support their development Managers at all levels can give examples of actions that they have taken and are currently taking to support the development of people People can describe how their managers are effective in supporting their development |
| | 9 People learn and develop effectively | People who are new to the organisation, and those new to a job, can confirm that they have received an effective induction The organisation can show that people learn and develop effectively People understand why they have undertaken development activities and what they are expected to do as a result People can give examples of what they have learnt (knowledge, skills and attitude) from development activities Development is linked to relevant external qualifications or standards (or both), where appropriate |
| Evaluation An Investor in People understands the impact of its investment in people on its performance | 10 The development of people improves the performance of the organisation, teams and individuals | The organisation can show that the development of people has improved the performance of the organisation, teams and individuals |
| | 11 People understand the impact of the development of people on the performance of the organisation, teams and individuals | Top management understands the overall costs and benefits of the development of people and its impact on performance People can explain the impact of their development on their performance, and the performance of their team and the organisation as a whole |
| | 12 The organisation gets better at developing its people | People can give examples of relevant and timely improvements that have been made to development activities |

Source: Investors in People, (2002)

5.07 Standards-based Personal Management

5.07.1 The Competence Movement

Tate, (1995) contends that the idea of competences is considered to have originated in the USA in the 1960s as a response to concerns with the quality of American teacher education. While interest in the concept grew within the UK from that time, the catalyst for widespread interest in the approach was the British Government's White Paper "A New Training Initiative" published in 1981. (Manpower Services Commission, 1981) The general thrust of this White Paper was a radical step-change in the vocational education and training systems within the UK to respond to the more challenging and competitive international commercial environment and to arrest the decline in competitiveness of UK organisations brought about through the lack of skill and flexibility of the UK workforce. This White Paper and others that followed on a similar theme (DE 1988; DE/DES 1986) set out the foundation of a new, integrated framework for vocational qualifications ⁽⁷⁾ based upon occupational standards to be determined by employers through "lead industry bodies". The rationale underpinning this strategy was that the existing educational and vocational development structures did not meet employers' requirements, and more "relevant" qualifications would increase both employer and employee participation and investment.

Tate, (1995) suggests that there are two models of competence, viz. the UK model, which establishes a single benchmark of competence, primarily for assessment purposes, and the USA model, which he describes as based on a study of the competence of outstanding performers in order to be able to plan for future development (P 33). He argues that these models are fundamentally different, insofar as the UK model is an "output model" concerned with deciding what outcomes you want individuals to achieve, whereas the USA model is an "input model" concerned with deciding what qualities you want in individuals, who the individual is and what he knows. Hayes, (1979) indicates the degree to which the USA model of management development was gaining ground within the UK and Horton, (2000) claims that the Civil Service College incorporated the concept of competence-based management development into its programmes in the mid-1980s. However, the most influential exponent of a refined version of the USA model was Boyatzis, (1982) and his impact will be referred to below.

(7) The vocational qualification framework that developed from these early beginnings is very complex and applies to virtually every sector of the UK economy. During the two decades or so of its existence, it has undergone a number of significant changes through evolution and changing government policy. This thesis is concerned purely with that part of the framework that affects the practice of management and any comments herein should be construed as referring to management qualifications.

5.07.2 Vocational Qualifications

The direction in which the development of competence-based activity in the UK would take was dictated to a very great extent by the Department of Employment, which was the driving force behind the initiative. It set out its definition of competence that became the foundation upon which the subsequent framework of vocational qualifications was built:

"The concept of competence ... is defined as the ability to perform the activities within an occupation or function to the standards expected in employment.

Competence is a wide concept that embodies the ability to transfer skills and knowledge to new situations within the occupational area.

It encompasses organisation and planning of work, innovation and coping with non-routine activities. It includes those qualities of personal effectiveness that are required in the workplace to deal with co-workers, managers and customers"

(Department of Employment, 1989)

The "Lead Industry Bodies" established by the Manpower Services Commission (MSC) determined National Occupational Standards (NOS) for their industries through a process of Functional Analysis. The starting point of Functional Analysis is the definition of the key purpose of the occupation and the identification of the things that need to happen to achieve it. This process is repeated "down to a level that ultimately allows individual performance to be assessed". (Tate, 1995, p 99). The resulting Standards are comprised of Units, Elements and Performance Criteria that break down a job function into its component parts. For qualification purposes, qualified, approved assessors assess candidates against the standards through a combination of observation and direct and indirect evidence. When the requirements of the standards are satisfied, two additional factors are taken into consideration; first, the context in which the tasks are performed to ensure transferability - described as "range statements" - and the underpinning knowledge and understanding to establish that, not only does the individual know how to perform, he also knows why it is necessary to perform in that particular way. (MCI, 1991).

This methodology was firmly embedded at an early stage in the standards development process before any attempt was made to apply it to management where critics questioned whether it was an appropriate methodology to determine models of management (Burgoyne, 1989; Stewart and Hamlin, 1992; Gibb, 1995). The national vocational qualification framework was controlled and administered by the National Council for Vocational Qualifications (NCVQ) and the Scottish Vocational Education Council (SCOTVEC) and its succeeding authority the Scottish Qualifications Authority (SQA).

These organisations approved the Standards devised by the Lead Industry Bodies and established guidelines for assessment, and internal and external verification. These

guidelines were enshrined within the “Awarding Bodies’ Common Accord” that all vocational qualification awarding bodies subscribed to. The structure was intended to provide a robust monitoring regime and to ensure the necessary rigour of the system.

5.07.3 The Management Standards

In the mid-1980s a number of reports were published that were highly critical of management performance and development in the UK (Mangham and Silver, 1986; Constable and McCormick, 1987; Handy, 1987). This led to the formation of the National Forum for Management Education and Development (NFMED), a government-backed, employer-led organisation charged with responding to the challenges highlighted by these reports. The then British Institute of Management was a key member of NFMED and saw it as an opportunity to advance its campaign to become a "Chartered" institute. It was instrumental in forming the Management Charter Initiative (MCI) as the operating arm of the NFMED with a key objective to establish a framework for a "chartered manager". However, this aspiration was very quickly dropped and the MCI did not attempt to promote a charter for management, although it remained saddled with the name until MCI merged into the Management and Enterprise Training Organisation in 2000.

MCI successfully tendered to become the Lead Industry Body for management in 1988 and set about establishing Occupational Standards for management. These were first published in 1989 for "Middle Managers", "Junior Managers" "and Supervisors" and were accepted as the basis for National Vocational Qualifications at Level 5, level 4 and Level 3 respectively. MCI produced a separate set of Senior Management Standards in 1994 that were generally well received (Pierce, *et al*, 1995; Tjok-a-Tam and Worth, 1995). These standards addressed many of the criticisms and deficiencies of the earlier standards, but these were not accepted as part of the NVQ framework on the basis that the middle management standards had been classified as Level 5, which is the highest level of the VQ system. Further Standards were issued for Managing Quality, Managing Energy and Managing Projects, which were all accepted as National Vocational Qualifications at level 4. Crawley, (1995) asserts;

"From their inception, the Management Standards’ main purpose has been to provide a basis for National and Scottish vocational qualifications." (p 36)

As Crawley's research was funded by MCI and the Department of Employment, it seems reasonable to assume that this comment reflected the official position. Examples of the Management Standards that comprise the Level 4 VQ are reproduced as Table 5.4.

All managers working at Level 4 are expected to maintain activities to meet requirements, support the efficient use of resources, manage themselves, create efficient working relationships and manage information for action. These are therefore mandatory units that form the core of every Level 4 manager's VQ. The qualification must include the five mandatory units and any two optional units from a choice of eight. The optional units are shaded in Table 5.2.

Table 5.2 VQ in Management Level 4 ⁽⁸⁾

| Key purpose | Key roles | Units of competence |
|-----------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| To achieve the organisation's objectives and continuously improve its performance | Key role A: Manage Activities | A1 Maintain activities to meet requirements |
| | Key role B Manage Resources | B1 Support the efficient use of resources |
| | Key role C Manage People | C1 Manage Yourself C4 Create effective working relationships C7 Contribute to the selection of personnel for activities C9 Contribute to the development of teams and individuals C12 Lead the work of teams and individuals to achieve their objectives C15 Respond to poor performance in your team |
| | Key role D: Manage Information | D1 Manage information for action |
| | Key role E: Manage Energy | E5 Identify improvements to energy efficiency E8 Provide advice and support for improving energy efficiency |
| | Key role F: Manage Quality | F5 Provide advice and support for the development and implementation of quality systems F7 Carry out quality audits |

Source: MCI (1997a)

(8) The National Management Standards were substantially revised in 2004. However, as all the research refers to the previous version of the Standards, this is the model that is represented.

5.07.4 Benefits of Competence-based Management

Empirical research on the developmental effectiveness of MCI's management standards is not extensive (for exceptions see Cheetham, 1994; Earley, 1993; Holman and Hall, 1996; Swailes, 1997). In a study of 52 managers who had completed a management VQ, Swailes, (1997) concluded,

“These results support the notion that management VQs can develop individuals. This is an important finding given the concerns noted in the introduction and runs counter to previous claims” (p 115).

Lawler [1994] thought that there was one compelling reason for adopting a skill or competence-based approach: to create a competitive advantage, because it leads to an organization performing better. He points out that, ultimately, the best competitive advantage in global markets is the performance capability of the organisation. Critical to developing and maintaining performance capability are the skills of the individual employees and how these skills mesh to support a particular organisational competence and strategic direction; that is, providing hard to duplicate competitive advantage.

However, Loan-Clarke, (1996a) cautions against accepting single case-study evidence and calls for large-scale research to identify the business benefits resulting from management development in general and the MCI's claims in particular. However, there is no evidence that this call has been heard.

The competence-based approach to management development and the use of national vocational qualifications engendered significant early support and, by the time the MCI standards were available, MCI had circa 2,000 organisations in membership. Advocates of the system stressed the relevance of the standards that had been developed and tested with over 3,000 managers across a range of sectors throughout the country. Many of these test organisations were highly reputable companies, which gave some legitimacy to MCI's contention that:

"occupational standards are therefore more than a description of current tasks and activities, they take account of future needs and reflect good practice rather than minimum requirements". (MCI, 1991)

Other perceived advantages included:

- They overcame the weaknesses of traditional methodologies for management education;
- They assessed only those skills and knowledge that were relevant to a manager's day-to-day job;
- They ensured a transfer of learning to the workplace;

- They provided a work-based, structured performance management system;
They provided a template for change management:
- Assessments were independently verified and nationally moderated.

(For example see Antonacopoulou and Fitzgerald, 1996; Breed, 1993; Burke, 1989; Jessop, 1991; McBeith, 1990; Stewart and Hamblin, 1993).

MCI claimed that the “Crediting Competence” process was based upon Kolb’s model of the “Experiential Learning Cycle” (Kolb, 1984), where the Standards provided an opportunity and focus that enabled experienced managers to examine their experiences and actions, reflect upon the skills and knowledge that informed those actions, use the Standards as a reference point of good practice, tailor future actions accordingly and test the organisational or personal improvements that resulted. Schon later extended this approach with his “Reflective Practitioner Model” (Schon, 1987 and 1988). The little empirical evidence of this process at work with the MCI Management Standards is very positive (Jones and Connolly, 2001).

5.07.5 Criticisms of Competence-based Management

The competence approach and VQs in general attracted extensive initial criticism on the basis of their task-based character and the way in which theoretical and knowledge-based skills were allegedly marginalized within them (for example see Currie and Darby, 1995; Everard, 1993; Hyland, 1994; Littlefield, 1994; Smithers, 1993).

In fairness to MCI, it did attempt to break out of the straitjacket imposed by the "output model" by developing its own personal competent model, which MCI acknowledged was heavily influenced by the work of Boyatzis, (1982). However, as MCI presented this as a stand-alone model to complement their standards, it did not feature as part of the formal assessment process for VQs. While criticisms of the structural aspects of VQs have emerged from attempts to implement them across diverse vocations, criticism of their impact on individual learning and development has been largely subjective. As far as management is concerned, criticism has focused on the competence process and the MCI's particular interpretation of management as portrayed in the standards (Loan-Clarke, 1996b). Mangham, (1990) rejected the competence approach altogether, ridiculing it as trying to build an identikit manager. Swailes, and Brown, (1999) summarise the main criticisms as follows:

- That management standards are unhelpful since the roles and activities of managers are too diverse to be accurately represented in a single description. Hence attempts to apply a

generic description of management to an individual manager will fall short of what that manager actually does.

- That the picture of management represented in the occupational standards does not reflect the "real" nature of managerial work as portrayed by contemporary studies; rather it reflects a traditional, Fayolian, view of the manager as planner and controller.
- That the structure of the standards emphasises atomization and reductionism at the expense of a more holistic, integrated, view of management and that the emphasis in the performance criteria reflects management processes rather than valued outcomes.

The Government initiated a review of national vocational qualifications in response to some of the criticisms and the subsequent report (Beaumont, 1995) criticised the structure and language of many of the standards in use at that time. This report coincided with the five-year review by MCI of the Management Standards that had been delayed and many of Beaumont's suggestions were incorporated in the revised standards that were eventually published in 1997 and became effective in 1998. (MCI, 1997a, 1997b, 1997c, 1997d, 1997e, 1997f, 1997g) Grugulis, (1998) undertook a thought-provoking review of these revised management standards, mostly from a contingency management perspective, and concluded that they were unlikely to be widely used and would not be successful. However, she concentrated on the level 4 VQ, aimed at "Junior Managers" and did not address the new standards at NVQ Level 5 for strategic and operational management, or the flexibility introduced by a "core and options" approach that was guardedly welcomed elsewhere (Swales and Brown, 1999).

5.07.6 Analysis of the Criticisms of the Management Standards

The point was made above that the Management Standards and management vocational qualifications have not attracted the attention of many researchers. While a number of papers have been produced on competency and the Management Standards, very few of these were based on research and large-scale empirical evidence. The papers that have been cited in support of the arguments advanced above appear to be the only ones of substance covering the decade from the issue of the first Management Standards in 1989. The revised Management Standards that were issued in 1997 were fundamentally different from those issued in 1989 and the revised standards address many of the criticisms that had been levelled at the earlier version. One must therefore be very cautious in making reference to research into the earlier version of the Standards and drawing conclusions that could inadvertently be applied to the 1997 version or indeed to the latest 2004 version. Many of

the criticisms already referred to, are criticisms of the generic vocational qualification process rather than its specific application to management and, as previously stated, an analysis of the VQ process is outwith the scope of this thesis.

If we revisit the summarised criticisms of the Management Standards as detailed above, - the roles and activities of managers are too diverse to be accurately represented in a single description and the occupational standards portray a traditional, Fayolian, view of the manager as planner and controller, at the expense of a more holistic, integrated, view of management that emphasises valued outcomes rather than management processes - while this is the basic position advanced by the contingency theorists referred to above, it ignores the fact that, in this modern world, many of the management processes are concerned with compliance. Operations Management is heavily influenced by health and safety, environmental and quality issues, whereas the whole area of employment and employee relations is controlled by legislation and codes of practice that have *de facto* legislative weight. Therefore, the role of the average manager - particularly at NVQ Level 4 - is highly prescriptive and predictive with very little scope to add value to the day-to-day activities. This position is in keeping with MCI's original contention that the Management Standards reflected the work that managers actually did, as opposed to what idealistic academics proposed that they should do.

Grugulis, (1998) based her criticisms of the management standards almost exclusively on the 1997 version of the VQ level 4 Standards for "junior" managers and concluded:

"in that it (MCI) presents its "standards" as the "benchmarks" of managerial work, it is actively distorting the national perception of managers and managers' perception of themselves. The behaviours contained in the management NVQ are intended to describe "real" management, yet "real" management (if it exists at all) should surely involve a far higher appreciation of the organisational context than is permitted by a essentially derived set of "standards". Indeed, redefining management to focus on the authority and influence managers exert as well as the context they operate in, might actively assist the management process".

Whether or not this is a fair criticism of the "junior" management standards is debatable. However, the researcher would submit that the 1997 version of the Management Standards at NVQ Level 5 could not be subjected to the same criticism. They retained and refined many of the features of the Senior Management Standards developed by Henley Management College for MCI in 1994 that were extensively field-trialled and were generally well received (Pierce, *et al*, 1995). An extract from the Strategic Management Standards is given hereunder as an illustration:

Unit A6 Review external and internal operating environments***Element A6.1 Analyse your organisation's external operating environment*****The National Standard**

This section provides criteria to assess whether you analyse your organisation's external operating environment to the National Standard of competence. It also lists the knowledge and understanding which are essential for effective performance.

Performance criteria

You must ensure that

- a) the methods you use to review your organisation's **external operating environment** are cost-effective*
- b) your analysis of the **external operating environment** is based on sufficient, valid and reliable information*
- c) your analysis of the **external operating environment** identifies emerging and predicted trends*
- d) your analysis takes into account likely future interests and activities of your organisation and other relevant organisations*
- e) you take opportunities to modify the external environment in favour of your organisation*

Knowledge requirements

You need to know and understand

Analytical techniques

the range of methods available to analyse your external operating environments
the relative advantages and disadvantages of these methods to the context in which you are working and the resources you have available
how to identify and analyse emerging and predicted trends in the external environment

Information handling

how to collect and validate information required to review external conditions

Organisational context

the significance of social, demographic, economic, political, commercial, legal and geographic factors for your organisation
how to interpret your organisation's mission, policies, objectives and values and identify the implications for strategic planning
how to identify and utilise opportunities to modify the external environment in favour of your organisation

Strategic planning

the importance of strategic planning to the effectiveness of your organisation and your role and responsibilities in relation to this
the principles underpinning strategic planning
the importance of analysing external conditions when developing organisational strategy
 (MCI, 1997c) (Emphasis in original)

This approach to Strategic Management is likely to be found in any business school MBA curriculum (for example see Thompson, 1998; Pearce & Robinson, 1998; Kotler, 1997; Slack, *et al.*, 1998). It does not match the restrictive, prescriptive framework that critics of the Management Standards describe. There is plenty of scope for organisational contextualisation and it must also be remembered that the behaviours outlined in the MCI personal competence model have also to be factored into the process. This suggests

considerable flexibility in the way that the Standards are applied in practice and further contextualisation is possible for VQ candidates to tailor the evidence that they bring forward to the specific needs of their organisation.

5.07.7 Use of Management Standards

It is difficult to obtain accurate data on how widespread the use of management standards has become. Both MCI and METO were disbanded in 2001 and have not been replaced, while their standards setting body role has been assumed on a caretaker basis by the Chartered Management Institute (formerly the Institute of Management and originally the British Institute of Management) that has established a Management Standards Centre for this purpose. It claims

“Thousands of UK organisations - public, private and not-for-profit, are using the Standards to help their performance and over 90,000 managers have achieved a full NVQ since 1992.” (Management Standards Centre, 2002).

As most management VQs make up the bulk of awards at levels 4 and 5, the Government's own statistics can be used as a guide. These figures are reproduced below as Table 5.3 and show that the numbers achieving VQs at this level remained static for the last three years that figures were available.

Table 5.3 Completion Level 4 & 5 VQs

| | ,000 |
|------------------|-------------|
| Prior to 1994/95 | 34 |
| 1994/95 | 8 |
| 1995/96 | 9 |
| 1996/97 | 10 |
| 1997/98 | 12 |
| 1998/99 | 15 |
| 1999/00 | 15 |
| 2000/01 | 15 |

Source: Vocational Qualifications in the UK: 2000/01, DfES, *Issue No 04/02 May 2002*

The Management Standards Centre was commissioned by the Government to undertake a review of the existing management standards. A major consultation exercise commenced in June 2002 as the first of four main phases to the review, comprising:

- Occupational Mapping, to develop a map of the Management occupational area.
- Sectoral Benchmarking, to benchmark the current national occupational standards for management and leadership with the measures used in other countries.
- Review of the current standards for Management and NVQs/SVQs in Management

- Functional Analysis, to develop a functional mapping for Management by defining the key roles i.e. key activities and functions.

This agenda involved a root-and-branch, fundamental review of the Management Standards that addressed some of the criticisms that remained outstanding. However, the retention of functional analysis as the basis of the model is unlikely to satisfy proponents of a contingency approach to management. The revised Functional Map of Management and Leadership was published in January 2003 (Management Standards Centre, 2003) and is reproduced as Figure 5.3 below. This document proposed a key purpose for management and leadership as:

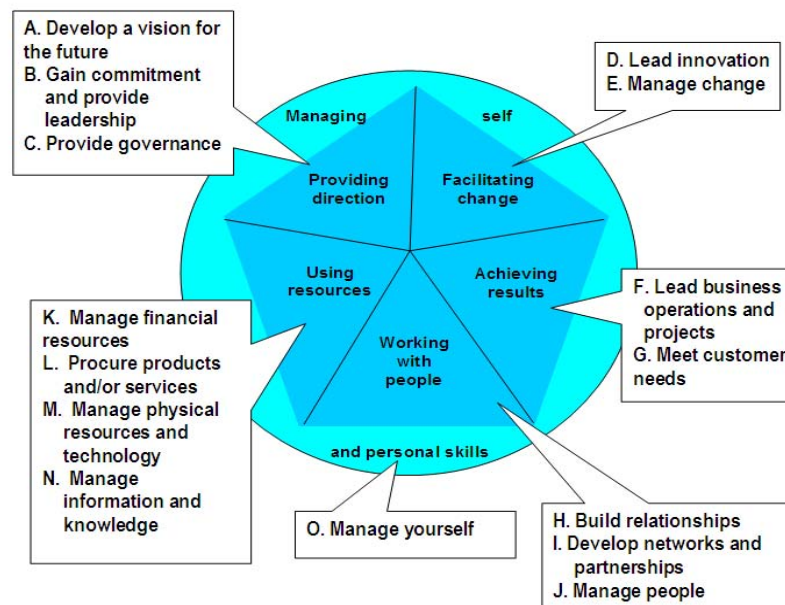
“Provide direction, gain commitment, facilitate change and achieve results through the efficient, creative and responsible deployment of people and other resources”,

together with some fifty-six functions or activities that need to be undertaken in order to achieve that key purpose.

The functions were grouped under six headings:

1. Provide direction
2. Facilitating change
3. Using resources
4. Working with people
5. Achieving results
6. Managing self and personal skills

Figure 5.3: Functional Map of Management and Leadership



5.07.8 The Future of Management Standards

The Government's attitude to National Occupational Standards and the delivery mechanisms necessary to convert them into qualifications has undergone a number of changes since their inception. In terms of the Management Standards, the decision to replace Lead Industry Bodies with National Training Organisations (NTOs) in 2000 had the most far-reaching effect. A NTO for Management and Enterprise was established (METO) consisting of MCI and the Small Firms Enterprise Development Initiative (SFEDI) covering the areas of, Design, International Trade and Services, Management, Marketing, Sales, Small Firms and Business Support and Supply Chain Management.

In a parallel move the Council for Excellence in Management & Leadership (CEML) was appointed in April 2000 by the Secretary of State for Education & Employment and the Secretary of State for Trade & Industry to "develop a strategy to ensure that the UK has the managers and leaders of the future to match the best in the world". Although this was a one-off remit with a stated intention that CEML would disband once this task was completed, there was an obvious conflict with the role of METO. This conflict was resolved when METO was disbanded in 2001 ahead of the Government's decision to replace NTOs with Sector Skills Councils (SSCs) that came into effect on 1 April 2002 under the control of the Sector Skills Development Agency (SSDA). The SSDA is still going through a transitional phase and its approach to management has yet to emerge. However, during the consultative process that was the precursor to the establishment of SSCs, the mention of any cross-sectoral SSC such as management was conspicuous by its absence.

The CEML issued its final report in May 2002 (CEML, 2002) and, among the 30 detailed and specific recommendations for change; it pressed upon Government "an urgent need for the establishment of a new, over-arching strategic body for management and leadership". Included in its recommendations were specific changes to the Management Standards to address detailed attributes of leadership that the Council had identified. The revised Management Standards released in 2004 incorporated these recommendations and the Standards were renamed as the National Occupational Standards for Management and Leadership. Taylor, (2002) claims that the Government has spent almost £100 million developing National Occupational Standards and that these standards and the vocational qualifications that accompany them in the UK are "being dusted off and revitalised as part of a government drive to plug the nation's skills gaps." It seems likely therefore that the combination of the review of the Management Standards, together with the call for the

establishment of a strategic body for management and leadership and a concerted effort by government to increase the use of NVQs and VQs will raise the profile of the Management Standards for use as a business improvement tool.

5.08 Standards-based Management of Stress

A further example of the proliferation of management standards in the UK is the recent decision of the Health and Safety Executive (HSE) to produce a set of standards for the management of stress in the workplace.

Justification for this stance was expressed on the HSE's web site as:

“Some academics have argued that stress is an almost meaningless term and does not exist. However numerous research reports have shown that whatever you choose to call it, there is a clear link between poor work organisation and subsequent ill-health..... HSE's key messages are [that] work-related stress is a serious problem for organisations; but there are things organisations can do to prevent and control it; and the law requires organisations to take action.”(HSE, 2003).

The HSE piloted their draft standards with just 24 organisations before launching them in November 2004. The Standards consist of the following units:

Demands - The organisation has achieved the Standard if:

at least 85% of employees indicate that they are able to cope with the demands of their jobs; and systems are in place locally to respond to any individual concerns.

Control - The organisation has achieved the Standard if:

at least 85% of employees indicate that they are able to have a say about the way they do their work; and systems are in place locally to respond to any individual concerns.

Support - The organisation has achieved the Standard if:

at least 85% of employees indicate that they receive adequate information and support from their colleagues and superiors; and systems are in place locally to respond to any individual concerns.

Relationships - The organisation has achieved the Standard if:

at least 65% of employees indicate that they are not subjected to unacceptable behaviours (e.g. bullying) at work; and systems are in place locally to respond to any individual concerns.

Role - The organisation has achieved the Standard if:

at least 65% of employees indicate that they understand their role and responsibilities; and systems are in place locally to respond to any individual concerns.

Change - The organisation has achieved the Standard if:

at least 65% of employees indicate that the organisation engages them frequently when undergoing an organisational change; and systems are in place locally to respond to any individual concerns.

Although these Standards are voluntary there is an expectation that they will become the *de facto* mandatory requirement for UK businesses as they will certainly form the basis of employment litigation for stress related cases (CIPD, 2004; Javaid, 2004). While it is too early for any research in this area, it is concerning that management standards – with the potential to stimulate court action - can be proposed against a background where opinion is widely divided on the fundamental premise that underpins them.

5.09 Integrated Management

5.09.1 The Emerging Debate

The introduction of ISO9000-2000 mentioned above is possibly just one step – albeit an important one - along the road to an emerging movement towards what is being described as “integrated management”. The first noticeable mention of the term "integrated management" in the context of this thesis appears at the time when the popularity of business process re-engineering (BPR) was at its height. A number of researchers argued that BPR and quality had many complementary features that facilitated their integration (Azhashemi and Ho, 1996; Castle, 1996; Zairi, 1996b; Zairi and Sinclair, 1995). The pace for integration accelerated somewhat with the publication and adoption of ISO 14000 and the similarity between it and ISO 9000 has been the focus of arguments that these two international standards could be integrated (Abounaga, 1998; Chin and Lau, 1999; Karapetrovic and Willborn, 1998; Renzi and Cappelli, 2000; Johnson, 2000). It was perhaps an inevitability that this argument should be extended to include the health and safety standard, BS 8800 and a significant number of papers have been published on the integration of the standards for these three areas (Husband and Mandal, 1999; Mackau, 2003; Pun, *et al*, 1999 Pun and Hui, 2002; Scipioni, *et al*, 2001; vonAhsen and Funck, 2001; Wilkinson and Dale, 1998, 1999, 2001, 2002; Winder, 2000). However, the decision of the ISO not to introduce an international occupational health and safety management standard undermined this movement to some extent (see Zuckerman, 1997).

5.09.2 Generic Management Systems Standards

The literature suggests that there is a movement that may be gathering momentum for a "super" management standard that will incorporate the generic functions of management in

addition to those of quality, environment and health and safety (Cicmil, 2001; Ho and Donnelly, 2001; Karapetrovic, 2001, 2002, Matias & Coelho, 2002; Pun, & Hui, 2002). This is not a new concept (Uzumeri, 1997; Wilkinson and Dale, 1999), but it is worth noting that the 6th International Conference on ISO 9000 and TQM held in April 2001 used “Integrated Management” as its main theme, despite the suggestion contained in the first conference paper that:

“...integrated management is not a universal construct 'out there' based on a scientifically provable truth about its form, content, and existence, but a phenomenon with which people have had, and are having different experiences due to different contexts, conditions and culture of their working environment”. (Cicmil, 2001)

This theme generated debate on the attributes of a “super” management standard incorporating as a minimum existing quality, environmental and health & safety standards. This view was perhaps exemplified in the prize-winning paper in the Integrated Management category at the conference that introduced the concept of:

“A single and truly generic management system standard (GMSS), possibly covering all disciplines and functions within an organisation.” (Karapetrovic, 2001).

In their comprehensive survey of the theory, principles and practice surrounding the integration debate, Wilkinson and Dale, (1999) suggest that the EFQM Model for Business excellence perhaps provides a foundation upon which an integrated management system could be constructed. They are supported by Seghezzi, (2001), whereas Karapetrovic, (2002) addresses some of the auditing and certification difficulties highlighted by Wilkinson and Dale, (1999) in integrating the International Management Standards.

It is the researcher's view that the integration movement will continue to gather pace until a model for a “super” management system standard is proposed as the new “brilliant idea and new management paradigm” to which Taylor referred (Cannon and Taylor, 1994, p 20).

5.10 Progression from Total Quality Management

The integration debate has become clouded by some researchers who suggest that the various excellence models that have developed from quality awards are becoming *de facto* "Standards" for TQM. Dale, *et al*, (2000) suggest that:

“The way in which the model [EQA] is used by some organizations (in the form of a “tick-box” mentality) is resulting in an almost standard method of managing quality and its improvement” (p8).

While it is generally accepted that such developments are part of a natural evolution of TQM, there is no evidence to suggest that this argument would have gained the support of the "founders" of the TQM movement referred to in Chapter 4.

A theme that appears continuously in virtually all commentaries on TQM is that it should be considered as a continuous, never-ending journey and not a tangible thing in the sense that a company can achieve TQM at any particular point. However, there is a growing tendency to establish business or organisational "excellence" as a target, or for some even as the journey's end.

While the term "excellence" surfaced fairly early in the chronology of quality with the publication of Peters and Waterman's book "In search of Excellence" in 1982, McAdam, (2000) claims that the term organisational or business excellence has few historical roots and; "appears to be a product mainly of 1990s quality awards". (p 318) A retrospective analysis of the "excellent" organisations in Peters and Waterman's book illustrates the dangers of determining excellence without objective critical analysis. The commonest measure of "excellence" has become one of a growing number of quality/excellence awards, such as the Baldrige and EFQM awards. The EFQM defines excellence as; "outstanding practice in managing the organisation and achieving results, all based on a set of 8 fundamental concepts." McAdam suggests:

"Organisations scoring over or around 600 points on these models are deemed to have reached a state of excellence."

The excellence movement has its critics. For example Dale, *et al*, (2000) in a hard-hitting paper suggest that the EFQM and "certain management consultancies" were reacting to "the tarnished image of TQM" in their drive to supplant TQM with excellence. They accuse the EFQM of "stripping out" references to quality and TQM from the 1999 version of the model and draw attention to the confusion that this change in language has caused. They argue that;

"This form of term replacement not only marginalizes quality but also reinforces the belief that TQM is a fad and quality is no longer an important issue for European business".

Dale and Lascelles, (1997) have produced a six-level positioning model of TQM which, while they argue should not be perceived as a longitudinal process of TQM development, probably is seen as an incremental process. Interestingly, they place the "award winners" as the penultimate stage of the TQM continuum using McAdam's definition. They suggest that the achievement of this stage:

"marks the end of an organization's TQM apprenticeship and signifies that the organization has the capability and the potential to make an impact at the highest level, worldwide." (p 426)

For Dale and Lascelles there is one more stage beyond excellence; that of "world-class", which they claim has been achieved by very few organisations - particularly in the UK.

They conclude by remarking that even this "elite" has not come to the end of their journey:

"Attaining level 6 status is not the end, for none of the levels described here represents a "steady state". In particular, "world-class" status is often attainable for only a few years, and it is dangerous for an organization to become complacent and blinkered to environmental changes. It is possible for organizations to "slip" to level 5, or even lower." (p 427)

5.11 Excellence Models

A number of scholars have undertaken an analysis of the differences between the Malcolm Baldrige National Quality Award (MBNQA) and the European Excellence Model (McDonald, *et al*, 2002 or Khoo and Tan, 2003 for comparisons with Japanese awards). However, Table 5.4 allows comparisons to be drawn between the widely accepted vision of TQM as identified above and the concepts of excellence that underpin these excellence award models. Definitions have been used fairly loosely to identify broad correlations where they appear to exist, but it is apparent that the quality award models have moved well beyond the model for quality management advocated by the Gurus and the accepted vision of TQM. This is marked by the inclusion of financial performance as a specific criterion, but most notably with the introduction of "Public Responsibility".

Young, (2001) refers to Institute for Policy Studies research that claims that of the world's 100 largest economic entities, 51 are now corporations and 49 are countries. One could foresee the potential for conflict in a situation where a corporation's global attempts to establish its public responsibility for a western-based quality award are incompatible with the culture of some of the communities in which they are based, resulting in tensions with elected representatives, whether in government or in opposition, who may have very different priorities. It seems likely therefore that interventions in the community of this nature would lead to a political dimension of some sort. However, this concept of 'community support' is being rapidly overtaken by the notion of corporate social responsibility.

Table 5.4 Comparisons between widely accepted vision of TQM and the underpinning concepts of excellence models

| TQM Dimensions | BS 7850 (Part 1) 1992 | EFQM Model (2002) | Baldrige Model (2002) |
|----------------------------------|------------------------------------------------------------|-------------------------------------------------|---------------------------------------|
| Top management support | Top management Commitment | Leadership and constancy of purpose | Visionary leadership |
| Customer relationship | Customer satisfaction | Customer focus | Customer-driven excellence |
| Supplier relationship | Participation by all | Partnership development | Valuing employees and partners |
| Workforce management | Alignment of corporate objectives and individual attitudes | People development and involvement | Organizational and personal learning |
| Employee attitudes and behaviour | Personal accountability Personal development | Continuous learning, improvement and innovation | |
| Product design process | Continuous improvements | | Agility |
| Process flow management | Process measurement | Management by processes and facts | Managing for innovation |
| Quality data and reporting | Problem identification | | Management by fact |
| Role of the quality department | Quality losses | | Systems perspective |
| Benchmarking | | Results orientation | Focus on results and creating value |
| | | Public responsibility | Public responsibility and citizenship |
| | | | Focus on the future |

5.12 Corporate Social Responsibility

The concept of businesses putting something back into the communities that support them is not new and Quakers such as the Cadbury family are probably the best-known examples of this philosophy. Zairi, (2000a) points out that many of the gurus in the TQM field have stressed the importance of stakeholders and cites Deming as an example, “as far back as 1946”. Juran referred briefly to “corporate citizenship” in his Introduction to Quality Planning” (Juran, 1988 p 9) but did not return to the subject, although Zairi, (2000)

maintains that Juran “often urged quality institutions such as the American Society for Quality to expand their mandate by placing more emphasis on rendering service to society.” (p 173). However, there is now a global movement to promote Corporate Social Responsibility (CSR) that CSR Europe defines as:

“Conducting business responsibly by contributing to the economic health and sustainable development of the communities in which we operate.” (CSR Europe, 2003).

Trapp, (2001) suggests that what started in the 1980s as a focus on environmental issues has evolved to take in the wide-ranging interests of many stakeholders in the organisation. He contends that CSR is no longer the goal, but many companies aspire to “corporate citizenship” and draws attention to the efforts made by companies to gain entry to the FTSE4Good UK Index introduced in July 2001 to track companies’ performance in this area.

A clear definition of corporate citizenship and how it differs from CSR so far eludes us, but the laudable, altruistic approach to CSR seems to have been overtaken by advocates of the business case for CSR that continue to increase with the publication of books and a number of web sites devoted to the subject (; <http://www.csreurope.org>; <http://www.corporate-citezenship.co.uk>; <http://www.dti.gov.uk./sustainability>). There is a growing argument that CSR leads to greater profitability. Egan and Wilson, (2001) draw on research undertaken at Havard Business School of 200 organisations to conclude that companies with strong corporate values can expect turnover, earnings per share and profitability to increase significantly faster than the norm. Zairi and Peters, (2002) echo this view and suggest that:

“a focus on social responsibility can be an area of high leverage and as such can enable organisations to derive a sustainable competitive advantage.” (p 178)

Advice such as this attracts attention from those who question the moral and ethical stance adopted by many companies who claim commitment to CSR. Suspicions that profit motive is the driving force behind many CSR programmes are underpinned by press reports such as that suggesting that the DIY retailer, B&Q, spent more on the promotion of its CSR programme than it did on the programme itself. (Overell, 2002)

Peston, (2002) argues that the perception of ethical behaviour as being good for business ultimately leads to unethical behaviour. He suggests that;

“Quite an industry has grown up, as an adjunct to public relations and advertising, that earns considerable fees from advising companies on ethical behaviour, how

to exploit it for profit, and how to make a big noise about how wonderful they are.” (p 30).

He reminds us of the controversy surrounding the sale of £40 million of radar equipment by BAE Systems to Tanzania in late 2001. It was argued that the sale to one of Africa’s poorest countries was unnecessary and too sophisticated for the infrastructure. BAE was accused of preventing important anti-poverty measures being introduced. He further criticized BAE for its stance when it produced a “glossy annual ‘Community Review’, in which the CEO, John Weston, extols ‘the calibre of our people who work to ensure that BAE Systems remains a good corporate citizen’. (p30) One can only speculate on how BAE would be judged against the Baldrige criteria, or indeed by their shareholders who perhaps would have differing views on morality and “corporate citizenship”.

Another example of the dangers of organisations offering themselves as examples of CSR occurred with the launch of the European CSR campaign using a quotation from Ralph Larson, Chairman and CEO of Johnson & Johnson to the effect:

"Does our [CSR] value system make good business sense? Absolutely, it brings us the best people. It helps us make the best decisions. At the end of the day, it contributes greatly to a reputation that is for us, an important competitive advantage." (CSREurope, 2002).

This quotation appeared at the same time that the international press was reporting that Johnson & Johnson shares had fallen by some 16% on the news that the company was under investigation for alleged falsification of records to hide problems with its best selling drug Eprex (Bowe, 2002). Laufer, (2003) draws attention to, “Social and environmental accounting research that finds corporate posturing and deception in the absence of external verification, and a parallel body of literature describing corporate “greenwashing” and other forms of corporate disinformation”. This is an example of a movement to progress corporate social responsibility to corporate social accountability, where the volunteerism of the former is replaced by the implied compulsion of the latter (c.f. Garsten, 2003 and Sethi, 2003).

Overell, (2003) contends that the business case for CSR has reduced UK business ethics to a spectacular new level of crassness, where the Institute of Business Ethics, Business in the Community and the DTI are devoting their energies to promoting the message that ‘doing the right thing’ must be lucrative. He interprets this as; “responsibility, honesty, duty, morality and concern for employees and suppliers is all very well, but businesses cannot be expected to take them seriously without a bottom line imperative.”

The growth of CSR and corporate citizenship looks set to continue with a planned EU Directive on this subject in prospect and global support. Golzen, (2001) points out that Michael Porter, described by *Wired* magazine as the most famous business school professor in the world, delivered a lecture at the London Business School in which he advocated that ethical policies, governance and corporate responsibility were emerging as the new source of competitive advantage. Zairi and Peters, (2002) support Porter's position, but then bizarrely caution that one of the possible impediments to this growth is the "Total absence of a mandatory process" (p 178). However, they do not give examples of where competitive advantage and mandatory processes coexist successfully.

Sethi, (2003), among others, argues that:

"Large corporations are coming under intense pressure to act in a socially responsible manner. Corporations have accepted this notion provided that it is exercised voluntarily. It has also been argued that corporations can do well by doing good, and that good ethics is good business".

Sethi suggests that three approaches are appropriate for measuring corporate accountability through corrections. These are: information imbalance, bargaining power imbalance, and, adjudication, remedy and relief imbalance. But, the impetus seems to be moving towards another Management Standard for an organisation's external relationships: and one is already established in SA 8000.

Social Accountability International (SAI) claims that SA 8000 is a comprehensive, global, verifiable standard for auditing and certifying compliance with corporate responsibility. The standard is based upon the belief that all workplaces should be managed in such a manner that basic human rights are supported and that management is prepared to accept accountability for this. SAI is credited with initiating the standard. SAI is a non-profit organisation, "Dedicated to the development, implementation, and oversight of voluntary verifiable social accountability standards". It is claimed that the SA 8000 system is modelled on ISO 9001 and ISO 14001 standards for Quality and Environmental Management Systems. The standard was developed and field-tested by the non-profit Council on Economic Priorities (CEP), and assisted by an international Advisory Board including representatives of prominent corporations, human rights organisations, certification professionals, academics, and representatives of various workforces. The standard is based on a number of existing international human rights standards including the United Nation's Universal Declaration of Human Rights and the UN Convention on the Rights of the Child.

SA 8000 provides transparent, measurable, verifiable standards for certifying the performance of companies in nine essential areas:

1. *Child Labour* - Prohibits child labour (under age 15 in most cases). Certified companies must also allocate funds for the education of children who might lose jobs as a result of this standard.
2. *Forced Labour* - Workers cannot be required to surrender their identity papers or pay "deposits" as a condition of employment.
3. *Health and Safety* - Companies must meet basic standards for a safe and healthy working environment, including drinkable water, restroom facilities, applicable safety equipment, and necessary training.
4. *Freedom of Association* - Protects the rights of workers to form and join trade unions and to bargain collectively, without fear of reprisals.
5. *Discrimination* - No discrimination on the basis of race, caste, national origin, religion, disability, gender, sexual orientation, union membership, or political affiliation.
6. *Disciplinary Practices* - Forbids corporal punishment, mental or physical coercion and verbal abuse of workers.
7. *Working Hours* - Provides for a maximum 48-hour work week, with a minimum one day off per week, and a cap of 12 hours overtime per week remunerated at a premium rate.
8. *Compensation* - Wages paid must meet all minimum legal standards and provide sufficient income for basic needs, with at least some discretionary income.
9. *Management* - Defines procedures for effective management implementation and review of SA 8000 compliance, from designating responsible personnel to keeping records, addressing concerns and taking corrective actions.

The corporate think-tank that calls itself Tomorrow's Company has recently published an extensive paper on CSR within which it states "The International Standards Organisation (ISO) is even rumoured to be preparing its own CSR standard" (Goyder 2003). These rumours were substantiated when in September 2004 the ISO announced that it had assigned the leadership of a working group that will develop an International Standard giving guidelines for social responsibility collectively to the national standards institutes of Brazil (ABNT) and Sweden (SIS) (ISO, 2004). Recently the Times claimed:

"It [CSR] has been hijacked by the box-tickers. It is now an area in which compliance is increasingly required and some investors and busy-bodies will insist on it being measured. Inevitably, there is a minister with responsibility for CSR."

(Wheatcroft, 2003). The growth of interest in environmental matters and calls for more regulation in this area could give a CSR Standard an impetus similar to that enjoyed by BS 5750 in the 80s and 90s.

5.13 Conclusion

The origin of the belief that there is 'one best way' to manage organisations was addressed in the previous chapter, but this research suggests that it is still prevalent today.

Unfortunately the 'one best way' turns out to be several best ways in the absence of a consensus on how Management Standards should be constructed.

The most ubiquitous Standards-based approach to management is BS 5750/ISO 9000 and it has inspired a plethora of research, most of which it has to be said is positive. This research has ranged from descriptive papers on motivational factors to cost/benefit analyses, improved efficiency and the consequence on performance and strategy. Critical research includes those who contend that it does not improve product quality, those who believe that it is anti-competitive and some who argue that it actually impedes performance. Some researchers have examined ISO 9000 and its relationship with TQM and have concluded that the Standard as it stood may be incompatible with TQM, whereas others advocate the Standard as a route to TQM. The conclusion that can be drawn from this research is that the ISO 9000 Standard can be said to be effective in many of the organisations that have adopted it, but it is not uniformly effective. There are a number of reasons for the phenomenal worldwide growth of ISO 9000, but an important reason has to be the "compulsion" that attaches to the Standard. While it is certainly true that many larger organisations and government departments insist upon their suppliers becoming registered to ISO 9000, a significant aspect of the compulsion is anecdotal and market-driven. A number of researchers have reported that organisations that are forced to adopt quality management Standards such as ISO 9000 are unlikely to derive the same benefits as those organisations that embark upon the process with the aim of improving their performance.

Despite extensive promotion, Competence Standards-based management as defined by the National Management Standards has received little critical research attention. What research does exist is undertaken from a contingency management perspective of just one aspect of the National Management Standards and is inconclusive. In April 2000 the UK Government appointed The Council for Excellence in Management & Leadership (CEML) to:

“Develop a strategy to ensure that the UK has the managers and leaders of the future to match the best in the world”. In its final report it recommended specific changes to the Management Standards to address detailed attributes of leadership that the Council had identified (CEML, 2002).

