

AN APPROACH TO THE EVALUATION OF THE EFFECTIVENESS OF MANAGEMENT
INFORMATION SYSTEMS WITH PARTICULAR APPLICATION TO PUBLIC
UTILITIES AND OTHER ORGANISATIONS IN NATIONALISED
INDUSTRIES WITHIN THE UNITED KINGDOM

(APPENDICES)

A Thesis submitted to the
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for the Degree of
Doctor of Philosophy

by

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APPENDICES

APPENDIX (6.1)

Nationalised Industries And State Holding Companies
And Their SubsidiariesA. Nationalised Industries and State Holding Companies*

- (1) Electricity Council & Boards
- (2) Post Office
- (3) British Steel Corporation
- (4) National Enterprise Board
- (5) National Coal Board
- (6) British Gas Corporation
- (7) British Railways Board
- (8) British Airways
- (9) National Bus Company
- (10) South of Scotland Electricity Board
- (11) National Freight Corporation
- (12) London Transport Executive
- (13) British Broadcasting Corporation
- (14) North of Scotland Hydro-Electric Board
- (15) British Airports Authority
- (16) British Transport Docks Board
- (17) Scottish Transport Group
- (18) British National Oil Corporation
- (19) Independent Broadcasting Authority
- (20) British Aerospace[†]
- (21) British Shipbuilders[†]

* Source: "The Times 1000, 1977-1978", (London: Times Books, 1978).

† Added by the researcher.

B Nationalised Industries And State Holding Companies
And Their Subsidiaries*

(1) ELECTRICITY COUNCIL BOARDS

- 1.0 Electricity Council & Boards
- 1.1 Electricity Board - London
- 1.2 Electricity Board - South Eastern
- 1.3 Electricity Board - Southern
- 1.4 Electricity Board - South Western
- 1.5 Electricity Board - Eastern
- 1.6 Electricity Board - East Midlands
- 1.7 Electricity Board - Midlands
- 1.8 Electricity Board - South Wales
- 1.9 Electricity Board - Merseyside & North Wales
- 1.10 Electricity Board - Yorkshire
- 1.11 Electricity Board - North Eastern
- 1.12 Electricity Board - North Western

(2) POST OFFICE

- 2.0 Post Office - Central Headquarters
- 2.1 Postal Headquarters
- 2.2 Scottish Postal Board
- 2.3 Wales and The Marches Postal Board
- 2.4 Northern Ireland Postal and Telecommunications Board
- 2.5 London Postal Region
- 2.6 Eastern Postal Region
- 2.7 Midlands Postal Board
- 2.8 North Eastern Postal Board
- 2.9 North Western Postal Board
- 2.10 South Eastern Postal Region
- 2.11 South Western Postal Region
- 2.12 Telecommunications Headquarters
- 2.13 Scottish Telecommunications Board
- 2.14 Wales and The Marches Telecommunications Board
- 2.15 London Telecommunications Region
- 2.16 London Inland Telegraphs
- 2.17 Eastern Telecommunications Region
- 2.18 Midlands Telecommunications Region
- 2.19 North Eastern Telecommunications Region
- 2.20 North West Telecommunications Board
- 2.21 South Eastern Telecommunications Region
- 2.22 South Western Telecommunications Region
- 2.23 National Giro
- 2.24 National Savings Bank
- 2.25 Savings Certificate & Save As You Earn Office
- 2.26 Bonds & Stock Office

* Source: Who Owns Whom - Volume 1, (London: Publications Division, Dun & Bradstreet Ltd., 1978);

Kompass. Company Information, (W. Sussex: Kompass Publishers Ltd., 1978);

Kelly's Manufacturers and Merchants Director, (Surrey: Kelly's Directories Ltd., 1978);

Key British Enterprises, Volume 1, (London: Publications Division, Dun & Bradstreet Ltd., 1977/1978);

Samson Management Information Manual, (London: Croner Publications Ltd)

(3) BRITISH STEEL CORPORATION

- 3.0 British Steel Corporation
- 3.1 British Steel Corporation (Chemicals)
- 3.2 Bitmac Ltd
- 3.3 British Steel Corporation (Tubes) Ltd.
- 3.4 Redpath Dorman Long Ltd.
- 3.5 Redpath Dorman Long (Contracting)
- 3.6 Redpath Dorman Long (North Sea) Ltd.
- 3.7 Stanton & Stavely Exports Ltd.