The 2004 review of the Management Standards incorporated the attributes of leadership that the CEML called for and a concerted effort by the UK Government through organisations such as Sector Skills Councils to increase the use of National Management Standards for use as a business improvement tool can be expected. However, there is no research that has looked in detail at whether clear business benefits can be gained by organisations in which managers have adopted the National Management Standards.

Corporate Social Responsibility (CSR) is also accredited with generating business benefits, or the competitive advantage that can be gained. However, there is also research that points to corporate posturing and deception and corporate "greenwashing" and other forms of corporate disinformation. This can lead to detrimental effects as demonstrated by the highjacking of British American Tobacco's (BAT) AGM in April 2004 by Christian Aid, Action on Smoking and Health, and Friends of the Earth; and Christian Aid's publication of a report into international CSR that had very damaging effects upon the share performance of the organisations named and shamed (Christian Aid, 2004).

IiP UK claims that circa 40% of the UK workforce have been assessed against the Standard or their organisation has given a firm commitment to work towards assessment. IiP UK used the occasion of its tenth birthday to try and raise its profile through the publication of a specially commissioned report by NOP World. (IiP UK, 2001). This research coincided with a number of reports of research that suggested that the use of IiP could not be linked to profitability or productivity (Mahony, 2000; Nelson, 2001; Hammond, 2001). Perhaps the most damning of all judgments on IiP came from the Efficiency in Government Unit when it said;

“It is of dubious benefit to the private sector, although it has slowly become more of a criterion for big companies to demand of their small company suppliers. It requires an annual inspection and is now even expected of time-pressed headmasters in schools. IiP is devaluing quickly as more and more sign up to it. It would be better to scrap it altogether.” (Lewis, 2005, p 7).

The absence of substantive academic research into the effectiveness of the IiP Standard is therefore surprising when such a large proportion of the workforce is involved and the Standard is still assiduously promoted by the Government.

Despite the fact that the UK has some of the most comprehensive occupational health and safety legislation of anywhere in the world, it has been at the forefront of efforts to establish an international standard similar to ISO 9000 and ISO 14000. Although the publication of BS 8800:1996 Guide to Health & Safety Management Systems, has not led to the widespread adoption of the standard and the ISO rejected a common standard for health and safety management, a number of standards and certification bodies, together with specialist consultancies, have developed an Occupational Health & Safety Management Systems Specification OHSAS 18001:1999. This Standard seems to have gained more coverage from proposals for its inclusion in an integrated management systems Standard than it would appear to warrant on its own merit, but nevertheless its profile has increased.

A further set of Management Standards have been introduced in the UK by the Health and Safety Executive (HSE) for the management of stress in the workplace, despite their own admission that the subject is controversial. The HSE website includes a photograph of Professor Cary Cooper and the quotation "stress at work does exist", which seems bizarre if the HSE's own research is robust. Although these standards are voluntary there is an expectation that they will become the *de facto* mandatory requirement for UK businesses as they will certainly form the basis of employment litigation for stress-related cases. The HSE claims that adopting the Standard could lead to improved organisational performance, but it is not clear in what way.

There has been little critical research into ISO 14000, the environmental Standard, or BS 8800 and OHSAS 18001, the health and safety Standards, beyond exploring their possible integration with ISO 9000. This approach is driven by a desire to reduce the administrative and bureaucratic burdens that multiple Standards impose (Aboulnaga, 1998; Karapetrovic & Willborn, 1998; Chin & Lau, 1999; Pun, *et al*, 1999; Wilkinson & Dale, 1999; Renzi & Cappelli, 2000; Karapetrovic, 2001 & 2002). Dale, (2002) argues that the effects of systems seeking to integrate quality management, environmental management, occupational health and safety, and data protection need to be researched in the future, along with the best means of developing an integrated management system.

The literature supports the suggestion that there is a movement for a "super" management standard that will incorporate the generic functions of management in addition to those of quality, environment and health and safety that is gathering momentum. This is not a new concept and it is worth noting that the 6th International Conference on ISO 9000 and TQM

2001 called for a single and truly generic management system standard (GMSS), possibly covering all disciplines and functions within an organisation. Some researchers argue that the EFQM Model for Business excellence perhaps provides a foundation upon which an integrated management system could be constructed and others believe that some of the auditing and certification difficulties that this proposal creates can be addressed.

The literature review confirms that Standards-based management approaches are increasing and encroaching into ever more areas of management. It seems incongruous that this trend has not received more critical attention including challenging the basis of the Standards and the legitimacy of the Standards' architects and writers. For example, is the Health and Safety Executive competent to produce Standards for the management of stress when there is little unanimity on what stress is or what causes it? There is also evidence of a growing movement for the integration of a range of existing Standards and calls for the creation of a "super" Standard to include additional areas of management. This movement seems to be driven by a desire to reduce the bureaucracy and auditing burden of multiple Standards, rather than a belief in the benefits of extending Standards-based management.

The literature review examined a very wide body of research that was persuasive in suggesting that a range of benefits would accrue from some Standards-based approaches to management. However, it did not identify sufficient empirical evidence to suggest that Standards-based management techniques would uniformly deliver improved performance in organisations unless other factors were present. There is sufficient evidence from the literature review to conclude that Standards-based management by compulsion will not, by itself, lead to the necessary change in the culture of the recipient organisation. This is an important factor that will be explored in the research into SQMS.

Chapter 6 Results of the SQMS Research Project

6.01 Chapter Synopsis

The research project that was set out in Chapter 3 was extensive and produced a very good response rate from organisations that had been successfully assessed against the SQMS Standard. This resulted in a very large body of data for subsequent analysis using SPSS Version 11 and the key results of this analysis are summarised in this chapter. All of the results are contained within Appendix 5 to this thesis that includes tabulations of frequencies for each of the questions that were asked. Some tabulation is included in the text to aid comprehension and amplify conclusions that are being drawn from it. A sample of the questionnaire forms Appendix 3 where its structure can be noted. The questionnaire was subdivided into sections that were intended to follow a logical structure. However, key questions surrounding attitudes, beliefs and measurement were repeated in different sections in different ways in order to draw comparisons. Attention is drawn to these comparisons where it is considered to be relevant, rather than in the section where the secondary question is asked. Where questions have been cross tabulated the question numbers are indicated in brackets immediately following the cross tabulation.

Readers are reminded that the majority of questions contained within the questionnaire invited responses on a Likert-type scale with the following meanings: 1 strongly disagree, 2 disagree, 3 neither agree nor disagree, 4 agree, 5 strongly agree. In order to ensure uniformity of presentation and to obviate the possibility of over-emphasis in the results, the majority of the results will be stated by reference to those who had agreed and strongly agreed with the statement or question. An explanation is provided in the text where this convention is not followed.

Analysis of the profile of respondents to the research instrument and comparisons with the population profile confirms that the distribution of the responses accurately reflects the population. The majority of respondents had extensive experience of both the training industry and of SQMS and therefore the data that was collected was likely to be robust. Analysis of each section of the research instrument is undertaken and the results discussed.

6.02 Characteristics of the SQMS Population

6.02.1 Respondent Profile

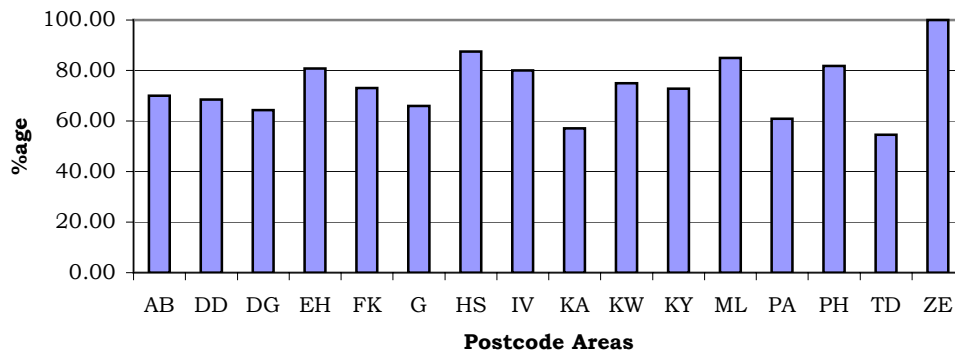
Data covering the rate of response and the representation from the various types of organisations were produced in Chapter 3 and they showed that the sample very closely followed the profile of the population. However, in relation to representation from the various parts of Scotland, Table 6.01 shows the results that were achieved in each postcode area expressed as a percentage of the total of SQMS recognised organisations in that area:

Table 6.01 Responses by Geographical Area

| Postcode | %age | Postcode | %age |
|----------|------|----------|------|
| AB | 82 | KA | 39 |
| DD | 55 | KW | 50 |
| DG | 40 | KY | 58 |
| EH | 50 | ML | 59 |
| FK | 36 | PA | 46 |
| G | 34 | PH | 45 |
| HS | 14 | TD | 50 |
| IV | 44 | ZE | 100 |

These results are presented graphically in the following chart:

Figure 6.01 Responses by Geographical Area



The mean response rate was 70.47% and all but three areas were within +/- 15% of the mean. The exceptions were the most remote areas with Shetland (ZE) and the Western Isles (HS) returning the highest percentage and The Borders (TD) the lowest.

The first section of the questionnaire invited respondents to identify themselves, their position, organisation and address. Respondents were also asked if they were willing to be interviewed on their views and experiences of SQMS in case this option was chosen as a

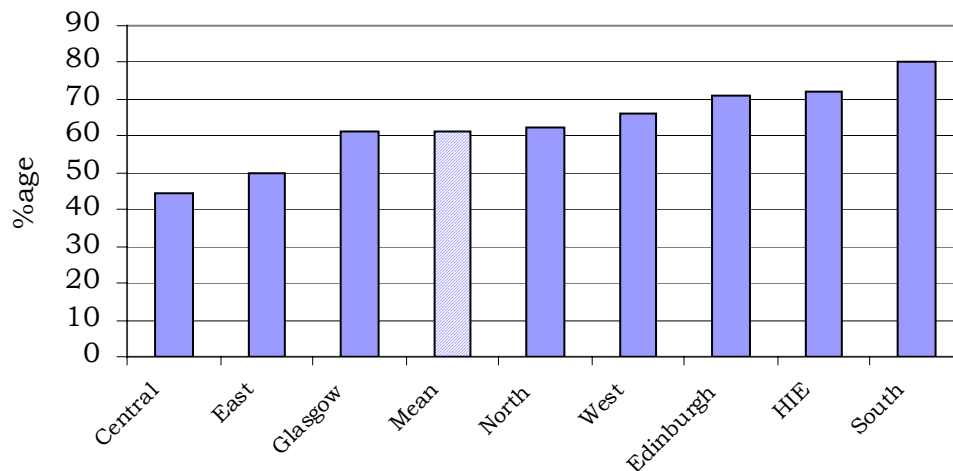
method of triangulation. The segment was clearly headed "This section is voluntary, but completion would be appreciated". Table 6.02 shows the response received across the country.

Table 6.02 willing to be interviewed by area

| Area | %age |
|-----------|-------|
| Central | 44.70 |
| East | 50.00 |
| Glasgow | 61.00 |
| Mean | 61.40 |
| North | 62.50 |
| West | 65.90 |
| Edinburgh | 71.10 |
| HIE | 71.90 |
| South | 80.00 |

These results are presented graphically in the following chart:

Figure 6.02 Willing to be interviewed by area



A mean of 61.4% of the respondents who completed this section agreed to be interviewed. This indicates a relatively high level of confidence and ownership in the responses that were being given.

81.2% of respondents claimed that their organisations had been involved in training for over five years and 64.6% for over 10 years. 69.3% of respondents claimed to have been working with SQMS for over three years. This suggests that their responses were informed and relevant.

49.1% of respondents claimed that their organisation's training turnover was less than £0.5 million and 65.3% of respondents employed less than 20 people in their training divisions. This suggests a combination of SMEs and small training departments within larger organisations. 52.0% of respondents relied upon the LEC network for over 40% of their turnover with 31.1% relying on the LEC network for over 70% of their turnover. This is a very high dependency on what is essentially one customer and companies in this situation would normally be considered unstable. The potential for this very high dependency on LEC activity to influence the responses from respondents in this situation who may not wish to 'rock the boat' was recognised. Responses from respondents in this category were compared with the rest of the population to identify if there were any discernible differences in the answers that were given. A synopsis of this comparison is contained in section 6.13 below.

The distribution of respondents in terms of their classification and geographical location is detailed hereunder in Tables 6.03 and 6.04 and 76.9% of respondents claimed to have used the Training Provider version of SQMS.

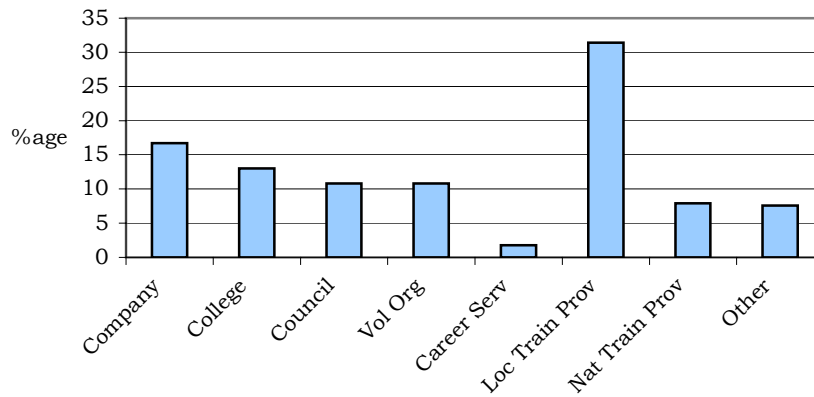
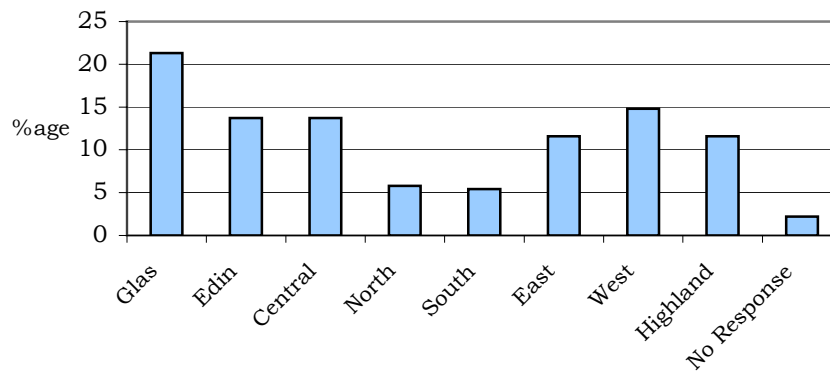
Table 6.03 Status of Responding Organisations

| Classification | %age |
|-------------------------|-------------|
| Company | 16.7 |
| College | 13.0 |
| Council | 10.8 |
| Vol Org | 10.8 |
| Career Service | 1.8 |
| Local Train Provider | 31.4 |
| National Train Provider | 7.9 |
| Other | 7.6 |
| | 100 |

Table 6.04 Area of Operation

| Geographical Area | %age |
|-------------------|------|
| Glasgow | 21.3 |
| Edinburgh | 13.7 |
| Central | 13.7 |
| North | 5.8 |
| South | 5.4 |
| East | 11.6 |
| West | 14.8 |
| Highland | 11.6 |
| No response | 2.1 |
| | 100 |

These results are presented graphically in the following charts:

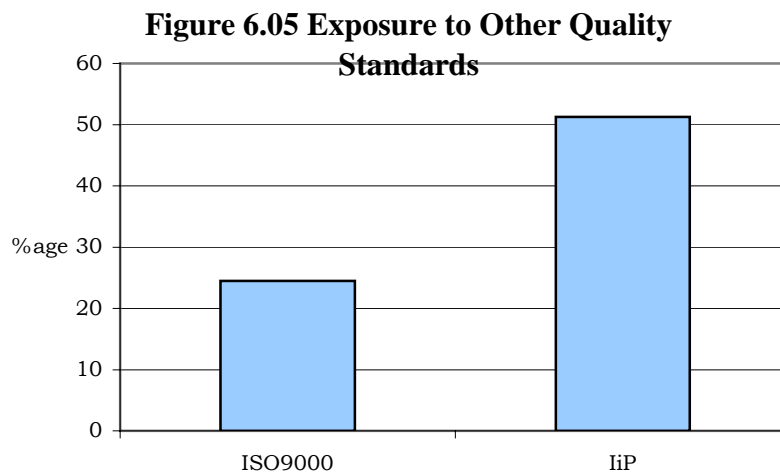
Figure 6.03 Status of Responding Organisations**Figure 6.04 Area of Operation**

6.03 Exposure to Other Standards

The next section of the questionnaire was intended to determine to what extent SQMS accredited organisations had been exposed to other quality management systems.

Respondents were invited to complete this section only if they were accredited to ISO 9000 or Investor in People. Figure 6.05 below shows the level of exposure.

It is perhaps surprising that there is not a greater take up of IiP within the local training industry. This indicates that SQMS is by far the predominant quality standard within training.



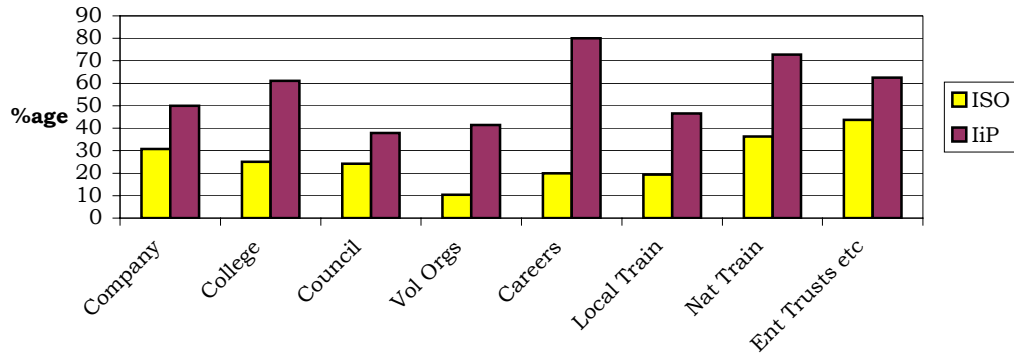
However, there is a difference in the take up of quality standards between the different types of organisation and Table 6.05a indicates those differences.

Table 6.05 Exposure to Other Quality Standards by category

| Category | ISO %age | IiP %age |
|-------------------------|----------|----------|
| Company | 30.77 | 50.00 |
| College | 25.00 | 61.10 |
| Council | 24.14 | 37.93 |
| Voluntary Organisations | 10.34 | 41.37 |
| Careers | 20.00 | 80.00 |
| Local Train | 19.32 | 46.59 |
| Nat Train | 36.36 | 72.72 |
| Enterprise Trusts etc | 43.75 | 62.50 |

These results are presented graphically in the following chart:

Figure 6.05a Exposure to Other Quality Standards by category



A Chi-square test was undertaken to determine if the difference in take up rates for ISO 9000 and IiP was significant. The results are illustrated in Table 6.05b below and show that the significance levels for both ISO9000 and IiP were greater than .05 suggesting that the differences are not significant.

Table 6.05a Chi-square Tests

| | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|--------|----|-----------------------|
| ISO 9000 | | | |
| Pearson Chi-Square | 10.450 | 7 | 0.164 |
| Likelihood Ratio | 10.574 | 7 | 0.158 |
| Linear-by-Linear Association | 0.002 | 1 | 0.964 |
| IiP | | | |
| Pearson Chi-Square | 11.915 | 7 | 0.103 |
| Likelihood Ratio | 12.253 | 7 | 0.093 |
| Linear-by-Linear Association | 0.491 | 1 | 0.484 |

6.04 Reasons for Pursuing SQMS

As SQMS was imposed upon the training industry in Scotland by the local enterprise company network it may seem unnecessary to attempt to determine the primary motivating factors in these organisations seeking accreditation to SQMS. However the literature review and the preliminary research indicated that, notwithstanding any compulsion that may exist,

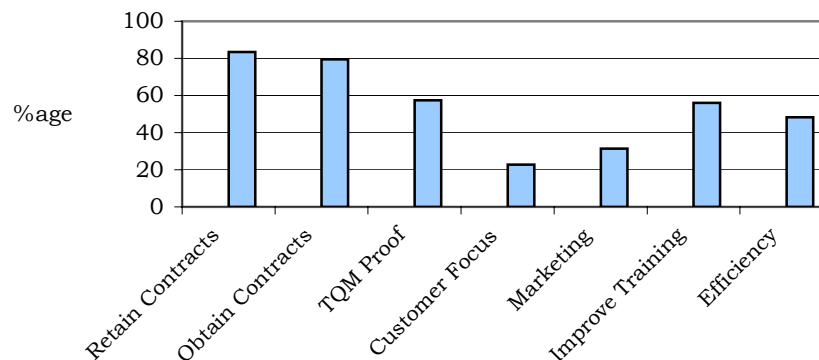
motivational factors could be a key determinant of future success. Table 6.06 shows the percentage of respondents who agreed with the selection of reasons given.

Table 6.06 Reasons for Pursuing SQMS

| Reason | %age |
|------------------|------|
| Retain Contracts | 83.4 |
| Obtain Contracts | 79.4 |
| TQM Proof | 57.4 |
| Customer Focus | 22.7 |
| Marketing | 31.4 |
| Improve Training | 56.0 |
| Efficiency | 48.3 |

These results are presented graphically in the following chart:

Figure 6.06 Reasons for Pursuing SQMS



The result for Customer Focus is interesting as it shows that this was the least important motivating factor for pursuing SQMS accreditation. This is explored in more detail below.

6.04.1 Marketing

Table 6.06 shows that almost a third of respondents (31.4%) expected SQMS to be a significant marketing tool, but interestingly, in response to question 6.03, only 7.2% of respondents claimed to have increased their market share, indicating that perhaps a number of aspirations have not been realised. However, looking in more detail at those who expected SQMS to be a significant marketing tool, 23.0% claim to have experienced an increase in

market share as a result of becoming registered against the Standard. Although 23% is not a high percentage it is nevertheless over double the experience of the population as a whole and it may be worth exploring why this is the case. It could be that they had used their SQMS accreditation in a more proactive way in promotional campaigns. Interestingly, only 10.1% of the respondents who claimed to have pursued SQMS to provide a significant marketing tool agreed that SQMS had enhanced the status of vocational training in the marketplace. (3.05/4.11) While only 17.3% of respondents who claimed to have pursued SQMS for marketing reasons believed that the reputation of their organisation in the marketplace had improved. (3.05/7.18)

Table 6.07 Marketing Crosstabulation

| | Q4.11 Status | Q7.03 Share | Q7.18 Reputation |
|---------------------------------------------|-------------------------|------------------------|-----------------------------|
| Q 3.05 Provide a significant marketing tool | 10.1% | 7.2% | 17.3% |

The Mann-Whitney U Test was employed in order to determine if these results were significant and the results are illustrated in Table 6.07a below and show that they are significant at the .01 level.

Table 6.07a Comparing expectations of SQMS as a significant marketing tool

| Expectation | Means | | | Mann-Whitney U Test | |
|----------------------------------------|-----------------|---------------------|------------|----------------------------|-----------------------|
| | Expected | Not expected | Dif | Value | Sig (2 tailed) |
| Enhanced status of vocational training | 2.99 | 2.29 | 0.70 | 6301.00 | 0.000 |
| Increased market share | 2.78 | 2.16 | 0.62 | 6669.50 | 0.000 |
| Reputation improved | 3.41 | 2.54 | 0.87 | 4879.5 | 0.000 |

6.04.2 Training Quality

Notwithstanding the absence of any clearly stated objective for SQMS, it would be reasonable to assume that improving the quality of training services was the *de facto* aim of the Standard. Table 6.06 shows that 56.0% of all respondents claimed to have pursued SQMS in order to improve the quality of their training services. This is a considerable majority and a laudable motivating factor that any management system for training organisations would be expected to deliver. However, when respondents were asked in

question 7.16 if their training delivery had improved in clearly measurable ways as a result of introducing SQMS, only 25.3% agreed. If we then look specifically at those respondents who cited training quality as a motivating factor, only 40.0% of them believed that, following SQMS implementation, training delivery had improved in clearly measurable ways. (3.06/7.16) Correspondingly only 45.5% of those who claimed that SQMS had established a system of continuous improvement in training delivery believed that, following SQMS implementation; training delivery had improved in clearly measurable ways. (4.06/7.16) These results would support the contention that training quality has not appreciably improved as a direct result of the implementation of SQMS.

Table 6.08 Training Quality Crosstabulation

| | Q7.16 Training delivery has improved |
|---------------------------------------------|--------------------------------------|
| Q 3.06 Improve quality of training services | 40.0% |
| Q 4.06 Continuous improvement in training | 45.5% |

The low number responding to market demand for more customer focus was highlighted above, but if we examine the responses of these few it reveals that, despite their commitment to customer focus, less than half of them (49.2%) believed that, following SQMS implementation, training more closely reflected trainee's needs (3.04/7.13). If we take a similar look at those who claimed to be responding to feedback on specific areas for improvement, only 35.7% of them believed that, following SQMS implementation, training more closely reflected trainee's needs (5.03/7.13). It seems incongruous if customer-led improvements do not lead to customer services that more closely reflect customer requirements. If we explore these responses through a slightly tangential lens, it transpires that 53.8% of those who claimed to have identified specific areas where feedback showed that improvements were necessary also claimed to have introduced management systems to identify customer requirements and 63.2% to evaluate improvements in customer satisfaction. So, the new management systems to monitor the improvements do not appear to have been particularly successful either.

A similar picture emerges in the examination of efficiency, where although Table 6.6 shows that 48.3% of respondents claimed to have pursued SQMS to make their business operations more efficient, only 13.4% of respondents to question 7.10 believed that their productivity had improved, while only 14.8% of respondents to question 7.09 believed that

administration had been considerably reduced and efficiency increased. Only 26.1% of those who agreed that a motivating factor in seeking accreditation to SQMS was to improve the efficiency of their business operations noted efficiency improvements. (3.07/7.09)

Table 6.09 Customer Focus Crosstabulation

| | Q7.13 As per needs | Q 7.09 Efficiency |
|--------------------------------------|-----------------------|----------------------|
| Q 3.04 Customer focus demand | 49.2% | |
| Q 3.07 Efficient business operations | | 26.1% |
| Q 5.03 Feedback driven improvements | 35.7% | |

To summarise in simple terms: despite the compulsion that attaches to SQMS, a considerable number of organisations claim to have pursued SQMS with specific improvement areas in mind and many also introduced systems to measure the results. Yet, overall, the anticipated improvements do not appear to have been realised.

6.05 Approach to Quality

Table 6.10 illustrates the attitudes to quality and SQMS as expressed in section 4 of the questionnaire.

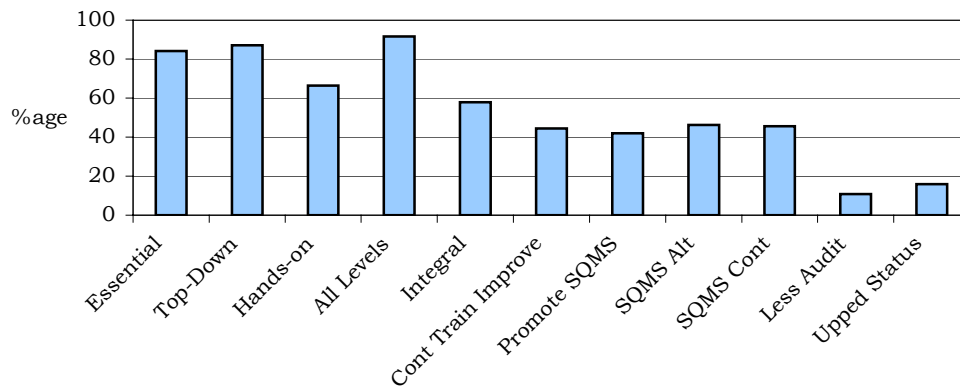
The first four questions in section 4 were about the concept of quality and the remaining seven questions about SQMS in particular.

Table 6.10 Approach to Quality

| Approach | %age |
|--------------------|-------------|
| Essential | 84.1 |
| Top-Down | 87.0 |
| Hands-on | 66.4 |
| All Levels | 91.7 |
| Integral | 57.8 |
| Cont Train Improve | 44.4 |
| Promote SQMS | 41.9 |
| SQMS Alt | 46.2 |
| SQMS Cont | 45.5 |
| Less Audit | 10.8 |
| Upped Status | 15.9 |

These results are presented graphically in the following chart:

Figure 6.07 Approach to Quality



Even a cursory glance at the chart above illustrates that there was overwhelming support for quality management systems and continuous improvement, but rather less support for SQMS. Table 6.10 shows that 91.7% of respondents claimed to believe that continuous quality improvement must be actively pursued at all levels. This is supported by the response to question 9.04 where only 15.5% of respondents agreed that they had only done what was necessary to get registered to the Standard. Therefore, the indications are that the approach to SQMS should not have been the “tick box” approach that is often a criticism levelled at quality management systems generally. However, when the responses to other questions are examined in more depth this general support for quality is called into question.

Only 15.9% of respondents to question 4.11 believed that SQMS had enhanced the status of training and only 10.8% of respondents to question 4.10 believed it had reduced auditing. Less than half (approximately 46%) of respondents would continue to use SQMS, or pursue a different quality standard if it ceased to be mandatory, and 44.4% of respondents to question 9.14 agreed that a lot of the time spent on standards and audits would be better spent on development. Only 48.5% of those who believed that quality management systems are essential for effective business operation would continue to use SQMS if it was not mandatory (4.01/4.09) and less than half of this group (49.4%) would pursue a different quality accreditation (4.01/4.08). Similarly, only 46.5% of those who believed that continuous quality improvement must be actively pursued at all levels would pursue a different quality accreditation if SQMS ceased to be mandatory. (4.04/4.08)

Table 6.11 Commitment to quality Crosstabulation

| | Population | Crosstabulation | |
|---------------------------------------|------------|---------------------|----------------------|
| | | Q 4.01 Essential | Q 4.04 All levels |
| Q 4.08 Would pursue other QMS | 46.3% | 49.4% | 46.5% |
| Q 4.09 Continue to use SQMS as a tool | 45.2% | 48.5% | |
| Q 4.10 Reduced auditing | 10.8% | | |
| Q 4.11 Enhanced status | 15.9% | | |
| Q 9.04 Only did what was necessary | 15.5% | | |
| Q 9.14 Time better on development | 44.4% | | |

This can be interpreted in a number of ways, but if these groups are genuinely interested in quality and continuous improvement, they do not see quality management systems as the vehicle to deliver these improvements. Conversely, perhaps the respondents gave what they considered to be the expected answer to the first four questions, rather than answering honestly. This calls into question the reliability of any conclusions that could be drawn from the responses given to questions on the general approach to quality.

6.06 The Starting Point

The purpose of this section was to determine if respondents had approached SQMS with a clear quality development plan for their organisation, or whether they had simply identified those areas of the Standard where they could not produce evidence to meet the criteria and had then simply concentrated on providing the evidence, rather than trying to improve the activity. Table 6.12 illustrates the approach to the SQMS process that was adopted.

Table 6.12 The Starting Point

| | %age |
|-----------------------|------|
| No Evidence | 61.4 |
| New Things | 66.8 |
| Feedback | 65.7 |
| Goals | 61.7 |
| SQMS Led | 54.2 |
| Measures | 53.4 |
| Quality Plans | 40.8 |
| Customer Requirements | 41.9 |
| Customer Satisfaction | 50.9 |

These results are presented graphically in the following chart:

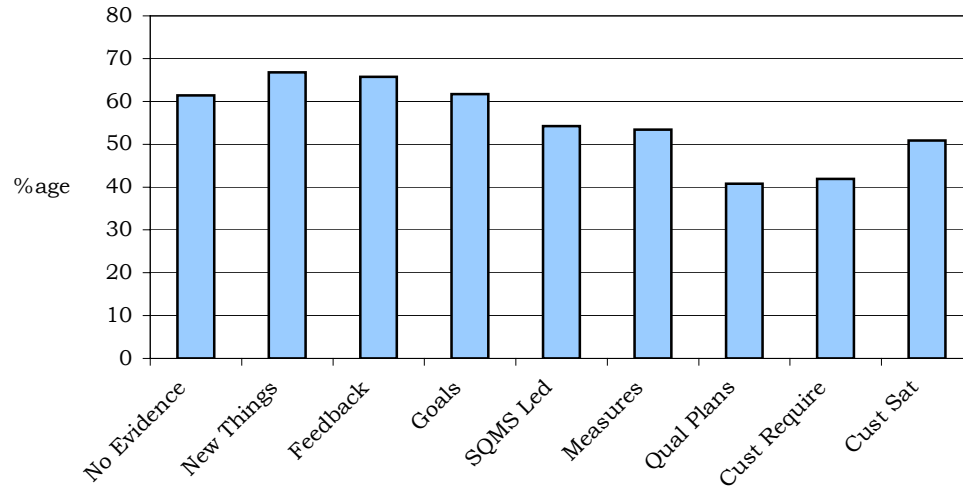
Figure 6.08 The Starting Point

Table 6.12 shows that, whilst 61.4% of respondents agreed that they had concentrated on areas where they couldn't provide evidence against the Standard, conversely, only 15.5% of respondents to question 9.04 agreed that they had only done what was necessary to get accredited to the Standard. Perhaps, as the second question was included as a possible disadvantage, it was deemed to have more negative connotations. Similar inconsistencies and contradictions can be highlighted in this section. Table 6.13 below contrasts answers given in this section to those given in other sections. These results suggest an attitude of compliance, rather than improvement as the underlying motivation in these areas. This is supported by Table 6.13a that contrasts answers given on planning and measurement that are also contradictory. These results could be interpreted in a number of ways, but they do not support the concept of quality improvement achieved through planning and measurement.

Table 6.13 Improvement –v- Compliance

| Question | %age |
|-------------------------------------------------------------------------------------------------------------|------|
| 5.02 Introduced new activities and processes to fill these evidence gaps | 66.8 |
| 5.03 Identified specific areas where feedback showed that improvements were necessary | 65.7 |
| 9.01 There are things that we do purely for evidence for quality audits | 56.3 |
| 9.02 Many of the additional activities required for "quality" don't make things better for customers | 55.2 |
| 9.03 Some plans and policies are produced solely for the Standard not as working documents | 39.3 |

Table 6.13a Planning and Measurement

| Question | %age |
|---------------------------------------------------------------------------------------|------|
| 5.06 Established measurement techniques to monitor progress against the quality goals | 53.4 |
| 5.07 Introduced both short and long-term, customer satisfaction-driven quality plans | 40.8 |
| 5.08 Introduced management systems to identify customer requirements | 41.9 |
| 5.09 Introduced management systems to evaluate improvements in customer satisfaction | 50.9 |
| 7.02 Trainee satisfaction has significantly improved | 22.7 |
| 11.01 Accurately measure and quantify every aspect of potential quality improvement | 17.0 |

6.07 The Process

This section was intended to gauge the effectiveness of the audit process and the attitude of respondents to the auditors. In Chapter 4 the background to SQMS was examined and the point was made that it was introduced into an environment where knowledge and experience of quality management systems and quality issues in general were at a very low level. LEC staff had to be trained to undertake the audit process and to provide advice and guidance to training providers who were similarly inexperienced. It would be reasonable to assume that this provided a recipe for conflict and dissatisfaction, yet, as Table 6.14 demonstrates, the responses received do not suggest that this is the case.

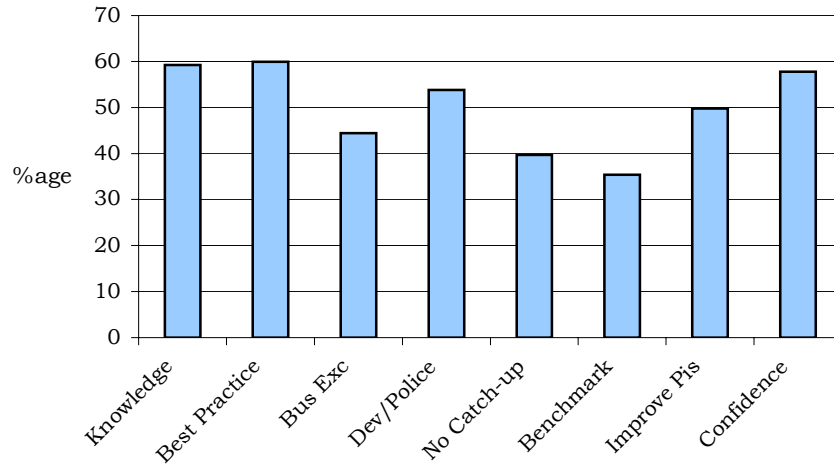
Over half of respondents were positive about the Auditor's knowledge and approach, and agreed that auditors look for opportunities to spread best practice in training. However, the opportunity to benchmark against the best is obviously being missed and only 49.8% used the audit to refine their performance indicators to ensure year-on-year improvements.

Table 6.14 The Process

| Question | %age |
|------------------------------------------------------------|------|
| 6.01 Wide knowledge of training and related issues | 59.2 |
| 6.02 Spreads best practice in training | 59.9 |
| 6.03 Drives the organisation towards business excellence | 44.4 |
| 6.04 Developer rather than a policemen | 53.8 |
| 6.05 Natural process that does not require any catching-up | 39.7 |
| 6.06 Provides an opportunity to benchmark against the best | 35.4 |
| 6.07 Refines performance indicators | 49.8 |
| 6.08 Boosts confidence in operations | 57.8 |

These results are presented graphically in the following chart:

Figure 6.09 The Process



6.08 Potential Benefits

The purpose of this section was to try and recognise benefits that one would typically identify with TQM, a quality management system and SQMS. It had been the area that had received the most attention during the piloting process and had undergone a number of changes. It was important to differentiate between changes that had actually taken place and can be properly evaluated and perceptions of benefits that could not be authenticated. Respondents were asked therefore to identify with a range of possible benefits and then to indicate whether the benefits were accurately measured. In view of its importance, this section is reproduced below in its entirety as Table 6.15.

The question of Measurement was referred to earlier and was addressed at various points in the questionnaire. 53.4% of respondents to question 5.06 claimed that they had established measurement techniques to monitor progress against the quality goals. Readers will note the responses to the measurement questions above, but approximately 47% of respondents didn't answer the questions at all, which is perplexing. However, in response to question 11.01, only 17.0% of respondents agreed that they accurately measured and quantified every aspect of potential quality improvement. There is therefore a contradiction here. The low numbers completing the measurement questions is borne out by the very low numbers who agreed that they accurately measure and quantify every aspect of potential quality improvement.

Conversely, it could simply be that the questionnaire was badly designed and the lack of response was due to confusion on the part of the respondents.

Table 6.15 Responses to Questions 7.01 – 7.20

| Since working with, or becoming accredited to SQMS, we have noted the following positive changes that we believe are directly attributable to SQMS | % agree & strongly agree | This is accurately measured |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------|
| 7.01 The overall management of the organisation has significantly improved | 35.4 | 30.3 |
| 7.02 Trainee satisfaction has significantly improved | 22.7 | 45.5 |
| 7.03 Market share has increased | 9.7 | 28.9 |
| 7.04 Staff motivation and turnover have improved | 14.8 | 32.9 |
| 7.05 Staff skills and competence levels have been appreciably enhanced | 28.2 | 37.2 |
| 7.06 People selection methods have improved | 19.9 | 26.0 |
| 6.07 The occurrence of accidents and incidents has been reduced | 11.9 | 43.0 |
| 7.08 Training aids and facilities have been significantly enhanced | 22.0 | 31.8 |
| 7.09 Administration has been considerably reduced and efficiency increased | 14.8 | 25.6 |
| 7.10 Productivity has improved | 13.4 | 33.9 |
| 7.11 Reduced costs and higher market share have increased profitability | 7.2 | 31.8 |
| 7.12 The number receiving training has increased | 19.5 | 43.0 |
| 7.13 Training more closely reflects trainee's identified needs | 30.3 | 32.5 |
| 7.14 Number of dissatisfied trainees has decreased | 19.9 | 35.7 |
| 7.15 The design and content of training more closely reflects best practice | 31.8 | 28.5 |
| 7.16 Training delivery has improved in clearly measurable ways | 25.3 | 30.7 |
| 7.17 Assessment practice has improved in clearly measurable ways | 33.9 | 35.0 |
| 7.18 The reputation of the Organisation in the market place has improved | 27.1 | 23.8 |
| 7.19 The number of positive achievers has increased | 18.1 | 43.0 |
| 7.20 The number of drop-outs from training has decreased | 12.6 | 41.2 |

As measurement is one of the underpinning tenets of Total Quality Management and quality management systems this is a noteworthy response, particularly as the SQMS Standard specifically requires measurements to be taken in many of the above areas.

It seems inconsistent that organisations showing a cavalier attitude to measurement in critical areas could successfully achieve accreditation to SQMS. Perhaps this is an area worthy of further research.

6.09 Possible Disadvantages

To some extent the disadvantages of a quality management system are harder to define than the potential advantages. It doesn't necessarily follow that a failure to achieve some of the benefits listed above could be described as a disadvantage, as the failure is not necessarily attributable to the quality management system. However, a range of possible disadvantages

were offered to respondents, some of which were intended to test answers given previously in other sections. This section is reproduced as Table 6.16.

Table 6.16 Responses to questions 9.01 – 9.17

| Since working with, or becoming accredited to SQMS, we have noted the following negative changes that we believe are directly attributable to the SQMS process: | % agree & strongly agree |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| 9.01 There are things that we do purely for evidence for quality audits | 56.3 |
| 9.02 Many of the additional activities required for “quality” don’t make things better for customers | 55.2 |
| 9.03 Some plans and policies are produced solely for the Standard not as working documents | 39.4 |
| 9.04 We only did what was necessary to get accredited to the Standard | 15.5 |
| 9.05 Parts of the Standard don’t take practicality into account | 46.6 |
| 9.06 Often the auditor(s) doesn’t understand the realities of delivering training in our position | 33.2 |
| 9.07 If we want to make an improvement it takes too much time and effort to change the system | 11.2 |
| 9.08 Quality is only important when financial and numerical targets are being met | 7.6 |
| 9.09 Quality is driven more by cost reduction than customer satisfaction | 7.2 |
| 9.10 No-one thinks about quality until six weeks before the audit and then there’s a panic | 9.7 |
| 9.11 Auditors try to catch us out rather than help us | 13.7 |
| 9.12 If you can talk a good game you’ll get through any audit | 12.3 |
| 9.13 Paperwork and processes are more important than actual training delivery | 24.2 |
| 9.14 A lot of the time spent on standards and audits would be better spent on development | 44.4 |
| 9.15 Most of the policies and procedures have little relevance to day-to-day activities | 14.8 |
| 9.16 It’s difficult to get individuals to take ownership for quality procedures and processes | 31.8 |
| 9.17 New organisations get contracts despite not having SQMS | 33.9 |

First, it has to be pointed out that some 92% of respondents dismissed the mildly disparaging and deliberately provocative comments about quality and quality management systems contained in questions 9.08 and 9.09, although it should be borne in mind that some 60% of respondents to question 6.05 did not agree that there was no catching up to be done before the audit took place. It would seem therefore that the discrepancy is one of timescale rather than one of consistent performance.

Turning to the main results in this section, almost half of the respondents did not believe that the standards took practicality into account and agreed that a lot of the time spent on standards and audits would be better spent on development.

A third of respondents agreed that often the Auditor doesn't understand the realities of training delivery. However, more than half of the respondents agreed that they did things purely for evidence for quality audits and many of these activities did not make things better for their customers. 54.1% of those who believed that quality management systems are

essential for effective business operation also agreed that there are things that they did purely for evidence for quality audits (4.01/9.01). 72.5% of those who agreed that they had introduced new activities and processes to fill evidence gaps against the Standard also believed that many of these additional activities did not make things better for customers (5.02/9.02). Paradoxically, only 11.9 % of the same group believed that most of the policies and procedures have little relevance to day-to-day activities (5.02/9.15)

Table 6.17 Possible disadvantages Crosstabulation

| | Q9.01 Evidence | Q 9.02 No better | Q 9.15 Irrelevant |
|----------------------------------|---------------------------|-----------------------------|------------------------------|
| Q 4.01 QMS essential | 54.1% | | |
| Q 5.02 Introduced new activities | | 72.5% | 11.9% |

This suggests that a considerable number of organisations undertake activities or produce pieces of paper for no reason, other than the Standard (or the Auditor?) tells them to. This suggestion is underpinned by the response to question 9.02 that resulted in 39.3% of respondents agreeing that some plans and policies were produced solely for the Standard and not as working documents. The response to question 9.15 where only 14.8% of respondents agreed that most of the policies and procedures had little relevance to day-to-day activities suggests that the policies and procedures that are produced for the Standard are in the minority.