(4) NATIONAL ENTERPRISE BOARD

- 4.0 National Enterprise Board
- 4.1 British Leyland Ltd.
- 4.2 British Leyland Motor Corp. Ltd.
- 4.3 British Leyland Truck & Bus Division Ltd.
- 4.4 Rolls-Royce Ltd.
- 4.5 Alvis Ltd.
- 4.6 Aveling Bradford Ltd.
- 4.7 Aveling Marshall Ltd.
- 4.8 Bedford of Belton Ltd.
- 4.9 Goodwin Barsly & Co. Ltd.
- 4.10 Lyne Ltd.
- 4.11 Coventry Climax Engines Ltd.
- 4.12 Nuffield Press Ltd.
- 4.13 Prestcold Ltd.
- 4.14 Prestcold Central Ltd.
- 4.15 Prestcold International Ltd.
- 4.16 Prestcold Southern
- 4.17 Searle Manufacturing Co. Ltd.
- 4.18 Self-Changing Gears Ltd.
- 4.19 Data Recording Instruments Ltd.
- 4.20 Ferranti Ltd.
- 4.21 Ferranti Engineering Ltd.
- 4.22 Frenckay Ltd.
- 4.23 Herbert Ltd.
- 4.24 Herbert Controls and Instruments
- 4.25 Mollart Engineering Co. Ltd.

(5) NATIONAL COAL BOARD

- 5.0 National Coal Board
- 5.1 National Coal Board - England and Wales
- 5.2 National Coal Board - Scotland
- 5.3 National Smokeless Fuels Ltd.
- 5.4 Filtracite Ltd.
- 5.5 J.H. Sankey & Son Ltd.
- 5.6 Pollard Ray and Sampsons Ltd.
- 5.7 Sankey (Central) Ltd.
- 5.8 Sankey Jonchu Ltd.
- 5.9 Sankey (Scotland) Ltd.

(6) BRITISH GAS CORPORATION

6.0 British Gas Corporation

(7) BRITISH RAILWAYS BOARD

7.0 British Railway Board
 7.1 British Rail Engineering Ltd.
 7.2 British Rail Hovercraft Ltd.
 7.3 British Transport Hotels Ltd.

(8) BRITISH AIRWAYS

8.0 British Airways
 8.1 British Airways Helicopters Ltd.
 8.2 Alta Holidays Ltd.
 8.3 International Aeradio Ltd.
 8.4 Digital Systems Ltd.

(9) NATIONAL BUS COMPANY

9.0 National Bus Company
 9.1 Bristol Omnibus Co. Ltd.
 9.2 The City of Oxford Motor Services Ltd.
 9.3 Crosville Motor Services Ltd.
 9.4 Cumberland Motor Services Ltd.
 9.5 East Kent Road Car Co. Ltd.
 9.6 East Midland Motor Services Ltd.
 9.7 East Yorkshire Motor Services Ltd.
 9.8 Eastern Counties Omnibus Co. Ltd.
 9.9 The Eastern National Omnibus Co. Ltd.
 9.10 Hants & Dorset Motor Services Ltd.
 9.11 Lincolnshire Road Car Co. Ltd.
 9.12 The Meidstone & District Motor Services Ltd.
 9.13 Midland Red Omnibus Co. Ltd.
 9.14 National Travel (NBC) Ltd.
 9.15 National Travel (North East) Ltd.
 9.16 National Travel (South East) Ltd.
 9.17 The Northern General Transport Co. Ltd.
 9.18 The Potteries Motor Traction Co. Ltd.
 9.19 The South Wales Transport Co. Ltd.
 9.20 Southdown Motor Services Ltd.
 9.21 The Thames Valley & Aldershot Omnibus
 9.22 Trent Motor Traction Co. Ltd.
 9.23 United Automobile Services Ltd.
 9.24 United Counties Omnibus Co. Ltd.
 9.25 West Riding Automobile Co. Ltd.
 9.26 West Yorkshire Road Co. Ltd.