6.10 Time Spent on SQMS

There is little evidence to suggest that the questions in this section regarding the time spent on SQMS were particularly productive. With the benefit of hindsight the design of this part of the questionnaire could have been better and consequently, some of the results do not lend themselves to meaningful analysis. The questions were not contained within a contextual framework that allowed the time to be expressed in proportional terms and unfortunately this only became obvious after the event. However, a couple of results are worth mentioning. 56% of respondents claimed that the SQMS audit lasted more than three days. This would put the average cost of an audit in excess of £1,000. 56% of respondents claimed that less than 10% of the time spent on SQMS matters is budgeted for. This suggests that the amount

of time spent on SQMS matters is probably not measured. Table 6.18 shows that 63.9% of respondents to question 10.07 considered that the time spent on SQMS was time well spent. However, this represents a stark contrast with responses to section eleven regarding the value of SQMS as illustrated below.

Table 6.18 Responses to Time Spent on SQMS

As a means of improving your business, do you believe that this time is:

| | Frequency | %age |
|-----------------|-----------|-------|
| Very useful | 41 | 14.8 |
| Useful | 136 | 49.1 |
| Not very useful | 76 | 27.4 |
| Wasted | 15 | 5.4 |
| No response | 9 | 3.2 |
| Total | 277 | 100.0 |

6.11 Value

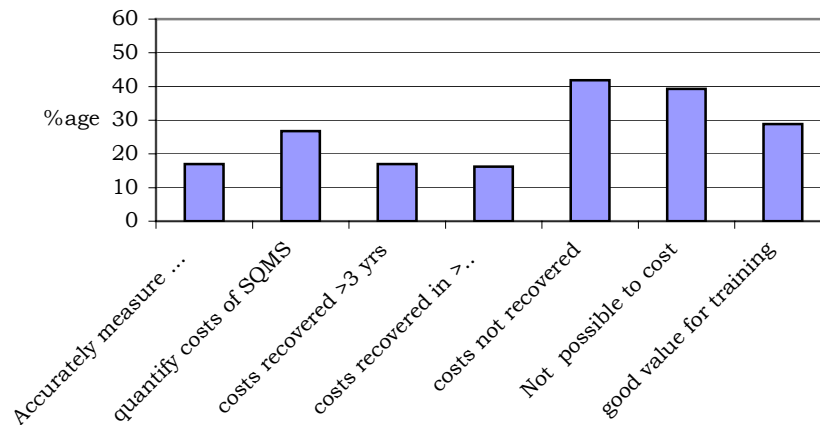
Table 6.19 shows the main results of responses to section 11.0 where only 28.9% of respondents believed that SQMS represents good value for the training industry and 41.9% of respondents believed that the cost of SQMS would not be recovered. These are only perceptions as only 26.7% of respondents claimed to accurately measure and quantify the cost of maintaining the SQMS accreditation and only 17.0% accurately measure and quantify every aspect of potential quality improvement.

Table 6.19 SQMS Perceived Value

| | %age |
|--------------------------------|-------|
| Accurately measure improvement | 17.00 |
| Quantify costs of SQMS | 26.80 |
| Costs recovered >3 yrs | 17.00 |
| Costs recovered in >10 yrs | 16.20 |
| Costs not recovered | 41.90 |
| Not possible to cost | 39.30 |
| Good value for training | 28.90 |

These results are presented graphically in the following chart:

Figure 6.10 SQMS Perceived Value



6.12 Additional Comments

A considerable amount of space at the end of the questionnaire was made available for additional comments, but only 48.7% of respondents took the opportunity to add comments in the space provided. These comments had to be categorised in some way and the categories were dictated by the nature of the comments made rather than trying to fit unstructured comments into predetermined “boxes”. A total of ten categories were eventually determined as shown in Table 6.20 below:

Table 6.20 Additional Comments

| | Frequency | Percent |
|---------------------------------------------------|-----------|---------|
| Questioning SQMS Scotland's role | 1 | 0.4 |
| Negative about SQMS relevance/ value/credibility | 43 | 15.5 |
| Neutral about SQMS negative about | 10 | 3.6 |
| Neutral about SQMS negative about cost | 8 | 2.9 |
| Positive about quality management negative about | 1 | 0.4 |
| Positive about quality negative about duplication | 25 | 9 |
| Positive about SQMS negative about certain | 11 | 4 |
| Positive about SQMS negative about bureaucracy | 5 | 1.8 |
| Positive about Quality & SQMS negative about | 12 | 4.3 |
| Positive about Quality & SQMS no negatives | 19 | 6.9 |
| No comments | 142 | 51.3 |
| Total | 277 | 100 |

Of those who did comment, 85.9% of the comments made were negative about SQMS in some respect. 31.9% of those who commented were critical about the relevance/value/credibility of SQMS and 19% were critical about duplication, although these tended to be comments from further education colleges.

6.13 Differences in the Data

While it was always the intention to treat the sample of SQMS accredited organisations as a homogenous group, nevertheless it did consist of eight different categories of organisation that range from small voluntary organisations to major national training organisations spread throughout the country. With such diversity in a sample it is prudent to examine any major differences in opinions that may exist, although there is of course a limit to the extent to which the data benefit from analysis. The results from each group and geographical area have been compared in an attempt to identify where any significant differences lie. In broad terms the responses from companies tended to be the most positive, whereas the responses from national training providers tended to be more negative. Similarly, responses from the West were the most positive and those from the North more negative. Although standard deviations would signify how well the mean represents the data, the following examples are presented graphically in order to highlight some notable differences. The percentages shown are those respondents who agreed or strongly agreed with the sentiment expressed in the questions that have been paraphrased in some cases due to space constraints.

6.13.1 Organisational Differences

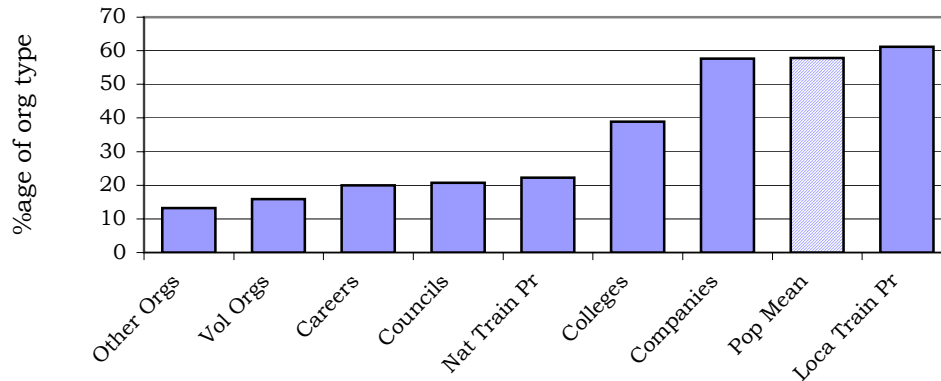
Although 84.4% respondents to question 4.01 gave an overwhelming endorsement to quality management systems, Table 6.21 suggests that there is an obvious reluctance with some of the group to voluntarily pursue an alternative to SQMS. This calls into question the reliability of any conclusions that could be drawn from the responses given to questions on the general approach to quality.

Table 6.21 If SQMS not mandatory we would use another tool

| | %age |
|-----------------------------|-------------|
| Other Organisations | 13.2 |
| Vol Organisations | 15.9 |
| Careers Service | 20.0 |
| Councils | 20.7 |
| National Training Providers | 22.3 |
| Colleges | 38.9 |
| Companies | 57.6 |
| Local Training Providers | 61.2 |

These results are presented graphically in the following chart:

Figure 6.11 If SQMS not mandatory we would use another tool (Q1.07/Q4.08)



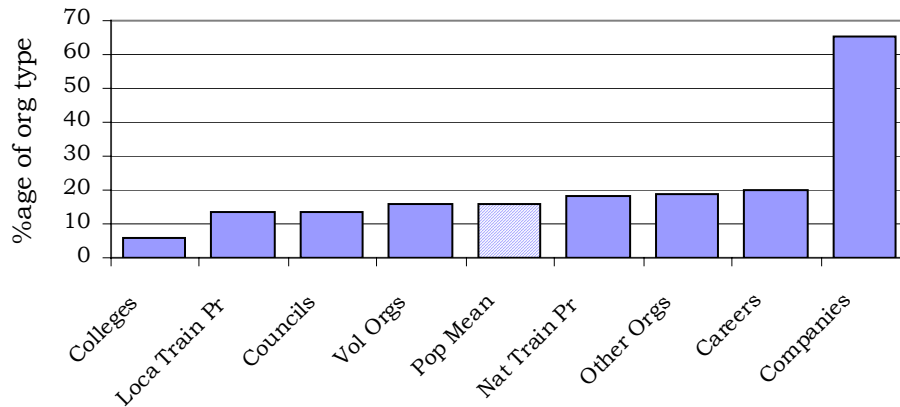
The major difference between the attitudes of companies to the perception of SQMS in the market place compared with the rest of the population as depicted in Table 6.22 is quite striking. Readers are reminded that these companies are those for which training is not the core activity and, perhaps, they value their own quality “badge”.

Table 6.22 SQMS has enhanced the status of vocational training

| | %age |
|-----------------------------|-------------|
| Colleges | 5.6 |
| Local Training Providers | 13.6 |
| Councils | 13.8 |
| Voluntary Organisations | 15.9 |
| Pop Mean | 15.9 |
| National Training Providers | 18.1 |
| Other Organisations | 18.8 |
| Careers service | 20.0 |
| Companies | 65.4 |

These results are presented graphically in the following chart:

Figure 6.12 SQMS has enhanced the status of vocational training



Tables 6.23 and 6.24 suggest that there are differences between the ways in which SQMS Auditors are regarded within the industry. The contrast between national and local training providers is particularly perplexing, as they essentially perform exactly the same function and there is no logical explanation for the difference.

Table 6.23 The Auditor(s) demonstrates a wide knowledge of training

| | %age |
|-----------------------------|------|
| National Training Providers | 27.3 |
| Other Organisations | 50.1 |
| Local Training Providers | 51.1 |
| Companies | 65.4 |
| Voluntary Organisations | 68.9 |
| Councils | 68.9 |
| Colleges | 75.0 |
| Careers Service | 80.0 |

Table 6.24 The Auditor(s) see him/herself as developer rather than policeman

| | %age |
|-----------------------------|------|
| National Training Providers | 31.8 |
| Local Training Providers | 50.0 |
| Other Organisations | 56.3 |
| Colleges | 57.3 |
| Companies | 59.6 |
| Careers Service | 60.0 |
| Voluntary Organisations | 62.1 |
| Councils | 68.9 |

These results are presented graphically in the following charts:

Figure 6.13 The Auditor(s) demonstrates a wide knowledge of training

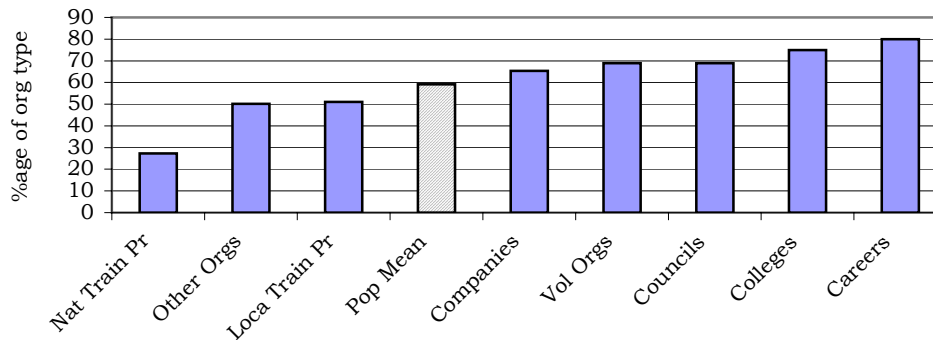
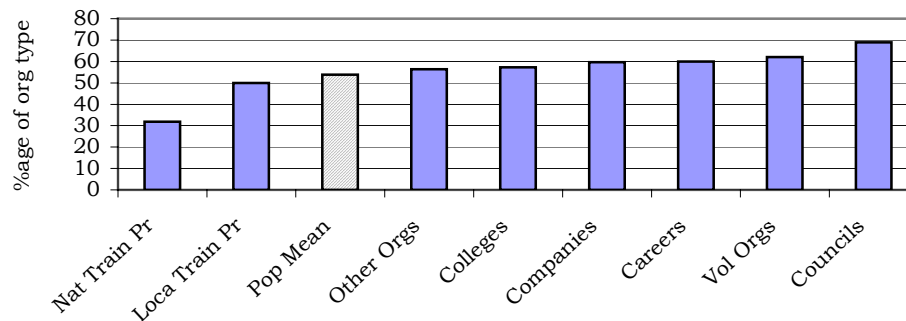


Figure 6.14 The Auditor(s) see him/herself as developer rather than policeman



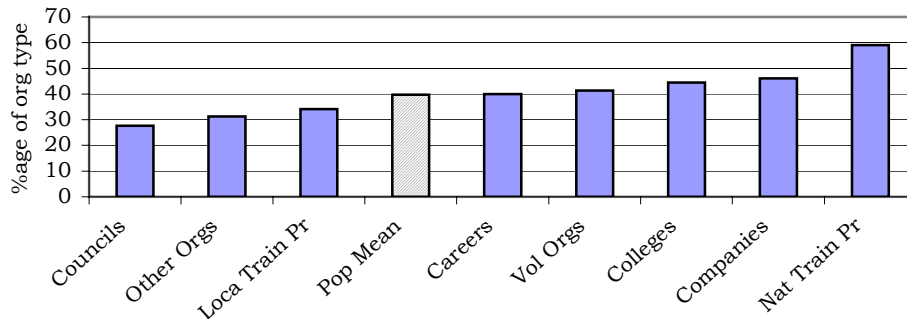
National training providers were more negative about the audit process than any other group and Table 6.25 suggests that they have a higher level of confidence in their systems than the others. Could it be that, as these companies find it necessary to meet the requirements of various quality control procedures throughout the UK, their systems are more robust?

Table 6.25 The audit is a natural process that doesn't require any catching up

| | %age |
|-----------------------------|-------------|
| Councils | 27.6 |
| Other Organisations | 31.3 |
| Local Training Providers | 34.1 |
| Careers | 40.0 |
| Voluntary Organisations | 41.3 |
| Colleges | 44.5 |
| Companies | 46.1 |
| National Training Providers | 59.1 |

These results are presented graphically in the following chart:

Figure 6.15 The audit is a natural process that doesn't require any catching up



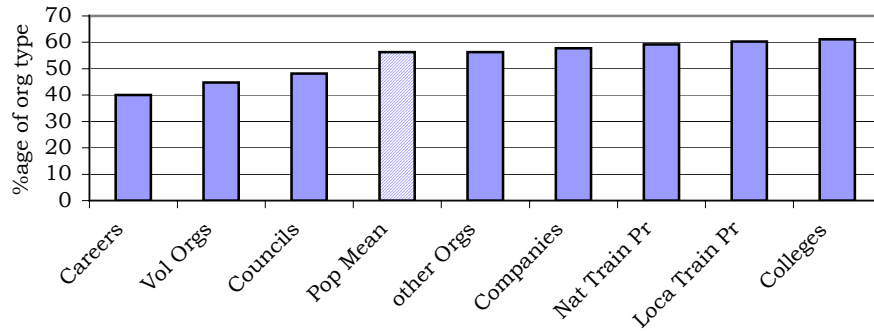
The lack of contrast shown in Table 6.26 is what makes it noteworthy. A considerable number of all the respondents claim to do certain things for no reason other than to provide evidence for quality audits. Grint, (1997), Seddon, (1994, 1997 & 2000), Shaw, (1998) and van der Wiele, *et al*, (2000), are among those who have recorded similar negative activity among organisations registered to ISO 9000. This willingness to misrepresent activities to auditors will be explored further in Chapter 7.

Table 6.26 There are things that we do purely for quality audits

| | %age |
|-----------------------------|------|
| Careers | 40.0 |
| Voluntary Organisations | 44.8 |
| Councils | 48.2 |
| Other Organisations | 56.3 |
| Companies | 57.7 |
| National Training Providers | 59.2 |
| Local Training Providers | 60.3 |
| Colleges | 61.1 |

These results are presented graphically in the following chart:

Figure 6.16 There are things that we do purely for quality audits



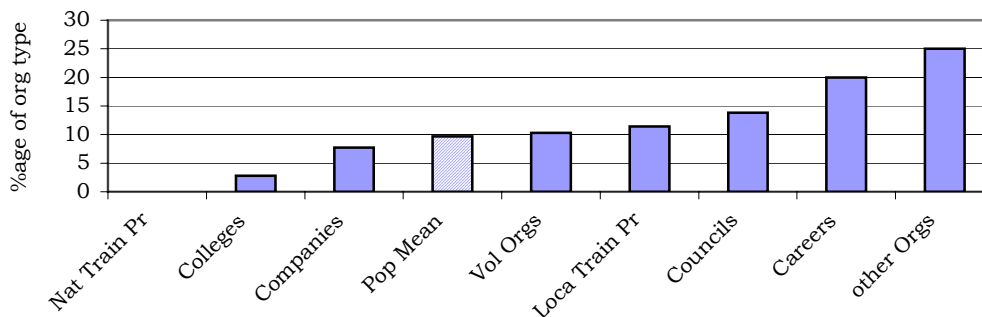
The position of national training providers in Table 6.27 perhaps adds weight to the comments given for Table 6.25 above. It suggests a high level of confidence in their processes that seems to be shared in almost the same measure by colleges.

Table 6.27 No-one thinks about quality until six weeks before the audit

| | %age |
|-----------------------------|------|
| National Training Providers | 0.0 |
| Colleges | 2.8 |
| Companies | 7.7 |
| Pop Mean | 9.7 |
| Voluntary Organisations | 10.3 |
| Local Training Providers | 11.4 |
| Councils | 13.8 |
| Careers | 20.0 |
| Other Organisations | 25.0 |

These results are presented graphically in the following chart:

Figure 6.17 No-one thinks about quality until six weeks before the audit



The point was made previously that a large number of organisations were heavily dependent upon LECs for their livelihood and indeed 31.1% of respondents relied on the LEC network for over 70% of their turnover. There is potential for this very high dependency on LEC activity to influence the responses from respondents in this situation who may not wish to 'rock the boat', but this group tended to be more negative about the effects of SQMS than the population as a whole. Some of the differences are highlighted in Table 6.28. However, when a Kruskal-Wallis Test was applied to these results only Question 9.05 was shown to be significant at the .05 level as illustrated in Table 6.28a below.

Table 6.28 Potential Disadvantages

| | Non-LEC Dep | LEC Dep |
|---------------------------------|--------------------|----------------|
| Evidence for audits | 48.3 | 60.5 |
| Additional activities no better | 55.2 | 62.8 |
| Only did necessary | 15.5 | 22.1 |
| Standard not practical | 46.6 | 54.7 |
| Auditor(s) unrealistic | 33.2 | 41.9 |
| Quality -v- targets | 7.6 | 11.6 |
| Quality -v- cost | 7.2 | 14.0 |
| Auditors catch us | 13.7 | 19.8 |
| Policies irrelevant | 12.4 | 20.9 |

These results are presented graphically in the following chart:

Figure 6.18 Potential Disadvantages

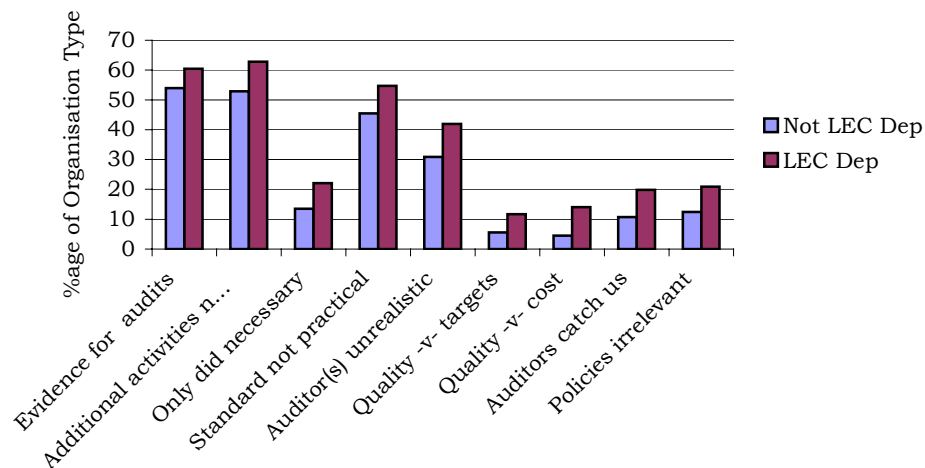


Table 6.28a Kruskal-Wallis Test of LEC Dependent/Not LEC Dependent

| | Q 9.01 | Q 9.02 | Q 9.04 | Q 9.05 | Q 9.06 | Q 9.08 | Q 9.09 | Q 9.11 | Q 9.15 |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Chi-Square | 2.796 | 2.854 | 3.318 | 5.626 | 2.891 | 1.489 | 1.206 | 0.518 | 3.099 |
| df | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Asymp. Sig. | 0.095 | 0.091 | 0.069 | 0.018 | 0.089 | 0.222 | 0.272 | 0.472 | 0.078 |

6.13.2 Differences by Size

Interesting comparisons between small and large organisations, as measured by training turnover, are illustrated in Tables 6.29 and 6.30, with the smaller organisations seeming to derive more from SQMS than the larger ones in most operational areas, but not in terms of market share and profitability. The smaller organisations returned a mean of 24.76% in agreement with the questions on advantages against the larger organisation's mean of 18.55%. Similarly, the smaller organisations returned a mean of 21.96% in agreement with the questions on disadvantages against the larger organisation's mean of 25.91%. However, a similar comparison between organisations based upon the numbers employed did not show similar differences.

Table 6.29 Comparison of Advantages by Turnover

| Question | Turnover <£0.5m | Turnover >£2.5m |
|-----------------------------------------------------------------------------|----------------------|--------------------|
| | %age agreeing | |
| 7.01 The overall management of the organisation has significantly improved | 42.9 | 21.9 |
| 7.03 Market share has increased | 7.1 | 12.5 |
| 7.05 Staff skills and competence levels have been appreciably enhanced | 38.1 | 9.4 |
| 7.06 People selection methods have improved | 21.4 | 15.6 |
| 7.07 The occurrence of accidents and incidents has been reduced | 9.5 | 15.6 |
| 7.09 Administration has been considerably reduced and efficiency increased | 23.8 | 6.3 |
| 7.10 Productivity has improved | 21.4 | 15.6 |
| 7.11 Reduced costs and higher market share have increased profitability | 4.8 | 15.6 |
| 7.12 The number receiving training has increased | 16.7 | 31.3 |
| 7.13 Training more closely reflects trainee's identified needs | 38.1 | 25.0 |
| 7.15 The design and content of training more closely reflects best practice | 35.7 | 18.8 |
| 7.16 Training delivery has improved in clearly measurable ways | 35.7 | 21.9 |
| 7.17 Assessment practice has improved in clearly measurable ways | 40.5 | 25.0 |
| 7.18 The reputation of the Organisation in the market place has improved | 26.2 | 28.1 |
| 7.20 The number of drop-outs from training has decreased | 9.5 | 15.6 |

These results are presented graphically in the following chart:

Figure 6.19 Comparison of Advantages by Turnover

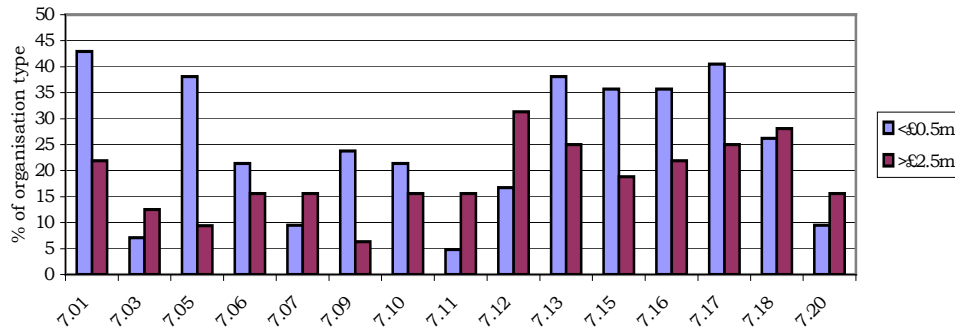
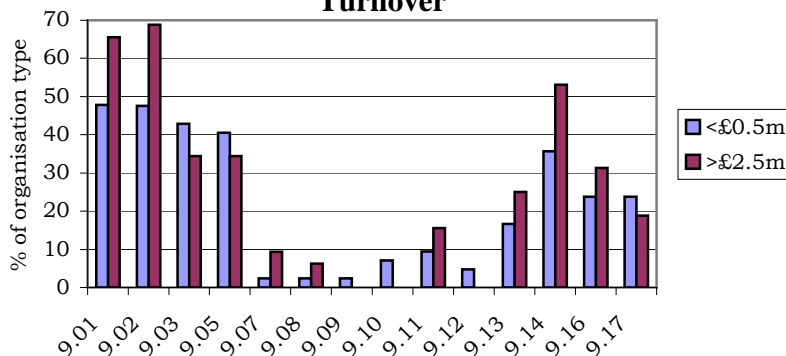


Table 6.30 Comparison of Disadvantages by Turnover

| Question | Turnover | Turnover |
|-----------------------------------------------------------------------------|----------------------|----------|
| | <£0.5m | >£2.5m |
| | %age agreeing | |
| 9.01 There are things that we do purely for evidence for quality audits | 47.8 | 65.6 |
| 9.02 Many additional activities don't make things better for customers | 47.6 | 68.8 |
| 9.03 Some plans and policies are produced solely for the Standard | 42.9 | 34.4 |
| 9.05 Parts of the Standard don't take practicality into account | 40.5 | 34.4 |
| 9.07 If we want to make an improvement it takes too much time and effort | 2.4 | 9.4 |
| 9.08 Quality is only important when financial and numerical targets are met | 2.4 | 6.3 |
| 9.09 Quality is driven more by cost reduction than customer satisfaction | 2.4 | 0.0 |
| 9.10 No-one thinks about quality until six weeks before the audit | 7.1 | 0.0 |
| 9.11 Auditors try to catch us out rather than help us | 9.5 | 15.6 |
| 9.12 If you can talk a good game you'll get through any audit | 4.8 | 0.0 |
| 9.13 Paperwork and processes are more important than actual training | 16.7 | 25.0 |
| 9.14 Time spent on standards would be better spent on development | 35.7 | 53.1 |
| 9.16 It's difficult to get individuals to take ownership for quality | 23.8 | 31.3 |
| 9.17 New organisations get contracts despite not having SQMS | 23.8 | 18.8 |

These results are presented graphically in the following chart:

Figure 6.20 Comparison of Disadvantages by Turnover



However, when a Kruskal-Wallis Test is applied to these results, no significant at the .05 level can be demonstrated as illustrated in Table 6.30a below.

Table 6.30a Kruskal-Wallis Test of the differences between small/large organisations

| | Chi-Square | df | Asymp. Sig. |
|--------|------------|----|-------------|
| Q 7.01 | 0.714 | 1 | 0.398 |
| Q 7.02 | 0.036 | 1 | 0.849 |
| Q 7.03 | 1.429 | 1 | 0.232 |
| Q 7.04 | 0.811 | 1 | 0.368 |
| Q 7.05 | 2.507 | 1 | 0.113 |
| Q 7.06 | 0.007 | 1 | 0.934 |
| Q 7.07 | 0.115 | 1 | 0.734 |
| Q 7.08 | 0.138 | 1 | 0.710 |
| Q 7.09 | 1.473 | 1 | 0.225 |
| Q 7.10 | 0.207 | 1 | 0.649 |
| Q 7.11 | 1.409 | 1 | 0.235 |
| Q 7.12 | 2.505 | 1 | 0.113 |
| Q 7.13 | 0.091 | 1 | 0.762 |
| Q 7.14 | 0.633 | 1 | 0.426 |
| Q 7.15 | 0.082 | 1 | 0.775 |
| Q 7.16 | 0.009 | 1 | 0.925 |
| Q 7.17 | 0.500 | 1 | 0.480 |
| Q 7.18 | 0.534 | 1 | 0.465 |
| Q 7.19 | 0.286 | 1 | 0.593 |
| Q 7.20 | 0.316 | 1 | 0.574 |

| | Chi-Square | df | Asymp. Sig. |
|--------|------------|----|-------------|
| Q 9.01 | 0.088 | 1 | 0.767 |
| Q 9.02 | 0.254 | 1 | 0.614 |
| Q 9.03 | 0.690 | 1 | 0.406 |
| Q 9.04 | 0.734 | 1 | 0.391 |
| Q 9.05 | 1.745 | 1 | 0.186 |
| Q 9.06 | 0.116 | 1 | 0.733 |
| Q 9.07 | 0.339 | 1 | 0.560 |
| Q 9.08 | 0.461 | 1 | 0.497 |
| Q 9.09 | 1.024 | 1 | 0.311 |
| Q 9.10 | 2.050 | 1 | 0.152 |
| Q 9.11 | 1.153 | 1 | 0.283 |
| Q 9.12 | 0.113 | 1 | 0.737 |
| Q 9.13 | 0.063 | 1 | 0.802 |
| Q 9.14 | 0.907 | 1 | 0.341 |
| Q 9.15 | 1.423 | 1 | 0.233 |
| Q 9.16 | 0.164 | 1 | 0.686 |
| Q 9.17 | 0.708 | 1 | 0.400 |

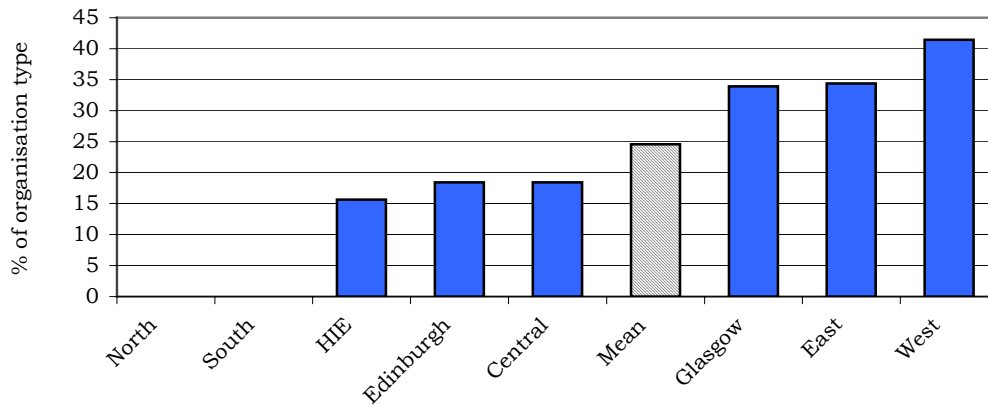
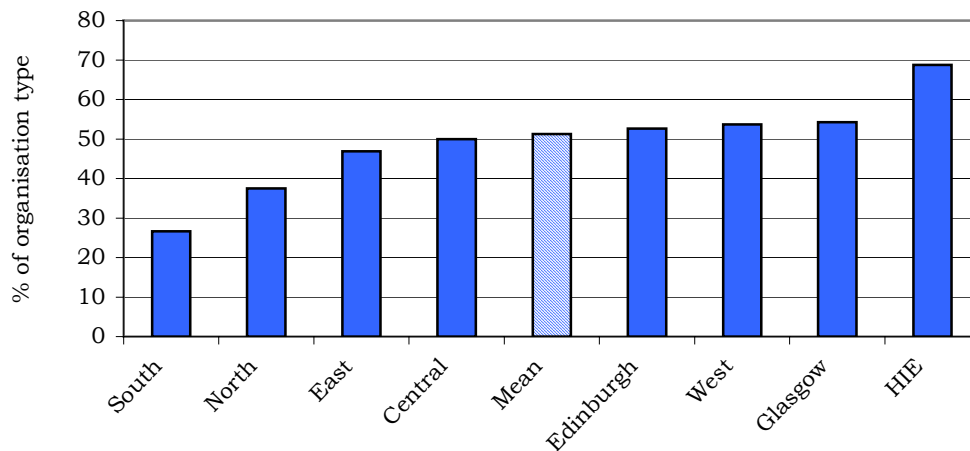
6.13.3 Geographical Differences

Comparisons between respondents based upon their geographical area produced a number of notable differences. The reasons for these differences are not clear and any observations are purely speculative. The involvement in ISO 9000 is very different across the country and this is an interesting result. The high incidence in the West may due to the fact that ISO 9000 was a contractual requirement in Ayrshire before SQMS was introduced. Table 6.31 shows the take-up of both ISO 9000 and IiP across the various areas. The more even distribution of IiP recognition perhaps reflects the fact that IiP recognitions are a national Scottish/Hi Enterprise target implemented by LECs.

Table 6.31 Comparison of ISO and IiP by Area

| Area | IiP | ISO |
|-------------|-------|-------|
| North | 37.50 | 0.00 |
| South | 26.67 | 0.00 |
| HIE | 68.75 | 15.63 |
| Edinburgh | 52.63 | 18.42 |
| Central | 50.00 | 18.42 |
| Mean | 51.26 | 24.55 |
| Glasgow | 54.24 | 33.90 |
| East | 46.88 | 34.38 |
| West | 53.66 | 41.46 |
| No response | 33.33 | 16.67 |

These results are presented graphically in the following charts:

Figure 6.21 ISO9000 Organisations by Area**Figure 6.22 IiP Organisations by Area**

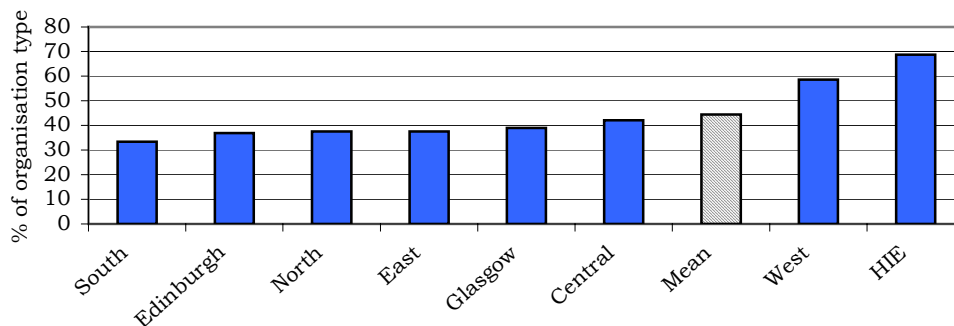
Another notable geographic difference is depicted in Table 6.32 where two areas stand out as believing more strongly in the effectiveness of SQMS when responding to question 4.06.

Table 6.32 SQMS has established continuous improvement

| Area | %age |
|-----------|-------|
| South | 33.33 |
| Edinburgh | 36.84 |
| North | 37.50 |
| East | 37.50 |
| Glasgow | 38.98 |
| Central | 42.11 |
| West | 58.54 |
| HIE | 68.75 |

These results are presented graphically in the following chart:

Figure 6.23 SQMS has established cont improvement



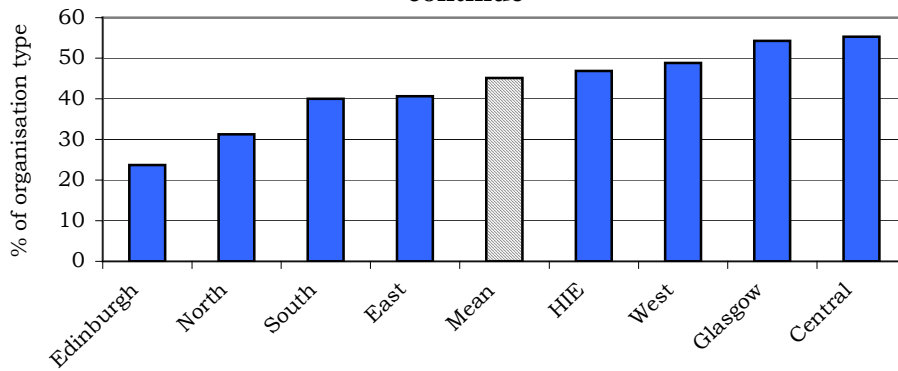
A definite East/West divide is apparent in Table 6.33 in organisations responding to question 4.08.

Table 6.33 If SQMS not mandatory we would continue

| Area | %age |
|-------------|-------|
| Edinburgh | 23.68 |
| North | 31.25 |
| South | 40.00 |
| East | 40.63 |
| HIE | 46.88 |
| West | 48.78 |
| Glasgow | 54.24 |
| Central | 55.26 |
| No response | 66.67 |

These results are presented graphically in the following chart:

Figure 6.24 If SQMS not mandatory we would continue



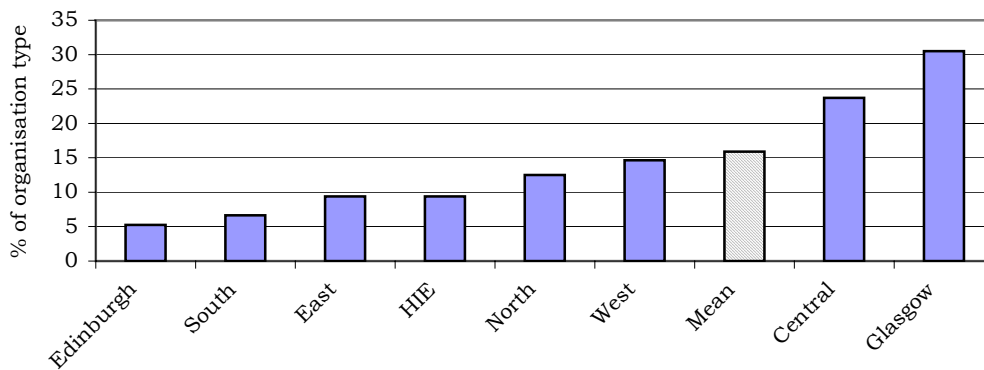
A similar but more pronounced difference appears in Table 6.34 from respondents to question 4.11.

Table 6.34 SQMS has enhanced Training Status

| Area | %age |
|-----------|-------|
| Edinburgh | 5.26 |
| South | 6.67 |
| East | 9.38 |
| HIE | 9.38 |
| North | 12.50 |
| West | 14.63 |
| Central | 23.68 |
| Glasgow | 30.51 |

These results are presented graphically in the following chart:

Figure 6.25 SQMS has enhanced Training Status



One geographical area showed very marked differences in responses from the rest of the population; particularly in response to the SQMS audit process. This is the area classified as “North” ⁽⁹⁾. Although this represents a relatively low sample of 16 organisations, the results shown in Table 6.35 below do suggest that the support for SQMS is very much lower in this area and further research is necessary to determine if there are any underlying reasons for these differences.

Table 6.35 Geographical differences in responses

| | Q5.08 | Q6.02 | Q6.04 | Q9.11 | Q9.12 | Q6.07 |
|-----------|----------------------------|-------------------------------|------------------------------|------------------------------|-----------------------------|---------------------------------|
| | Systems for customer needs | Auditor spreads best practice | Auditor developer not police | Auditors try to catch us out | Talk a good game thru Audit | Audit ensures continued improve |
| North | 25.00% | 37.50% | 25.00% | 25.00% | 37.50% | 37.50% |
| Edinburgh | 31.58% | 55.26% | 50.00% | 10.53% | 7.89% | 34.21% |
| Glasgow | 38.98% | 64.41% | 52.54% | 11.86% | 13.56% | 57.63% |
| HIE | 40.63% | 68.75% | 65.63% | 12.50% | 12.50% | 59.38% |
| South | 46.67% | 53.33% | 53.33% | 13.33% | 6.67% | 33.33% |
| Central | 47.37% | 52.63% | 55.26% | 13.16% | 2.63% | 44.74% |
| East | 50.00% | 59.38% | 43.75% | 12.50% | 9.38% | 43.75% |
| West | 56.10% | 73.17% | 68.29% | 17.07% | 12.20% | 70.73% |

| | Q6.08 | Q7.01 | Q7.02 | Q7.13 | Q9.13 | Q9.14 |
|-----------|-------------------------|-------------------|-------------------------|----------------------|--------------------------|-------------------|
| | Audit boosts confidence | Better management | Trainees more satisfied | Training meets needs | Paperwork more important | Time better spent |
| North | 37.50% | 37.50% | 25.00% | 18.75% | 50.00% | 62.50% |
| Edinburgh | 50.00% | 26.32% | 7.89% | 10.53% | 18.42% | 50.00% |
| Glasgow | 61.02% | 28.81% | 22.03% | 40.68% | 16.95% | 47.46% |
| HIE | 68.75% | 37.50% | 25.00% | 34.38% | 34.38% | 40.63% |
| South | 60.00% | 40.00% | 20.00% | 20.00% | 46.67% | 53.33% |
| Central | 50.00% | 39.47% | 31.58% | 31.58% | 18.42% | 28.95% |
| East | 53.13% | 31.25% | 18.75% | 28.13% | 21.88% | 43.75% |
| West | 70.73% | 53.66% | 34.15% | 43.90% | 21.95% | 39.02% |

These results are presented graphically in the following charts:

⁽⁹⁾ Responses in this category were all the AB postcodes, plus one from Inverness and one from Perth.

Figure 6.26 Introduced systems to identify customer requirements

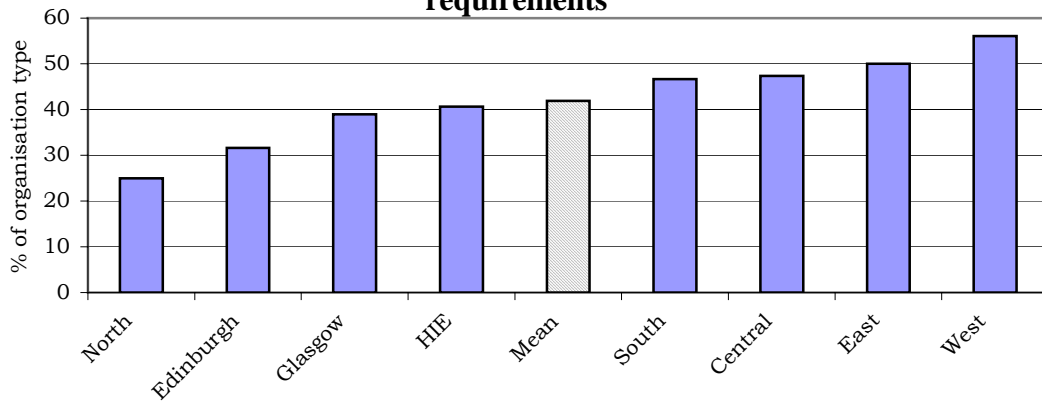


Figure 6.27 Auditors spread best practice

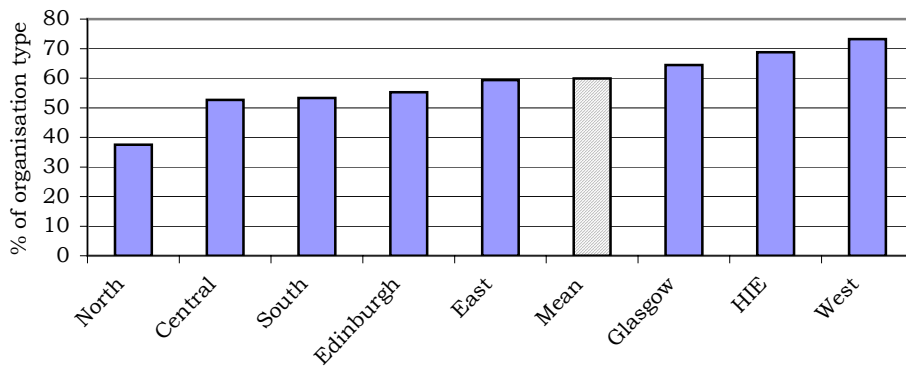


Figure 6.28 Auditor developer not policeman

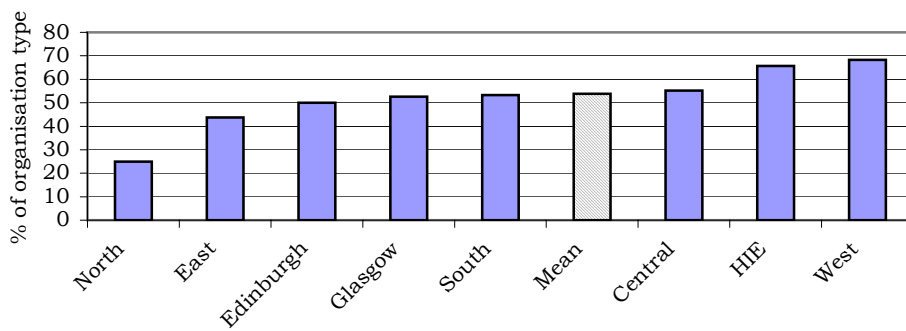


Figure 6.29 Auditors try to catch us out

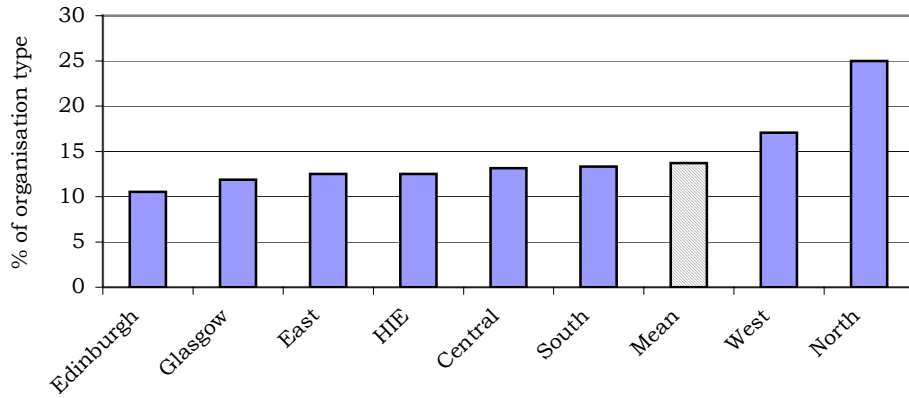


Figure 6.30 Talking a good game gets audit

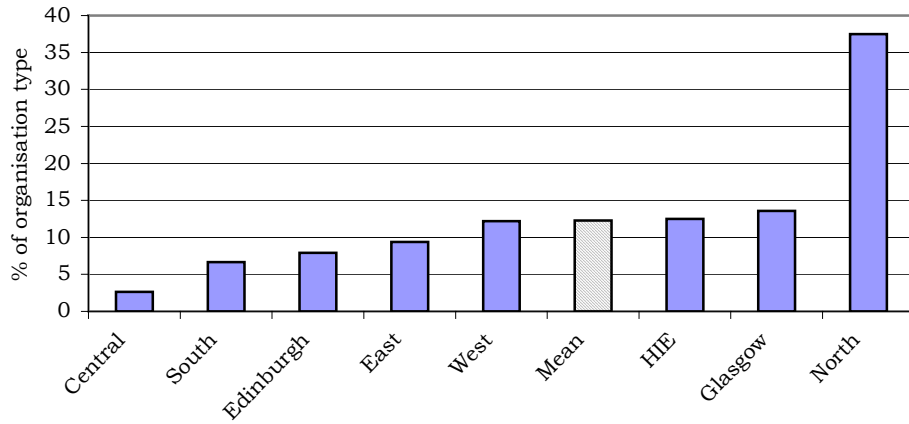


Figure 6.31 Audit refines performance

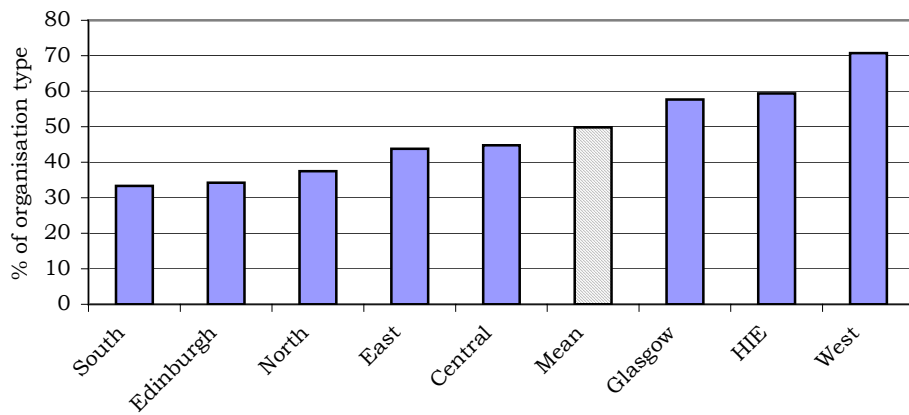


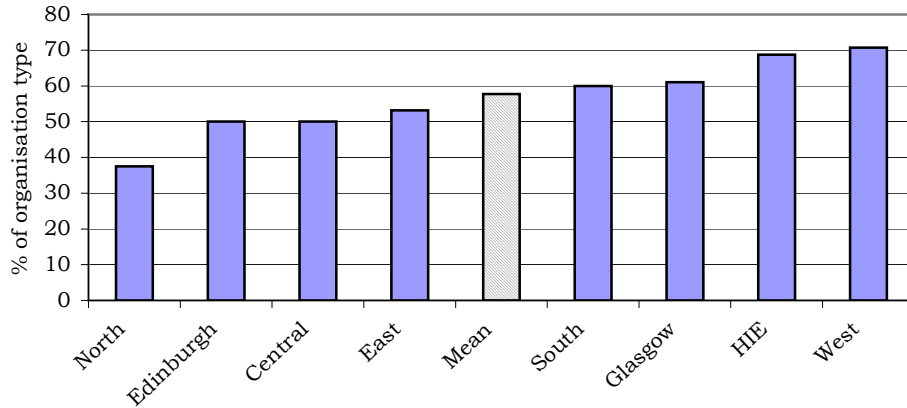
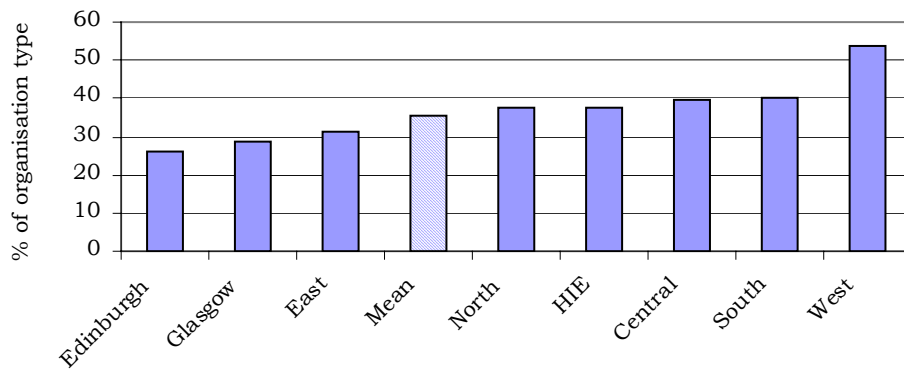
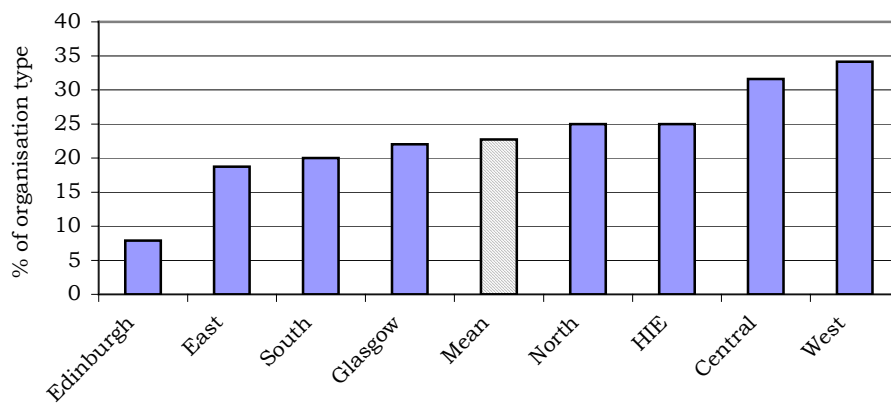
Figure 6.32 Audit boosts confidence**Figure 6.33 Overall management has improved****Figure 6.34 Trainee satisfaction has improved**

Figure 6.35 Training reflects trainee needs

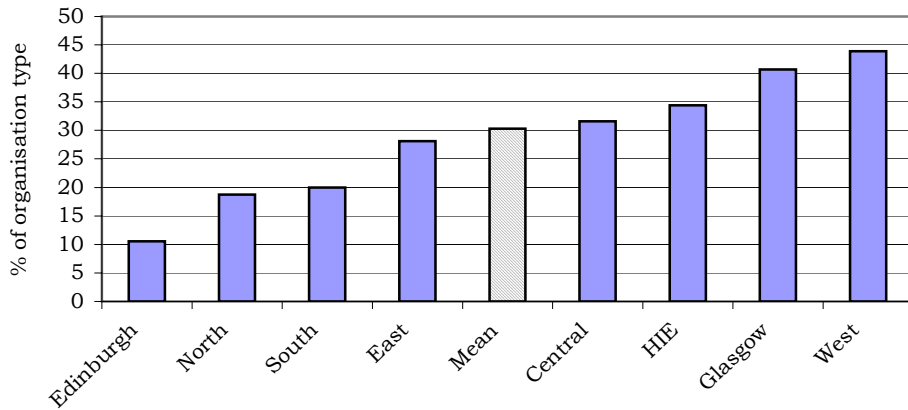


Figure 6.36 Paperwork more important than training

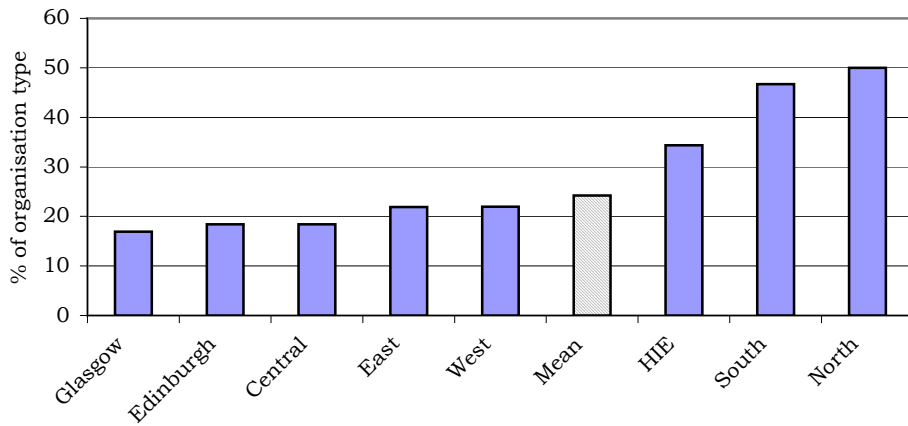
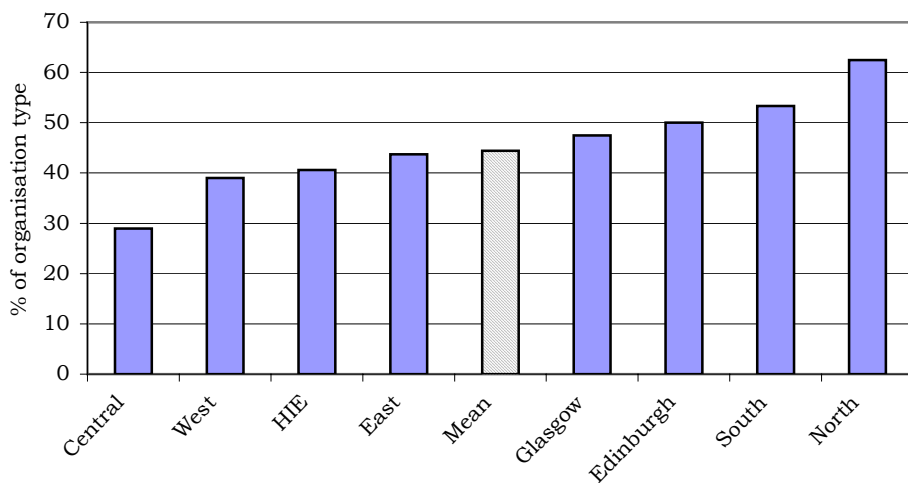


Figure 6.37 Time spent on SQMS better on training



6.13.4 Differences between ISO and Non-ISO Organisations

One of the important aspects of the research was to identify if there was any difference in the SQMS experience between those organisations that had embraced quality management through ISO 9000 and those that were only exposed to SQMS. Perhaps one could be excused for anticipating significant differences in responses from those organisations that were also registered to ISO 9000 on the grounds that they are likely to be more committed to quality management systems. However, when a Pearson Chi-Square test was applied to sections 4, 5, 7, 8 and 9, there were no significant differences between any of the questions asked in each of these sections. Twenty five respondents had the title “Quality Manger” and the results that they gave were cross tabulated with the rest of the respondents. A Pearson Chi-Square test was applied to these results and no significant differences were identified. This is noteworthy, as both these sections clearly attributed the questions specifically to SQMS and one is left to wonder how the ISO 9000 registered organisations reconciled the effect of each quality management system. What is also noteworthy is the absence of any difference in the responses given to questions regarding measurement, where Quality Managers and ISO 9000 registered organisations would be expected to be more inclined to measure variation in the systems.

6.14 Factor Analysis

Factor analysis is a technique to analyse the inter-relationship among a large number of variables and then explain these variables in terms of their common underlying dimensions (Litwin, 1995). The two main sections of the questionnaire that address the issues of perceived advantages and disadvantages were sections 7 and 9 containing 21 and 18 variables respectively. It was considered that exposure to factor analysis, or to be more correct Principal Component Analysis; with a varimax orthogonal rotation would identify any underlying themes, whereas a direct oblimin oblique rotation would also test the construct validity of these two sections.

6.14.1 Suitability

Not all data are suitable for factor analysis and its reliability is affected by the sample size. There is a wealth of literature on the subject suggesting that correlation coefficients from as low as 0.3 can be important where the sample size is large. This inverse relationship can be depicted in a table of critical values against which loadings can be compared. Field, (2003,

pp 440 - 443) provides a brief literature review summarising the main arguments and concludes: "What's clear from this work is that a sample of 300 or more will probably provide a stable factor solution" and "if a factor has four or more loadings greater than 0.6 then it is reliable regardless of sample size". In this study, with a sample size approaching 300, a factor loading greater than 0.4 was considered to be highly significant.

Factor extraction on SPSS produces a number of tests the most significant of which are the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity. The KMO statistic measures the extent to which factor analysis is likely to be appropriate and produces values between 0 and 1. Field, (2003, p 455) suggests the following interpretation: "values between 0.8 and 0.9 are great and values above 0.9 are superb". Table 6.36 below shows the value of 0.947 for the data within section 7 and a value of 0.906 for the data within section 9, both of which fall into the range of being superb: so, the researcher is confident that factor analysis is appropriate for these data. Bartlett's measure tests the null hypothesis and SPSS produces a measure of significance. Again Table 6.36 shows that for these data, Bartlett's test is highly significant ($p < 0.001$), and therefore factor analysis is appropriate for both sections.

Table 6.36 KMO and Bartlett's Test

| | | Section 7 | Section 9 |
|--------------------------------------------------|--------------------|------------------|------------------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.947 | 0.906 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 3321.299 | 2027.325 |
| | df | 190.000 | 136.000 |
| | Sig. | 0.000 | 0.000 |

6.14.2 Factor Extraction

Table 6.37 lists the Eigenvalues associated with each factor within section 7 before extraction, after extraction and after rotation and shows that three factors have been identified that together account for 62.78% of the variation in the data. The SPSS default option is to ignore factors with any Eigenvalues of less than 1 and these have been excluded from Table 5.8.

Table 6.37 Total Variance Explained for Section 7

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|-----------|---------------------|----------|------------|-------------------------------------|----------|------------|-----------------------------------|----------|------------|
| | Total | % of | % | Total | % of | % | Total | % of | % |
| | | Variance | Cumulative | | Variance | Cumulative | | Variance | Cumulative |
| 1 | 9.859 | 49.293 | 49.293 | 9.859 | 49.293 | 49.293 | 5.498 | 27.489 | 27.489 |
| 2 | 1.424 | 7.121 | 56.414 | 1.424 | 7.121 | 56.414 | 3.892 | 19.460 | 46.949 |
| 3 | 1.273 | 6.364 | 62.778 | 1.273 | 6.364 | 62.778 | 3.166 | 15.829 | 62.778 |

Extraction Method: Principal Component Analysis.

Rotated Component Matrix

Table 6.38 shows the way in which the variables loaded against each factor in section 7 and it should be noted that no variables scored below the cut-off point of 0.4. The questions that load highly on factor 1 seem to all relate to the design, delivery and performance of training. The researcher has therefore chosen to label this factor *Training Performance*. The questions that load highly on factor 2 all seem to relate to the operational process and the researcher has chosen to label this factor *Management Performance*. Questions that load highly on factor 3 all seem to relate to finance and the researcher has chosen to label this factor *Financial Performance*. Therefore the underlying concerns of respondents to this section may be categorised within these three labels.

A similar picture is shown for section 9 in table 6.39. Again, three factors have emerged that together account for 56.61% of the variation in the data and no variables have factor loadings below the 0.4 level. Table 6.40 shows the way in which the variables loaded against each factor in section 9. The questions that load highly on factor 1 seem to all relate to the negative aspects of meeting the requirements of the Standard. The researcher has therefore chosen to label this factor *Compliance*. The questions that load highly on factor 2 all seem to relate to attitudes to quality and the researcher has chosen to label this factor *Quality Philosophy*. Questions that load highly on factor 3 all seem to relate to the audit process and the researcher has chosen to label this factor *Inspection*. Therefore the underlying concerns of respondents to this section may be categorised within these three labels.

Table 6.38 Rotated Component Matrix^a

| | Component | | |
|------------------------------------------------------------------------------|-----------|------|------|
| | 1 | 2 | 3 |
| Q7.13 Training more closely reflects trainee's identified needs | .817 | | |
| Q7.15 The design and content of training more closely reflects best practice | .740 | | |
| Q7.14 Number of dissatisfied trainees has decreased | .712 | | |
| Q7.16 Training delivery has improved in clearly measurable ways | .704 | | |
| Q7.12 The number receiving training has increased | .659 | | |
| Q7.20 The number of drop-outs from training has decreased | .658 | | |
| Q7.17 Assessment practice has improved in clearly measurable | .643 | | |
| Q7.19 The number of positive achievers has increased | .625 | | |
| Q7.08 Training aids and facilities have been significantly enhanced | .594 | .448 | |
| Q7.02 Trainee satisfaction has significantly improved | .483 | .470 | |
| Q7.01 The overall management of the organisation has significantly improved | | .743 | |
| Q7.04 Staff motivation and turnover have improved | | .718 | |
| Q7.05 Staff skills and competence levels have been appreciably enhanced | .463 | .657 | |
| Q7.09 Administration has been considerably reduced and efficiency increased | | .628 | .520 |
| Q7.10 Productivity has improved | | .567 | .550 |
| Q7.06 People selection methods have improved | .514 | .541 | |
| Q7.18 The reputation of the Organisation in the market place | | .436 | |
| Q7.11 Reduced costs and higher market share have increased profitability | | | .821 |
| Q7.03 Market share has increased | | | .794 |
| Q7.07 The occurrence of accidents and incidents has been reduced | | | .549 |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

^a. Rotation converged in 9 iterations.

Table 6.39 Total Variance Explained for Section 9

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
| | Total | % of Variance | % Cumulative | Total | % of Variance | % Cumulative | Total | % of Variance | % Cumulative |
| 1 | 6.777 | 39.863 | 39.863 | 6.777 | 39.863 | 39.863 | 3.560 | 20.941 | 20.941 |
| 2 | 1.544 | 9.081 | 48.943 | 1.544 | 9.081 | 48.943 | 3.142 | 18.484 | 39.424 |
| 3 | 1.303 | 7.665 | 56.608 | 1.303 | 7.665 | 56.608 | 2.921 | 17.184 | 56.608 |

Table 6.40 Rotated Component Matrix ^a

| | | Component | | |
|--------|------------------------------------------------------------|-----------|-------|-------|
| | | 1 | 2 | 3 |
| Q 9.02 | Many of the additional activities required for “quality” | 0.818 | | |
| Q 9.01 | There are things that we do purely for evidence | 0.797 | | |
| Q 9.03 | We produce plans and policies for the Standard | 0.737 | | |
| Q 9.05 | Parts of the Standard don’t take practicality into account | 0.707 | | |
| Q 9.14 | A lot of the time spent on standards and audits | 0.565 | | 0.474 |
| Q 9.04 | We only did what was necessary to get accredited | 0.541 | 0.468 | |
| Q 9.17 | New organisations get contracts despite not having SQMS | | | |
| Q 9.09 | Quality is driven more by cost reduction than customer | | 0.806 | |
| Q 9.10 | No-one thinks about quality until six weeks before the | | 0.773 | |
| Q 9.08 | Quality is only important when financial and numerical | | 0.750 | |
| Q 9.07 | If we want to make an improvement it takes too much | | 0.612 | |
| Q 9.11 | Auditors try to catch us out rather than help us | | | 0.809 |
| Q 9.06 | Often the auditor(s) doesn’t understand the realities | | | 0.700 |
| Q 9.15 | Most of the policies and procedures have little | | | 0.629 |
| Q 9.12 | If you can talk a good game you’ll get through any audit | | 0.429 | 0.608 |
| Q 9.16 | It’s difficult to get individuals to take ownership | | | 0.457 |
| Q 9.13 | Paperwork and processes are more important than actual | | | 0.427 |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

^aRotation converged in 9 iterations.

6.14.3 Factor Correlation

When an oblique rotation is conducted the factor matrix is split into two matrices: the pattern matrix and the structure matrix. The pattern matrix contains the factor loadings and is comparable to the factor matrix that was produced for the orthogonal rotation. The pattern matrices for sections 7 and 9 are reproduced as Tables 6.41 and 6.42 respectively below. Table 6.41 shows that the same three factors have emerged for section 7 with very similar loadings, although the shared variance is not ignored. All of variables load heavily on factor 1 and there is an obvious relationship between all three factors. However, while Table 6.42 also shows similar factors for section 9, the loadings are more evenly dispersed. The final part of the factor analysis is a correlation matrix that contains the correlation coefficients between the factors as shown in Table 6.43 for section 7 and Table 6.44 for section 9. As predicted by the structure matrix, all the factors are inter-related to some degree. The fact that these correlations exist tells us that the constructs measured can be inter-related suggesting that these sections had good construct validity.

Table 6.41 Structure Matrix for Section 7

| | | Component | | |
|--------|---------------------------------------------------------------|-----------|-------|-------|
| | | 1 | 2 | 3 |
| Q 7.13 | Training more closely reflects trainee's identified needs | 0.850 | | |
| Q 7.15 | The design and content of training more closely reflects | 0.821 | | 0.441 |
| Q 7.16 | Training delivery has improved in clearly measurable ways | 0.810 | | 0.436 |
| Q 7.14 | Number of dissatisfied trainees has decreased | 0.792 | 0.576 | |
| Q 7.19 | The number of positive achievers has increased | 0.762 | 0.514 | 0.402 |
| Q 7.17 | Assessment practice has improved in clearly measurable ways | 0.753 | | 0.456 |
| Q 7.20 | The number of drop-outs from training has decreased | 0.752 | 0.477 | |
| Q 7.08 | Training aids and facilities have been significantly enhanced | 0.746 | 0.413 | 0.517 |
| Q 7.12 | The number receiving training has increased | 0.692 | 0.513 | |
| Q 7.06 | People selection methods have improved | 0.688 | | 0.597 |
| Q 7.02 | Trainee satisfaction has significantly improved | 0.672 | 0.472 | 0.533 |
| Q 7.18 | The reputation of the Organisation in the market place | 0.578 | 0.506 | 0.493 |
| Q 7.11 | Reduced costs and higher market share have increased | 0.488 | 0.871 | |
| Q 7.03 | Market share has increased | 0.420 | 0.825 | |
| Q 7.10 | Productivity has improved | 0.485 | 0.667 | 0.616 |
| Q 7.07 | The occurrence of accidents and incidents has been reduced | 0.588 | 0.659 | |
| Q 7.01 | The overall management of the organisation has improved | 0.505 | | 0.768 |
| Q 7.04 | Staff motivation and turnover have improved | 0.493 | | 0.748 |
| Q 7.05 | Staff skills and competence levels have been enhanced | 0.655 | | 0.700 |
| Q 7.09 | Administration has been considerably reduced | 0.409 | 0.629 | 0.665 |

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

Table 6.42 Structure Matrix for Section 9

| | | Component | | |
|--------|------------------------------------------------------------|-----------|--------|-------|
| | | 1 | 2 | 3 |
| Q 9.09 | Quality is driven more by cost reduction than customer | 0.832 | | |
| Q 9.10 | No-one thinks about quality until six weeks before | 0.828 | | 0.412 |
| Q 9.08 | Quality is only important when financial and numerical | 0.791 | | |
| Q 9.07 | If we want to make an improvement it takes too much | 0.668 | | |
| Q 9.02 | Many of the additional activities required for "quality" | | -0.840 | |
| Q 9.03 | We produce plans and policies for the Standard | 0.513 | -0.799 | |
| Q 9.01 | There are things that we do purely for evidence | | -0.797 | |
| Q 9.05 | Parts of the Standard don't take practicality into account | | -0.776 | 0.517 |
| Q 9.14 | A lot of the time spent on standards and audits | 0.500 | -0.690 | 0.618 |
| Q 9.04 | We only did what was necessary to get accredited | 0.586 | -0.635 | |
| Q 9.17 | New organisations get contracts despite not having SQMS | | | |
| Q 9.11 | Auditors try to catch us out rather than help us | | | 0.809 |
| Q 9.06 | Often the auditor(s) doesn't understand the realities | | -0.468 | 0.748 |
| Q 9.15 | Most of the policies and procedures have little relevance | 0.517 | -0.545 | 0.737 |
| Q 9.12 | If you can talk a good game you'll get through any audit | 0.548 | | 0.676 |
| Q 9.13 | Paperwork and processes are more important than actual | 0.476 | -0.446 | 0.534 |
| Q 9.16 | It's difficult to get individuals to take ownership | | | 0.506 |

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

Table 6.43 Component Correlation Matrix for Section 7

| Component | 1 | 2 | 3 |
|-----------|-------|-------|-------|
| 1 | 1.000 | 0.483 | 0.440 |
| 2 | 0.483 | 1.000 | 0.263 |
| 3 | 0.440 | 0.263 | 1.000 |

Table 6.44 Component Correlation Matrix for Section 9

| Component | 1 | 2 | 3 |
|-----------|--------|--------|--------|
| 1 | 1.000 | -0.408 | 0.426 |
| 2 | -0.408 | 1.000 | -0.396 |
| 3 | 0.426 | -0.396 | 1.000 |

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

6.15 Has SQMS Achieved its Objectives?

The original intention of this research was to look at SQMS as a generic Management System Standard, rather than one confined to the training industry. However, in view of the significant public investment that went into devising and implementing the system, it is worth spending a short time exploring whether SQMS had met the original objectives established by its architects and proponents in the belief that such an analysis would be beneficial in providing a more rounded interpretation of the results of the research. It is not possible to properly determine the effectiveness of SQMS in the absence of any clearly articulated objective for its introduction. However, a number of possible objectives can be postulated.

6.15.1 A public demonstration of control

The ethos of public management demands that organisations that receive their funding from government demonstrate that best value is being achieved for the expenditure. It is therefore necessary for such organisations to have mechanisms in place that demonstrate their control of the "quality" of the goods and services for which they contract. In the case of SE, it had an added statutory duty as specified in Section 3 of the Enterprise and New Towns Act 1990 "*of keeping under continuous review the suitability and adequacy of any training provided by that agent, or as the case may be that person (or his agent), in discharging those functions*". It is quite likely that this requirement was one of the driving forces behind the development of SQMS. If this was the case, then it must be said that SQMS has been very successful. A

very significant amount of public expenditure was allocated to the development of the SQMS Standard and its implementation. Some 600 organisations have been registered as meeting the requirements of the Standard and thousands of audits have been undertaken during the lifetime of the Standard. A complex infrastructure has been developed to apply, administer and monitor the Standard and it has the backing and participation of a number of prestigious organisations. There is an impression that any internal evaluation of SQMS that has been commissioned has been positive and the current internal feedback mechanisms established by SQMS Scotland Ltd also produce positive data on the performance of the system. Therefore, the Enterprise Network in Scotland would doubtless argue that it has put in place a robust and rigorous quality control process for the training activities that it supports. However, this perception by its creators, custodians and a few users could actually be preventing real improvements in quality, because there is a misconception that quality has already been achieved, although the results of the survey detailed above suggest that it may not.

6.15.2 To improve the quality of training delivery

Only three of the elements of the Standard actually address this aspect directly, although the SQMS Manual maintains that the evaluation of the efficiency and effectiveness of education and training services is embedded throughout the Standard. The Standard has been written so that the SQMS audit can establish if the mechanisms exist to deliver the required training, but it then takes a hands-off approach to let the monitoring and verification systems of the awarding bodies determine if the delivery meets their requirements. This is a market contrast from the approach taken by the ALI in England and Wales where the standard of training delivery is the primary concern of the system. If improving the quality of training delivery was the main objective for the introduction of SQMS, then the research data suggests that this objective has not been met. There is insufficient evidence to suggest that training delivery has improved, or that it has altered significantly as a result of the introduction of SQMS.

6.15.3 To improve the quality of the training provider base

The structure of the SQMS Standard would suggest that its main objective was the improvement of the organisations to which it is applied. The integrated nature of the Standard is such that it embraces most of the generic functions of management, with an

emphasis on strategic, quality and safety management activities. However, while the Standard sets out a vast number of policies, procedures and practices that have to be in place, it does not provide a mechanism to promote continuous improvement in these areas. The research data suggest that some organisations may have achieved registration to SQMS by having policies and procedures that have been produced purely to satisfy the requirements of the Standard. There is also no certainty that the introduction of SQMS was used as a "weeding out" exercise, where organisations that could not meet the SQMS criteria had funding withdrawn. Indeed, there is confirmation that persistent failure to achieve SQMS was not an impediment to continued funding for some organisations (Alba, 1999). The research evidence suggests that, overall; SQMS has not been successful in improving the quality of the training provider base in Scotland.

6.15.4 To introduce continuous improvement and/or TQM

This is the only expressed objective of the Standard and possibly its most important aspiration and the one that should determine its credibility as a quality management system. It therefore requires to be examined in more detail. The rhetoric of SQMS in the published materials referred to expresses its intent to be a TQM implementation tool and, in order to assess whether this is a justifiable claim, it is necessary to measure it against some uniform and recognised criteria. Chapter 4 includes an accepted model of TQM criteria as determined by Martinez-Lorente, *et al*, (1998) that identified the key dimensions of TQM in Table 4.5 as:

| | |
|-----------------------------------|---------------------------------|
| Top management support; | Product design process; |
| Customer relationship; | Process flow management; |
| Supplier relationship; | Quality data and reporting; |
| Workforce management; | Role of the quality department; |
| Employee attitudes and behaviour; | Benchmarking. |

Each of these dimensions is addressed hereunder as a template against which to measure the TQM credentials of SQMS.

6.15.4.1 Top Management Support

The research data suggest a weak commitment to SQMS from the top management of the SQMS registered organisations and the research did not explore the reasons for this. However, analysis of the data may provide some clues. For example, 81.2% of respondents claimed that their organisations had been in the training industry for more than five years

and must therefore have had SQMS imposed upon them. No incentive was applied to this imposition and the research data show that little tangible benefit accrued from the implementation of SQMS. Taylor and Wright, (2003) in a longitudinal study of 113 TQM programmes over a five-year period highlighted what they described as some necessary antecedents for TQM success. In particular they concluded that:

“managers need to understand the nature and purpose of TQM, its relationship to ISO9000, and the potential benefits that can accrue from its implementation.” (p 547)

There is no evidence to determine whether a similar understanding of SQMS was fostered by the proponents of SQMS, but it does not appear to be present among the managers of SQMS registered organisations. The research demonstrates that, unlike ISO 9000, increased market share and an enhanced reputation are unlikely to accrue from registration to the SQMS Standard. Benefits to training providers, whether short or longer-term, does not appear to have been a major factor in the way that SQMS was promoted by the Enterprise Network in Scotland. SQMS therefore became the de facto entrance cost for contracting with the Enterprise Network in Scotland and it is therefore difficult to envisage circumstances in which top management was likely to give its full support to the Standard.

Interpreting Top Management in its widest sense, the bulk of the research into Standards-based management highlighted in Chapters 4 and 5 surrounds the implementation of ISO 9000 and its derivatives and, in most cases where compulsion is applied, it is where a major organisation or industry is keen to incorporate its supply chain and sub-contractors within a quality management framework. In these circumstances the contracting organisation is usually totally committed to the quality ethos. In the circumstances under which SQMS was introduced the main contractor is the Enterprise Network in Scotland and their actions do not suggest a commitment to a quality ethos. Scottish Enterprise, Highlands and the Islands Enterprise, and the Local Enterprise Companies chose not to adopt SQMS for their own operations and it was only possible to identify one LEC - Scottish Enterprise Ayrshire - which had adopted any other quality management system. The decision to outsource the SQMS auditing function to SQMS Scotland Ltd served further to render SQMS as an arms-length quality management system. While some may argue that this is a tangential approach to "top management" it is a factor that could be influential.

6.15.4.2 Customer Relationship

The Enterprise Network in Scotland contracts with training providers and others principally to deliver national training programme targets determined annually, originally by the Scottish Office and latterly by the Scottish Executive. The environment within which SQMS applies is therefore target driven with funding heavily dependent upon the achievement of targets. It does not necessarily follow that the needs of the end-user - the trainees - are the same as the needs of the Enterprise Network to achieve their targets. Brevity precludes an analysis of this customer relationship beyond highlighting that, to SQMS registered organisations, the first customer that they have to satisfy is their Local Enterprise Company in order to secure their income. This may have some bearing on the relatively low priority given to customer orientation and identifying customer needs revealed in the research data.

6.15.4.3 Supplier Relationship

The environment in which SQMS organisations operate is one where their "raw materials" are people and the training process is determined by national qualification awarding bodies. In most cases the suppliers of these raw materials are government agencies, such as Jobcentre Plus and Careers Scotland. Therefore, the issue of supply is an area over which SQMS registered organisations have little control and the SQMS Standard does not address directly.

6.15.4.4 Workforce Management

Two units of the SQMS Standard address these issues directly and set out criteria covering the structure, level and type of staffing and the way in which they should be developed. However, the research data show that only 28.2% of respondents agreed that staff skills and competence levels had been appreciably enhanced and only 19.9% of respondents agreed that people selection methods had improved. These are interesting results when viewed against the background of a slight majority of respondents being recognised as Investors in People.

6.15.4.5 Employee Attitudes and Behaviour

These aspects are addressed to some extent within the Strategic Management unit of the SQMS Standard where communication of the business plan is covered. However, the research data show that only a small minority of respondents believed that their productivity

or profitability had increased and 31.8% of respondents agreed that it was difficult to get individuals to take ownership of quality procedures and processes. There is therefore insufficient evidence to support the notion that employee attitudes and behaviour have been markedly influenced by SQMS.

6.15.4.6 Product Design Process

Programme Design is a separate unit of the SQMS Standard, which addresses form, structure, access, responsiveness, learning and assessment methods and outcomes. However, the research data show that only approximately one third of respondents agreed that the training that they delivered more closely reflected trainees' identified needs and more closely reflected best practice. Less than 20% of respondents agreed that the number of dissatisfied trainees had decreased or that the number of positive achievers had increased. While there may well be an influence from the dichotomy that exists in the relationship with customers that goes some way to explain this situation, it nevertheless falls short of the requirements for TQM.

6.15.4.7 Process flow management

The requirement of this dimension is that the "process must be kept under statistical control", yet the research data show that there is little in the way of statistical analysis or techniques in use by SQMS registered organisations. The general lack of evidence of measurements techniques provided a conundrum in the main body of the research, but to some extent the research results were supported by the responses from SQMS auditors as detailed in the following chapter. This apparent weakness in measurement and statistical processes is a significant impediment to achieving quality improvement.

6.15.4.8 Quality Data and Reporting

While the SQMS Standard does provide for some quality indicators, it is not prescriptive and the research data do not show any consistency across the population. Only 17% of respondents agreed that they accurately measure and quantify every aspect of potential quality improvement and even this low percentage is not persuasive when answers to similar questions are taken into account.

6.15.4.9 Role of the quality department

Most SQMS registered organisations are not large enough to justify a separate quality department and the database suggests that often one individual has the responsibility for overseeing SQMS. Consequently, the research did not pursue this aspect in any detail. However, readers are reminded that the results from organisations that had a Quality Manager were compared with the rest of the population and no significant differences in responses could be found as detailed in section 6.13.4.

6.15.4.10 Benchmarking

There is no provision within the SQMS Standard for benchmarking and the research data did show that there is little taking place, even on an informal basis. While this omission is significant in any event, the research data show wide variations in responses from different sizes of organisation and geographical regions. The lack of benchmarking is likely to perpetuate these differences and is certainly an impediment to embedding TQM across the population.

In Chapter 2 reference was made to the tenth anniversary edition of the SQMS Scotland newsletter that stated:

“The quality system that was devised incorporated the ideals, principles and good practices contained in other systems, including Total Quality Management (TQM).” (SQMS Scotland, 2003b)

This is clearly the view of the architects of SQMS and those responsible for its implementation over a decade. However, the research shows that the majority of the agreed fundamental elements of TQM are not present in the majority of SQMS organisations and therefore it cannot be said that SQMS has achieved its main objective.

6.16 Conclusions

The overall response rate to the questionnaire was 70.47% with all but three areas of Scotland within +/- 15% of the mean. The vast majority of respondents had been involved in training for many years and had worked with SQMS for over three years, suggesting that their responses were informed and relevant. 61.4% of the respondents agreed to be interviewed, which perhaps indicated a relatively high level of confidence and ownership in the responses that were given. The responses confirmed that SQMS was the prominent

Management Standards in the industry with only a quarter of respondents registered against ISO 9000 and a half against IiP. As SQMS had been imposed upon the population as a contractual condition, it was not surprising that some 80% of respondents agreed that their motivation to pursue SQMS was to retain and obtain contracts. However, despite a similar number professing a belief in quality improvement, only 22.7% claimed that customer focus was a factor.

A considerable number of organisations claimed to have pursued SQMS with specific improvement areas in mind and many also introduced systems to measure the results, yet overall, the anticipated improvements do not appear to have been realised. Almost a third of respondents expected SQMS to be a significant marketing tool, but only 7.2% of respondents claimed to have increased their market share, which reflects the difficulty experienced by the researcher in trying to identify SQMS registered organisations. Over half of all respondents claimed to have pursued SQMS in order to improve the quality of their training services, but when respondents were asked if their training delivery had improved in clearly measurable ways as a result of introducing SQMS, only 25.3% agreed.

The results suggest an attitude of compliance, rather than improvement as the underlying attitude to SQMS, with only 15.9% of respondents believing that SQMS had enhanced the status of training and only 10.8% believing that it had reduced auditing. Less than half of respondents would continue to use SQMS, or pursue a different quality standard if it ceased to be mandatory, and 44.4% of respondents agreed that a lot of the time spent on standards and audits would be better spent on development. Answers given on planning and measurement are also contradictory and the results could be interpreted in a number of ways, but they do not support the concept of quality improvement achieved through planning and measurement.

While over half of respondents were positive about the Auditor's knowledge and approach and agreed that auditors look for opportunities to spread best practice in training, only 49.8% used the audit to refine their performance indicators to ensure year-on-year improvements and therefore the opportunity to benchmark against the best is obviously being missed. However, this is only one aspect of measurement that caused surprise with only 17.0% of respondents agreeing that they accurately measured and quantified every aspect of potential

quality improvement and the majority missing out the measurement section of the questionnaire entirely.

More than half of respondents agreed that they did things purely for evidence for quality audits and some 40% of respondents agreed that some plans and policies were produced solely for the Standard and not as working documents, suggesting that a considerable number of organisations undertake activities or produce pieces of paper for no reason, other than the Standard (or the Auditor?) tells them to.

The structure of the questionnaire issued to SQMS registered organisations was based upon elements of ISO 9004; the experiences of the preliminary field research and the SQMS Standard itself. Therefore, a number of questions in the questionnaire were derived from elements that the SQMS Standard suggests are prerequisite for a successful audit. What proved to be perplexing and disconcerting was that a number of these "essential" elements appear to be absent from many of the responses. For example, questions regarding the efficiency and effectiveness of the various functions and services provided were a response to the statement in the SQMS manual that:

"The important business of the efficiency and effectiveness of management functions and education and training services is not present as a section but rather is embedded throughout SQMS." (SQMS, 1993, p6)

and the relatively poor responses to these questions were therefore surprising.

It is important to note that 69.3% of respondents claimed to have been working with SQMS for more than three years and it is therefore reasonable to expect some developmental activity to have taken place. It seems inconsistent that an organisation's strategic and quality management could be successfully audited repeatedly without there being some evidence that the overall management of the organisation had significantly improved during the period. However, only 35.4% of respondents believed that it had. Similar inconsistencies arise in responses to questions regarding people selection methods, training aids and facilities, health and safety, design and content of training, training delivery and measurement techniques, which are specific requirements of the SQMS Standard. These questions could only be answered through additional research into the effectiveness of the SQMS Standard and the auditing process.

It may be prudent to point out at this juncture that the continuous client feedback maintained by SQMS Scotland Ltd shows a very different picture from that revealed by this research. On completion of every SQMS audit the organisation concerned is asked to complete a post audit questionnaire and return it to SQMS Scotland Ltd. The latest figures available for the year 2002 - 2003 suggest that 79% of organisations returned the SQMS feedback questionnaires. The SQMS newsletter states:

"Of the 79% of organisations who returned their questionnaire, 85.5 % felt that their external, independent, audit added value to their management systems. Additionally 80.5% of organisations felt that the external audit identified areas where the organisation's business could be improved. Such high and positive responses demonstrate organisations value the SQMS process." (SQMS Scotland, 2003a, p6)

One of the major criticisms of Standards-based management is the "one size fits all" approach that is inherent in the concept. The results of the research into the SQMS registered organisations highlighted this criticism, as there were very significant variations in the experiences of SQMS registered organisations depending on their size, geographical location and other variables. While the attention given to these mixed messages provides a better understanding of the nature of the data, it is not intended to detract from the analysis of the responses from the population as a whole.

Notwithstanding the general "one size fits all" criticism, the literature set out in Chapter 4 suggests that, in the case of ISO 9000, while there are a significant number of organisations that do not benefit from applying the Standard, on balance the experiences of the majority are positive.

The research into SQMS registered organisations does not support this position, with only a minority of respondents claiming to have derived significant benefits from the implementation of SQMS. The results can be summarised as follows:

Motivation - apart from the compulsion that attaches to the Standard, a minority of participants claimed to be motivated by additional factors. However, the evidence to substantiate these claims was mixed and, if the claims were genuine, only a minority achieved any goals that were set. These results are very similar to the results of the preliminary field research where the management of the MoD Depot was imbued with the rhetoric of quality improvement, yet its main motivation was compliance.

Attitude to quality - despite apparent overwhelming support for the basic principles of

quality management systems and continuous improvement, support for SQMS was less pronounced. Only a minority would continue with SQMS or other quality management systems if they had a choice and only a minority believe that SQMS represents good value for the industry. Paradoxically, 69.3% of respondents believed that the time that they spent on SQMS was a useful means of improving the business.

Implementation - notwithstanding the requirements for a "business, corporate, strategic or development plan" that is a fundamental requirement of the strategic management element of SQMS, the SQMS Arrangements for External Auditing (SE, 1997) states:

"When the organisation has decided which set of standards and pointers it wishes to meet for its corporate purposes, it will use SQMS to generate a quality development plan and will measure success towards achievement of that plan by regular internal audit, using SQMS documentation to build a portfolio of evidence." (p 13)

Only a slim majority of respondents agreed that they had written clear, specific quality improvement goals and only a minority agreed that they had introduced both short and long-term, customer satisfaction-driven quality plans. The degree of sophistication of any plans that may have existed is not clear, although the survey highlighted the absence of systematic measurement across the range of business activity. Indeed, the communications and administration element of the SQMS Standard (SE, 1993) states:

"Good practice will include the use of statistical techniques to analyse and review the information, particularly for its accuracy." (p 6),

yet there was insufficient evidence to suggest that even the most basic statistical techniques were in use.

The audit process - the majority of respondents were positive about the auditor's knowledge and approach, but this became a slight minority when respondents were asked about the audit process itself.

Benefits gained - despite the fact that the answers to a number of the questions asked should have formed part of the evidence that is an integral part of achieving a satisfactory audit, none of the benefits listed received a majority, positive response.

Disadvantages - significant positive responses were received in areas that questioned the practicality and relevance of the Standard. There was a very strong relationship between the responses from all factions of the population in these areas, particularly on the question of undertaking activities purely to generate evidence for quality audits.

Value - only a minority believed that SQMS represented good value for the industry.

The results of this research suggest that, even allowing for a wide definition of the original objectives for the Standard, SQMS has not achieved them, beyond demonstrating that a control mechanism is in place. Despite its aspirations to be a TQM implementation tool, it cannot be shown to meet the accepted criteria of TQM and there is little evidence to show that SQMS has inspired the pursuit of TQM among those organisations that are familiar with the Standard.

The following chapter records the results of interviews with a selection of SQMS auditors which provides an alternative perspective on some of the questions raised in this chapter.

Chapter 7 Results of the Interviews with SQMS Auditors

7.01 Chapter Synopsis

This Chapter records the results of the structured interviews that were undertaken with the SQMS Auditors and contrasts and compares their perceptions and opinions with those given by the SQMS registered organisations to broadly similar questions. In Chapter 3 the method and content of the interviews was explained, as was the intention to interview six auditors who had agreed to participate. When the interviews were conducted it transpired that one of the Auditors, while very experienced in auditing other standards, had actually only audited one SQMS company and was therefore unable to respond to a significant number of questions asked. Consequently, it was considered that this person's responses had the potential to skew the data and it was decided to remove her from the sample. The final interviews were therefore undertaken with five Auditors who between them had audited 268 organisations that were registered to SQMS. The Auditors claimed that it was the practice of SQMS Scotland Ltd to allocate the same auditor to an organisation. Therefore, while there may be some duplication within the total number of organisations audited, the level of duplication is likely to be low.