(10) SOUTH OF SCOTLAND ELECTRICITY BOARD

10.0 South of Scotland Electricity Board

(11) NATIONAL FREIGHT CORPORATION

- 11.0 National Freight Corporation
- 11.1 British Transport Services Group
- 11.2 Eastern British Road Services Ltd.
- 11.3 Islandlink Ltd.
- 11.4 Midlands British Road Services Ltd.
- 11.5 Morton's (B.R.S.) Ltd.
- 11.6 North Eastern British Road Services Ltd.
- 11.7 North Western British Road Services Ltd.
- 11.8 Road Services (Tyne Tees) Ltd.
- 11.9 Southern British Road Services Ltd.
- 11.10 Western British Road Services Ltd.
- 11.11 Ferry Trailers Ltd.
- 11.12 Freightliners Ltd.
- 11.13 Lawther & Harvey Ltd.
- 11.14 Pickfords Heavy Haulage Ltd.
- 11.15 Pickfords Removals Ltd.
- 11.16 Tankfreight Ltd.
- 11.17 Caledonian Bulk Liquids Ltd.
- 11.18 Felixstowe Tank Developments Ltd.
- 11.19 Pickfords Tank Haulage Ltd.
- 11.20 Tayforth Ltd.
- 11.21 Road Services (Caledonian) Ltd.
- 11.22 Road Services (Forth) Ltd.
- 11.23 Scottish Road Services Ltd.
- 11.24 Waste Management Ltd.
- 11.25 Bridges Transport Ltd.
- 11.26 Tartan Arrow Service Ltd.
- 11.27 Hanson Haulage Ltd.

(12) LONDON TRANSPORT EXECUTIVE

- 12.0 London Transport Executive

(13) BRITISH BROADCASTING CORPORATION

- 13.0 British Broadcasting Corporation
- 13.1 BBC Television
- 13.2 BBC Radio
- 13.3 BBC External Broadcasting

(14) NORTH OF SCOTLAND HYDRO-ELECTRIC BOARD

- 14.0 North of Scotland Hydro-Electric Board

(15) BRITISH AIRPORTS AUTHORITY

- 15.0 British Airports Authority

(16) BRITISH TRANSPORT DOCKS BOARD

- 16.0 British Transport Docks Board
- 16.1 British Transport Docks - Humber
- 16.2 British Transport Docks - Southampton
- 16.3 British Transport Docks - South Wales

(17) SCOTTISH TRANSPORT GROUP

- 17.0 Scottish Bus Group Ltd.
- 17.1 W. Alexander & Sons (Fife) Ltd.
- 17.2 W. Alexander & Sons (Midlands) Ltd.
- 17.3 General S.M.T. Co. Ltd.
- 17.4 Highland Omnibus Ltd.
- 17.5 Western S.M.T. Co. Ltd.

(18) BRITISH NATIONAL OIL CORPORATION

- 18.0 British National Oil Corporation

(19) INDEPENDENT BROADCASTING AUTHORITY

- 19.0 Independent Broadcasting Authority

(20) BRITISH AEROSPACE

- 20.0 British Aerospace
- 20.1 British Aircraft Corporation (Guided Weapons) Ltd.
- 20.2 British Aircraft Corporation (Preston) Ltd.
- 20.3 Hawker Siddeley Dynamics Engineering
- 20.4 Scottish Aviation Ltd.