There is no intention to imply that the results of the structured interviews with the SQMS Auditors are statistically significant, in view of the very small sample and the way that the interviews were conducted. Readers are reminded that the Auditors were asked to estimate the number of SQMS organisations that they believed met the conditions of the questions and there are limits to the reliability of such an approach. However, there are also merits in such an approach. Indeed, as Meredith, (1995) argued:

“The information compiled from the perceptions of key participants is often closer to reality than an artificial reconstruction of the objective reality based on a focused and limited collection of incomplete objective data gathered independently by researchers themselves.”

The Mandy Rice-Davies adage that, "they would say that wouldn't they?" is also a factor that must be taken into consideration. It is reasonable to expect that the SQMS Auditors, some of whom rely wholly upon income from SQMS audits for their livelihood, would advocate the use of SQMS and be positive about its effect on an organisation. This bias should result in differences between the responses given by the Auditors to those given by the SQMS

registered organisations. This position should be borne in mind when examining the results and comments below. For this reason, only major differences between the actual number of organisations responding to a question and the estimation given by the Auditors are highlighted hereunder. Conversely, the SQMS Auditors who only visit the SQMS organisations at most on an annual basis could be better placed to observe improvements over time than people working at the coalface on a day-to-day basis.

The approach to the interviews with the auditors mirrored the approach to the SQMS organisations with questionnaires structured along very similar lines. That allowed direct comparisons to be drawn between similar questions addressed to each and the results are contrasted with differences highlighted where necessary.

7.02 Profile of the SQMS Auditors

All of the Auditors had been involved for over ten years in training services and all but one had been an SQMS Auditor for more than five years. This suggests that they were experienced and their views are likely to be based upon experience over time. Three Auditors derived over 70% of their income from SQMS auditing, while two Auditors relied upon SQMS auditing for up to 40% of their income. This dependence upon SQMS auditing could be interpreted in a number of ways, both positive and negative and, in the absence of any evidence to determine if it had any effect upon the answers given, it is simply being noted as a factor that the reader should bear in mind. The backgrounds of all of the auditors were either as a training practitioner or as an education practitioner.

It is not the intention here to attempt to analyse the effectiveness of the SQMS audit process. However, it would be remiss of any responsible researcher not to draw attention to the apparent incongruity between the requirements of the SQMS Standard and the background of the auditors. SQMS auditors are required to audit up to 12 Units of the Standard that include Strategic Management, Quality Management and Marketing in a range of organisations. One wonders how training and education practitioners would have sufficient knowledge and experience to audit these highly specialist areas that would normally require a combination of senior management experience and advanced, relevant qualifications. Similar concerns have been expressed about the very much increased scope of ISO 9000: 2000 and the ability of existing ISO 9000 auditors to undertake such a wide role (Laszlo,

2000). This level of experience and expertise should be borne in mind when interpreting the results in Chapter 7.

Figure 7.1 indicates the wide difference between the numbers of organisations audited by individual auditors. The mean number of organisations audited by the group was 53.4 with a standard deviation of 44.4.

Figure 7.1 Number of Organisations Audited



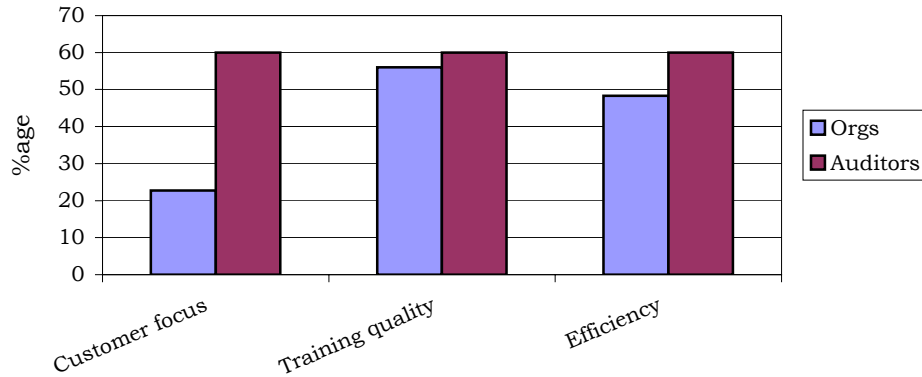
The distribution of the type of organisation between the Auditors closely matched the profile of the population and there were no specialists in any particular sector. Therefore it was not considered necessary to try and differentiate between the types of organisations and the Auditors were asked to take a general view. Only one of the Auditors claimed to audit ISO 9000, and one Auditor claimed to audit specific systems within the education sector. Two of the Auditors claimed that, in the majority of cases, when they audited an organisation their contact was with senior management and three dealt mainly with middle management.

7.03 Motivating factors to pursue SQMS

There was very little difference between the estimations given by the SQMS Auditors of the number of organisations that had been persuaded by the six categories suggested. Figure 7.2 below illustrates where discrepancies lay. An obvious difference is in the area of customer focus, where the Auditors believed that responding to demands from the market for more customer-focused training was a significant motivating factor. However, only 22.7% of organisations agreed that they had been motivated in this way. This result is particularly significant as the Auditors were also asked specifically if they believed that SQMS organisations were customer-focused and they all agreed that they were. However,

indications from the survey of organisations suggest that less than a quarter believe that they are customer-focused or have mechanisms in place to allow them to be so.

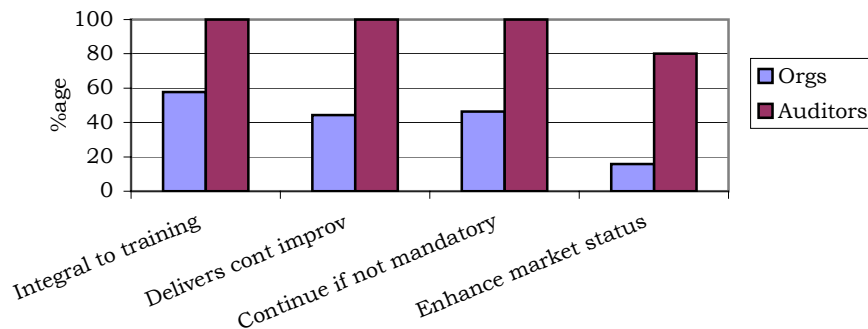
Figure 7.2 Motivation to Pursue SQMS



7.04 The Approach to Quality and SQMS

There were major differences between the views of the SQMS Auditors and responding organisations on the subject of their approach to quality and to SQMS. Figure 7.3 illustrates the range of the differences, which are very interesting. The SQMS Auditors obviously believe in a level of support for the Standard that obviously does not exist and one can only speculate on why that is the case. One obvious conclusion could be that the individuals who have the closest contact with the Auditor during the audit "talk up" their belief in the Standard in order to ensure a successful audit. In any event, it does suggest that an auditor's perception of an organisation's approach to quality may not be reliable.

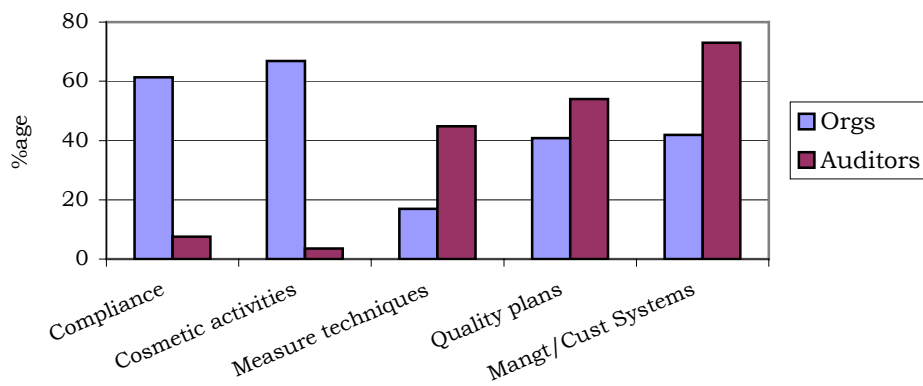
Figure 7.3 Approach to SQMS



7.05 Starting the Quality Journey

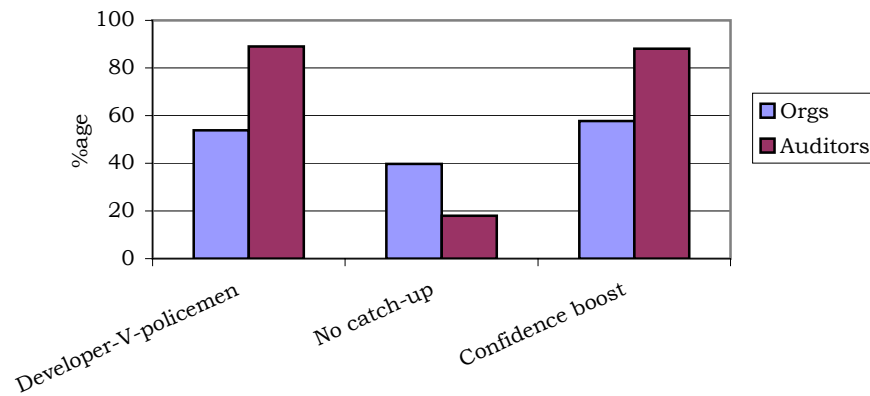
The auditors in question were very experienced and had undertaken a number of audits within the same organisations and one would therefore expect them to be reasonably familiar and conversant with the systems, procedures and attitudes that they encountered during the audit process. In order to determine the starting point for most organisations embarking on the SQMS process, the Auditors were asked if they had any "evidence" to support the view that they were asked to express. Figure 7.4 shows that the Auditors' belief that the organisations that they audited had an attitude of continuous improvement rather than compliance and did not introduce activities and processes purely to satisfy SQMS criteria is misplaced. Similarly, the Auditors' belief that they have evidence of measurement techniques and management/customer systems is contradicted by the survey of organisations that raised a number of questions regarding the absence of measurement.

Figure 7.4 The Starting Point



7.06 The SQMS Audit Process

The reader may remember that the survey of SQMS organisations returned a fairly positive response to questions regarding the SQMS audit process. The point was made then that this was a somewhat surprising finding in view of the background to the introduction of SQMS. However, it could be said that the Auditors have a rose-tinted view of the relationship they have with the organisations that they audit and of the audit process itself as illustrated in Figure 7.5.

Figure 7.5 The Audit Process

7.07 The Benefits to be derived from SQMS

The SQMS Auditors were asked for their opinions on the same range of potential benefits that were put to the SQMS organisations. Figures 7.6 to 7.8 show that in most cases the Auditors' belief in the benefits that have accrued from SQMS are starkly different from those of the organisations that they audit. These opinions are based upon a mixture of perceptions and on evidence presented at audit and must raise questions about the effectiveness of the audit process.

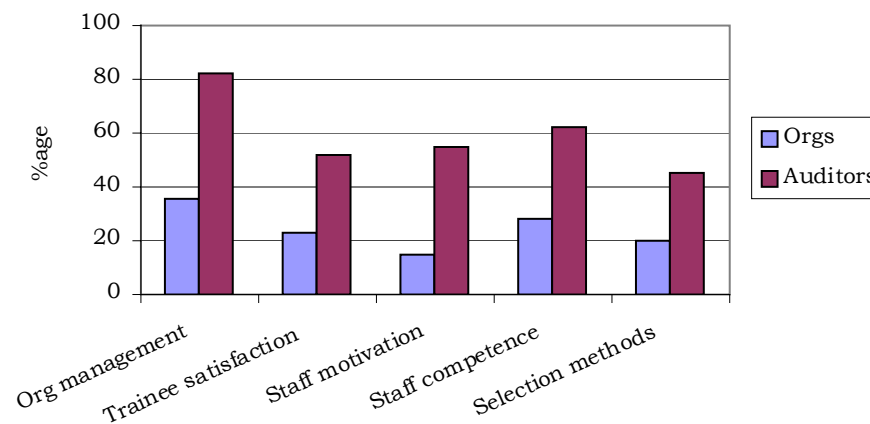
Figure 8.6 Evident Improvements from SQMS

Figure 7.7 Evident Improvements from SQMS (Cont)

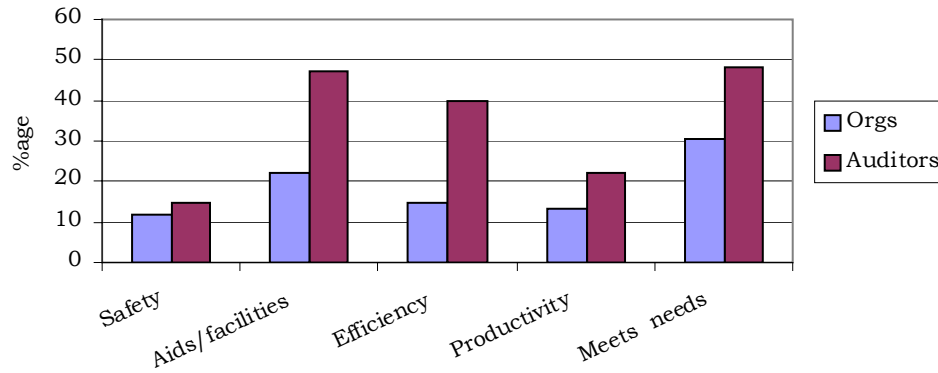
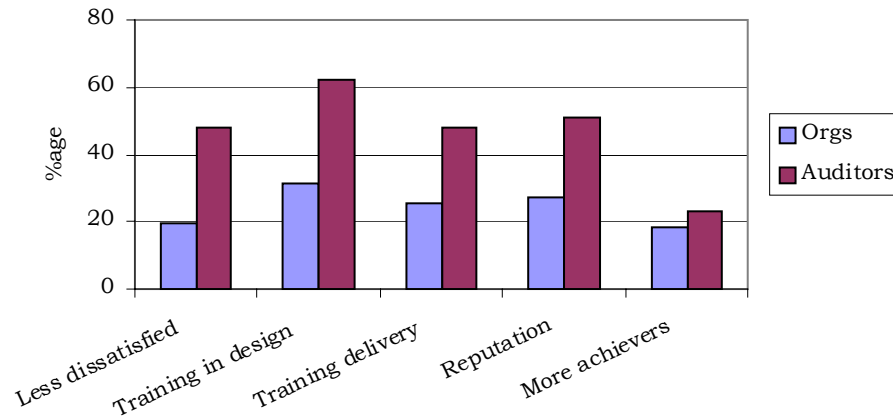


Figure 7.8 Evident Improvements from SQMS (Cont)



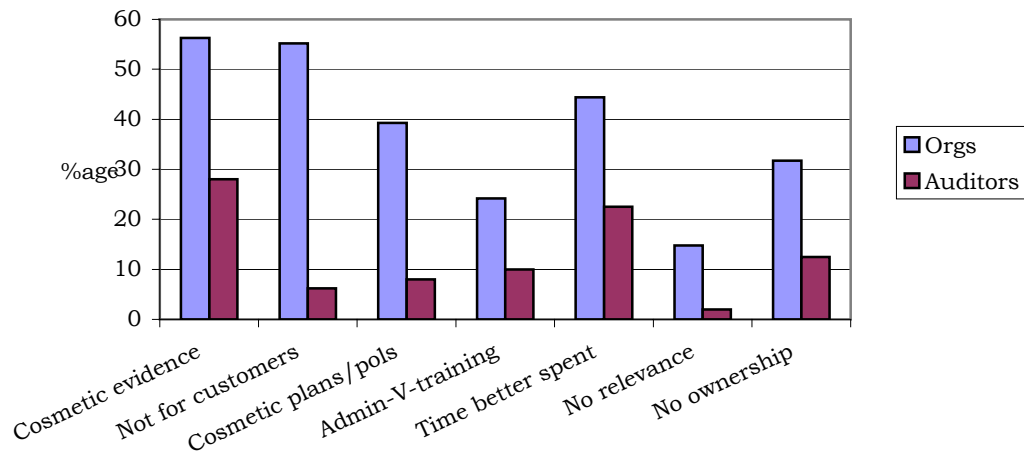
Conversely, the results of the questions regarding any improvements in health and safety show a very strong unanimity that requires some comment. For some organisations the SQMS auditing process is heavily weighted towards health and safety issues to a degree that the time allocated to health and safety matters can be twice that allocated to other issues. Both the organisations and the Auditors agree that this emphasis on health and safety has not led to a reduction in accidents or incidents. While there would no doubt be arguments regarding the preventative nature of this aspect of the audit, it should raise questions about the cost effectiveness of this emphasis.

7.08 The Possible Disadvantages of SQMS

Differences in opinions on possible disadvantages of SQMS are even more pronounced as illustrated in Figure 7.9. The Auditors seem to be convinced that the plans, policies and

evidence that are presented to them confirm that effective processes are in place, whereas the organisations admit to producing documents purely to satisfy the SQMS audit. One of the most striking differences is where over 55% of the organisations believed that many of the new activities introduced as a result of SQMS did not improve things for customers, whereas the Auditors estimated that only some 6% of organisations would take that view. It is surprising that the Auditors' views are so different from the views of the organisations that they audit.

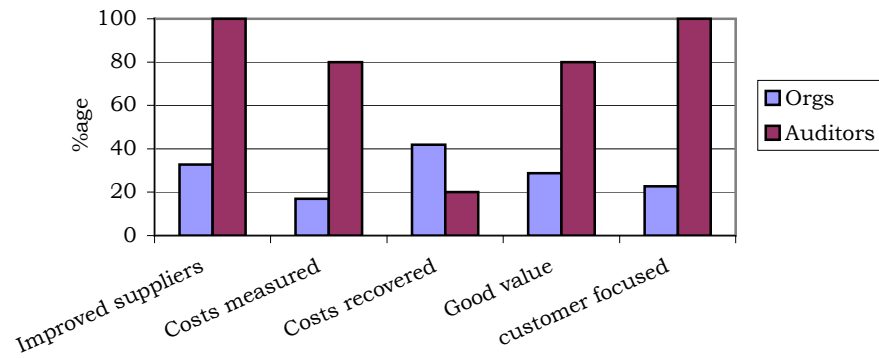
Figure 7.9 Evident Disadvantages of SQMS



7.09 The Value of SQMS

Figure 7.10 demonstrates the differences in perceptions between the Auditors and the organisations that they audit of the value of SQMS. The most significant difference regarding customer-focus has already been mentioned above, but it is almost matched by the differences in opinion on the training supplier base. Without exception and without hesitation the Auditors expressed the view that SQMS had significantly improved the training supplier base, yet only 32.8% of SQMS registered organisations believed that going through the SQMS process and being audited against the Standard had improved their organisation. The point was made above that the principle of "the spectator sees most of the game" could be applied to the Auditors who could be better placed to identify where improvements had taken place. However, the frequency and extent of the differences in opinion that have resulted from this survey call this assumption into question.

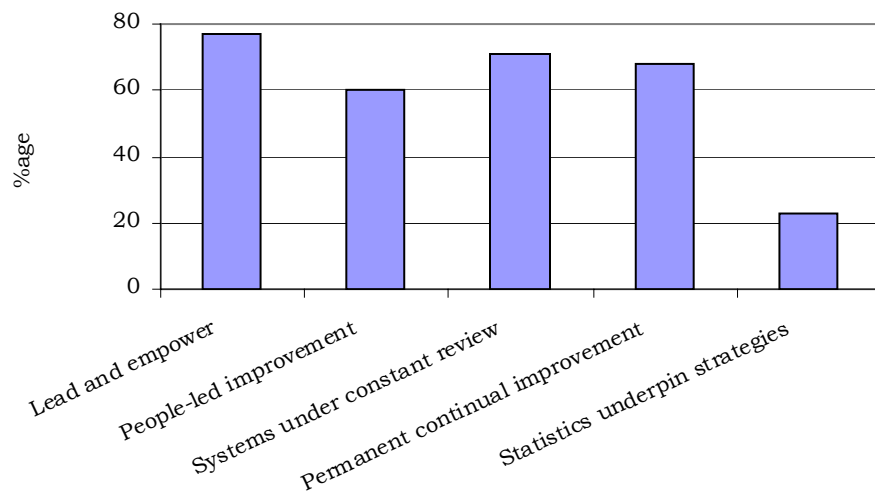
Figure 7.10 Value of SQMS



7.10 SQMS and Total Quality Management

The difficulties of defining TQM and some of the misconceptions that surround the term were addressed in detail in Chapter 4. There is clear evidence that the local enterprise company network promotes SQMS as a TQM programme and there is some value in trying to identify the perceptions of the SQMS Standard in this regard. Consequently, the SQMS Auditors were reminded that the SQMS Manual states that, "SQMS draws on TQM thinking across the audit as a whole", and were asked to explore some aspects of TQM. The Auditors were unanimous in their belief that SQMS is a TQM implementation tool and some ventured a view that organisations that had achieved registration to SQMS were well along the road to achieving TQM.

Figure 7.11 SQMS and TQM



The Auditors confidence in the level of TQM compliance among SQMS registered organisations is not supported by the research that suggests that some of the key dimensions of TQM are absent. Without trying to prioritise those common dimensions, certainly one of the prerequisites of TQM is the collection and analysis of data on every aspect of an organisation's operations. The absence of meaningful measurement was a recurring factor within the research, notwithstanding the possibility that a flaw in the questionnaire design could have contributed to the poor response to the main measurement questions. It is significant that the Auditors place statistical analysis fairly low down in their estimations of how SQMS registered organisations have espoused TQM and calls into question their understanding of its importance.

7.11 Origins of SQMS

The Auditors were asked if they knew the original objective behind the development of SQMS and they all claimed that they did. However, three believed that it was the continuous improvement of training and development; one believed that it was a benchmarking device to reduce the audit burden; and one believed that it was intended to replace and improve the previous Approved Training Organisation status and to reduce the amount of resources that local enterprise companies required to commit. Only one Auditor believed that the original objective had been met, while three believed that the original objective had since been compromised.

7.12 Contradictory Views

Finally, the Auditors were asked if they would be surprised if their views differed from those of SQMS registered organisations. Two Auditors said that they would not be surprised, as they believed that the SQMS organisations were too close to the day-to-day activities to be in a position to make an informed judgment. This qualification has the effect of declaring that even if the SQMS organisations disagreed it was a result of their myopia rather than any error of judgment on behalf of the Auditors. Therefore, overall the Auditors believed implicitly in the opinions that they advanced on the effectiveness of SQMS and its effect upon the training industry.

7.13 Conclusions

It has not been possible to identify the total number of auditors involved in the SQMS auditing process. An estimate of "around 50" suggested at one time by SQMS Scotland Ltd is deceptive, as apparently this included specialists auditors such as those who address purely financial and health and safety issues. Although the number of auditors included in the sample is relatively low, collectively they audited a very significant number of organisations. It seems likely therefore that the auditors who were chosen for the interviews are representative of SQMS auditors generally. If this is the case, then probably the auditors have a background of training rather than quality and their auditing experience seems to be limited to SQMS and other training related standards, rather than the more widely known and accepted standards such as ISO 9000. While the competence of the SQMS auditors is beyond the scope of this research, the apparent incongruity between the requirements of the SQMS Standard and the background of the auditors is worthy of attention. SQMS auditors are required to audit senior management activities in a range of organisations and none of the auditors that were involved in this research had the combination of senior management experience and advanced relevant qualifications. Similar concerns have been expressed about the very much increased scope of ISO 9000: 2000 and the ability of existing ISO 9000 auditors to undertake such a wide role (Laszlo, 2000). This level of experience and expertise should be borne in mind when interpreting the results in this chapter.

It was reasonable to expect differences in the results of the interviews with the Auditors from the interviews with the SQMS organisations, purely on the grounds that the Auditors would be expected to be more positive about the system upon which their livelihood, or part thereof, depended. While a difference of perception between the Auditors and the organisations was expected, in many areas the scale of this disparity is not easily explained. If the very strong temptation to speculate on the reasons for the disparity is to be avoided, then the scope for comment is very much restricted. One aspect of the research with the SQMS Auditors that cannot be demonstrated within the results is the confidence and conviction that came across during the interviews. In particular, the Auditors that had undertaken the most audits were very convincing in the way that they answered questions and certainly gave the impression of a strong belief in the reliability of the answers that they gave. Notwithstanding this in-built bias, the differences proved to be very striking and

certainly greater than would be expected from the rather subjective approach to the questioning. These differences are so noteworthy that they warrant further research to try and more accurately identify the reasons for the differences. However, such research is beyond the resources and scope of this project.

Differences between the responses from the SQMS organisations and the perceptions of the auditors abound, such as the Auditor's belief that responding to demands from the market for more customer-focused training was a significant motivating factor, whereas, only 22.7% of organisations agreed that they had been motivated in this way. Major discrepancies between the views of the auditors and the results of the survey occurred in every category of the questionnaire, except on the question of health and safety where unanimity was identified. This is ironic as the SQMS auditing process is heavily weighted towards health and safety issues to a degree that the time allocated to health and safety matters can be twice that allocated to other issues, yet both the organisations and the Auditors agreed that this emphasis on health and safety has not led to a reduction in accidents or incidents. One of the most striking differences is where over 55% of the organisations believed that many of the new activities introduced as a result of SQMS did not improve things for customers, whereas the Auditors estimated that only some 6% of organisations would take that view.

The responses of the SQMS organisations to questions on the audit process revealed that it was generally considered to be a positive experience and that the Auditors were normally well regarded. It is also worth remembering that the database of SQMS registered organisations was provided by SQMS Scotland Ltd and the contact names that it contained were the individuals that SQMS Scotland Ltd liaises with on audit matters. It is therefore reasonable to assume that, in the majority of cases, the individuals who completed the questionnaires also influenced the impressions gained by the Auditors of the organisations that they audited. If that is the case, then reaching the conclusion that the disparity between the views expressed by the SQMS organisations and the impression that they have given to the SQMS Auditors is due to an element of "stage management" of the audit process is persuasive.

The difficulties of defining TQM and some of the misconceptions that surround the term were addressed in detail in Chapter 4. There is clear evidence that the local enterprise

company network promotes SQMS as a TQM programme and there is some value in trying to identify the perceptions of the SQMS Standard in this regard. Consequently, the SQMS Auditors were reminded that the SQMS Manual states that, "SQMS draws on TQM thinking across the audit as a whole", and were asked to explore some aspects of TQM. The Auditors were unanimous in their belief that SQMS is a TQM implementation tool and some ventured a view that organisations that had achieved registration to SQMS were well along the road to achieving TQM. This belief that SQMS is a TQM implementation tool suggests a lack of knowledge and understanding of TQM approaches and models. The narrow auditing experience of the SQMS auditors and their insular dependency on income from SQMS audits may well be a limiting factor, but the same criticism could be levelled at the auditors of other Standards who tend to find a niche within markets with which they are familiar. The complete absence of any benchmarking activity within the SQMS process could also perpetuate this insularity, which may also be compounded by the practice of assigning the same auditor to organisations rather than give them the benefit of wider experience. Whilst there are no doubt persuasive commercial arguments for this approach, nevertheless the negative aspects must also be noted.

The lack of unanimity on the part of the auditors on the original objectives of SQMS lends support to the researcher's difficulty in identifying what they were. However, it should be a concern to those administering SQMS that the overall objective of the Standard has not been clearly communicated. Similarly, it should be a concern that only 33.2% of SQMS registered organisations disagreed with the statement that; "There are things that we do purely for evidence for quality audits". It is perhaps a reflection of the competence of the auditors that they did not even contemplate this possibility.

Chapter 8 Synthesis of the Research Findings

8.01 Chapter Synopsis

This chapter seeks to draw together all the various strands of the literature review, the preliminary research and main research project to provide responses to the research aims set out in Chapter 1. The entire body of the research consisted of separate, but inter-related elements, viz: the research of the literature covering the development of Quality Management and Total Quality Management as detailed in Chapter 4; research of the literature covering the growth and variety of Management Standards as detailed in Chapter 5; preliminary field research as referred to in Chapter 2; research into the SQMS organisations as detailed in Chapter 6; and the interviews with the SQMS auditors as detailed in Chapter 7. Each of these chapters contains some conclusions reached upon the research contained therein, but the importance of each element of the research to the others also requires to be developed. This chapter examines the entire body of the research; analyses relationship between the various elements of the research and explores the conclusions that can be drawn from the main research project.

8.02 The Growth of Management Standards

The first aim of this research set out in Chapter 1 was;

1. To investigate the growth and development of the main Management Standards and to gauge the extent to which the goals of the system are attained by compliant organisations.

The first task was one of definition and distillation to identify which were the most appropriate Standards to include and to allow selection from a huge body of research literature. Chapter 1 details this analysis and explains the rationale behind the selection process. Thereafter a review of the literature was undertaken in pursuit of the first aim.

As the examination of the relevant literature progressed, a number of factors became apparent:

1. There are major differences in the way that the theory of management, as epitomised by the way in which contingency and pluralist theorists had advocated that management

praxis should develop, and the way that the practice of management had embraced Standards-based systems and quality management.

2. Although Quality Management, Total Quality Management and Standards-based Management systems are very closely linked, they are nevertheless different management philosophies, despite the arguments of a number of researchers that they are not, as detailed in Chapter 4.
3. The growth of Management Standards-based approaches is relentless and is likely to continue into the foreseeable future with additional and integrated Management Standards in prospect.
4. The body of Management Standards has become so large and diverse that it is now possibly beyond the scope of general academic research to consider it as a manageable entity.
5. Management Standards are now so ubiquitous that controversial Standards such as the HSE Standards for Managing Stress can be imposed with little critical comment.
6. Despite this ubiquity, there is no accepted definition of a Management Standard or a consensus on how a Management Standard should be structured.
7. Previous research has tended to concentrate on the most popular international Standards without looking at Management Standards as a phenomenon.

Chapter 1 offered a definition of Management Standards that helped to reduce the Standards included in the research to more manageable numbers. However, even these few Standards represent a considerable burden for the organisations that choose, for whatever reason, to adopt them and represent but a fraction of the Management Standard's landscape.

In view of the resources issues identified previously, it was deemed sufficient to note the ways in which classical and other schools of management thinking have differed from the way in which the practice of management linked to Standards and quality management have developed, particularly during the last quarter of the twentieth century. However, the scale of divergence of management praxis from the prevailing pluralist and contingency management theories is certainly worthy of further research and may add value to other research into the failure of various quality management initiatives to which this research has made reference.

The review of the relevant literature made clear that it was not possible to isolate Standards-based Management from Quality Management and Total Quality Management, as they were inextricably linked to the extent that to ignore one would seriously detract from an understanding of the other. However, this area is probably the most researched of any management research field and therefore there was sufficient extant research on the subject of 'quality' to negate the need to duplicate what was already a respected body of data. However, it was necessary to draw attention to that research in order to put into context the management Standards taxonomy that is summarised in Chapter 1.

The literature research revealed that Standards-based management and Quality Management approaches had overshadowed much of the practice of management, particularly in the last quarter of the twentieth century. The hypothesis that underpins the advocacy of Standards-based management of any kind is that adherence to the criteria encapsulated within the Standard will lead to improvements in those areas covered by the Standard. While systems Standards generally espouse a philosophy of training, there is nevertheless an assumption that it is the system of management that is important and possibly independent of the individual. Therefore, there is an expectation that, if the Standard is rigidly adopted, then individuals in the organisation will become competent as a result of operating the Standard. As these mechanistic approaches concentrate upon how the organisation works, rather than how individuals work in the organisation, it follows that the theories of management that are briefly touched on above, have had little influence on the practice of management in those organisations that have adopted Standards in recent times.

Attention was drawn in Chapter 1 to the competence debate, where it is argued that incompetent managers can operate effectively in a 'competent' organisation which has comprehensive management systems in place without fully understanding why they act in the way that they do. However, if these managers then move to an 'incompetent' organisation with little or no management systems, they would lack the essential knowledge and understanding to operate effectively (Currie and Darby, 1995). The basic principle behind the National Management Standards is that a competent manager can and probably will be an agent of change in an 'incompetent' organisation through the need to produce evidence of competence. However, the reverse is unlikely to be the case in a "compliant" organisation that is judged on its ability to 'do what it says it will do' no matter whether

what it says it will do is the right thing to do. This suggests that management system Standards alone are likely to have a limited effect on the competence of the managers charged with their implementation.

Therefore, the review of literature supports the hypothesis that Standards-based management is growing and is permeating ever more areas of management.

8.03 The Development of Management Standards

The literature review confirmed that Standards-based Management was increasing and permeating ever more areas of management, particularly the more peripheral areas of management that a few years ago would have seemed implausible, such as social responsibility and stress. This begs the question; are we likely to see a continuation of different Management Standards being introduced from time to time, or will the existing Management Standards evolve to incorporate additional areas of activity?

Van der Wiele, *et al*, (2000c) argue that ISO 9000 and TQM as exemplified in excellence models have been around so long that they have transcended the management “fad” status and have avoided what Cannon and Taylor, (1994) described as managers’ desire for “the next ‘brilliant idea’ or new ‘management paradigm’ in order to tackle today’s problems.” While additional Management Standards are certainly in prospect such as those for CSR, by far the most important factor that affects the longevity and credibility of the main Management Standards is the review process that keeps them ‘fresh’ and available to new markets.

The ISO 9000 Standards were fundamentally restructured in 2000 and are very significantly different from the previous version. The IiP Standard has been through three incarnations since its launch in 1991 and the relationship of the current Standard to the original is tenuous. The National Management Standards are also in their third incarnation and, although they still form the basis of vocational qualifications, a useful comparison of the vocational qualification in management over the life of the Standards is just not possible. This virtuous circle of review followed by what is close to reinvention probably ensures that the existing Management Standards will still be around for many years to come.

The literature confirms that the existing Management Standards are developing and evolving and it seems likely that other Standards are likely to be developed.

8.04 The Effectiveness of Management Standards

The answer to the question ‘do Management Standards deliver tangible business improvements’ is far from straightforward and requires further explanation. For example, the ability to market using the ISO 9000 logo has been shown to increase turnover in some companies (Buttle, 1997), whereas the cost of compliance has been shown to have affected the profitability of others (Ferguson, 1994; Barnes, 1998). Although there is a surfeit of research into the “business benefits” of Standards there is no accepted definition of what constitutes a “benefit”, therefore no matter how well defined the classification may be for this research, the determination of the answer will always be subjective. For the purposes of this research, tangible business improvements have been deemed to have occurred where the balance of the available research suggested that they had.

Although Manoochehr and Kehoe, (2000), noted that there was positive feedback from twenty ISO 9000 registered companies for every company with a negative experience, they concluded that the Standard does not in itself lead to continuous improvement or indeed promote a customer orientated culture. Sun, (2000) argued that if the main motivation behind getting registered to ISO 9000 was only for the purpose of getting a certificate and an advertisement, the procedures would destroy the normal business process and would not contribute to the improvement of performance. These comments are probably typical of the majority of research into the effectiveness of the ISO 9000 Standards, particularly in relation to those organisations that wish only to “get a plaque on the wall”. However, on balance the overwhelming body of the research into ISO 9000 is positive and confirms that tangible business improvements have resulted from its implementation.

The business benefits of other Standards are less clear cut and can be affected by a range of factors. For example, companies that operate in environmentally sensitive areas will presumably gain more benefit from ISO 14000 than companies with products and processes that are environmentally neutral. The research also suggests that the vast majority of organisations that have adopted ISO 14000 and the various health and safety Standards have also adopted ISO 9000 and this is likely to impact on the assessment of separate business improvements. Consequently, the case for tangible business improvements from these Standards cannot be confirmed.

Investors in People UK is unequivocal in its claims that the Standard “is a straightforward, proven framework for delivering business improvement”, but the available research is not as convincing. The definition of business benefits used by IiP UK has been criticised and the reliability of some of the research to which they refer has been questioned. Therefore, it cannot yet be said with confidence that the IiP Standard delivers tangible business improvements.

The third edition of the National Management Standards was launched in 2004 under the title of the National Occupational Standards for Management and Leadership and are fundamentally different from the previous version. All the research referred to herein applies to the previous version of the Standard and showed clearly that the business benefits of this Standards had still to be proven. Obviously, the new version of the Standard will take time to bed-in and attract research interest.

The Standards for Managing Stress are too recent to have attracted any research interest, but in any event, the proposed business improvements include reduced absence due to stress and a healthier workforce. Quantifying these benefits is likely to be very challenging and it seems unlikely that any meaningful independent research will be available for some time.

8.05 The Future of Management Standards

The propensity of the architects and custodians of Standards to periodically re-invent them was referred to above and all Standards have specified review periods. However, the Management Standards Centre that is responsible for the National Occupational Standards for Management and Leadership claims on its website that:

“Unlike previous versions of the standards it is intended that this suite will be subject to incremental change using feedback collected from new and existing users of the standards.”

It is not clear how this is likely to work given that the Standards are intended to fulfil a function as the basis of management qualifications. However, it seems likely that the existing Management Standards will continue to evolve through the scheduled periodic review process and, if past performance is an indicator of future developments, it is probable

that the Standard's landscape in the next decade will be very different from today, but whether the role of management will change to the same extent is perhaps not as predictable.

The literature suggests that the future of Standards-based management will include integrated Standards that encompass areas of management such as quality, environmental, health and safety and corporate social responsibility. This is certainly not imminent, as there are problems associated with structure and approach, but as the various Standards come under the scheduled review process it is possible that these issues will be addressed. The literature also supports the suggestion that calls for integration of the existing Standards for quality, environment and health and safety and CSR will advance the argument for a "super" management standard that will incorporate "all disciplines and functions within an organisation". Some researchers argue that the EFQM Model for Business excellence perhaps provides a foundation upon which an integrated management system could be constructed, but it is argued in Chapter 5 that such a Standard would only be capable of adoption by organisations well advanced in quality management. Perhaps organisations looking for an integrated Standard on a more simple level could be attracted to the Scottish Quality Management System?

Statistics produced by ISO and featured in Chapter 5 show that the take-up of ISO 9000 is declining in Europe, whereas it is soaring in other parts of the World. The reasons given by the ISO for this are not convincing and it is a trend that no doubt will attract research interest. Meantime, it has not been taken as a significant factor in assessing the future of Management Standards.

8.06 The Effectiveness of the SQMS Standard

The principle aim of this research was to examine the Scottish Quality Management System to determine its ability to bring about organisational improvements and its suitability as a tool to implement the principles of TQM. The SQMS population that was surveyed consisted of large, national organisations, SMEs, voluntary organisations, local authorities, FE establishments and other organisations for which training was not their core activity and therefore the population represented a wide array of management styles and levels of sophistication from all parts of Scotland. The research instrument that was chosen was as comprehensive as the research suggested was sustainable to attract an acceptable response

rate. The entire population of SQMS assessed organisations was surveyed and the final response rate was exceptionally high. The vast majority of respondents were very experienced in their industry and also experienced with SQMS. The resultant data set was therefore robust and the results of its analysis authoritative.

The structure of the questionnaire issued to SQMS registered organisations was based upon elements of ISO 9004; the experiences of the preliminary field research and the SQMS Standard itself. Therefore, a number of questions in the questionnaire were derived from elements that the SQMS Standard suggests are prerequisite for a successful audit. What proved to be perplexing and disconcerting was that a number of these "essential" elements appear to be absent from many of the responses. It is important to note that 69.3% of respondents claimed to have been working with SQMS for more than three years and, not only is this experience important in terms of the reliability of the data, it is also a sufficient period in which to expect organizational improvements to have taken place. The difficulties in identifying the original objectives behind the development of SQMS have been described and a number of objectives were postulated for the purposes of this research. High on the list was likely to be an objective to improve the standard of training provided under the various SE funded programmes. The structure of the Standard suggests that also high on the list would be the improvement of the training supplier base in Scotland. If we consider these two for a moment as the "business case" for SQMS, how would its success be judged against these criteria?

The first criterion is likely to be measured in terms of customer satisfaction. Has trainee satisfaction improved significantly? Does the training delivery post SQMS more closely reflect trainees' identified needs? Has that training delivery improved in clearly measurable ways? Has the number of dissatisfied trainees decreased and the number of positive achievers increased as a result of introducing SQMS? Does the design and content of training more closely reflect best practice? Has the number of drop-outs from training decreased?

The second criterion is likely to be measured in terms of business benefits. For example; has the overall management of the organisation significantly improved? Has market share increased? Has the number receiving training increased? Has reduced costs and higher market share increased profitability? Has productivity improved? Has administration been

considerably reduced and efficiency increased? Has the reputation of the organisation in the market place improved? Has staff motivation and turnover improved? These are just some of the tangible organisational improvements that it seems reasonable to expect from a Standard such as SQMS. The results of the data analysis set out in Chapter 6 show that the answer from the majority – and in some cases the overwhelming majority – of respondents to these questions was – No!

Therefore, the only conclusion that can be drawn from the results of the research is that the research did not support the hypothesis that the implementation of SQMS would bring about significant organisational improvements in the host organisation or significantly improve the services that the organisation provides. Also, the results of the data analysis presented in Chapter 6 depict a Management Standard that has failed to achieve the majority of the objectives that it could reasonably have been expected to set.

Pfeiffer, (1994, p. 206) suggests programmes should not be compared with some ideal, but with the situation that would exist in their absence. He argues that, just because a programme does not solve every problem or move the organisation all the way, particularly initially, to where it wants and needs to be does not mean that it is a failure. A programme can only be said to have failed when it produces either no sustained change or else change that is dysfunctional and ineffective. This is an exacting criterion which, when applied to the research, helps to put the results into perspective. The research sought to identify where sustained positive change had taken place in the SQMS organisations or the training delivered by those organisations, but as Table 6.15 in Chapter 6 illustrates, only a minority of respondents agreed that it had. SQMS therefore cannot be said to have been successful in improving the management and performance of the training provider base in Scotland and has therefore failed in that regard.

8.07 The Effectiveness of SQMS as a TQM Tool

The second part of this research aim was to determine if SQMS was a suitable tool to implement the principles of TQM, which is a stated aim that permeates the literature about the Standard. The literature that was highlighted in Chapter 4 demonstrated that TQM was a complex concept and open to a variety of definitions and meanings. However, despite the number of “gurus” and the diversity of their messages, there is a common thread that links most of the TQM philosophies together. We are indebted to Martinez-Lorente, *et al*, (1998)

who refined the considerable body of research on this subject to a more manageable 10 key dimensions of TQM as:

| | |
|----------------------------------|--------------------------------|
| Top management support | Product design process |
| Customer relationship | Process flow management |
| Supplier relationship | Quality data and reporting |
| Workforce management | Role of the quality department |
| Employee attitudes and behaviour | Benchmarking. |

It is admitted that these are fairly broad categories and a dimension by dimension comparison is perhaps a fairly blunt instrument, but nevertheless when the SQMS Standard was exposed to a comparison with this model of the generally accepted attributes of TQM, in nine of the ten attributes that could be applied to SQMS, it was shown not to be able to meet the TQM requirements.

The Martinez-Lorente, *et al*, research that been referred to was published some five years after the publication of SQMS and there could be an argument that the understanding of TQM was at a less sophisticated level when SQMS was conceived. This could be a persuasive argument if SQMS Scotland Ltd had not stated in its 10th anniversary assessment of SQMS that:

The quality system that was devised incorporated the ideals, principles and good practices contained in other systems, including Total Quality Management (TQM).” (SQMS Scotland, 2003b)

This misconception is supported by the results of the interviews with the SQMS auditors and is stated on the SQMS website confirming that those who control the refinement and development of SQMS believe in its capacity to act as a tool to implement TQM, whereas the research suggests that this is not the case.

8.08 The SQMS Auditor Perspective

The final aim of this research was to examine the extent to which SQMS Auditors perceived the Standard to have delivered organisational improvements. Originally this objective had been intended to provide any triangulation that may have been necessary if the level of response had been low and the data set had not been so robust. However, the preliminary research had stimulated a curiosity about the audit process and a decision was taken to pursue this aspect of the research to add value to the main research project. Chapter 7 details

the results of the structured interviews with the SQMS Auditors which raised a number of questions. The relatively small sample of auditors has been highlighted previously and this must detract from the weight that is given to the results. However, their experience and coverage was extensive, encapsulating a significant proportion of the population and therefore their opinions have validity. The discrepancies between the perceptions of the auditors and the responses of the organisations that they audit is way beyond that which could reasonably be expected and this alone raises questions about the audit process. However, when viewed against the background whereby only 33.2% of respondents disagreed with the statement that; “There are things that we do purely for evidence for quality audits” and only 40.8% of respondents disagreed with the statement that; “Some plans and policies are produced solely for the Standard not as working documents”, then these discrepancies take on a potentially more serious aspect.

The apparent willingness of so many organisations to generate evidence and produce plans and policies for no other reason than to satisfy the needs of the auditor must call into question the effectiveness of the audit process and ultimately of the Standard itself.

As Management Standards become more extensive and embrace more senior and specialist areas of management, it must raise questions about the competence of the auditors who are charged with ensuring compliance. In the case of the SQMS auditors who were interviewed, their backgrounds and experience were largely as training practitioners and the researcher’s “preunderstanding” referred to earlier suggests that this profile is close to the norm for SQMS auditors. However, the SQMS Standard addresses a sequence of senior management activities that could only reasonably be assessed by someone with previous senior management experience or, failing that, senior management qualifications that would at least attest to an understanding of the principles of senior management if not the practice. The profiles of the SQMS auditors who were interviewed did not suggest the necessary depth to competently audit every aspect of the Standard, particularly strategy, quality and marketing. The results of this aspect of the research raise questions that may well apply to the audit of ISO 900: 2000 which has changed significantly from a mechanistic approach to a TQM approach, necessitating a fundamentally different set of auditing skills. The sheer scale of the audits necessary for the transition from the one Standard to the next calls into question the capacity of the auditing system to cater for the new demands placed upon it.

8.09 Summary

The research of the literature has shown that Management Standard's growth has been significant, despite the pluralist and contingency theorists advocating a less mechanistic approach to management. The growth of Management Standards is closely linked to Quality Management and Total Quality Management, although the philosophies of each may be contradictory. Existing Management Standards continue to evolve and new Standards are devised that encompass new areas of management activity. The review process that is a feature of Management Standards has resulted in considerable changes to all the Standards that were evaluated and is likely to continue for the foreseeable future. The determination of the effectiveness of Management Standards is not straightforward and the only Standard that could be shown with any degree of confidence to deliver business improvements was ISO 9000, but then only if certain conditions were met. The capability of SQMS to deliver organisational improvements could not be shown to from the research and it was concluded that SQMS had not met the likely objectives that were set for it. Similarly, when SQMS was compared against an accepted model of TQM it could not be shown to be an effective tool to introduce TQM.

Chapter 9 Conclusions and Further Research

9.01 Chapter Synopsis

This chapter concludes the thesis by describing the achievements of the research, its originality and speculates on the implications of the research for future theory and practice. The original motivation for this research was stimulated by an awareness of the imposition of an increasing number of Management Standards on organisations without sufficient justification of the benefits that were supposed to accrue from their adoption. The body of previous research into Management Standards was daunting, yet as this research has revealed, the focus of this previous research was confined to a limited selection of Standards and there has been no previous research into Management Standards as an entity or phenomenon. This research has identified that gap and has taken an important step towards providing a more rounded and encompassing view of Management Standards by first defining the term and providing a taxonomy of Management Standards. There was also a perception that the trend for ever more Management Standards pointed towards a movement that would eventually seek to establish a Management Standard that would encompass all the functions of management. The research confirmed this perception and this thesis contributes to the debate on the future of Standards-based Management practice. The research into the Scottish Quality Management System provides valuable empirical evidence of the results of the only identified attempt to standardise most of the key functions of management within an auditable Standards framework. It corroborates many of the research findings for ISO 9000 and other similar Standards, particularly as a distinctive example of a Standard that was unilaterally imposed upon a dependent population. The research includes additional novelty by contrasting the perceptions of the managers implementing the SQMS Standard with the perceptions of the auditors charged with policing that implementation and provides empirical evidence of the major differences between these perceptions that existed. The Chapter concludes with suggestions of where other researchers could build upon this foundation.

9.02 Conclusions

9.02.1 Has the Research Achieved its Objectives?

Rosemary Stewart, (1963) succinctly defined the process of management as "deciding what should be done and then getting other people to do it", but very few modern practising managers would be able to identify with her definition today. Management has become a much more complex process and in many ways managers' discretion has been eroded and replaced by Management Standards. A practicing manager is likely to be encouraged by the local Sector Skills Council or Local Enterprise Company to adopt the National Occupational Standards for Management and Leadership, which are intended to be generic and cover every aspect of management. If s/he wishes to be a member of a professional institute such as the Chartered Institute of Management, s/he will be expected to submit to assessment against the Institute's Management Standards, which are intended to be generic and cover every aspect of management, but they still differ from the National Standards. Both these sets of Standards are aimed at assessing the personal competence of the individual and influencing the way in which s/he manages on a day-to-day basis. Notwithstanding this demonstration of generic management competence, the manager is also likely to be required to implement a raft of other Management Standards within the organisation, covering quality management, environmental management, health and safety management, personnel management, and others perhaps specific to that particular industry, and to submit to assessment or audit where the 'competence' of the organisation is measured against those Standards. A typical manager is therefore faced with a number of personal and organisational Standards to implement in the daily practice of management.

Karapetrovic, (2003, p 4) talks about "an avalanche of management system standards", yet he is referring only to those Standards that cover quality, the environment, health and safety and corporate social responsibility. This is a good example of research in the Management Standards field which tends to totally ignore those Standards that are not "real" Standards despite the absence of a definition of what the constituents of a real Standard should be. However, the Management Standards imposed upon long suffering managers by the plethora of organisations identified in this research are very real indeed and demand significant commitments in terms of time and resources. When examined through a wider lens, the Management Standard's landscape is cluttered and this situation is not reflected in the

research undertaken to date. This research has attempted to identify a pathway through the clutter and to set out a simple framework that can facilitate further research.

A key element in this process was to establish a definition that clearly set out what a Management Standard is and what it should do. The literature research did not identify a definition of a generic Management Standard that was in common use and could be utilised to guide this research. Indeed, there was no clear taxonomy of Management Standards to underpin the definition process. Therefore, the first task of this research, as detailed in Chapter 1, was to establish a workable taxonomy of Management Standards and use this to categorise the various Standards involved. This enabled the key components of a Management Standard to be identified as a prelude to establishing a definition. The process of grading Standards set out in section 1.05 of this thesis readers may consider to be subjective and simplistic and such criticisms are valid. However, in the absence of a proven alternative methodology, it is advanced as a suitable if blunt instrument to facilitate the proposition of a tentative definition of a generic Management Standard. The definition that guided this research and is proposed on page 12 as:

an International, National or government-backed autonomous model of generic organisational management behaviours or systems that delivers consistent, competent managerial or organisational performance to the criteria set by the Standard and substantiated by third party assessment,

is the first such definition and is a cautious step towards establishing an understanding of the requirement for clarity in the crowded Management Standards landscape. The proposed definition is potentially controversial, as it implies that the Management Standards produced by a number of vested interest groups would either require to be ratified by a much wider population, or reclassified in some other way. However, it does provide a basis to stimulate the debate on the future development of Management Standards.

9.02.2 The Aims of the Research

The primary objectives of this research were summarised on page 19 and were addressed in the following ways:

- 1. To investigate the growth and development of the main Management Standards and to investigate whether there is any evidence that they deliver tangible business**

improvements in compliant organisations.

In addressing the first objective this research has focussed attention on the crowded Management Standards landscape in the UK and its confusing range of Standards-setting bodies devising and imposing Management Standards almost at will. In so doing it has highlighted the dilemma that managers face when trying to decide between the different Standards without the benefit of a 'road map' to guide them through the maze of Standards that are promoted by various vested interests. Such a road map should come from research into the Management Standards phenomenon of which there is none and this research provides a first step by providing a taxonomy of Management Standards, using that taxonomy to categorise Management Standards and then providing a definition of a generic Management Standard for research purposes.

The literature research identified the origins of the main Management Standards through a chronological background that includes quality management and draws upon the literature to show the linkages between them. Attention was drawn to the disparity between research into ISO 9000, ISO 14000 and the integration of these Standards with health and safety and corporate social responsibility, with the absence of empirical research into other Management Standards.

The most omnipresent Standards-based approach to management is BS 5750/ISO 9000 and it has inspired a plethora of research. This research has ranged from motivational factors to cost/benefit analyses, improved efficiency and the consequence on performance and strategy. Chow-Chua, *et al* (2003), have tabulated a range of claimed motivations, drivers and benefits of ISO 9000 certification and identified a number of research sources that is reproduced as table 9.1 below. Some additional research that they have not highlighted includes; Askey and Dale, 1994; Brecka, 1994; Fox, 1994; Arora, 1996; Kanji and Asher, 1996; Laszlo, 1996; Arora, 1997; Erel and Ghosh, 1997; Johnson, 1997; Meegan and Taylor, 1997; Yung, 1997; Chittenden, *et al*, 1998; Huarng, 1998; Martinez-Lorente, *et al.*, 1998; Anderson, *et al*, 1999; Huarng, *et al*, 1999; Lee, *et al*, 1999; Leung and Chan, 1999; Withers, and Ebrahimpour, (1999, 2000 & 2001); Hughes, *et al*, 2000; Sun, 2000; Dick, *et al*, 2002; Heras, *et al*, 2002. While most of these papers were descriptive, they are a small selection of research that is persuasive that Standards-based management has positively contributed towards improved organisational performance.

Table 9.1 Motivations, drivers and benefits of ISO 9000 certification

| Benefit items | Source |
|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Better corporate image | Goetsch and Davis (1998), Johnson (1977), Tsiotras and Gotzamani (1996) and Vloeberghs and Bellens (1996) |
| Greater quality awareness | Brown and Van der Wiele (1995a, b), Brown et al. (1998), Dale (1994), Dick (2000), Goetsch and Davis (1998), Quazi and Padibjo (1998) and Tsiotras and Gotzamani (1996) |
| Better documentation procedures | Goetsch and Davis (1998), Jones et al. (1997), McLachlan (1996), Santos and Escanciano (2002) and Tsiotras and Gotzamani (1996) |
| Clearer working instructions or procedures | Santos and Escanciano (2002) and Tsiotras and Gotzamani (1996) |
| Clearer job responsibilities | McLachlan (1996) and Santos and Escanciano (2002) |
| Eliminate redundancy/reduce unnecessary work | Lloyd's Register Quality Assurance Ltd (1994) and McLachlan (1996) |
| Enable easy accessible, traceable and auditable work procedure | Dale (1994), Dick (2000) and Lloyd's Register Quality Assurance Ltd (1994) |
| Better customer service | Brown and Van der Wiele (1995a, b), Brown et al. (1998), Jones et al. (1997), McLachlan (1996) and Raynor and Porter (1991) |
| Reduction in waste and inefficiency | Brown et al. (1998), Dale (1994), Dick (2000), Garvin (1988), Gotzamani and Tsiotras (2002), Lee (1998), Mo and Chan (1997) and Raynor and Porter (1991) |
| Improve customer satisfaction | Brown and Van der Wiele (1995a, b), Dale (1994), Lee (1998), McLachlan (1996), Mo and Chan (1997), Morgan and Pierce (1992), Gotzamani and Tsiotras (2002), Quazi and Padibjo (1998) and Raynor and Porter (1991) |
| Greater competitive advantage | Brown and Van der Wiele (1995a, b), Corrigan (1994), Dick (2000), Gotzamani and Tsiotras (2002), McLachlan (1996) and Quazi and Padibjo (1998) |
| Helped in continual improvement | Brocka and Brocka (1994), Dick (2000) and McLachlan (1996) |
| Greater staff retention | Brown et al. (1998), Gotzamani and Tsiotras (2002), McLachlan (1996) and Mo and Chan (1997) |
| Improve profitability | Dick (2000), Gotzamani and Tsiotras (2002), Haversjo (2000), Jones et al. (1997), Lee (1998), Mo and Chan (1997), Scotto (1996) and Santos and Escanciano (2002) |
| Increase market share | Brown et al. (1998), Dick (2000), Lloyd's Register Quality Assurance Ltd (1994), Jones et al. (1997), McLachlan (1996) and Santos and Escanciano (2002) |
| Greater opportunity for export | Brown et al. (1998), Dick (2000), Gotzamani and Tsiotras (2002) |
| Expansion to international market | Brown et al. (1998) and Lloyd's Register Quality Assurance Ltd (1994) |

Source: Chow-Chua, *et al* (2003)

Conversely, there is also a significant body of critical research that includes those who argue that it actually impedes performance (Seddon, 1994, 1997 & 2000; Reavill, 1998; Shaw, 1998; Owen, 2002). Others contend that it does not improve product quality (Iizuka, 1996; Singels, *et al*, 2001; Shaw, 1998; Spiers, 1998; Ferguson, 1994; Barnes, 1998; Manoochehr and Kehoe, 2000); and those who believe that it leads to uncompetitiveness (Avery, 1994 & 1996; Zuckermann, 1994 & 1997a; Juran, 1995; Reilly, 1995). Therefore, whilst there was certainly evidence to suggest that a range of business improvements are likely to accrue from the adoption of ISO 9000 and ISO 14000 Management System Standards, such improvements were not uniform and could be influenced by other factors, such as the degree of compulsion attached to the decision to adopt them. There was less evidence that the other Management Standards included in the research, such as the Investors in People Standard, delivered tangible business improvements.

The use of the term “compliant organisation” in this research aim was intended to mean those organisations that complied with the criteria set out in the Standards, but the other meaning of the term as acquiescent is also worthy of note. Section 5.03.3.4 of this thesis drew attention to a body of research to underpin the view that organisations that are forced to adopt quality management standards such as ISO 9000, or indeed TQM, are unlikely to derive the same benefits as those organisations that embark upon the process with the aim of improving their performance. The research into SQMS tended to support that position and Table 6.13 is reproduced hereunder to remind the reader of the attitude of compliance – in both senses of the term – that was identified by this research.

Table 6.13 Improvement –v- Compliance

| Question | %age |
|-------------------------------------------------------------------------------------------------------------|------|
| 5.02 Introduced new activities and processes to fill these evidence gaps | 66.8 |
| 5.03 Identified specific areas where feedback showed that improvements were necessary | 65.7 |
| 9.01 There are things that we do purely for evidence for quality audits | 56.3 |
| 9.02 Many of the additional activities required for “quality” don’t make things better for customers | 55.2 |
| 9.03 Some plans and policies are produced solely for the Standard not as working documents | 39.3 |

The results from this element of this research have made an important contribution to the debate on the likely success from the imposition of Management Standards

2.0 To explore the possible future direction that the Management Standard's 'market' will take in relation to the creation of new Management Standards or the consolidation of existing Standards

In addressing the second objective, the analysis of the literature has drawn attention to the inverse relationship between the body of research and the taxonomy of Management Standards. It broadened the research framework beyond the most 'popular' Management Standards that dominate the field of management praxis and looked at the wider trends of Management Standards development in the future. It highlighted that there is a debate on the need to try and curtail the number of Management Standards by integrating some of the existing Management Standards, but that this integration debate has been narrowly focussed on ISO 9000, ISO 14000, health and safety Standards and the emerging corporate social responsibility agenda and has ignored the existence of a number of other Management Standards. It also highlighted that a number of these other Management Standards are devised by various vested interest groups, many of which derive significant revenue from Standards-related activities and products, whilst others were promoted by various government agencies. This research has therefore tried to refocus the integration debate beyond the technical aspects of integration that have dominated the literature, by highlighting that there are a number of commercial and political battles that must be fought and these possible tensions acknowledged and addressed if a viable "super" Standard is to emerge in the future.

This research drew distinctions in Chapter 1 between Management Standards that were de jure, discretionary and de facto and the blurring of the distinction between them by the entrance into the market of new Standards-setting bodies, such as the Health and Safety Executive. The research suggested that, while the growth of ISO 9000 was declining in the developed world, it was increasing in the developing world and the increasing emphasis on the environment and corporate social responsibility and accountability would result in increasing interest in the existing Standards. Similarly, the growth of corporate and social regulation, particularly in the UK, would continue to drive the Management Standards 'industry' and additional Management Standards were more than likely to be introduced in the future. This research into SQMS has shown that a £multi-million sector of the economy can be subjected to the arbitrary imposition of unproven Management Standards for well over a decade at very significant cost without any transparent research into and evaluation of

their effectiveness. The trends identified in the literature suggest that similar circumstances could occur in the future.

3.0 To undertake research into the Scottish Quality Management System to determine its ability to bring about organisational improvements and its suitability as a tool to implement the principles of TQM.

The main focus of this thesis was to assess the effectiveness of the Scottish Quality Management System. This was an important and major piece of research that has achieved the following:

- it has drawn attention to the significant adoption of SQMS on an increasingly international basis over a thirteen-year period;
- it has alerted other researchers to the absence of any independent research into SQMS during this prolonged period of its development and consolidation;
- it has exposed SQMS to detailed, critical review on a number of levels;
- it has tested its effectiveness as an integrated Management Standard;
- it has tested its effectiveness as a TQM implementation tool;
- it has considered whether SQMS has met the objectives that were set for it;
- it has drawn attention to where this research compliments research into other Management Standards;
- it has identified a number of areas that would benefit from further research.

In view of the absence of any other published research into SQMS, it was important that the research undertaken as part of this project was comprehensive and robust. Consequently, the entire population was surveyed and a methodology applied that was designed to deliver a high rate of response. In the final analysis a response rate of 70.5% was achieved, which provided reliable data that enabled a wide range of statistical analysis to be undertaken. The results of the research are therefore authoritative and have been extensively cross-tabulated to identify significant factors that answered the questions posed by this research aim. These results were comprehensively laid out in Chapter 6 and suggest that, overall; SQMS has not been an effective Management Standard or TQM implementation tool and has not achieved the objectives that were set for it.

4.0 To examine the extent to which SQMS Auditors perceive the Standard to have delivered organisational improvements.

The final objective of the research was achieved by undertaking structured interviews with those SQMS auditors who were willing to participate to compare their perceptions with the views of the organisations that they audit. Notwithstanding the limitations presented by the small sample and methodology adopted for this part of the research that have been set out in detail above, the auditors who did contribute were very experienced and had audited a majority of the population progressively over a prolonged period. These auditors are the gatekeepers of SQMS and in a unique position to monitor, and to a great extent influence, the progression of the SQMS organisations on their road to improvement. This is a very important relationship that has a direct bearing on the way that the results of the interviews with the auditors are interpreted.

Although its origins are somewhat obscure, the model in general use which explains how people (and collectively organisations) learn new things is the Conscious Competence Learning Matrix. The Management Standards developed by the MCI that were outlined in Chapter 5 relied heavily on this model, as it is particularly apposite in the case of Standards-based activities and includes four stages of development - 'unconscious incompetence', 'conscious incompetence' 'conscious competence' and 'unconscious competence' as depicted in Figure 9.1 below:

Figure 9.1 Conscious Competence Learning Matrix

| | Competence | Incompetence |
|--------------------|---------------------------------|---------------------------------------|
| Conscious | Stage 3 - We Know We Know | Stage 2 - We Know We Don't Know |
| Unconscious | Stage 4 - We Don't Know We Know | Stage 1 - We Don't Know We Don't Know |

The first stage is before the introduction of Standards when people perform in the way that they always have and do not know that there are better ways of doing things. The second stage is where Standards are introduced and people become aware of what they should do and start the learning process. The third stage is following the implementation of the Standard's criteria, where the activities necessary to meet the criteria of the Standard are still new and require to be actively managed. The final stage is where working to the Standard has become embedded in the organisation and the criteria have become "the way we do things

around here” and no longer require conscious thought. It is widely accepted that any learning process will follow these four stages.

In Section 7.01 it was pointed out that the SQMS Auditors that were interviewed claimed that it was the practice of SQMS Scotland Ltd to allocate the same auditor to an organisation and these auditors had in many cases been auditing the same organisations for a number of years. Therefore, it is reasonable to assume that the auditors had witnessed and even contributed to the progress of the organisations as they went through this four-stage learning process. This presumption is underpinned by some 60% of respondents agreeing that the auditors spread best practice and a similar number agreeing that the auditor was a developer rather than a policeman. The auditor’s perceptions in these areas were more extreme with estimates of up to 99% of organisations seeking advice on training and related issues and examples of best practice. This rose to up to 100% on the question of developer versus policeman. This close relationship between auditors and auditees one would expect to result in very similar perceptions of the effectiveness of the SQMS Standard. However, the opposite proved to be the case and readers are reminded of some of the major discrepancies that were reported in Chapter 7 and reproduced hereunder:

Figure 8.6 Evident Improvements from SQMS

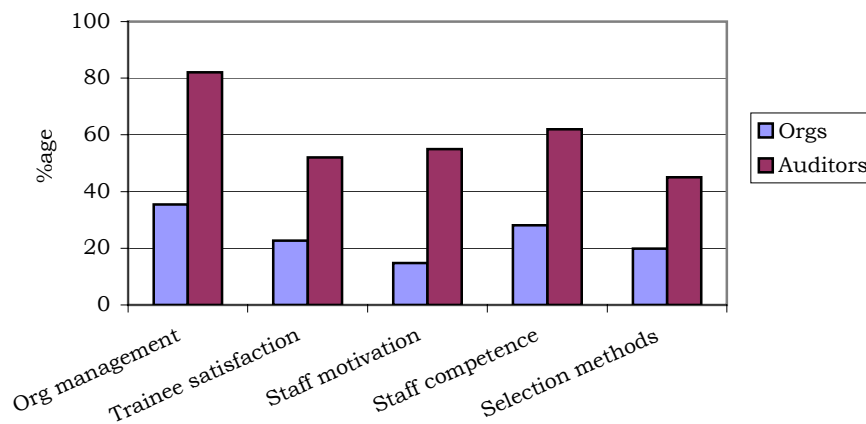


Figure 7.7 Evident Improvements from SQMS (Cont)

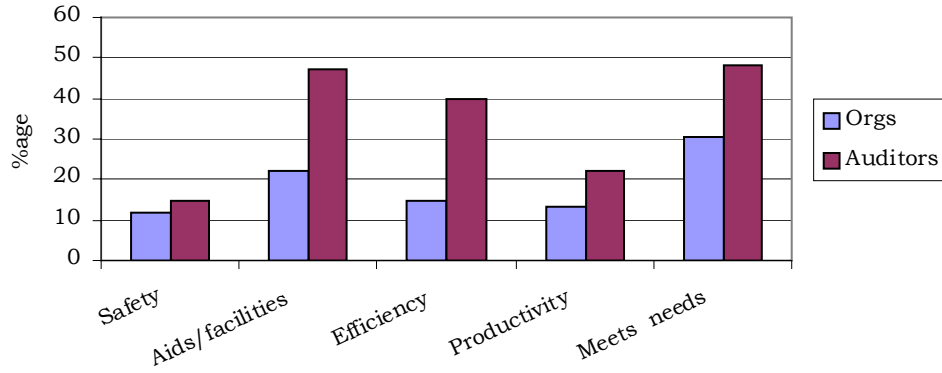


Figure 7.8 Evident Improvements from SQMS (Cont)

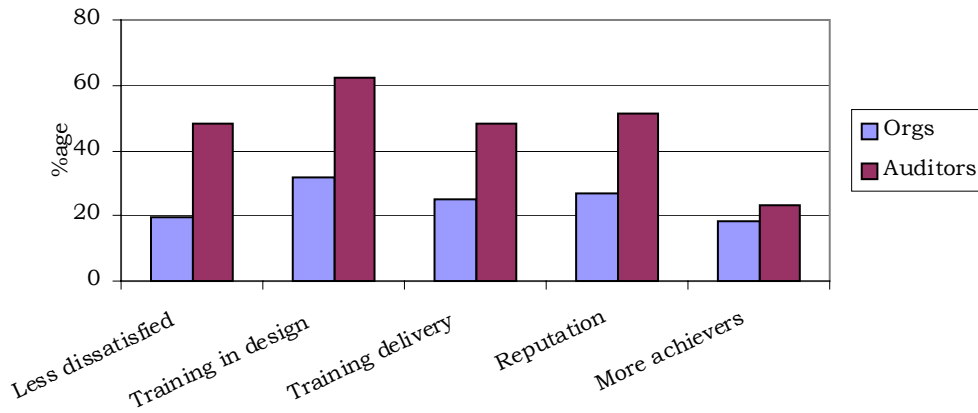


Figure 7.9 Evident Disadvantages of SQMS

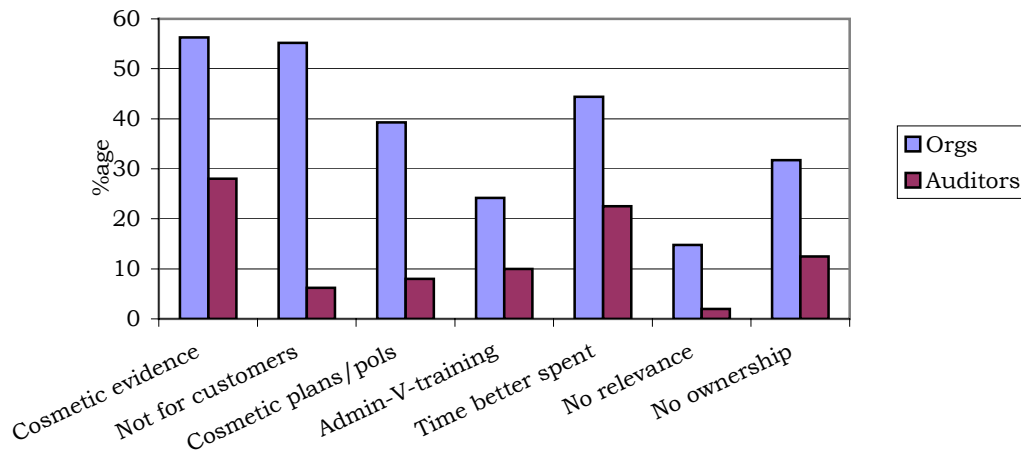
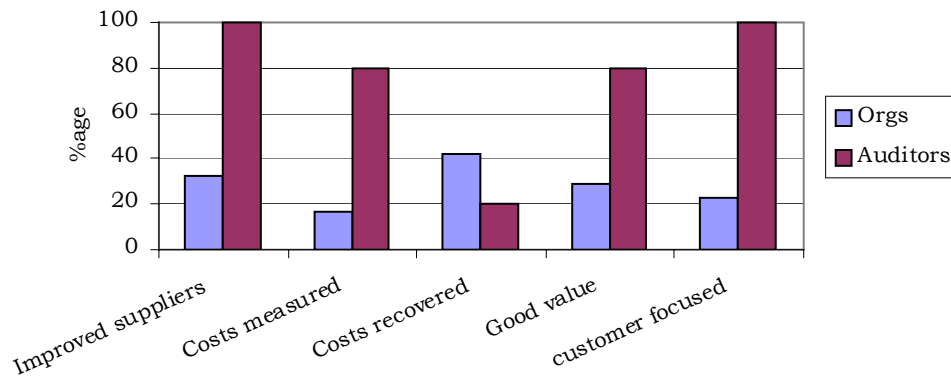


Figure 7.10 Value of SQMS



The major differences that existed between these parties in key areas must give cause for disquiet and beg the question whether the 'conscious competence' stage was achieved through managing the audit process, rather than implementing the Management Standard. This should stimulate further research into auditor/auditee perceptions, particularly where the extent of the management activities included in the Standard are likely to extend the range of competencies required of an auditor.

9.03 Implications for Theory

Some argue that it is management practice that drives management theory rather than the other way around and that the theory will therefore always lag behind the practice. There may well be some legitimacy in this argument and this has certainly been the case with TQM where the search for a theoretical basis has followed the practice. For example, Dale, *et al*, (2001) argue that TQM comes from a different background from most management theory and "is breaking the mould" by promoting experimentation through "action research". Deming, (1986) expressed the view that his "Principles for Transformation of Western Management" constituted the definitive management theory and a number of researchers have tried to promote the Deming approach as the principal TQM theory (Gartner and Naughton, (1988), Handfield and Melnyk, (1998), Hillmer and Karney, (1997& 2001), Rungtusanatham and Schroeder, (1994), Rungtusanatham, *et al* (1998)).

The search for the theory behind TQM began at a fairly early stage (Dean and Bowen, (1994); Reeves and Bednar, (1994); Spencer, (1994); Waldman, (1994); Sitkin, Sutcliffe

and Schroeder, (1994) Hackman, and Wageman, (1995)) and continues, yet conversely, despite a phenomenal number of publications on Standards-based approaches, they do not appear to have attracted research that has established their theoretical legitimacy. While there is a lot of common ground between the Plan, Do, Check, Act (PDCA) cycle of quality (Deming, 1986) and the Experiential Learning Cycle (Kolb, 1984) and Reflective Practitioner Model (Schon, 1987 and 1988) that underpins a lot of standards, this is not a theoretical foundation upon which Standards-based management can be built.

In the absence of any previous research into the theory that underpins Standards-based management, it was necessary to examine existing management theory to try and identify the links between them. Obviously, a comprehensive analysis of the various theories of management was outside the scope of this thesis and has been well researched elsewhere. However, it was necessary to draw attention to the divergence of the “scientific” standards-based approach to management from some of the accepted ‘schools of management’ that were developing at the same time as Management Standards. John Seddon’s detailed criticisms of ISO 9000 have been set out in Chapter 5, but Seddon’s fundamental criticism of the Standard is its “command and control” philosophy that he identifies specifically with Frederick Taylor’s ‘one best way’ to manage (Seddon, 2004). Taylor, together with Max Webber, Henry Fayol, Lyndall Urwick, and F. W. Mooney are generally considered to be the founders of the classical school of management, arguing that their classical solutions could be applied across various organisations with the same results. A similar, if conflicting, ‘one best way’ was advocated by human relations theorists such as Elton Mayo and his colleagues at Harvard University. Despite Etzioni’s, (1964) contention that human relations theory marked a significant break with its classical counterpart, the underlying principle of both approaches was the presumption that organisations could be made more productive and efficient through the application of a particular management ‘model’. These theories appear to be the best fit with the principles of Standards-based management.

The work of theorists such as Bennis, (1973); Burns and Stalker, (1961); Child, (1972); Fox, (1966); Gross and Etzioni, (1985); Handy, (1986); Hofstede, (1994); Kanter, (1997); Kotter, (1982); Lawrence and Lorsh, (1967); Mangham and Silver, (1986); Mintzberg, (1973 and 1975); Mullins, (1993); Perrow, (1970); Peters, (1989); Peters and Waterman, (1982); Stewart, (1963 to 1992); Stewart and Marshall (1981a, 1981b); Tate, (1995); Toffler, (1970);

and Woodward, (1970) were cited to illustrate that their research and analysis would suggest that Management Standards are incompatible with organisational dynamics and the way that managers actually perform their day-to-day work. This is the first time that Standards-based Management has been examined in this way and this research has identified significant gaps in the existing literature regarding the theoretical basis for Standards-based Management. This research has shown that overall SQMS has not been effective in improving the host organisations and, if the SQMS model is subjected to analysis using the lens provided by these theorists, the inevitable conclusion would be that it would not be effective. This makes a persuasive argument for pluralist and contingency management theories to be given more credence in research into Management Standards.

The literature research into ISO 9000 highlighted a significant body of research that suggested that a considerable number of organisations that had adopted the Standard had done so as a result of direct or perceived external pressure to do so. The research further suggested that organisations that are forced to adopt ISO 9000 are unlikely to derive the same benefits as those organisations that embark upon the process with the aim of improving their performance (Ferguson, (1994); Juran, (1994); Barnes; (1998), Brown, *et al*, (1998); Grint, (1997); Jones, *et al*, (1997); Leung, *et al*, (1999); Seddon, (2000); van der Wiele, *et al*, (1997), (2000), (2000c); Manoochehr and Kehoe, (2000); Withers and Ebrahimpour, (2001)). This research into the SQMS organisations provides a unique example of a Management Standard that was unilaterally imposed upon a dependent population to a degree whereby around a third of the population relied upon achieving SQMS in order to survive and therefore had no choice in the matter. The results of this research suggest that, notwithstanding this dependence on achieving the Standard, tangible benefits did not accrue to these organisations, the majority of which it would appear pay lip service to the aims of the Standard to satisfy the auditors. This research therefore corroborates many of the research findings for ISO 9000 and makes a very important contribution to the argument that the compulsory imposition of a Management Standard is likely to be counter-productive.

It must be emphasised that the research was specific to the training industry in Scotland and the results of the research must be interpreted in that context and the extent to which they have wider applicability is therefore limited. With this caveat firmly in place, SQMS is nevertheless the only current example of a Management Standard that attempts to cover most

of the key functions of management within an auditable framework. The SQMS population that was surveyed consisted of large, national organisations, SMEs, voluntary organisations, local authorities, FE establishments and other organisations for which training was not their core activity and therefore the population represented a wide array of management styles and levels of sophistication from all parts of Scotland. The research was based on a survey of the entire population, the response rate was very high and a majority of the respondents had been working with SQMS for a number of years. Therefore, although there are obvious limitations to the generalisability of the research, it is an important contribution to the field of research into aspects of the integration of Standards and may inform the debate on a “super” Standard.

As Management Standards become more complex the experience and qualifications of the auditors becomes more significant. The introduction of the revision of ISO 9000: 2000 has led to concerns about the ability of the existing ISO 9000 auditors to audit the new Standard (see for example Laszlo, (2000) and van der Wiele, *et al*, 2005). Van der Wiele, *et al*, (2005, p 104) articulated the problem succinctly when they said:

“The work required of internal auditors for the 1994 series was relatively simple and internally orientated and thus they often came from the quality function. In general, these auditors are not equipped to audit the very different kinds of areas covered by the new 2000 standard and thus auditors with a more senior management background are needed. And these are likely to be far less easily available.”

This research examined the backgrounds of the SQMS auditors and questioned whether they had sufficient knowledge and experience to audit a Standard that encompassed most of the generic functions of senior management. It then provided hard evidence of the different perceptions of the benefits of SQMS between the managers implementing the Standard and the SQMS auditors checking up on that implementation. The scale of the differences in these perceptions suggests that the auditors have not accurately interpreted the evidence presented to them during the audit, despite their confidence to the contrary. This empirical evidence makes an important contribution to the debate about the competence of the auditors of Management Standards.

9.04 Implications for Policy and Practice

The latest version of SQMS has moved to a self-assessment model with auditors checking the self-assessment evidence compiled by the organisation. There is a significant body of research into the benefits and pitfalls of self-assessment against quality models (see for example Coulambidou and Dale, (1995) and van der Wiele, *et al*, 2000), which while not directly comparable to self-assessment against SQMS, offer cautions that are worthy of consideration. The research suggests that organisations that are not experienced in TQM will not benefit from the self-assessment exercise unless this is linked to “the all important action plans”. This research highlighted the absence of any quality plans in the majority of SQMS organisations and there was little evidence of continuous improvement. The most concerning aspect of course was the willingness of a majority of organisations to create documents purely as evidence for audits, rather than for their practical value. If this attitude was prevalent during a fairly strict audit regime, it must cast doubt on the value of the self-assessment process which by definition will not be subject to the same level of audit.

The major differences that existed between the auditors perceptions of the improvements in organisations that were directly attributable to SQMS and the evidence of the survey results is another concern. The auditors firmly believed that the organisations that they audited had made significant progress and improvements, but the evidence from the survey suggested that this was not the case. This belief militates against any likelihood of significant change having taken place since the research was undertaken, unless there were other avenues of research that yielded more positive results that this researcher is not aware of. Similarly, one can only speculate on the background to the decision to move to a self-assessment process, but it would be surprising if the opinions of the auditors on the ‘quality’ of the organisations that they audited were not a significant contributory factor. If that is the case, then there is likely to be a presumption of quality maturity among SQMS organisations that is not borne out by the research.

This research provides an alternative view to that of the internal research undertaken by SE, which at least should provide sufficient concerns to make them question their future policy and practice with regard to SQMS.

This research has shown that there are already in existence a plethora of Management Standards devised and promoted by a range of vested interests covering every aspect of management practice. The Standards produced by these vested interests are usually linked in some way to income streams and there is likely to be resistance to any attempt to consolidate these competing Standards. This research has highlighted that the debates on integration and the possible development of a “super” Standard have perhaps been too narrowly focussed and the position of other stakeholders in the Management Standards “industry” overlooked. If any consolidation of Management Standards is to take place it must be in a climate of consensus where some of the Standards setting bodies concede that they may have to sublimate their own Standards within a more robust and comprehensive framework in the interests of better management. This is unlikely to be an easy argument.

9.05 Implications for Further Research

This research has introduced the concept that Standards-based management approaches have become an entity and that research of the Management Standards phenomenon should be given wider attention than has been the case in the past. Chapter 1 set out a hierarchy of Management Standards and contrasted the research activity against it. The research revealed that Standards-based approaches to management and TQM were running in parallel and that there was a body of opinion that they should converge through a “super” Standard based on business excellence models such as the EFQM. The research suggested that this could create an elite Standard that would not strengthen the standards of management in less sophisticated organisations. This research suggests that there is a case for wider research into the influence that Standards-based management approaches are exerting on the practice of management, particularly within the UK, to identify ways in which different approaches to and the structures of Management Standards can be harmonised to rationalise the current cluttered and confusing position facing practicing managers today.

This research was the first of its kind into the Scottish Quality Management System and attention has been drawn to the fact that, from the very limited assessment available in the public domain, the results would appear to differ markedly from those of research undertaken by Scottish Enterprise and SQMS Scotland Ltd. This research has raised a number of questions about the effectiveness of the Standard and its auditing, as well as raising questions surrounding the continuous improvement of the training services that are

publicly funded in Scotland. The costs of devising, implementing and assessing SQMS must have been very significant and are now being underwritten by public funding. There are now considerable numbers of organisations that are involved with SQMS on an international basis and all these factors combine to argue for further research that builds upon this foundation.

This research is unique in testing and comparing the perceptions of auditors of a wide range of key generic management activities with those of the organisations that have been audited by those auditors over a prolonged period and the results have raised concerns. Broad comparisons can be made with the auditing of ISO 9000: 2000 and other researchers may wish to conduct similar research with auditors and auditees of this Standard to test the reliability of the audit process.

9.06 Summary

This chapter drew together all the strands of the previous chapters and tried to distil them into a set of conclusions on the research that has been described and documented. It returned to the original research questions and detailed the way in which each had been addressed by the research. It summarised the literature review and highlighted the gaps in the extant literature that this research had identified. The achievements of the field research into SQMS were summarised and the answers that it revealed were put into context in relation to the existing research into ISO 9000 and integrated management. The contribution that the research has made to existing knowledge was explained and its impact on theory and practice postulated. The chapter and the thesis concluded with some thoughts on ways in which this research could influence and inform future research.

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42 Morrishill Drive
BEITH
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KA15 1LS

Alec Devlin
Manager
SQMS Scotland
Rosyth Dockyard
Rosyth
Fyfe
KY11 2YB

12 January 2000

Dear Mr Devlin

PhD Research - Scottish Quality Management System (SQMS)

I refer to our telephone conversation and my discussions with Steve Foley in December regarding the above.

As I explained, I am undertaking doctoral research in quality management on a part-time basis at the University of Stirling. While I am looking at BS EN ISO 9000 and other international standards, the Scottish Quality Management System (SQMS) provides a unique population of organisations that have all experienced the accreditation process within a relatively short time frame and at their client's insistence. It is my intention to survey organisations that are accredited to SQMS to determine their experiences and identify the benefits that have accrued from the SQMS process. I believe that my research could be beneficial to those who have an interest in the continuous improvement of training and development in Scotland and I will gladly make the results available to whoever wishes them.

Despite one of the perceived advantages of quality management systems being the potential marketing benefits of achieving the standard, I have been surprised at the difficulty I have experienced in identifying those companies that are SQMS accredited. While details of ISO 9000 accredited companies are actively promulgated, similar details of SQMS registrations seems to be less widely available. My enquiries have led me to your organisation as the custodian of the database of SQMS accredited organisations. I seek access to this database in order to undertake a generic, postal survey among all SQMS accredited organisations. I require only the name and address of the accredited organisation, although a named contact would also be helpful

As I explained on the 'phone, I understand that coincidentally within ten minutes of my original enquiry to Steve Foley, Napier University made a similar request for access. This seems to have confused matters and may account for the lack of response to my original enquiry and subsequent calls. I have compared my research with that of Napier, but they are working on a commercial consultancy basis for SFEU whereas my research is purely academic. Again coincidentally, the Professor leading the Napier research is based at Stirling and we have agreed to meet to exchange ideas. However, the only research into SQMS that I have been able to identify is the unpublished "*Early Impact Review*" of 1996. I understand that this is also in your possession and I would also appreciate access to it if this were possible.

If you require confirmation of my PhD project, this can be obtained from my Supervisor, Ms Gillian Mould, Department of Management and Organisation, University of Stirling, FK9 4LA. Tel: 01786 467316

As I explained to you, my enquiries have been on going for some weeks now and I would appreciate an early response. If you require any further information, please contact me on 07957 138054

I will telephone you early next week to discuss how we can take matters forward.

Kind regards.

Yours sincerely,

Howard Marshall

cc: Gill Mould



Scottish Quality Management System
Rosyth Dockyard, Rosyth, Fife KY11 2YD
Tel: 01383 424944 Tel: 01383 424641
Fax: 01383 423280
E-mail: alexdevlin@compuserve.com

21 January 2000

Howard Marshall
42 Morrishill Drive
Beith
Ayrshire
KA15 1LS

Ref: sh/011/00

Dear Howard

PhD Research – Scottish Quality Management System (SQMS)

In response to your request please find enclosed a copy from our records of organisations who currently have SQMS or are working towards SQMS certification.

These records are supplied on the following conditions, namely:

1. No links are to be made in your questionnaire/letter to purport undertaking this research on behalf of Scottish Enterprise, Highlands and Islands Enterprise, the local Enterprise Networks or SQMS Scotland.
2. As the majority of these organisations work closely with the Local Enterprise Networks you must make the network aware of your study as the network may get queries from the organisations.
3. A copy of the final report concerning SQMS clients/data is made available prior to being published.

You may not be aware but Segal Qunice Wickstead (SQW) are conducting a study on behalf of Scottish Enterprise as I write. You may wish to contact them also for your research – the contact is Graham Thom 0131 225 4007.

I wish you well with your research and look forward to the finished report.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Alex Devlin', with a long horizontal flourish extending to the right.

Alex Devlin
SQMS Scotland Manager

42 Morrishill Drive
BEITH
Ayrshire
KA15 1LS

Dave McWattie
Senior Development Executive
Scottish Enterprise
120 Bothwell Street
GLASGOW

14 February 2000

Dear Mr Mc Wattie

PhD Research - Scottish Quality Management System (SQMS)

I refer to our telephone conversations of Monday and Friday last regarding the above.

As I explained, I am undertaking doctoral research into quality management on a part-time basis at the University of Stirling. While I am looking at BS EN ISO 9000 and other international standards, the Scottish Quality Management System (SQMS) provides an interesting opportunity for study for a variety of reasons. It is my intention to seek the opinions of every SQMS accredited organisation on the effectiveness of SQMS. I have taken on board your concerns that I do not give the impression that I am in any way connected with the enterprise network. I have also given an undertaking to SQMS Scotland that I will make my research results available to them.

You will appreciate that doctoral research requires the researcher to critically evaluate all the available material on the subject and, as the only research that seems to have been undertaken into SQMS is the Early Impact Survey of 1996, I was anxious to obtain access to it. While I appreciate that it was not intended for publication, it has been widely referred to - not least in the current SQMS literature - as underpinning the SQMS initiative. It is therefore reasonable for my examiners to question why I have been unable to access this data.

I note that you have commissioned your own research that is current and I respect your decision not to disclose its nature or content. However, I would point out that there might well be areas of overlap between your own efforts, those of Napier University on behalf of SFEU, and mine. You may wish to consider the potential value in our collaboration and I would willingly discuss options with you.

I will be required to substantiate the reasons for not reviewing the only research material that has been carried out and I would be obliged if you would confirm your verbal advice that it will not be made available to me. It would be very helpful if you could also detail the reasons for your refusal, which are not clear.

Finally, I appreciate the time that you have taken to consider this matter. I am sure that you have more pressing issues to attend to and I do not wish to impose upon you any more than is necessary.

I look forward to your response in due course.

Kind regards.

Yours sincerely,

Howard Marshall



Scottish Enterprise

Mr Howard Marshall
42 Morrishill Drive
BEITH
Ayrshire KA15 1LS

18 February 2000

Dear Mr Marshall

PhD Research – Scottish Quality Management System (SQMS)

I refer to your letter of 14 February and our earlier telephone conversation concerning your request to be supplied with a copy of the SQMS Early Impact Review. I am sorry to inform that we are unable to provide you with a copy of this internal report. The report was jointly commissioned by Highlands and Islands Enterprise and Scottish Enterprise to examine and advise on the reorganisation of Network policy concerning SQMS arrangements. The content of this report could not therefore be made public.

I wish you well with your doctoral research and look forward to reading your report when it is published.

Yours sincerely

Dave McWattie
Skills Development



42 Morrishill Drive
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Dave McWattie
Senior Development Executive
Scottish Enterprise
120 Bothwell Street
GLASGOW

23 February 2000

Dear Mr McWattie

PhD Research - Scottish Quality Management System (SQMS)

Thank you for your letter of 18 February 2000 confirming that you are not prepared to allow me access to the Early Impact Survey on the grounds that it was not intended for publication. I would reiterate my disappointment at your decision which, as I explained to you during our telephone discussions, I find perplexing.

During our discussions I advised you that Alex Devlin had made me aware of the further research that you had commissioned and I suggested to you that we could possibly work in partnership to our mutual advantage. Despite the fact that you refused to discuss this research or to reveal its nature, I reiterated my suggestion in my letter to you of 14 February 2000. I noted that you chose not to acknowledge my suggestion in your response, but gave it little thought at that time.

However, acting on the advice of Alex Devlin, I had made contact with Graham Thom of Segal Quince Wickstead and suggested that we could discuss possible areas of collaboration. Graham was initially very positive about possible cooperation between us that he believed could enhance their assignment and we had provisionally agreed to meet after he had discussed the matter with you. When I had not received any response from Graham I managed to contact him and he informed me that you have instructed him not to cooperate with me in any way. He also advised me that you had given him strict instructions not to communicate with me under any circumstances and this was why he had not contacted me as previously agreed and wished to terminate our conversation as quickly as possible.