(21) BRITISH SHIPBUILDERS

- 21.0 British Shipbuilders
- 21.1 Swan Hunter Shipbuilders
- 21.2 Barclay Curle & Co. Ltd.
- 21.3 Clelands Shipbuilding Co. Ltd.
- 21.4 Goole Shipbuilding & Repairing Co. Ltd.
- 21.5 The Grangemouth Dockyard Co. Ltd.
- 21.6 Smith's Dock Co. Ltd.
- 21.7 M.W. Swinburne & Sons Ltd.
- 21.8 Walksend Slipway & Engineering
- 21.9 Vickers Shipbuilding Group Ltd.
- 21.10 Vosper Thornycroft Ltd.
- 21.11 Lithgows Ltd.
- 21.12 Appledore Shipbuilders Ltd.
- 21.13 Austin & Pickersgill Ltd.
- 21.14 Brooke Marine Ltd.

(21) BRITISH SHIPBUILDERS (continued)

- 21.15 Cammell Laird Shipbuilders Ltd.
- 21.16 Hall Russell & Company Ltd.
- 21.17 Campbeltown Shipyard Ltd.
- 21.18 Perenco Co. Ltd.
- 21.19 Robb Caledon Shipbuilders Ltd.
- 21.20 Scotts' Shipbuildings Co. Ltd.
- 21.21 Sunderland Shipbuilders Ltd.
- 21.22 Barrow Shipbuilding and Engineering
- 21.23 Barrow Engineering Works
- 21.24 Yarrow (Shipbuilders) Ltd.

APPENDIX (6.2)

First Request For Co-operation Sent To Managing Director
Or The Person Of Similar Position (First Batch)*Department of Accountancy and Business Law**Head of Department: Professor J M S Risk*

UNIVERSITY OF STIRLING STIRLING FK9 4LA SCOTLAND | TELEPHONE: STIRLING (0786) 3171

Dear Sir,

One of our Ph.D. students, Mr. M. Meguid, is conducting research into "The Effectiveness of Management Accounting Systems" (The Internal Accounting Reports) in public enterprise and nationalised industries.

This research is an attempt to find the views of managers (as users of information) and subordinate or assistant managers (as persons affected by it) regarding the internal accounting reports used in planning and control, as well as the views of accountants (as providers of information) regarding the informational requirements of managers. The findings of this research we hope will give some indication of the effective aspects of these reports, so that the strengths can be highlighted, and those aspects which may need to be improved.

It is not one of the purposes of this research to obtain any confidential information in respect of the organisations from which the participants in this study will be selected.

The views of participants will be obtained by means of mailed questionnaires which should take about 30 minutes to complete. Needless to say, all information in any replies will be strictly confidential, nor will participants or their organisations be identified in the presentation of the results.

The conclusions obtained by this research will depend entirely upon an adequate response by those who are asked to take part in it and consequently we would appreciate your help and assistance in providing the names and the business postal addresses of the following:

- (1) Head of the management accounting department, or the chief accountant with special responsibility for internal accounting reports or any other person possessing this responsibility.
- (2) Four senior executives of differing functions (e.g., in an industrial company: production, sales/marketing, etc.) who are involved extensively in tactical planning and management control
- (3) Four assistant managers of similar functions.
- (4) Four accountants (seniors, if possible) concerned with responsibility for preparation of the internal accounting reports.

If you would like any further information relating to the project or to the questionnaires, please do not hesitate to contact us when we will be delighted to give answers to your queries. We will supply you, of course, with a copy of the research findings.

Thanking you in anticipation of your co-operation.

Yours faithfully,

J.A. STITT
Senior Lecturer

APPENDIX (6.3)

First Request For Co-operation Sent To Managing Director
Or The Person Of Similar Position (Second Batch)*Department of Accountancy and Business Law**Head of Department: Professor J M S Risk*

UNIVERSITY OF STIRLING STIRLING FK9 4LA SCOTLAND | TELEPHONE: STIRLING (0786) 3171

Our ref: JAS/MM/R

Dear Sir,

One of our Ph.D. students, Mr. M. Meguid, is conducting research into "The Effectiveness of Management Accounting Systems" in public enterprise and nationalised industries. The purpose of this research being an attempt to find the views of managers, as users of information and subordinate or assistant managers as persons affected by it, regarding the internal accounting reports used in planning and control, as well as the views of accountants as providers of information.

It is not one of the purposes of this research to obtain any confidential information in respect of the organisations from which the participants in this study will be selected.

The views of participants will be obtained by means of mailed questionnaires which should take about 30 minutes to complete. Needless to say, all information in any replies will be strictly confidential, nor will participants or their organisations be identified in the presentation of the results.

The conclusions obtained by this research will depend entirely upon an adequate response by those who are asked to take part in it and consequently I would appreciate your help and assistance in providing the names and the business postal addresses of the following:

- (1) Head of the management accounting department, or the chief accountant with special responsibility for internal accounting reports or any other person possessing this responsibility.
- (2) Two accountants, if possible, who are concerned with responsibility for preparation of the internal accounting reports.
- (3) Two senior executives, if possible, of differing functions.
- (4) Two assistants, if possible, to the above.

For your information, I enclose herewith copies of the questionnaires which will be circulated. If you would like any further information relating to the project I will be pleased to supply it. Needless to say you will be sent a copy of the research findings.

Yours faithfully,

J A STITT
Senior Lecturer

APPENDIX (6.4)

Second Request For Co-operation Sent To Managing Director
Or The Person Of Similar Position

Department of Accountancy and Business Law

Head of Department: Professor J M S Risk

UNIVERSITY OF STIRLING STIRLING FK9 4LA SCOTLAND | TELEPHONE: STIRLING (0786) 317

Our ref: JS/MM/R

Dear Sir,

Research Project: The Effectiveness of Management Accounting Systems

I recently sent a letter to you asking for your co-operation in the above research project, and as I have not as yet heard from you I am taking the liberty of writing you further, because the success of this part of the project depends entirely on the co-operation of an adequate number of participants.

I realise how busy you must be, but if it is possible for you to help in the project I will be pleased to hear from you at your convenience.

If you require any further information regarding the project, I will be pleased to supply it.

Yours faithfully,

J A STITT
Senior Lecturer

APPENDIX (6.5)

QUESTIONNAIRE FOR HEAD OF MANAGEMENT ACCOUNTING DEPARTMENT OR THE
PERSON WITH SPECIAL RESPONSIBILITY FOR INTERNAL ACCOUNTING REPORTS

Department of Accountancy and Business Law

Head of Department: Professor J. M. S. Risk

UNIVERSITY OF STIRLING STIRLING FK9 4LA SCOTLAND | TELEPHONE: STIRLING (0756) 5171

ALL INFORMATION WILL BE STRICTLY CONFIDENTIALQUESTIONNAIRE FOR
HEAD OF MANAGEMENT ACCOUNTING DEPARTMENT
OR THE PERSON WITH SPECIAL RESPONSIBILITY
FOR INTERNAL ACCOUNTING REPORTSResearch Into The Effectiveness Of
Management Accounting SystemsYOUR OPINIONS ARE OF UTMOST IMPORTANCE
Would you please share with us in this research projectTo help in following-up replies, would you please
fill in the information below:

- (1) Respondent's name:
- (2) Job title:
- (3) Organisation name:

If you would like a copy of the research findings,
please tick the box at the left.This part will be detached before analysing the information contained
in this questionnaire.

WOULD YOU PLEASE READ THIS SHEET BEFORE COMPLETING THE QUESTIONNAIRE

A. HOW TO FILL IN THE QUESTIONNAIRE

- . Please tick the space beside the appropriate alternative. Unless indicated more than one space may be ticked.
- . With other questions you will find numbers. Please ring the number which most indicates your opinion.
- . Where space has been left, please write in your answer. Use additional sheets if required.