I must express my concern at what can only be described as a bizarre response from you to what I believe was a reasonable request for cooperation aligned to academic research. Your attitude in this matter would be considered unusual in any event, but as Scottish Enterprise is a public body with a remit to promote both education and business excellence, it seems particularly inappropriate. If I have done something that is provocative, then I can only apologise in ignorance. As you well know, I am well known in SE, the LEC network and in the training community and I am concerned that your actions in this matter could impact upon my reputation.

I would appreciate some form of explanation from you that justifies the hostility that you have shown towards me and have demonstrated to others.

Yours sincerely,

Howard Marshall

42 Morrishill Drive
BEITH
Ayrshire
KA15 1LS

Mr David Ingram
Grampian Enterprise Ltd
27 Albyn Place
Aberdeen
ABIO 1DB

14 February 2000

Dear Mr Ingram

PhD Research - Scottish Quality Management System (SQMS)

I am undertaking doctoral research in quality management on a part-time basis at the University. While I am looking at BS EN ISO 9000 and other international standards, the Scottish Quality Management System (SQMS) provides a unique population of organisations that have all experienced the accreditation process within a relatively short time frame and at their client's insistence. It is my intention to survey organisations that are accredited to SQMS to determine their experiences and identify the benefits that have accrued from the SQMS process.

SQMS Scotland provided me with details of organisations in your area that are accredited to or working towards SQMS on condition that I made it quite clear that my research is academic, entirely independent of them and not connected with the enterprise network in any way. They also insisted that I make you aware that the survey is taking place on the off chance that you receive an enquiry.

Questionnaires were posted today.

If you have any questions regarding my research, you can contact me on 07957 138054.

Yours sincerely,

Howard Marshall

42 Morrishill Drive
BEITH
KA15 1LS

Ms Elaine Anderson
Glasgow Development Agency
Atrium Court
50 Waterloo Street
Glasgow
G2 6HQ

15 March 2000

Dear Elaine

PhD Research - Scottish Quality Management System (SQMS)

I refer to our telephone discussion of earlier today.

I attach hereto a copy of the questionnaire, together with the covering letter for your information.

Yours sincerely,

Howard Marshall

«Title» «First_Name» «Second_Name»
«Address_1»
«Address_2»
«Address_3»
«Address_4»
«State»
«Post_code»

Dear «Title» «Second_Name»

14 February 2000

Dear

The Scottish Quality Management System (SQMS)

The Foreword to the second edition of the SQMS Standard states, "...SQMS will continue to make a valuable contribution to the prosperity of Scotland" This is an ambitious claim in any event, but perhaps, even more so for a quality management system that applies to a very small proportion of the Scottish economy.

However, what is the reality? Does SQMS work? Is it effective? Has it actually improved the prosperity of the organisations that have adopted it? If so, what are the benefits and can we identify the critical success factors? These questions assume a greater significance when viewed against the recent decision to pass on the costs of the SQMS "industry" to those organisations that are obliged to subscribe to it.

I am a PhD degree student researching quality management standards and I need to answer these and other questions as a key part of my research. While these questions are relatively straightforward, surprisingly the answers are not so easy to find. Despite the overwhelming amount of literature on quality generally, no research into SQMS has been published. Scottish Enterprise commissioned Consultants in 1996 to review the early impact of SQMS and claimed its "*great strength*". However, notwithstanding the wide promulgation of the survey, Scottish Enterprise will not permit access to this research.

I need, and would really appreciate, your help. I have enclosed a questionnaire that I would ask you to take the time to complete and return to me in the reply-paid envelope. I know that you get lots of survey material and everyone tells you how important it is, but SQMS has a big impact on the training and education sector in Scotland and the precise nature of that impact would benefit from some analysis.

SQMS Scotland provided me with your details on condition that I made it quite clear that my research is academic, entirely independent of them and not connected with the enterprise network in any way. I am very pleased to be able to give you this assurance, as I don't want you to feel constrained in the way that you answer the questions. I am surveying **every** organisation that is accredited or working towards SQMS and the results of the survey will be presented collectively. Your replies and comments will remain completely confidential and I hope you will take this opportunity to give a frank account of your experiences of SQMS in the knowledge that your honesty is respected.

Finally, let me grovel a little bit. Part-time students have very limited time and resources and this is a major research undertaking. I need a very good response rate if my research is to be statistically significant and I need a lot of time to process the data. Could you find the time to return the questionnaire to me and, if possible by 3 March 2000?

Thanks for your help and valuable contribution.

Kind regards

Yours sincerely

Howard Marshall

«Title» «First_Name» «Second_Name»
«Address_1»
«Address_2»
«Address_3»
«Address_4»
«State»
«Post_code»

10 March 2000

Dear «Title» «Second_Name»

The Scottish Quality Management System (SQMS)

The Foreword to the second edition of the SQMS Standard states, “...SQMS *will continue to make a valuable contribution to the prosperity of Scotland*” This is an ambitious claim in any event, but perhaps, even more so for a quality management system that applies to a very small proportion of the Scottish economy.

However, what is the reality? Does SQMS work? Is it effective? Has it actually improved the prosperity of the organisations that have adopted it? If so, what are the benefits and, if so, do those benefits provide value? These questions assume a greater significance when viewed against the recent decision to pass on the costs of the SQMS “industry” to those organisations that are obliged to subscribe to it.

I am a PhD degree student researching quality management standards and I need to answer these and other questions as a key part of my research. While these questions are relatively straightforward, surprisingly the answers are not so easy to find. Despite the overwhelming amount of literature on quality generally, no research into SQMS has been published. Scottish Enterprise commissioned Consultants in 1996 to review the early impact of SQMS and claimed its “*great strength*”. However, notwithstanding the wide promulgation of the survey, Scottish Enterprise will not permit access to this research.

I need, and would really appreciate, your help. I have enclosed a questionnaire that I would ask you to take the time to complete and return to me in the reply-paid envelope. I know that you get lots of survey material and everyone tells you how important it is, but SQMS has a big impact on the training and education sector in Scotland and the precise nature of that impact would benefit from some analysis.

SQMS Scotland provided me with your details on condition that I made it quite clear that my research is academic, entirely independent of them and not connected with the enterprise network in any way. I am very pleased to be able to give you this assurance, as I don’t want you to feel constrained in the way that you answer the questions. I am surveying **every** organisation that is accredited or working towards SQMS and the results of the survey will be presented collectively. Your replies and comments will remain completely confidential and I hope you will take this opportunity to give a frank account of your experiences of SQMS in the knowledge that your honesty is respected.

Finally, let me grovel a little bit. Part-time students have very limited time and resources and this is a major research undertaking. I need a very good response rate if my research is to be statistically significant and I need a lot of time to process the data. Could you find the time to return the questionnaire to me and, if possible by 24 March 2000?

Thanks for your help and valuable contribution.

Kind regards

Yours sincerely

Howard Marshall

«Title» «First_Name» «Second_Name»
«Address_1»
«Address_2»
«Address_3»
«Address_4»
«Post_Code»

10 April 2000

Dear «First_name»

The Scottish Quality Management System (SQMS)

Sorry, it's me again risking making a nuisance of myself.

Do you recall that I wrote to you on 10 March 2000 seeking your help with my research into the effectiveness of SQMS? Almost half of those surveyed (189) returned the questionnaire and gave a wide variety of very interesting, frank, comments. Unfortunately, you were unable to respond at that time, but I can't let you off the hook yet.

Why are your views so important when I've already had an above average response for a postal survey? Well, the views of the people who are most affected by SQMS - you - have not been generally sought, despite the fact that the livelihood of many depends upon maintaining accreditation to the Standard. This is an interesting time when the future of the enterprise network and the training that it delivers are under scrutiny and review. Also an SQMS Standards Council will be established soon to take ownership of the SQMS standards, and will be responsible for developing, maintaining and reviewing those standards. This is taking place against a background where the Scottish Executive is raising questions about the role of SQMS ⁽¹⁾, while the Chief Executive of Scottish Enterprise is suggesting that SE's training role should be passed on to others ⁽²⁾ and no doubt HIE would follow suit.

Although my research is independent, I hope that it will be influential and I would like to be able to include your views and say that the results of my research accurately represent the views of SQMS accredited organisations across the entire spectrum. A mediocre or fragmented response to the first major test of the views of SQMS users could be dismissed as insignificant, particularly as your geographical area is under-represented in the responses so far.

Please will you help me? I'm imposing on you again in the hope that this time you will be able to find the time to respond. I have enclosed another questionnaire and another reply-paid envelope so that you don't have to admit that you threw the first one out. (Of course you didn't, it's still in your crowded in-tray!)

Finally, do you remember that in my earlier letter I tried grovelling? Well, that obviously didn't work, so I'll try moral blackmail. As my research is academic, entirely independent and not connected with the enterprise network in any way, I'm a "learner" as defined by the SQMS Standard. As an SQMS accredited organisation, how can you refuse?

Also, if I receive your response before Easter, I have an excuse not to decorate the bedroom.

Thanks and kind regards.

Yours sincerely

Howard Marshall

"Developing Skills and Employability: Training for the long-term unemployed". Consultative Document SE1711/1999, 16 Dec 1999, Para 5.17 – 5.19.

McConnell Ian, "Scottish Enterprise chief targets the cutting edge: Crawford would drop regeneration and training roles for hi-tech nursery", The Herald, 30 March 2000, P21.

Introduction

The Scottish Quality Management System (SQMS) was first launched in 1993 as a harmonised quality management framework for vocational education and training in Scotland. Since that time it has expanded to the point that now over 400 organisations are accredited to the Standard. Unlike other quality management systems such as ISO 9000 it has not been market-led, but is compulsory within the enterprise network. However, as no independent research has been carried out since SQMS was introduced, can we be sure that it is effective and represents value for money? This questionnaire is the first major attempt to survey the views of the users of SQMS - the people who have to pay for its operation.

This research is completely independent and is not being undertaken on behalf of Scottish Enterprise, Highlands and Islands Enterprise, the local enterprise networks or SQMS Scotland. All the information that you give on this questionnaire is for academic purposes and will be maintained in strict confidence and no comments or answers will be directly attributed to you in any way.

Please answer **all** of the questions by either putting a tick in the appropriate box, or putting a circle around or completely scoring through a number. Each number means: **1 strongly disagree, 2 disagree, 3 neither agree nor disagree, 4 agree, 5 strongly agree.**

About You *(This section is voluntary, but completion would be appreciated)*

| | | |
|--------------------------------------------------------------------------|------------------------------|-----------------------------|
| Name: _____ | Position: _____ | |
| Organisation: _____ | | |
| Address: _____ | | |
| Phone No: _____ | | |
| I would be willing to be interviewed on my views and experiences of SQMS | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

1.0 About your Organisation

| | <2 yrs | 2-5 yrs | 5-10 yrs | >10 yrs |
|-------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1.01 How long has your organisation been providing training services? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | <1 year | 1-3 yrs | 3-5 yrs | >5 yrs |
| 1.02 How long have you been working towards/accredited with SQMS? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | <5 | 6-20 | 21-40 | >40 |
| 1.03 How many people do you employ in your training divisions? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | <£0.5m | £0.5-1.5m | £1.5-2.5m | >£2.5m |
| 1.04 What was your training turnover/budget in its last financial year? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | <10% | 10-40% | 40-70% | >70% |
| 1.05 What percentage of your training is dependent upon having SQMS? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Employer | Training Provider | Careers Service | Don't know |
| 1.06 Which version of SQMS have you used? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Company | College | Council | Vol Org |
| 1.07 What is your status? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Glasgow | Edinburgh | Central | North |
| 1.08 Which geographical area(s)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | South | East | West | HIE |

2.0 Other Quality Standards *(Only complete this section if you are accredited to ISO9000 or Investors in People)*

| My SQMS accreditation helped me to: | | | | | | |
|--------------------------------------------|--------------------------------------------------------------------------------|---|---|---|---|---|
| 2.01 | Achieve ISO 9000 accreditation more easily | 1 | 2 | 3 | 4 | 5 |
| 2.02 | Gain credit from my ISO accreditation body for elements that overlap with SQMS | 1 | 2 | 3 | 4 | 5 |
| 2.03 | Helped me to achieve liP recognition | 1 | 2 | 3 | 4 | 5 |
| 2.04 | Gain credit by liP Scotland/UK for elements that overlap with SQMS | 1 | 2 | 3 | 4 | 5 |

3.0 The Reasons Why

1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree.

| <i>Our primary motivation in seeking accreditation to SQMS was to:</i> | | | | | | |
|------------------------------------------------------------------------|---------------------------------------------------------------------------|---|---|---|---|---|
| 3.01 | Respond to demands from LEC(s) relating to existing contracts | 1 | 2 | 3 | 4 | 5 |
| 3.02 | Obtain contracts with LECs in the future | 1 | 2 | 3 | 4 | 5 |
| 3.03 | Provide proof of commitment to Total Quality Management | 1 | 2 | 3 | 4 | 5 |
| 3.04 | Respond to demands from the market for more customer-focussed training | 1 | 2 | 3 | 4 | 5 |
| 3.05 | Provide a significant marketing tool | 1 | 2 | 3 | 4 | 5 |
| 3.06 | Improve the quality of the training services that we provide to customers | 1 | 2 | 3 | 4 | 5 |
| 3.07 | Make our business operations more efficient | 1 | 2 | 3 | 4 | 5 |
| 3.08 | Seek validation from awarding bodies to offer vocational qualifications | 1 | 2 | 3 | 4 | 5 |

4.0 Approach to Quality

1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree.

| <i>The management and key people in our organisation believe that:</i> | | | | | | |
|------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---|---|---|---|---|
| 4.01 | Quality Management Systems are essential for effective business operation | 1 | 2 | 3 | 4 | 5 |
| 4.02 | The quality policy must be driven from the top | 1 | 2 | 3 | 4 | 5 |
| 4.03 | They must have a hands-on involvement in most aspects of SQMS implementation | 1 | 2 | 3 | 4 | 5 |
| 4.04 | Continuous quality improvement must be actively pursued at all levels | 1 | 2 | 3 | 4 | 5 |
| 4.05 | SQMS should be an integral part of a quality strategy | 1 | 2 | 3 | 4 | 5 |
| 4.06 | SQMS has established a system of continuous improvement in our training delivery | 1 | 2 | 3 | 4 | 5 |
| 4.07 | SQMS should be more widely promoted as a good business discipline | 1 | 2 | 3 | 4 | 5 |
| 4.08 | If SQMS ceased to be mandatory, we would pursue a different quality accreditation | 1 | 2 | 3 | 4 | 5 |
| 4.09 | If SQMS ceased to be mandatory, we would continue its use as a business development tool | 1 | 2 | 3 | 4 | 5 |
| 4.10 | SQMS has reduced the amount of monitoring and auditing of our organisation by others | 1 | 2 | 3 | 4 | 5 |
| 4.11 | SQMS has enhanced the status of vocational training in the market place | 1 | 2 | 3 | 4 | 5 |

5.0 The Starting Point

1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree.

| <i>When we began the SQMS process we:</i> | | | | | | |
|-------------------------------------------|----------------------------------------------------------------------------------|---|---|---|---|---|
| 5.01 | Concentrated upon areas where we couldn't provide evidence against the Standard | 1 | 2 | 3 | 4 | 5 |
| 5.02 | Introduced new activities and processes to fill these evidence gaps | 1 | 2 | 3 | 4 | 5 |
| 5.03 | Identified specific areas where feedback showed that improvements were necessary | 1 | 2 | 3 | 4 | 5 |
| 5.04 | Wrote clear, specific quality improvement goals and objectives towards them | 1 | 2 | 3 | 4 | 5 |
| 5.05 | Saw SQMS as the mechanism to achieve, or work towards those goals | 1 | 2 | 3 | 4 | 5 |
| 5.06 | Established measurement techniques to monitor progress against the quality goals | 1 | 2 | 3 | 4 | 5 |
| 5.07 | Introduced both short and long-term, customer satisfaction-driven quality plans | 1 | 2 | 3 | 4 | 5 |
| 5.08 | Introduced management systems to identify customer requirements | 1 | 2 | 3 | 4 | 5 |
| 5.09 | Introduced management systems to evaluate improvements in customer satisfaction | 1 | 2 | 3 | 4 | 5 |

6.0 The Process

1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree.

| <i>My experience of the SQMS process suggests that:</i> | | | | | | |
|---------------------------------------------------------|-------------------------------------------------------------------------------------|---|---|---|---|---|
| 6.01 | The Auditor(s) demonstrates a wide knowledge of training and related issues | 1 | 2 | 3 | 4 | 5 |
| 6.02 | The Auditor(s) looks for opportunities to spread best practice in training | 1 | 2 | 3 | 4 | 5 |
| 6.03 | The Auditor(s) looks for ways to drive the organisation towards business excellence | 1 | 2 | 3 | 4 | 5 |
| 6.04 | The Auditor(s) see him/herself as a developer rather than a policeman | 1 | 2 | 3 | 4 | 5 |
| 6.05 | The audit is a natural process that does not require any pre-audit catching-up | 1 | 2 | 3 | 4 | 5 |
| 6.06 | The audit process provides an opportunity to benchmark against the best | 1 | 2 | 3 | 4 | 5 |
| 6.07 | The audit refines our performance indicators to ensure year-on-year improvements | 1 | 2 | 3 | 4 | 5 |
| 6.08 | The audit process boosts my confidence in our operations | 1 | 2 | 3 | 4 | 5 |

7.0 & 8.0 Potential Benefits

1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree.

| 7.0 Since working with, or becoming accredited to SQMS, we have noted the following positive changes that we believe are directly attributable to the SQMS process: | | 8.0 Is this accurately measured? | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------|----|
| | | Yes | No |
| 7.01 | The overall management of the organisation has significantly improved | 1 2 3 4 5 | |
| 7.02 | Trainee satisfaction has significantly improved | 1 2 3 4 5 | |
| 7.03 | Market share has increased | 1 2 3 4 5 | |
| 7.04 | Staff motivation and turnover have improved | 1 2 3 4 5 | |
| 7.05 | Staff skills and competence levels have been appreciably enhanced | 1 2 3 4 5 | |
| 7.06 | People selection methods have improved | 1 2 3 4 5 | |
| 7.07 | The occurrence of accidents and incidents has been reduced | 1 2 3 4 5 | |
| 7.08 | Training aids and facilities have been significantly enhanced | 1 2 3 4 5 | |
| 7.09 | Administration has been considerably reduced and efficiency increased | 1 2 3 4 5 | |
| 7.10 | Productivity has improved | 1 2 3 4 5 | |
| 7.11 | Reduced costs and higher market share have increased profitability | 1 2 3 4 5 | |
| 7.12 | The number receiving training has increased | 1 2 3 4 5 | |
| 7.13 | Training more closely reflects trainee's identified needs | 1 2 3 4 5 | |
| 7.14 | Number of dissatisfied trainees has decreased | 1 2 3 4 5 | |
| 7.15 | The design and content of training more closely reflects best practice | 1 2 3 4 5 | |
| 7.16 | Training delivery has improved in clearly measurable ways | 1 2 3 4 5 | |
| 7.17 | Assessment practice has improved in clearly measurable ways | 1 2 3 4 5 | |
| 7.18 | The reputation of the Organisation in the market place has improved | 1 2 3 4 5 | |
| 7.19 | The number of positive achievers has increased | 1 2 3 4 5 | |
| 7.20 | The number of drop-outs from training has decreased | 1 2 3 4 5 | |
| 7.21 | Other (please state) | | |

9.0 Possible Disadvantages

1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree.

| Since working with, or becoming accredited to SQMS, we have noted the following negative changes that we believe are directly attributable to the SQMS process: | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------|
| 9.01 | There are things that we do purely for evidence for quality audits | 1 2 3 4 5 |
| 9.02 | Many of the additional activities required for "quality" don't make things better for customers | 1 2 3 4 5 |
| 9.03 | Some plans and policies are produced solely for the Standard not as working documents | 1 2 3 4 5 |
| 9.04 | We only did what was necessary to get accredited to the Standard | 1 2 3 4 5 |
| 9.05 | Parts of the Standard don't take practicality into account | 1 2 3 4 5 |
| 9.06 | Often the auditor(s) doesn't understand the realities of delivering training in our position | 1 2 3 4 5 |
| 9.07 | If we want to make an improvement it takes too much time and effort to change the system | 1 2 3 4 5 |
| 9.08 | Quality is only important when financial and numerical targets are being met | 1 2 3 4 5 |
| 9.09 | Quality is driven more by cost reduction than customer satisfaction | 1 2 3 4 5 |
| 9.10 | No-one thinks about quality until six weeks before the audit and then there's a panic | 1 2 3 4 5 |
| 9.11 | Auditors try to catch us out rather than help us | 1 2 3 4 5 |
| 9.12 | If you can talk a good game you'll get through any audit | 1 2 3 4 5 |
| 9.13 | Paperwork and processes are more important than actual training delivery | 1 2 3 4 5 |
| 9.14 | A lot of the time spent on standards and audits would be better spent on development | 1 2 3 4 5 |
| 9.15 | Most of the policies and procedures have little relevance to day-to-day activities | 1 2 3 4 5 |
| 9.16 | It's difficult to get individuals to take ownership for quality procedures and processes | 1 2 3 4 5 |
| 9.17 | New organisations get contracts despite not having SQMS | 1 2 3 4 5 |
| 9.18 | Other (Please state) | |

10.0 Time spent on SQMS

| | | | | |
|--------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 0-10 | 10-50 | 50-100 | >100 |
| 10.01 How many staff hours are spent preparing for the annual audit? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10.02 Additionally, how many staff hours a year are spent maintaining SQMS ? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10.03 Additionally, how many staff hours are spent accompanying the Auditor? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10.04 Without SQMS how many staff hours would be spent on quality matters? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | 1-2 | 3-5 | 6-10 | >10 |
| 10.05 How many days does the annual audit take? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | <10% | 10-33% | 30-60% | >60% |
| 10.06 How much of the total time spent on SQMS matters is budgeted for? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Very useful | Useful | Not very useful | Wasted |
| 10.07 As a means of improving your business, do you believe that this time is: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

11.0 Value

1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree.

| | | | | | | |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|---|---|---|---|
| <i>Now that the costs of SQMS accreditation and auditing are being passed on to us, we:</i> | | | | | | |
| 11.01 | Accurately measure and quantify every aspect of potential quality improvement | 1 | 2 | 3 | 4 | 5 |
| 11.02 | Accurately measure and quantify the costs of maintaining the SQMS accreditation | 1 | 2 | 3 | 4 | 5 |
| 11.03 | Believe SQMS costs will be recovered through improved performance in 1 to 3 years | 1 | 2 | 3 | 4 | 5 |
| 11.04 | Believe SQMS costs will be recovered through improved performance in under 10 yrs | 1 | 2 | 3 | 4 | 5 |
| 11.05 | Believe SQMS costs will not be recovered at all | 1 | 2 | 3 | 4 | 5 |
| 11.06 | Not believe it's possible/productive to measure and quantify these costs | 1 | 2 | 3 | 4 | 5 |
| 11.07 | Believe SQMS represents good value for the training "industry" | 1 | 2 | 3 | 4 | 5 |

12.0 Final Comments

Please use this space to add any additional comments that you may wish to make:

Your help and co-operation with this survey is very much appreciated. Please return the questionnaire in the reply-paid envelope.

SQMS Auditor's Interview Record Name:.....

Open with pleasantries, thank them for agreeing to participate and explain that the interview should not take any longer than 30 minutes. Check that they have that amount of time to spare.

First, I need to find out a bit about you. Is that okay?

| | | | | | | | | | |
|------|--------------------------------------------------------------------|--------------------------|-----------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|---------|
| 1.01 | How long have you been involved in training services? | <input type="checkbox"/> | <2 yrs | <input type="checkbox"/> | 2-5 yrs | <input type="checkbox"/> | 5-10 yrs | <input type="checkbox"/> | >10 yrs |
| 1.02 | How long have you been working as an SQMS Auditor? | <input type="checkbox"/> | <1 year | <input type="checkbox"/> | 1-3 yrs | <input type="checkbox"/> | 3-5 yrs | <input type="checkbox"/> | >5 yrs |
| 1.03 | How would you describe your own background? | <input type="checkbox"/> | Training Practitioner | <input type="checkbox"/> | Personnel Practitioner | <input type="checkbox"/> | Education Practitioner | <input type="checkbox"/> | Other |
| 1.04 | What %age of your overall activity is taken up with SQMS Auditing? | <input type="checkbox"/> | <10% | <input type="checkbox"/> | 10-40% | <input type="checkbox"/> | 40-70% | <input type="checkbox"/> | >70% |
| 1.05 | How many organisations have you audited against the SQMS standard? | | | | | | | | |
| 1.06 | %age breakdown | Company | College | Council | Vol Org | Careers Office | Local Tr provider | National provider | Other |
| 1.07 | %age geographical area | Glasgow | Edinburgh | Central | North | South | East | West | HIE |
| 1.08 | Do you audit any other quality management systems? | Yes/No | ISO 9000 | liP | Other | | | | |
| 1.09 | When you do an Audit, who is your main contact? | Top Mgt | Middle Mgt | Junior Mgt | Trainers | Admin Staff | Other | | |

I would like your opinion on the factors that motivate organisations to "sign-up" for SQMS using the following scale 5 = very important, 4 = important, 3 = neutral, 2 = not very important and 1 = not at all important.

| | | | | | | |
|-------|----------------------------------------------------------------------------|---|---|---|---|---|
| 3.01 | Because LEC(s) make it mandatory? | 1 | 2 | 3 | 4 | 5 |
| 3.03 | Their commitment to Total Quality Management? | 1 | 2 | 3 | 4 | 5 |
| 3.04 | Responding to demands from the market for more customer-focussed training? | 1 | 2 | 3 | 4 | 5 |
| 3.05 | Provide a significant marketing tool? | 1 | 2 | 3 | 4 | 5 |
| 3.06 | Improve the quality of their training services? | 1 | 2 | 3 | 4 | 5 |
| 3.07 | Make their business operations more efficient? | 1 | 2 | 3 | 4 | 5 |
| Other | | 1 | 2 | 3 | 4 | 5 |

The rest are simple yes or no questions. From your experiences of dealing with managers and key people in the organisations that you audit, do they demonstrate a belief that:

| | Yes | No | |
|------|--------------------------------------------------------------------------------|----|--|
| 4.01 | Quality Management Systems are essential for effective business operation? | | |
| 4.02 | The quality policy must be driven from the top? | | |
| 4.05 | SQMS should be an integral part of a quality strategy? | | |
| 4.06 | SQMS delivers a system of continuous improvement in training delivery? | | |
| 4.08 | If SQMS wasn't mandatory, they would continue to use it, or something similar? | | |
| 4.10 | SQMS has reduced the amount of monitoring and auditing by others? | | |
| 4.11 | SQMS has enhanced the status of vocational training in the market place? | | |

During your audits, have you seen evidence of any of the following:

| | Yes | %age | No |
|------|----------------------------------------------------------------------------------------|------|----|
| 5.01 | Attitude of compliance to the Standard rather than continuous improvement? | | |
| 5.02 | New activities and processes introduced purely to satisfy SQMS criteria? | | |
| 5.04 | Written clear, specific quality improvement goals and objectives towards them? | | |
| 5.05 | SQMS is seen as the mechanism to achieve, or work towards those goals? | | |
| 5.06 | Measurement techniques to monitor progress towards quality goals. If so give examples? | | |
| 5.07 | Both short and long-term, customer satisfaction-driven quality plans? | | |
| 5.08 | Management systems to identify customer requirements? | | |
| 5.09 | Management systems to evaluate improvements in customer satisfaction? | | |

| <i>Do organisations that you audit:</i> | | Yes | % age | No |
|-----------------------------------------|-------------------------------------------------------------------------------------|-----|----------|----|
| 6.01 | Seek your advice on training and related issues? | | | |
| 6.02 | Look to you for examples of best practice in training? | | | |
| 6.03 | Look to you for ways to drive the organisation towards business excellence? | | | |
| 6.04 | See you as a developer rather than a policeman? | | | |
| 6.05 | See the audit is a natural process that does not require any pre-audit catching-up? | | | |
| 6.06 | See the audit process as providing an opportunity to benchmark against the best? | | | |
| 6.07 | Refine their performance indicators to ensure year-on-year improvements? | | | |
| 6.08 | See a successful audit as a boost to their confidence in their operations? | | | |

| <i>Have you seen any evidence that SQMS has led directly to?</i> | | Yes | % age | No | <i>How have you seen this measured?</i> |
|------------------------------------------------------------------|-------------------------------------------------------------|-----|----------|----|-----------------------------------------|
| 7.01 | Improvements in the overall management of the organisation? | | | | |
| 7.02 | Improvements in Trainee satisfaction? | | | | |
| 7.03 | Increased Market share? | | | | |
| 7.04 | Improved staff motivation and turnover? | | | | |
| 7.05 | Enhanced Staff skills and competence levels? | | | | |
| 7.06 | Improved people selection methods? | | | | |
| 7.07 | Reduced occurrence of accidents and incidents? | | | | |
| 7.08 | Enhanced training aids and facilities? | | | | |
| 7.09 | Reduced administration and increased efficiency? | | | | |
| 7.10 | Improved productivity? | | | | |
| 7.11 | Increased profitability? | | | | |
| 7.12 | Increased numbers receiving training? | | | | |
| 7.13 | Training more closely reflecting trainee's needs? | | | | |
| 7.14 | Less dissatisfied trainees? | | | | |
| 7.15 | Better design and content of training? | | | | |
| 7.16 | Improved training delivery? | | | | |
| 7.17 | Improved assessment practice? | | | | |
| 7.18 | Improved reputation of the Organisation? | | | | |
| 7.19 | The number of positive achievers has increased? | | | | |
| 7.20 | The number of drop-outs from training has decreased? | | | | |
| 7.21 | Other (please state) | | | | |

| Have you seen any evidence of any of the following: | Yes | % age | No |
|----------------------------------------------------------------------------------------------|-----|-------|----|
| 9.01 Things done purely for evidence for quality audits? | | | |
| 9.02 Many of the additional activities required for SQMS don't improve things for customers? | | | |
| 9.03 Some plans and policies produced solely for the Standard not as working documents? | | | |
| 9.04 They only did what was necessary to get accredited to the Standard? | | | |
| 9.07 Improvements are hampered by the bureaucracy of the quality system? | | | |
| 9.08 Quality is only important when financial and numerical targets are being met? | | | |
| 9.09 Quality is driven more by cost reduction than customer satisfaction? | | | |
| 9.10 No-one thinks about quality until six weeks before the audit and then there's a panic? | | | |
| 9.11 Belief that you try to catch them out rather than help them? | | | |
| 9.13 Paperwork and processes are more important than actual training delivery? | | | |
| 9.14 A lot of the time spent on standards and audits would be better spent on development? | | | |
| 9.15 Most of the policies and procedures have little relevance to day-to-day activities? | | | |
| 9.16 Lack of ownership of quality procedures and processes? | | | |
| 9.18 Other (Please state) | | | |

| If we look at the value of SQMS: do you believe that: | Yes | % age | No |
|--------------------------------------------------------------------------------|-----|-------|----|
| 11.01 SQMS has led to quantifiable improvements in the training supplier base? | | | |
| 11.02 The costs of maintaining the SQMS accreditation are accurately measured? | | | |
| 11.03 SQMS costs can be recovered through improved performance in 1 to 3 year? | | | |
| 11.04 SQMS costs can be recovered through improved performance in 4 to 10 yr? | | | |
| 11.05 SQMS costs cannot be recovered at all? | | | |
| 11.06 It's possible/productive to measure and quantify SQMS costs? | | | |
| 11.07 SQMS represents good value for the training "industry"? | | | |

| The SQMS Manual states that "SQMS draws on TQM thinking across the audit as a whole", so I would like to explore some aspects of TQM | Yes | %age | No |
|---------------------------------------------------------------------------------------------------------------------------------------------|-----|------|----|
| 13.01 Do you believe that SQMS is a TQM implementation tool? | | | |
| 13.02 Are SQMS organisations customer-focussed? | | | |
| 13.03 Do SQMS organisations have leaders who coach, facilitate and empower their people? | | | |
| 13.04 Are all people involved in operational decisions and process improvement? | | | |
| 13.05 Are SQMS organisations managed as a process with systems under constant review? | | | |
| 13.06 Is continual improvement a permanent objective of SQMS organisations? | | | |
| 13.07 Do statistics & scientific reasoning underpin work processes & improvement strategies? | | | |
| 13.08 Do you know the original objective behind the development of SQMS? | | | |
| If yes, what was it? | | | |
| | | | |
| 13.09 Has that objective been met? | | | |
| If no, why not? | | | |
| | | | |
| 13.10 Has that original objective changed? | | | |
| If yes, how? | | | |
| | | | |

14.01 How would you describe the attitude of LECs to SQMS?

Well, that's over and I'm sure that you're glad. I really appreciate your help with this project, which SQMS Scotland will get a copy of when it's complete.

One final question for my interest. If you were to discover that your views differed significantly from those of SQMS accredited organisations, would you be surprised? Yes No.

If no, why not?

General comments?

Thanks again.

«Title» «First» «Second»
«Address_1»
«Address_2»
«Address_3»
«Address_4»
«State»
«Post_code»

26 November 2001

Dear «First»

Alex Devlin of SQMS Scotland tells me that you are prepared to be interviewed on your experiences of the application of SQMS. I believe that he has explained the situation to you, but let me give you a bit of background just to make sure there is no misunderstanding.

I am a part-time PhD student at the University of Stirling researching management and my research should contribute to existing knowledge where possible. Despite its wide application, SQMS has not been subjected to academic research to date. I have surveyed all the organisations that were registered to, or working towards SQMS in March 2000 and I have achieved almost a 70% response rate that has provided a wealth of data for analysis. This analysis will be compared with similar research into other management models with an overall objective to identify a better model - if one exists. However, for statistical rigour, the data should be substantiated by another method and I thought it would be useful to try and do this by gauging the opinions of SQMS Auditors and comparing those with the opinions of the organisations that have been audited.

I would like to conduct a telephone interview with you to ask a number of questions about various aspects of SQMS, including the motivation factors, benefits, and disadvantages. I will also ask a few questions about general quality issues. The majority of questions will be of the Yes/No variety and you will find them very straightforward. However, it would be very helpful if you could research some data for me in advance on the number of organisations that you have audited (as opposed to the number of audits undertaken) and roughly how they break down between training providers, colleges, voluntary organisations, companies and others.

Although SQMS Scotland provided me with your details I must make it quite clear that my research is academic, entirely independent of them and not connected with the enterprise network in any way. I am pleased to be able to give you this assurance, as I don't want you to feel constrained in the way that you answer the questions. One of the significant findings of my initial research that you may find interesting is that almost 60% of respondents were positive about the SQMS Auditor's knowledge and approach, and of the audit process itself. Therefore, the auditing role is not a research issue and there is no "hidden agenda" in my wishing to speak to you. The results of the survey will be presented collectively and your replies and comments will remain completely confidential and I hope you will take this opportunity to give a frank account of your experiences of SQMS in the knowledge that your honesty is respected.

If you could find time to set aside around 30 minutes during the next few weeks that would really be appreciated. If you could give me a couple of days' notice of a convenient time when I can 'phone you, either by e-mail at gism@bigfoot.com or by phone on 07957138054, I would be really grateful.

I look forward to speaking to you soon.

Kind regards.

Yours sincerely

Howard Marshall

«Title» «First» «Second»
«Address_1»
«Address_2»
«Address_3»
«Address_4»
«State»
«Post_code»

21 January 2002

Dear «First»

The Scottish Quality Management System (SQMS)

Sorry, it's me again risking making a nuisance of myself.

Do you recall that I wrote to you on 26 November 2001 seeking your help with my research into the effectiveness of SQMS? Some of the others who did respond made the point that November/December is your busiest period and I apologise for expecting you to put my interests before your work. I'm sorry if you were unable to respond at that time, but your views are really important.

Why are your views important? Well, the responses that I have received from others have been very interesting and reveal a range of views on the Standard and its effectiveness. However, these views are based on a fairly narrow sample and I would like to be able to include your views and say that the results of my research accurately represent the views of SQMS Auditors across the entire spectrum.

Please will you help me? I'm imposing on you again in the hope that this time you will be able to find the time to respond. I have enclosed another questionnaire that I would ask you to complete and return to me in the reply-paid envelope.

Finally, I pointed out in my earlier letter that my research is academic, entirely independent and not connected with the enterprise network in any way. Your replies and comments will remain completely confidential and I hope you will take this opportunity to give a frank account of your experiences of SQMS in the knowledge that your honesty is respected.

If you could find time to set aside around 30 minutes during the next two weeks that would really be appreciated. If you could give me a couple of days' notice of a convenient time when I can 'phone you, either by e-mail at ghsm@bigfoot.com or by phone on 07957138054, I would be really grateful.

I look forward to speaking to you soon.

Kind regards.

Yours sincerely

Howard Marshall

SPSS FREQUENCIES OF THE POSTAL QUESTIONNAIRE

| I would be willing to be interviewed on my views and experiences of SQMS | | | |
|---------------------------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| No | 71 | 25.6 | 25.6 |
| Yes | 170 | 61.4 | 87.0 |
| No response | 36 | 13.0 | 100 |
| Total | 277 | 100 | |
| | | | |
| | | | |

| Q 1.01 How long has your organisation been providing training services? | | | |
|--------------------------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| >10 yrs | 179 | 64.6 | 64.6 |
| 5-10 yrs | 46 | 16.6 | 81.2 |
| 2-5 yrs | 43 | 15.5 | 96.8 |
| <2 yrs | 6 | 2.2 | 98.9 |
| No response | 3 | 1.1 | 100 |
| Total | 277 | 100 | |
| | | | |
| | | | |

| Q 1.02 How long have you been working towards/accredited with SQMS? | | | |
|----------------------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| >5 yrs | 105 | 37.9 | 37.9 |
| 3-5 yrs | 87 | 31.4 | 69.3 |
| 1-3 yrs | 55 | 19.9 | 89.2 |
| <1 year | 24 | 8.7 | 97.8 |
| No response | 6 | 2.2 | 100 |
| Total | 277 | 100 | |
| | | | |
| | | | |

| Q 1.03 How many people do you employ in your training divisions? | | | |
|-------------------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| >40 | 56 | 20.2 | 20.2 |
| 21-40 | 34 | 12.3 | 32.5 |
| 6-20 | 107 | 38.6 | 71.1 |
| <5 | 74 | 26.7 | 97.8 |
| No response | 6 | 2.2 | 100 |
| Total | 277 | 100 | |
| | | | |
| | | | |

| Q 1.04 What was your training turnover/budget in its last financial year? | | | |
|----------------------------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| >£2.5m | 32 | 11.6 | 11.6 |
| £1.5-2.5m | 18 | 6.5 | 18.1 |
| £0.5-1.5m | 59 | 21.3 | 39.4 |
| <£0.5m | 136 | 49.1 | 88.4 |
| No response | 32 | 11.6 | 100 |
| Total | 277 | 100 | |
| | | | |
| | | | |

| Q 1.05 What percentage of your training is dependent upon having SQMS? | | | |
|-------------------------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| >70% | 86 | 31.1 | 31.1 |
| 40-70% | 58 | 20.9 | 52.0 |
| 10-40% | 53 | 19.1 | 71.1 |
| <10% | 67 | 24.2 | 95.3 |
| No response | 13 | 4.7 | 100 |
| Total | 277 | 100 | |
| | | | |
| | | | |

| Q 1.06 Which version of SQMS have you used? | | | |
|----------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| Don't know | 15 | 5.4 | 5.4 |
| Careers Service | 6 | 2.2 | 7.6 |
| Training Provider | 213 | 76.9 | 84.5 |
| Employer | 33 | 11.9 | 96.4 |
| No response | 10 | 3.6 | 100 |
| Total | 277 | 100 | |
| | | | |
| | | | |

| Q 1.07 What is your status? | | | |
|------------------------------------|-------------|----------|--------------|
| Category | Freq | % | Cum % |
| Other | 16 | 5.8 | 5.8 |
| National Tr provider | 22 | 7.9 | 13.7 |
| Local Tr provider | 88 | 31.8 | 45.5 |
| Careers Office | 4 | 1.4 | 46.9 |
| Vol Org | 29 | 10.5 | 57.4 |
| Council | 29 | 10.5 | 67.9 |
| College | 36 | 13.0 | 80.9 |
| Company | 52 | 18.8 | 99.6 |
| No response | 1 | 0.4 | 100 |
| | | | |
| | | | |

| Q 1.08 Which geographical area(s)? | | | |
|------------------------------------|------|------|------|
| Category | Freq | % | Cum% |
| HIE | 32 | 11.6 | 11.6 |
| West | 41 | 14.8 | 26.4 |
| l East | 32 | 11.6 | 37.9 |
| South | 15 | 5.4 | 43.3 |
| North | 16 | 5.8 | 49.1 |
| Central | 38 | 13.7 | 62.8 |
| Edinburgh | 38 | 13.7 | 76.5 |
| Glasgow | 59 | 21.3 | 97.8 |
| No response | 6 | 2.2 | 100 |

| Q 2.01 Achieve ISO 9000 accreditation more easily | | | |
|---------------------------------------------------|------|------|------|
| Category | Freq | % | Cum% |
| Strongly agree | 0 | 0 | 0 |
| Agree | 4 | 1.4 | 1.4 |
| Neither agree or disagree | 19 | 6.9 | 8.3 |
| Disagree | 13 | 4.7 | 13 |
| Strongly disagree | 32 | 11.6 | 24.5 |
| No response | 209 | 75.5 | 100 |
| Total | 277 | 100 | |

| Q 2.02 Gain credit from my ISO accreditation body for elements that overlap with SQMS | | | |
|---------------------------------------------------------------------------------------|------|------|------|
| Category | Freq | % | Cum% |
| Strongly agree | 6 | 2.2 | 2.2 |
| Agree | 7 | 2.5 | 4.7 |
| Neither agree or disagree | 20 | 7.2 | 11.9 |
| Disagree | 7 | 2.5 | 14.4 |
| Strongly disagree | 30 | 10.8 | 25.3 |
| No response | 207 | 74.7 | 100 |
| Total | 277 | 100 | |

| Q 2.03 Helped me to achieve IIP recognition | | | |
|---------------------------------------------|------|------|------|
| Category | Freq | % | Cum% |
| Strongly agree | 17 | 6.1 | 6.1 |
| Agree | 36 | 13.0 | 19.1 |
| Neither agree or disagree | 31 | 11.2 | 30.3 |
| Disagree | 23 | 8.3 | 38.6 |
| Strongly disagree | 35 | 12.6 | 51.3 |
| No response | 135 | 48.7 | 100 |
| Total | 277 | 100 | |

| Q 2.04 Gain credit by IIP Scotland/UK for elements that overlap with SQMS | | | |
|---------------------------------------------------------------------------|------|------|------|
| Category | Freq | % | Cum% |
| Strongly agree | 19 | 6.9 | 6.9 |
| Agree | 37 | 13.4 | 20.2 |
| Neither agree or disagree | 27 | 9.7 | 30.0 |
| Disagree | 15 | 5.4 | 35.4 |
| Strongly disagree | 38 | 13.7 | 49.1 |
| No response | 141 | 50.9 | 100 |
| Total | 277 | 100 | |

| Q 3.01 Respond to demands from LEC(s) relating to existing contracts | | | |
|----------------------------------------------------------------------|------|------|------|
| Category | Freq | % | Cum% |
| Strongly agree | 176 | 63.5 | 63.5 |
| Agree | 55 | 19.9 | 83.4 |
| Neither agree or disagree | 16 | 5.8 | 89.2 |
| Disagree | 7 | 2.5 | 91.7 |
| Strongly disagree | 17 | 6.1 | 97.8 |
| No response | 6 | 2.2 | 100 |
| Total | 277 | 100 | |

| Q 3.02 Obtain contracts with LECs in the future | | | |
|-------------------------------------------------|------|------|------|
| Category | Freq | % | Cum% |
| Strongly agree | 153 | 55.2 | 55.2 |
| Agree | 67 | 24.2 | 79.4 |
| Neither agree or disagree | 22 | 7.9 | 87.4 |
| Disagree | 7 | 2.5 | 89.9 |
| Strongly disagree | 15 | 5.4 | 95.3 |
| No response | 13 | 4.7 | 100 |
| Total | 277 | 100 | |

| Q 3.03 Provide proof of commitment to Total Quality Management | | | |
|----------------------------------------------------------------|------|------|------|
| Category | Freq | % | Cum% |
| Strongly agree | 75 | 27.1 | 27.1 |
| Agree | 84 | 30.3 | 57.4 |
| Neither agree or disagree | 56 | 20.2 | 77.6 |
| Disagree | 32 | 11.6 | 89.2 |
| Strongly disagree | 21 | 7.6 | 96.8 |
| No response | 9 | 3.2 | 100 |
| Total | 277 | 100 | |

| Q 3.05 Provide a significant marketing tool | | | |
|----------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 16 | 5.8 | 5.8 |
| Agree | 71 | 25.6 | 31.4 |
| Neither agree or disagree | 91 | 32.9 | 64.3 |
| Disagree | 41 | 14.8 | 79.1 |
| Strongly disagree | 44 | 15.9 | 94.9 |
| No response | 14 | 5.1 | 100 |
| Total | 277 | 100 | |