B. DEFINITIONS (for the purpose of this questionnaire)

- . Management Accounting System: the internal accounting reports which provide managers with the accounting information needed for use in planning and control.
- . The Effectiveness of the System: is a measure to determine how satisfactory is the system in providing the specific information for which it is designed.
- . The Efficiency of the System: is the achievement of the purposes of the system at minimum cost.
- . Strategic Planning: the process of deciding company's objectives, and the resources used to achieve them.
- . Tactical Planning: the process of formulating, in more detail, the plans which are already determined in broad outline in the strategic planning.
- . Management Control: concerns the evaluation and adjustment of actual performance in accordance with the plans.
- . Operational Control: the process of ensuring that specific tasks are carried out effectively and efficiently.
- . Manager: an executive at middle management level who is involved extensively in tactical planning and management control and who makes operating and administrative decisions as part of his responsibilities.
- . Manager's decision making style: the strategy by which the manager operates to reach a decision or solve a problem.
 - The analytic style: who reduces a problem to a set of causal relationships and tries to find a solution by using formulae and models.
 - The heuristic style: who emphasizes workable solutions to solve problems. He solves problems through his common sense and relies more heavily on feedback.

- 1 -

(1) In your organisation, is the management accounting system computerized,

- Completely
 Partially
 Not at all

(2) Has your organisation a specialised information function other than the accounting function? YES/NO

IF YES:

a. How is this function described?

- Management Information Systems
 Information and Statistics
 Other; please specify .

b. To whom is the manager of this function directly responsible?

- Chief Executive
 Finance Director
 Other; explain

c. To what degree is the management accounting system integrated with this function:

- Completely integrated
 Partially integrated
 Separate system entirely

(3) What proportion of the total information used by managers is provided by the management accounting system?

- | | | |
|--------------------------|--------------------------|---|
| - In Strategic Planning | <input type="checkbox"/> | % |
| - In Tactical Planning | <input type="checkbox"/> | % |
| - In Management Control | <input type="checkbox"/> | % |
| - In Operational Control | <input type="checkbox"/> | % |

(4) Does your organisation evaluate its management accounting system?

- a. Evaluates the system to determine its effectiveness
 b. Evaluates the system to determine its efficiency
 c. Reviews the system to ensure that the procedures are being followed
 d. Does not evaluate it at all.

If you WICKED (a) please continue, if you DID NOT, please proceed to question No. (10).

(5) How often is the management accounting system evaluated to determine its effectiveness?

Under special circumstances; please specify:

- When operations and activities change
- Computerisation of the current system, or part of it, or use of a new model of computer
- When another additional information system is designed
- Other; please state

Periodically; please specify:

- quarterly
- twice a year
- yearly
- other; please state

(6) When your organisation evaluates the system to determine its effectiveness, does it rely on one or more of the following?

- Questionnaire circulated among managers
- Personal interviews with managers
- Managers' complaints about reports
- Review of the content and format of reports
- Other; please state

How satisfied are you with the method(s) USED which you TICKED?

| | Dissatisfied | | | Satisfied | | | Highly Satisfied |
|----------------------------|--------------|---|---|-----------|---|---|------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Questionnaire circulated | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Personal interviews | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Managers' complaints | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Review of the reports | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Other | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

(7) What criteria are used in determining the effectiveness of the management accounting system?

- Managers' satisfaction with the information provided
- Decisions outcome
- Other; please state

- 3 -

- (8) Is there any report issued on the effectiveness of the management accounting system? YES/NO

IF YES: Does such report point out:

- weaknesses of the current system?
 level of the system's effectiveness in qualitative terms
 (e.g. very good, good, etc.)?
 level of the effectiveness in quantitative terms
 (e.g. percentage: 70%, 80% etc.)?
 comparison with findings of past evaluation?
 other; please state

- (9) In your organisation, who does evaluate the management accounting system to determine its effectiveness?