| Q 3.06 Improve the quality of the training services that we provide to customers | | | |
|-----------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 54 | 19.5 | 19.5 |
| Agree | 101 | 36.5 | 56 |
| Neither agree or disagree | 57 | 20.6 | 76.5 |
| Disagree | 26 | 9.4 | 85.9 |
| Strongly disagree | 30 | 10.8 | 96.8 |
| No response | 9 | 3.2 | 100 |
| Total | 277 | 100 | |

| Q 3.07 Make our business operations more efficient | | | |
|-----------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 53 | 19.1 | 19.1 |
| Agree | 81 | 29.2 | 48.4 |
| Neither agree or disagree | 54 | 19.5 | 67.9 |
| Disagree | 49 | 17.7 | 85.6 |
| Strongly disagree | 27 | 9.7 | 95.3 |
| No response | 13 | 4.7 | 100 |
| Total | 277 | 100 | |

| Q 3.08 Seek accreditation from awarding bodies to offer vocational qualifications | | | |
|------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 51 | 18.4 | 18.4 |
| Agree | 68 | 24.5 | 43 |
| Neither agree or disagree | 62 | 22.4 | 65.3 |
| Disagree | 30 | 10.8 | 76.2 |
| Strongly disagree | 49 | 17.7 | 93.9 |
| No response | 17 | 6.1 | 100 |
| Total | 277 | 100 | |

| Q 4.01 Quality Management Systems are essential for effective business operation | | | |
|-----------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 124 | 44.8 | 44.8 |
| Agree | 109 | 39.4 | 84.1 |
| Neither agree or disagree | 26 | 9.4 | 93.5 |
| Disagree | 9 | 3.2 | 96.8 |
| Strongly disagree | 6 | 2.2 | 98.9 |
| No response | 3 | 1.1 | 100 |
| Total | 277 | 100 | |

| Q 4.02 The quality policy must be driven from the top | | | |
|--------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 158 | 57.0 | 57.0 |
| Agree | 83 | 30.0 | 87.0 |
| Neither agree or disagree | 23 | 8.3 | 95.3 |
| Disagree | 7 | 2.5 | 97.8 |
| Strongly disagree | 5 | 1.8 | 99.6 |
| No response | 1 | 0.4 | 100 |
| Total | 277 | 100 | |

| Q 4.03 They must have a hands-on involvement in most aspects of SQMS implementation | | | |
|--------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 72 | 26.0 | 26.0 |
| Agree | 112 | 40.4 | 66.4 |
| Neither agree or disagree | 59 | 21.3 | 87.7 |
| Disagree | 21 | 7.6 | 95.3 |
| Strongly disagree | 8 | 2.9 | 98.2 |
| No response | 5 | 1.8 | 100 |
| Total | 277 | 100 | |

| Q 4.04 Continuous quality improvement must be actively pursued at all levels | | | |
|-------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 152 | 54.9 | 54.9 |
| Agree | 102 | 36.8 | 91.7 |
| Neither agree or disagree | 14 | 5.1 | 96.8 |
| Disagree | 5 | 1.8 | 98.6 |
| Strongly disagree | 0 | 0 | 98.6 |
| No response | 4 | 1.4 | 100 |
| Total | 277 | 100 | |

| Q 4.05 SQMS should be an integral part of a quality strategy | | | |
|---------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 78 | 28.2 | 28.2 |
| Agree | 82 | 29.6 | 57.8 |
| Neither agree or disagree | 69 | 24.9 | 82.7 |
| Disagree | 25 | 9.0 | 91.7 |
| Strongly disagree | 20 | 7.2 | 98.9 |
| No response | 3 | 1.1 | 100 |
| Total | 277 | 100 | |

| Q 4.06 SQMS has established a system of continuous improvement in our training delivery | | | |
|------------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 36 | 13 | 13 |
| Agree | 87 | 31.4 | 44.4 |
| Neither agree or disagree | 89 | 32.1 | 76.5 |
| Disagree | 37 | 13.4 | 89.9 |
| Strongly disagree | 25 | 9.0 | 98.9 |
| No response | 3 | 1.1 | 100 |
| Total | 277 | 100 | |

| Q 4.07 SQMS should be more widely promoted as a good business discipline | | | |
|---------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 43 | 15.5 | 15.5 |
| Agree | 73 | 26.4 | 41.9 |
| Neither agree or disagree | 109 | 39.4 | 81.2 |
| Disagree | 27 | 9.7 | 91.0 |
| Strongly disagree | 22 | 7.9 | 98.9 |
| No response | 3 | 1.1 | 100 |
| Total | 277 | 100 | |

| Q 4.08 If SQMS ceased to be mandatory, we would pursue a different quality accreditation | | | |
|-------------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 55 | 19.9 | 19.9 |
| Agree | 73 | 26.4 | 46.2 |
| Neither agree or disagree | 71 | 25.6 | 71.8 |
| Disagree | 44 | 15.9 | 87.7 |
| Strongly disagree | 31 | 11.2 | 98.9 |
| No response | 3 | 1.1 | 100 |
| Total | 277 | 100 | |

| Q 4.09 If SQMS ceased to be mandatory, we would continue its use as a business development tool | | | |
|--------------------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 34 | 12.3 | 12.3 |
| Agree | 92 | 32.2 | 45.5 |
| Neither agree or disagree | 69 | 24.9 | 70.4 |
| Disagree | 45 | 16.2 | 86.6 |
| Strongly disagree | 36 | 13.0 | 99.6 |
| No response | 1 | 0.4 | 100 |
| Total | 277 | 100 | |

| Q 4.10 SQMS has reduced the amount of monitoring and auditing of our organisation by others | | | |
|----------------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 11 | 4.0 | 4.0 |
| Agree | 19 | 6.9 | 10.8 |
| Neither agree or disagree | 39 | 14.1 | 24.9 |
| Disagree | 73 | 26.4 | 51.3 |
| Strongly disagree | 134 | 48.4 | 99.6 |
| No response | 1 | 0.4 | 100 |
| Total | 277 | 100 | |

| Q 4.11 SQMS has enhanced the status of vocational training in the market place | | | |
|---------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 6 | 2.2 | 2.2 |
| Agree | 38 | 13.7 | 15.9 |
| Neither agree or disagree | 106 | 38.3 | 54.2 |
| Disagree | 74 | 26.7 | 80.9 |
| Strongly disagree | 47 | 17.0 | 97.8 |
| No response | 6 | 2.2 | 100 |
| Total | 277 | 100 | |

| Q 5.01 Concentrated upon areas where we couldn't provide evidence against the Standard | | | |
|-----------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 30 | 10.8 | 10.8 |
| Agree | 140 | 50.5 | 61.4 |
| Neither agree or disagree | 55 | 19.9 | 81.2 |
| Disagree | 32 | 11.6 | 92.8 |
| Strongly disagree | 11 | 4.0 | 96.8 |
| No response | 9 | 3.2 | 100 |
| Total | 277 | 100 | |

| Q 5.02 Introduced new activities and processes to fill these evidence gaps | | | |
|-----------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 34 | 12.3 | 12.3 |
| Agree | 151 | 54.5 | 66.8 |
| Neither agree or disagree | 45 | 16.2 | 83 |
| Disagree | 28 | 10.1 | 93.1 |
| Strongly disagree | 12 | 4.3 | 97.5 |
| No response | 7 | 2.5 | 100 |
| Total | 277 | 100 | |

| Q 5.03 Identified specific areas where feedback showed that improvements were necessary | | | |
|------------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 37 | 13.4 | 13.4 |
| Agree | 145 | 52.3 | 65.7 |
| Neither agree or disagree | 58 | 20.9 | 86.6 |
| Disagree | 17 | 6.1 | 92.8 |
| Strongly disagree | 12 | 4.3 | 97.1 |
| No response | 8 | 2.9 | 100 |
| Total | 277 | 100 | |

| Q 5.04 Wrote clear, specific quality improvement goals and objectives towards them | | | |
|-------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 33 | 11.9 | 11.9 |
| Agree | 138 | 49.8 | 61.7 |
| Neither agree or disagree | 56 | 20.2 | 81.9 |
| Disagree | 28 | 10.1 | 92.1 |
| Strongly disagree | 12 | 4.3 | 96.4 |
| No response | 10 | 3.6 | 100 |
| Total | 277 | 100 | |

| Q 5.05 Saw SQMS as the mechanism to achieve, or work towards those goals | | | |
|---------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 41 | 14.8 | 14.8 |
| Agree | 109 | 39.4 | 54.2 |
| Neither agree or disagree | 66 | 23.8 | 78 |
| Disagree | 33 | 11.9 | 89.9 |
| Strongly disagree | 20 | 7.2 | 97.1 |
| No response | 8 | 2.9 | 100 |
| Total | 277 | 100 | |

| Q 5.06 Established measurement techniques to monitor progress against the quality goals | | | |
|------------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 26 | 9.4 | 9.4 |
| Agree | 122 | 44.0 | 53.4 |
| Neither agree or disagree | 68 | 24.5 | 78 |
| Disagree | 33 | 11.9 | 89.9 |
| Strongly disagree | 18 | 6.5 | 96.4 |
| No response | 10 | 3.6 | 100 |
| Total | 277 | 100 | |

| Q 5.07 Introduced both short and long-term, customer satisfaction-driven quality plans | | | |
|-----------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 16 | 5.8 | 5.8 |
| Agree | 97 | 35 | 40.8 |
| Neither agree or disagree | 91 | 32.9 | 73.6 |
| Disagree | 43 | 15.5 | 89.2 |
| Strongly disagree | 20 | 7.2 | 96.4 |
| No response | 10 | 3.6 | 100 |
| Total | 277 | 100 | |

| Q 5.08 Introduced management systems to identify customer requirements | | | |
|-------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 16 | 5.8 | 5.8 |
| Agree | 100 | 36.1 | 41.9 |
| Neither agree or disagree | 91 | 32.9 | 74.7 |
| Disagree | 38 | 13.7 | 88.4 |
| Strongly disagree | 23 | 8.3 | 96.8 |
| No response | 9 | 3.2 | 100 |
| Total | 277 | 100 | |

| Q 5.09 Introduced management systems to evaluate improvements in customer satisfaction | | | |
|-----------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 25 | 9.0 | 9.0 |
| Agree | 116 | 41.9 | 50.9 |
| Neither agree or disagree | 72 | 26 | 76.9 |
| Disagree | 35 | 12.6 | 89.5 |
| Strongly disagree | 19 | 6.9 | 96.4 |
| No response | 10 | 3.6 | 100 |
| Total | 277 | 100 | |

| Q 6.01 The Auditor(s) demonstrates a wide knowledge of training and related issues | | | |
|-------------------------------------------------------------------------------------------|------------|------------|-------|
| Category | Freq | % | Cum % |
| Strongly agree | 48 | 17.3 | 17.3 |
| Agree | 116 | 41.9 | 59.2 |
| Neither agree or disagree | 71 | 25.6 | 84.8 |
| Disagree | 20 | 7.2 | 92.1 |
| Strongly disagree | 18 | 6.5 | 98.6 |
| No response | 4 | 1.4 | 100 |
| Total | 277 | 100 | |

| Q 6.02 The Auditor(s) looks for opportunities to spread best practice in training | | | |
|------------------------------------------------------------------------------------------|------------|------------|-------|
| Category | Freq | % | Cum % |
| Strongly agree | 38 | 13.7 | 13.7 |
| Agree | 128 | 46.2 | 59.9 |
| Neither agree or disagree | 66 | 23.8 | 83.8 |
| Disagree | 30 | 10.8 | 94.6 |
| Strongly disagree | 10 | 3.6 | 98.2 |
| No response | 5 | 1.8 | 100 |
| Total | 277 | 100 | |

| Q 6.03 The Auditor(s) looks for ways to drive the organisation towards business excellence | | | |
|---------------------------------------------------------------------------------------------------|------------|------------|-------|
| Category | Freq | % | Cum % |
| Strongly agree | 31 | 11.2 | 11.2 |
| Agree | 92 | 33.2 | 44.4 |
| Neither agree or disagree | 86 | 31 | 75.5 |
| Disagree | 43 | 15.5 | 91 |
| Strongly disagree | 20 | 7.2 | 98.2 |
| No response | 5 | 1.8 | 100 |
| Total | 277 | 100 | |

| Q 6.04 The Auditor(s) see him/herself as a developer rather than a policeman | | | |
|-------------------------------------------------------------------------------------|------------|------------|-------|
| Category | Freq | % | Cum % |
| Strongly agree | 43 | 15.5 | 15.5 |
| Agree | 106 | 38.3 | 53.8 |
| Neither agree or disagree | 66 | 23.8 | 77.6 |
| Disagree | 37 | 13.4 | 91 |
| Strongly disagree | 20 | 7.2 | 98.2 |
| No response | 5 | 1.8 | 100 |
| Total | 277 | 100 | |

| Q 6.05 The audit is a natural process that does not require any pre-audit catching-up | | | |
|----------------------------------------------------------------------------------------------|------------|------------|-------|
| Category | Freq | % | Cum % |
| Strongly agree | 21 | 7.6 | 7.6 |
| Agree | 89 | 32.1 | 39.7 |
| Neither agree or disagree | 54 | 19.5 | 59.2 |
| Disagree | 78 | 28.2 | 87.4 |
| Strongly disagree | 30 | 10.8 | 98.2 |
| No response | 5 | 1.8 | 100 |
| Total | 277 | 100 | |

| Q 6.06 The audit process provides an opportunity to benchmark against the best | | | |
|---------------------------------------------------------------------------------------|------------|------------|-------|
| Category | Freq | % | Cum % |
| Strongly agree | 9 | 3.2 | 3.2 |
| Agree | 89 | 32.1 | 35.4 |
| Neither agree or disagree | 76 | 27.4 | 62.8 |
| Disagree | 67 | 24.2 | 87.0 |
| Strongly disagree | 30 | 10.8 | 97.8 |
| No response | 6 | 2.2 | 100 |
| Total | 277 | 100 | |

| Q 6.07 The audit refines our performance indicators to ensure year-on-year improvements | | | |
|------------------------------------------------------------------------------------------------|------------|------------|-------|
| Category | Freq | % | Cum % |
| Strongly agree | 19 | 6.9 | 6.9 |
| Agree | 119 | 43.0 | 49.8 |
| Neither agree or disagree | 66 | 23.8 | 73.6 |
| Disagree | 46 | 16.6 | 90.3 |
| Strongly disagree | 21 | 7.6 | 97.8 |
| No response | 6 | 2.2 | 100 |
| Total | 277 | 100 | |

| Q 6.08 The audit process boosts my confidence in our operations | | | |
|------------------------------------------------------------------------|------------|------------|-------|
| Category | Freq | % | Cum % |
| Strongly agree | 48 | 17.3 | 17.3 |
| Agree | 112 | 40.4 | 57.8 |
| Neither agree or disagree | 54 | 19.5 | 77.3 |
| Disagree | 33 | 11.9 | 89.2 |
| Strongly disagree | 25 | 9.0 | 98.2 |
| No response | 5 | 1.8 | 100 |
| Total | 277 | 100 | |

| Q 7.01 The overall management of the organisation has significantly improved | | | |
|-------------------------------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| Strongly agree | 14 | 5.1 | 5.1 |
| Agree | 84 | 30.3 | 35.4 |
| Neither agree or disagree | 90 | 32.5 | 67.9 |
| Disagree | 56 | 20.2 | 88.1 |
| Strongly disagree | 24 | 8.7 | 96.8 |
| No response | 9 | 3.2 | 100 |
| Total | 277 | 100 | |

| Q 7.02 Trainee satisfaction has significantly improved | | | |
|---------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| Strongly agree | 9 | 3.2 | 3.2 |
| Agree | 54 | 19.5 | 22.7 |
| Neither agree or disagree | 114 | 41.2 | 63.9 |
| Disagree | 62 | 22.4 | 86.3 |
| Strongly disagree | 29 | 10.5 | 96.8 |
| No response | 9 | 3.2 | 100 |
| Total | 277 | 100 | |

| Q 7.03 Market share has increased | | | |
|------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| Strongly agree | 3 | 1.1 | 1.1 |
| Agree | 24 | 8.7 | 9.7 |
| Neither agree or disagree | 112 | 40.4 | 50.2 |
| Disagree | 80 | 28.9 | 79.1 |
| Strongly disagree | 45 | 16.2 | 95.3 |
| No response | 13 | 4.7 | 100 |
| Total | 277 | 100 | |

| Q 7.04 Staff motivation and turnover have improved | | | |
|-----------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| Strongly agree | 5 | 1.8 | 1.8 |
| Agree | 36 | 13 | 14.8 |
| Neither agree or disagree | 116 | 41.9 | 56.7 |
| Disagree | 78 | 28.2 | 84.8 |
| Strongly disagree | 34 | 12.3 | 97.1 |
| No response | 8 | 2.9 | 100 |
| Total | 277 | 100 | |

| Q 7.05 Staff skills and competence levels have been appreciably enhanced | | | |
|---------------------------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| Strongly agree | 10 | 3.6 | 3.6 |
| Agree | 68 | 24.5 | 28.2 |
| Neither agree or disagree | 87 | 31.4 | 59.6 |
| Disagree | 75 | 27.1 | 86.6 |
| Strongly disagree | 30 | 10.8 | 97.5 |
| No response | 7 | 2.5 | 100 |
| Total | 277 | 100 | |

| Q 7.06 People selection methods have improved | | | |
|------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| Strongly agree | 5 | 1.8 | 1.8 |
| Agree | 50 | 18.1 | 19.9 |
| Neither agree or disagree | 103 | 37.2 | 57.0 |
| Disagree | 72 | 26.0 | 83.0 |
| Strongly disagree | 37 | 13.4 | 96.4 |
| No response | 10 | 3.6 | 100 |
| Total | 277 | 100 | |

| Q 7.07 The occurrence of accidents and incidents has been reduced | | | |
|--------------------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| Strongly agree | 8 | 2.9 | 2.9 |
| Agree | 25 | 9.0 | 11.9 |
| Neither agree or disagree | 113 | 40.8 | 52.7 |
| Disagree | 76 | 27.4 | 80.1 |
| Strongly disagree | 46 | 16.6 | 96.8 |
| No response | 9 | 3.2 | 100 |
| Total | 277 | 100 | |

| Q 7.08 Training aids and facilities have been significantly enhanced | | | |
|-----------------------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| Strongly agree | 8 | 2.9 | 2.9 |
| Agree | 53 | 19.1 | 22 |
| Neither agree or disagree | 94 | 33.9 | 56 |
| Disagree | 75 | 27.1 | 83 |
| Strongly disagree | 39 | 14.1 | 97.1 |
| No response | 8 | 2.9 | 100 |
| Total | 277 | 100 | |

| Q 7.09 Administration has been considerably reduced and efficiency increased | | | |
|-------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 3 | 1.1 | 1.1 |
| Agree | 38 | 13.7 | 14.8 |
| Neither agree or disagree | 64 | 23.1 | 37.9 |
| Disagree | 96 | 34.7 | 72.6 |
| Strongly disagree | 67 | 24.2 | 96.8 |
| No response | 9 | 3.2 | 100 |
| Total | 277 | 100 | |

| Q 7.10 Productivity has improved | | | |
|-----------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 3 | 1.1 | 1.1 |
| Agree | 34 | 12.3 | 13.4 |
| Neither agree or disagree | 104 | 37.5 | 50.9 |
| Disagree | 89 | 32.1 | 83 |
| Strongly disagree | 37 | 13.4 | 96.4 |
| No response | 10 | 3.6 | 100 |
| Total | 277 | 100 | |

| Q 7.11 Reduced costs and higher market share have increased profitability p | | | |
|------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 2 | 0.7 | 0.7 |
| Agree | 18 | 6.5 | 7.2 |
| Neither agree or disagree | 96 | 34.7 | 41.9 |
| Disagree | 92 | 33.2 | 75.1 |
| Strongly disagree | 53 | 19.1 | 94.2 |
| No response | 16 | 5.8 | 100 |
| Total | 277 | 100 | |

| Q 7.12 The number receiving training has increased | | | |
|-----------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 10 | 3.6 | 3.6 |
| Agree | 44 | 15.9 | 19.5 |
| Neither agree or disagree | 70 | 25.3 | 44.8 |
| Disagree | 90 | 32.5 | 77.3 |
| Strongly disagree | 51 | 18.4 | 95.7 |
| No response | 12 | 4.3 | 100 |
| Total | 277 | 100 | |

| Q 7.13 Training more closely reflects trainee's identified needs | | | |
|-------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 12 | 4.3 | 4.3 |
| Agree | 72 | 26.0 | 30.3 |
| Neither agree or disagree | 84 | 30.3 | 60.6 |
| Disagree | 62 | 22.4 | 83.0 |
| Strongly disagree | 36 | 13.0 | 96.0 |
| No response | 11 | 4.0 | 100 |
| Total | 277 | 100 | |

| Q 7.14 Number of dissatisfied trainees has decreased | | | |
|-------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 10 | 3.6 | 3.6 |
| Agree | 45 | 16.2 | 19.9 |
| Neither agree or disagree | 110 | 39.7 | 59.6 |
| Disagree | 64 | 23.1 | 82.7 |
| Strongly disagree | 36 | 13 | 95.7 |
| No response | 12 | 4.3 | 100 |
| Total | 277 | 100 | |

| Q 7.15 The design and content of training more closely reflects best practice | | | |
|--------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 12 | 4.3 | 4.3 |
| Agree | 76 | 27.4 | 31.8 |
| Neither agree or disagree | 89 | 32.1 | 63.9 |
| Disagree | 57 | 20.6 | 84.5 |
| Strongly disagree | 31 | 11.2 | 95.7 |
| No response | 12 | 4.3 | 100 |
| Total | 277 | 100 | |

| Q 7.16 Training delivery has improved in clearly measurable ways | | | |
|-------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 10 | 3.6 | 3.6 |
| Agree | 60 | 21.7 | 25.3 |
| Neither agree or disagree | 92 | 33.2 | 58.5 |
| Disagree | 71 | 25.6 | 84.1 |
| Strongly disagree | 31 | 11.2 | 95.3 |
| No response | 13 | 4.7 | 100 |
| Total | 277 | 100 | |

| Q 7.17 Assessment practice has improved in clearly measurable ways | | | |
|---------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 15 | 5.4 | 5.4 |
| Agree | 79 | 28.5 | 33.9 |
| Neither agree or disagree | 76 | 27.4 | 61.4 |
| Disagree | 61 | 22 | 83.4 |
| Strongly disagree | 31 | 11.2 | 94.6 |
| No response | 15 | 5.4 | 100 |
| Total | 277 | 100 | |

| Q 7.18 The reputation of the Organisation in the market place has improved | | | |
|-----------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 14 | 5.1 | 5.1 |
| Agree | 61 | 22.0 | 27.1 |
| Neither agree or disagree | 110 | 39.7 | 66.8 |
| Disagree | 52 | 18.8 | 85.6 |
| Strongly disagree | 32 | 11.6 | 97.1 |
| No response | 8 | 2.9 | 100 |
| Total | 277 | 100 | |

| Q 7.19 The number of positive achievers has increased | | | |
|--------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 6 | 2.2 | 2.2 |
| Agree | 44 | 15.9 | 18.1 |
| Neither agree or disagree | 109 | 39.4 | 57.4 |
| Disagree | 71 | 25.6 | 83 |
| Strongly disagree | 37 | 13.4 | 96.4 |
| No response | 10 | 3.6 | 100 |
| Total | 277 | 100 | |

| Q 7.20 The number of drop-outs from training has decreased | | | |
|-------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 6 | 2.2 | 2.2 |
| Agree | 29 | 10.5 | 12.6 |
| Neither agree or disagree | 108 | 39 | 51.6 |
| Disagree | 88 | 31.8 | 83.4 |
| Strongly disagree | 34 | 12.3 | 95.7 |
| No response | 12 | 4.3 | 100 |
| Total | 277 | 100 | |

| Q 8.01 We measure the overall management of the organisation | | | |
|---------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| No | 73 | 26.4 | 26.4 |
| Yes | 84 | 30.3 | 56.7 |
| No response | 120 | 43.3 | 100 |
| Total | 277 | 100 | |

| Q 8.02 We measure trainee satisfaction | | | |
|-----------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| No | 34 | 12.3 | 12.3 |
| Yes | 126 | 45.5 | 57.8 |
| No response | 117 | 42.2 | 100 |
| Total | 277 | 100 | |

| Q 8.03 We measure market share | | | |
|---------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| No | 69 | 24.9 | 24.9 |
| Yes | 80 | 28.9 | 53.8 |
| No response | 128 | 46.2 | 100 |
| Total | 277 | 100 | |

| Q 8.04 We measure staff motivation and turnover | | | |
|--------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| No | 62 | 22.4 | 22.4 |
| Yes | 91 | 32.9 | 55.2 |
| No response | 124 | 44.8 | 100 |
| Total | 277 | 100 | |

| Q 8.05 We measure staff skills and competence levels | | | |
|-------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| No | 50 | 18.1 | 18.1 |
| Yes | 103 | 37.2 | 55.2 |
| No response | 124 | 44.8 | 100 |
| Total | 277 | 100 | |

| Q 8.06 We measure people selection methods | | | |
|---------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| No | 73 | 26.4 | 26.4 |
| Yes | 72 | 26.0 | 52.3 |
| No response | 132 | 47.7 | 100 |
| Total | 277 | 100 | |

| Q 8.07 We measure the occurrence of accidents and incidents | | | |
|--------------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| No | 31 | 11.2 | 11.2 |
| Yes | 119 | 43.0 | 54.2 |
| No response | 127 | 45.8 | 100 |
| Total | 277 | 100 | |

| Q 8.08 We measure training aids and facilities | | | |
|-------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| No | 55 | 19.9 | 19.9 |
| Yes | 88 | 31.8 | 51.6 |
| No response | 134 | 48.4 | 100 |
| Total | 277 | 100 | |

| Q 8.09 We measure administration and efficiency | | | |
|--------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| No | 75 | 27.1 | 27.1 |
| Yes | 71 | 25.6 | 52.7 |
| No response | 131 | 47.3 | 100 |
| Total | 277 | 100 | |

| Q 8.10 We measure productivity improvement | | | |
|---------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| No | 49 | 17.7 | 17.7 |
| Yes | 94 | 33.9 | 51.6 |
| No response | 134 | 48.4 | 100 |
| Total | 277 | 100 | |

| Q 8.11 We measure reduced costs, market share and profitability | | | |
|------------------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| No | 50 | 18.1 | 18.1 |
| Yes | 88 | 31.8 | 49.8 |
| No response | 139 | 50.2 | 100 |
| Total | 277 | 100 | |

| Q 8.12 We measure the number receiving training | | | |
|--------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| No | 27 | 9.7 | 9.7 |
| Yes | 119 | 43.0 | 52.7 |
| No response | 131 | 47.3 | 100 |
| Total | 277 | 100 | |

| Q 8.13 We measure training more closely reflects trainee's identified needs | | | |
|------------------------------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| No | 54 | 19.5 | 19.5 |
| Yes | 90 | 32.5 | 52.0 |
| No response | 133 | 48.0 | 100 |
| Total | 277 | 100 | |

| Q 8.14 We measure number of dissatisfied trainees | | | |
|----------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| No | 41 | 14.8 | 14.8 |
| Yes | 99 | 35.7 | 50.5 |
| No response | 137 | 49.5 | 100 |
| Total | 277 | 100 | |

| Q 8.15 We measure the design and content of training | | | |
|-------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| No | 63 | 22.7 | 22.7 |
| Yes | 79 | 28.5 | 51.3 |
| No response | 135 | 48.7 | 100 |
| Total | 277 | 100 | |

| Q 8.16 We measure training delivery | | | |
|--------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| No | 59 | 21.3 | 21.3 |
| Yes | 85 | 30.7 | 52.0 |
| No response | 133 | 48.0 | 100 |
| Total | 277 | 100 | |

| Q 8.17 We measure assessment practice | | | |
|----------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| No | 47 | 17.0 | 17.0 |
| Yes | 97 | 35.0 | 52.0 |
| No response | 133 | 48.0 | 100 |
| Total | 277 | 100 | |

| Q 8.18 We measure the reputation of the Organisation in the market place | | | |
|---------------------------------------------------------------------------------|-------------|------------|--------------|
| Category | Freq | % | Cum % |
| No | 75 | 27.1 | 27.1 |
| Yes | 66 | 23.8 | 50.9 |
| No response | 136 | 49.1 | 100 |
| Total | 277 | 100 | |

| Q 8.19 We measure the number of positive achievers | | | |
|-----------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| No | 25 | 9.0 | 9.0 |
| Yes | 119 | 43 | 52 |
| No response | 133 | 48 | 100 |
| Total | 277 | 100 | |

| Q 8.20 We measure the number of drop-outs from training | | | |
|----------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| No | 25 | 9.0 | 9.0 |
| Yes | 114 | 41.2 | 50.2 |
| No response | 138 | 49.8 | 100 |
| Total | 277 | 100 | |

| Q 9.01 There are things that we do purely for evidence for quality audits | | | |
|----------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 51 | 18.4 | 18.4 |
| Agree | 105 | 37.9 | 56.3 |
| Neither agree or disagree | 28 | 10.1 | 66.4 |
| Disagree | 69 | 24.9 | 91.3 |
| Strongly disagree | 23 | 8.3 | 99.6 |
| No response | 1 | 0.4 | 100 |
| Total | 277 | 100 | |

| Q 9.02 Many of the additional activities required for "quality" don't make things better for customers | | | |
|---------------------------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 53 | 19.1 | 19.1 |
| Agree | 100 | 36.1 | 55.2 |
| Neither agree or disagree | 51 | 18.4 | 73.6 |
| Disagree | 59 | 21.3 | 94.9 |
| Strongly disagree | 11 | 4.0 | 98.9 |
| No response | 3 | 1.1 | 100 |
| Total | 277 | 100 | |

| Q 9.03 Some plans and policies are produced solely for the Standard not as working documents | | | |
|-----------------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 35 | 12.6 | 12.6 |
| Agree | 74 | 26.7 | 39.4 |
| Neither agree or disagree | 52 | 18.8 | 58.1 |
| Disagree | 87 | 31.4 | 89.5 |
| Strongly disagree | 26 | 9.4 | 98.9 |
| No response | 3 | 1.1 | 100 |
| Total | 277 | 100 | |

| Q 9.04 We only did what was necessary to get accredited to the Standard | | | |
|--------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 12 | 4.3 | 4.3 |
| Agree | 31 | 11.2 | 15.5 |
| Neither agree or disagree | 53 | 19.1 | 34.7 |
| Disagree | 112 | 40.4 | 75.1 |
| Strongly disagree | 66 | 23.8 | 98.9 |
| No response | 3 | 1.1 | 100 |
| Total | 277 | 100 | |

| Q 9.05 Parts of the Standard don't take practicality into account | | | |
|--------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 41 | 14.8 | 14.8 |
| Agree | 88 | 31.8 | 46.6 |
| Neither agree or disagree | 71 | 25.6 | 72.2 |
| Disagree | 62 | 22.4 | 94.6 |
| Strongly disagree | 12 | 4.3 | 98.9 |
| No response | 3 | 1.1 | 100 |
| Total | 277 | 100 | |

| Q 9.06 Often the auditor(s) doesn't understand the realities of delivering training in our position | | | |
|------------------------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 37 | 13.4 | 13.4 |
| Agree | 55 | 19.9 | 33.2 |
| Neither agree or disagree | 65 | 23.5 | 56.7 |
| Disagree | 89 | 32.1 | 88.8 |
| Strongly disagree | 26 | 9.4 | 98.2 |
| No response | 5 | 1.8 | 100 |
| Total | 277 | 100 | |

Q 9.07 If we want to make an improvement it takes too much time and effort to change the system

| Category | Freq | % | Cum% |
|---------------------------|------------|------------|------|
| Strongly agree | 7 | 2.5 | 2.5 |
| Agree | 24 | 8.7 | 11.2 |
| Neither agree or disagree | 67 | 24.2 | 35.4 |
| Disagree | 120 | 43.3 | 78.7 |
| Strongly disagree | 56 | 20.2 | 98.9 |
| No response | 3 | 1.1 | 100 |
| Total | 277 | 100 | |

Q 9.08 Quality is only important when financial and numerical targets are being met

| Category | Freq | % | Cum% |
|---------------------------|------------|------------|------|
| Strongly agree | 8 | 2.9 | 2.9 |
| Agree | 13 | 4.7 | 7.6 |
| Neither agree or disagree | 41 | 14.8 | 22.4 |
| Disagree | 119 | 43 | 65.3 |
| Strongly disagree | 92 | 33.2 | 98.6 |
| No response | 4 | 1.4 | 100 |
| Total | 277 | 100 | |

Q 9.09 Quality is driven more by cost reduction than customer satisfaction

| Category | Freq | % | Cum% |
|---------------------------|------------|------------|------|
| Strongly agree | 6 | 2.2 | 2.2 |
| Agree | 14 | 5.1 | 7.2 |
| Neither agree or disagree | 35 | 12.6 | 19.9 |
| Disagree | 128 | 46.2 | 66.1 |
| Strongly disagree | 89 | 32.1 | 98.2 |
| No response | 5 | 1.8 | 100 |
| Total | 277 | 100 | |

Q 9.10 No-one thinks about quality until six weeks before the audit and then there's a panic

| Category | Freq | % | Cum% |
|---------------------------|------------|------------|------|
| Strongly agree | 7 | 2.5 | 2.5 |
| Agree | 20 | 7.2 | 9.7 |
| Neither agree or disagree | 36 | 13 | 22.7 |
| Disagree | 120 | 43.3 | 66.1 |
| Strongly disagree | 90 | 32.5 | 98.6 |
| No response | 4 | 1.4 | 100 |
| Total | 277 | 100 | |

Q 9.11 Auditors try to catch us out rather than help us

| Category | Freq | % | Cum% |
|---------------------------|------------|------------|------|
| Strongly agree | 11 | 4.0 | 4 |
| Agree | 27 | 9.7 | 13.7 |
| Neither agree or disagree | 57 | 20.6 | 34.3 |
| Disagree | 103 | 37.2 | 71.5 |
| Strongly disagree | 75 | 27.1 | 98.6 |
| No response | 4 | 1.4 | 100 |
| Total | 277 | 100 | |

Q 9.12 If you can talk a good game you'll get through any audit

| Category | Freq | % | Cum% |
|---------------------------|------------|------------|------|
| Strongly agree | 11 | 4.0 | 4 |
| Agree | 23 | 8.3 | 12.3 |
| Neither agree or disagree | 51 | 18.4 | 30.7 |
| Disagree | 113 | 40.8 | 71.5 |
| Strongly disagree | 75 | 27.1 | 98.6 |
| No response | 4 | 1.4 | 100 |
| Total | 277 | 100 | |

Q 9.13 Paperwork and processes are more important than actual training delivery

| Category | Freq | % | Cum% |
|---------------------------|------------|------------|------|
| Strongly agree | 30 | 10.8 | 10.8 |
| Agree | 37 | 13.4 | 24.2 |
| Neither agree or disagree | 39 | 14.1 | 38.3 |
| Disagree | 84 | 30.3 | 68.6 |
| Strongly disagree | 84 | 30.3 | 98.9 |
| No response | 3 | 1.1 | 100 |
| Total | 277 | 100 | |

Q 9.14 A lot of the time spent on standards and audits would be better spent on development

| Category | Freq | % | Cum% |
|---------------------------|------------|------------|------|
| Strongly agree | 44 | 15.9 | 15.9 |
| Agree | 79 | 28.5 | 44.4 |
| Neither agree or disagree | 67 | 24.2 | 68.6 |
| Disagree | 60 | 21.7 | 90.3 |
| Strongly disagree | 24 | 8.7 | 98.9 |
| No response | 3 | 1.1 | 100 |
| Total | 277 | 100 | |

| Q 9.15 Most of the policies and procedures have little relevance to day-to-day activities | | | |
|--------------------------------------------------------------------------------------------------|------------|------------|------|
| Category | Freq | % | Cum% |
| Strongly agree | 14 | 5.1 | 5.1 |
| Agree | 27 | 9.7 | 14.8 |
| Neither agree or disagree | 64 | 23.1 | 37.9 |
| Disagree | 125 | 45.1 | 83 |
| Strongly disagree | 43 | 15.5 | 98.6 |
| No response | 4 | 1.4 | 100 |
| Total | 277 | 100 | |

| Q 9.16 It's difficult to get individuals to take ownership for quality procedures and processes | | | |
|--------------------------------------------------------------------------------------------------------|------------|------------|------|
| Category | Freq | % | Cum% |
| Strongly agree | 17 | 6.1 | 6.1 |
| Agree | 71 | 25.6 | 31.8 |
| Neither agree or disagree | 55 | 19.9 | 51.6 |
| Disagree | 103 | 37.2 | 88.8 |
| Strongly disagree | 27 | 9.7 | 98.6 |
| No response | 4 | 1.4 | 100 |
| Total | 277 | 100 | |

| Q 9.17 New organisations get contracts despite not having SQMS | | | |
|-----------------------------------------------------------------------|------------|------------|------|
| Category | Freq | % | Cum% |
| Strongly agree | 47 | 17.0 | 17 |
| Agree | 47 | 17.0 | 33.9 |
| Neither agree or disagree | 124 | 44.8 | 78.7 |
| Disagree | 27 | 9.7 | 88.4 |
| Strongly disagree | 8 | 2.9 | 91.3 |
| No response | 24 | 8.7 | 100 |
| Total | 277 | 100 | |

| Q 10.01 How many staff hours are spent preparing for the annual audit? | | | |
|-------------------------------------------------------------------------------|------------|------------|------|
| Category | Freq | % | Cum% |
| >100 | 31 | 11.2 | 11.2 |
| 50-100 | 46 | 16.6 | 27.8 |
| 10-50 | 135 | 48.7 | 76.5 |
| 0-10 | 56 | 20.2 | 96.8 |
| No response | 9 | 3.2 | 100 |
| Total | 277 | 100 | |

| Q 10.02 Additionally, how many staff hours a year are spent maintaining SQMS ? | | | |
|---------------------------------------------------------------------------------------|------------|------------|------|
| Category | Freq | % | Cum% |
| >100 | 65 | 23.5 | 23.5 |
| 50-100 | 72 | 26.0 | 49.5 |
| 10-50 | 90 | 32.5 | 81.9 |
| 0-10 | 38 | 13.7 | 95.7 |
| No response | 12 | 4.3 | 100 |
| Total | 277 | 100 | |

| Q 10.03 Additionally, how many staff hours are spent accompanying the Auditor? | | | |
|---------------------------------------------------------------------------------------|------------|------------|------|
| Category | Freq | % | Cum% |
| >100 | 2 | 0.7 | 0.7 |
| 50-100 | 8 | 2.9 | 3.6 |
| 10-50 | 122 | 44.0 | 47.7 |
| 0-10 | 137 | 49.5 | 97.1 |
| No response | 8 | 2.9 | 100 |
| Total | 277 | 100 | |

| Q 10.04 Without SQMS how many staff hours would be spent on quality matters? | | | |
|-------------------------------------------------------------------------------------|------------|------------|------|
| Category | Freq | % | Cum% |
| >100 | 88 | 31.8 | 31.8 |
| 50-100 | 65 | 23.5 | 55.2 |
| 10-50 | 75 | 27.1 | 82.3 |
| 0-10 | 24 | 8.7 | 91 |
| No response | 25 | 9.0 | 100 |
| Total | 277 | 100 | |

| Q 10.05 How many days does the annual audit take? | | | |
|----------------------------------------------------------|------------|------------|------|
| Category | Freq | % | Cum% |
| >10 | 4 | 1.4 | 1.4 |
| 6-10 | 21 | 7.6 | 9 |
| 3-5 | 131 | 47.3 | 56.3 |
| 1-2 | 113 | 40.8 | 97.1 |
| No response | 8 | 2.9 | 100 |
| Total | 277 | 100 | |

| Q 10.06 How much of the total time spent on SQMS matters is budgeted for? | | | |
|----------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| >60% | 32 | 11.6 | 11.6 |
| 30-60% | 26 | 9.4 | 20.9 |
| 10-33% | 37 | 13.4 | 34.3 |
| <10% | 155 | 56 | 90.3 |
| No response | 27 | 9.7 | 100 |
| Total | 277 | 100 | |
| >60% | 32 | 11.6 | 11.6 |

| Q 10.07 As a means of improving your business, do you believe that this time is: | | | |
|-----------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Wasted | 15 | 5.4 | 5.4 |
| Not very useful | 76 | 27.4 | 32.9 |
| Useful | 136 | 49.1 | 81.9 |
| Very useful | 41 | 14.8 | 96.8 |
| No response | 9 | 3.2 | 100 |
| Total | 277 | 100 | |

| Q 11.01 Accurately measure and quantify every aspect of potential quality improvement | | | |
|----------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 8 | 2.9 | 2.9 |
| Agree | 39 | 14.1 | 17 |
| Neither agree or disagree | 102 | 36.8 | 53.8 |
| Disagree | 95 | 34.3 | 88.1 |
| Strongly disagree | 18 | 6.5 | 94.6 |
| No response | 15 | 5.4 | 100 |
| Total | 277 | 100 | |

| Q 11.02 Accurately measure and quantify the costs of maintaining the SQMS accreditation | | | |
|------------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 14 | 5.1 | 5.1 |
| Agree | 60 | 21.7 | 26.7 |
| Neither agree or disagree | 75 | 27.1 | 53.8 |
| Disagree | 96 | 34.7 | 88.4 |
| Strongly disagree | 19 | 6.9 | 95.3 |
| No response | 13 | 4.7 | 100 |
| Total | 277 | 100 | |

| Q 11.03 Believe SQMS costs will be recovered through improved performance in 1 to 3 years | | | |
|--------------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 5 | 1.8 | 1.8 |
| Agree | 42 | 15.2 | 17 |
| Neither agree or disagree | 83 | 30 | 46.9 |
| Disagree | 92 | 33.2 | 80.1 |
| Strongly disagree | 47 | 17 | 97.1 |
| No response | 8 | 2.9 | 100 |
| Total | 277 | 100 | |

| Q 11.04 Believe SQMS costs will be recovered through improved performance in under 10 yrs | | | |
|--------------------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 12 | 4.3 | 4.3 |
| Agree | 33 | 11.9 | 16.2 |
| Neither agree or disagree | 92 | 33.2 | 49.5 |
| Disagree | 84 | 30.3 | 79.8 |
| Strongly disagree | 45 | 16.2 | 96 |
| No response | 11 | 4.0 | 100 |
| Total | 277 | 100 | |

| Q 11.05 Believe SQMS costs will not be recovered at all | | | |
|----------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 56 | 20.2 | 20.2 |
| Agree | 60 | 21.7 | 41.9 |
| Neither agree or disagree | 80 | 28.9 | 70.8 |
| Disagree | 40 | 14.4 | 85.2 |
| Strongly disagree | 33 | 11.9 | 97.1 |
| No response | 8 | 2.9 | 100 |
| Total | 277 | 100 | |

| Q 11.06 Not believe it's possible/productive to measure and quantify these costs | | | |
|-----------------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 20 | 7.2 | 7.2 |
| Agree | 89 | 32.1 | 39.4 |
| Neither agree or disagree | 94 | 33.9 | 73.3 |
| Disagree | 39 | 14.1 | 87.4 |
| Strongly disagree | 22 | 7.9 | 95.3 |
| No response | 13 | 4.7 | 100 |
| Total | 277 | 100 | |

| Q 11.07 Believe SQMS represents good value for the training "industry" | | | |
|-------------------------------------------------------------------------------|-------------|------------|-------------|
| Category | Freq | % | Cum% |
| Strongly agree | 13 | 4.7 | 4.7 |
| Agree | 67 | 24.2 | 28.9 |
| Neither agree or disagree | 80 | 28.9 | 57.8 |
| Disagree | 65 | 23.5 | 81.2 |
| Strongly disagree | 41 | 14.8 | 96 |
| No response | 11 | 4.0 | 100 |
| Total | 277 | 100 | |

| Q12.00 Please use this space to add any additional comments that you may wish to make: | | | |
|-----------------------------------------------------------------------------------------------|-------------|----------|-------------|
| Category | Freq | % | Cum% |
| Questioning SQMS Scotland's role | 1 | 0.4 | 0.4 |
| Negative about SQMS relevance/ value/credibility | 43 | 15.5 | 15.9 |
| Neutral about SQMS negative about auditing/consistency | 10 | 3.6 | 19.5 |
| Neutral about SQMS negative about cost | 8 | 2.9 | 22.4 |
| Positive about quality management negative about SQMS | 1 | 0.4 | 22.7 |
| Positive about quality negative about duplication | 25 | 9.0 | 31.8 |
| Positive about SQMS negative about certain aspects | 11 | 4.0 | 35.7 |
| Positive about SQMS negative about bureaucracy | 5 | 1.8 | 37.5 |
| Positive about Quality & SQMS negative about cost | 12 | 4.3 | 41.9 |
| Positive about Quality & SQMS no negatives | 19 | 6.9 | 48.7 |
| No comments | 142 | 51.3 | 100 |