- Internal auditors
 Management accountants
 System designers
 Outside consultants
 Other; please state

- (10) To what degree have managers participated in the design of the management accounting system?

| | | | | | | |
|------|---|---|----------|---|---|-------------|
| None | | | Somewhat | | | Substantial |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

- (11) In your organisation, is there any specific method(s) applied to ensure that the management accounting system meets the informational needs of managers? YES/NO

IF YES:

- a. What is this method(s)?

- Questionnaire circulated among managers
 Discussions with managers
 Other; please specify

- 4 -

b. How satisfied are you with the method(s) USED which you TICKED?

| | Dissatis- fied | | | Satis- fied | | | Highly Satisfied |
|-----------------------------|-------------------|---|---|----------------|---|---|---------------------|
| - Questionnaire circulated | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Discussions with managers | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Other | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

c. How often is this method(s) used?

_____ Under special circumstances; please specify:

- _____ When operations and activities change
 _____ Computerisation of the current system, or part of it,
 or use of new model of computer
 _____ When another additional information system is designed
 _____ Other; please state

_____ Periodically; please specify:

- _____ quarterly
 _____ twice a year
 _____ yearly
 _____ other; please state

(12) Have some managers ever complained that the management accounting system has not met some of their accounting informational requirements? YES/NO

IF YES: In such cases, is there any procedure followed to reveal whether accountants have known precisely the informational requirements of these managers? YES/NO

(13) In your organisation, is there any specific method(s) used to obtain the views of the principal subordinates (e.g. the assistant managers) regarding the information which has been already provided by the system to their superiors? YES/NO

IF YES: What is this method(s)?

- _____ Questionnaire circulated among the principal subordinates
 _____ Personal interviews with the principal subordinates
 _____ Other; please specify

(14) Please indicate the degree of your agreement with each of the following statements.

| | Strongly disagree | | | | Neutral | | | | Strongly agree |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---|---|---|---------|---|---|--|----------------|
| A. In any evaluation of the effectiveness of an information system: | | | | | | | | | |
| - The key factor is users' satisfaction with the information provided | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| - It is necessary to determine whether the providers of the information have known the users' requirements precisely. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| - It is useful to know the views of assistant managers, as principal subordinates, regarding the information which has already been provided to managers | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| B. Managers' decision-making style (analytic/heuristic) should be taken into account when reports are designed | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| C. An information system can be more effective only if the resources allocated to running it are increased | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| D. The use of psychological tests to determine managers' decision-making styles (analytic/heuristic) is helpful in specifying the amount and mode of presentation preferred of the information required | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |

(15) Is there any method used in your organisation to determine manager's decision-making style (analytic/heuristic). YES/NO

IF YES: What is this method(s)?

- Psychological tests
- Interviews with managers
- Other; please state

(16) Have the different styles of managers in decision-making affected, in one way or another, the format and content of the internal accounting reports which they receive?

| | | | | | | | | |
|------------|---|---|---|----------|---|---|--|-------------|
| Not at all | | | | Somewhat | | | | Substantial |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | 7 |

- 6 -

(17) From the practical and economic point of view, how frequently should the management accounting system be evaluated to determine its effectiveness?

_____ Under special circumstances; please specify:

- _____ When operations and activities change
 _____ Computerisation of the current system, or part of it,
 or use of a new model of computer
 _____ When another additional information system is designed
 _____ Other; please state

_____ Periodically; please specify:

- _____ quarterly
 _____ twice a year
 _____ yearly
 _____ Other, please state

YOUR COMMENTS WOULD BE MUCH APPRECIATED

If you would like to make any further comments, please use the space below and any additional sheets, if required.

MANY THANKS FOR YOUR CO-OPERATION

Please return the completed questionnaire at your earliest convenience.

APPENDIX (6.6)

MANAGER - QUESTIONNAIRE

Department of Accountancy and Business Law

Head of Department: Professor J.M.S. Risk

UNIVERSITY OF STIRLING STIRLING FK9 4LA SCOTLAND | TELEPHONE: STIRLING (0730) 3171

ALL INFORMATION WILL BE STRICTLY CONFIDENTIAL

MANAGER - QUESTIONNAIRE

Research Into The Effectiveness Of
Management Accounting Systems

YOUR OPINIONS ARE OF UTMOST IMPORTANCE
Would you please share with us in this research project

To help in following-up replies, would you please fill
in the information below:

- (1) Respondent's Name:
- (2) Job title:
- (3) Organisation name

If you would like a copy of the research findings,
please tick the box at the left.

WOULD YOU PLEASE READ THIS SHEET BEFORE COMPLETING THE QUESTIONNAIRE

A. HOW TO FILL IN THE QUESTIONNAIRE

- . Please tick the space beside the appropriate alternative. Unless indicated, more than one space may be ticked.
- . With other questions you will find numbers. Please ring the number which most indicates your opinion.
- . Where space has been left, please write in your answer. Use additional sheets if required.

B. DEFINITIONS (for the purpose of this questionnaire)

- . Management Accounting System: the internal accounting reports which provide managers with the accounting information needed for use in planning and control.
- . The Effectiveness of the System: a measure for determining how satisfactory the system is in providing the specific information for which it is designed.
- . The Principal Subordinates: the principal assistants of the manager.
- . Manager's Decision Making Style: the strategy by which the manager operates to reach a decision or solve a problem.
- . The Information Attributes:
 - Relevance: information is related to the decision in hand.
 - Adequacy: amount of detailed information is sufficient.
 - Reliability: confidence in the information. Credibility.
 - Understandability: to be understandable the information must be presented in organised form, in a simple language, and the terminologies used are not in difficult technical terms.
(Report Format)
 - Timeliness: information is available as and when required.
- . Useful Information: information, if it is to be useful, should be relevant, adequate, reliable, understandable, and timely.

- 1 -

(1) What proportion of the total information which you use is provided by:

- The accounting function %
- Your own function %
- Any other functions; please state %
- 100 %

(2) How do you feel about the amount of detailed information in the internal accounting reports which you receive?

| | Too little | | | About right | | | Too much |
|-------------------------------|---------------|---|---|----------------|---|---|-------------|
| - In reports used in planning | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - In reports used in control | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

(3) How many internal accounting reports do you receive?

- | | | | |
|----------------|----------------------|------------------|----------------------|
| Once a week | <input type="text"/> | Once bi-annually | <input type="text"/> |
| Once a month | <input type="text"/> | Once annually | <input type="text"/> |
| Once quarterly | <input type="text"/> | Other? | <input type="text"/> |

(4) Do you feel that the number of the internal accounting reports which you receive has caused "information overload"? YES/NO

IF YES: please indicate with which reports you feel there is overloading.

With reports received:

- | | | | |
|----------------|----------------------|------------------|----------------------|
| Once a week | <input type="text"/> | Once bi-annually | <input type="text"/> |
| Once a month | <input type="text"/> | Once annually | <input type="text"/> |
| Once quarterly | <input type="text"/> | Other? | <input type="text"/> |

(5) How satisfied are you with the frequency of the internal accounting reports which you receive?

You are satisfied with the frequency of:

(If you tick b, c or d, please give the percentage)

- a. All the reports
- b. Most of the reports (70%-99%) %
- c. Some of the reports (40%-69%) %
- d. Few of the reports (1% -39%) %
- e. None at all

(6) How often do you conduct an "expanded search" to obtain accounting information which you feel is relevant to the management of your function and has not been contained in the internal accounting reports which you receive?

| | <u>Never</u> | <u>Seldom</u> | <u>Occasionally</u> | <u>Frequently</u> |
|------------------------------|----------------------|----------------------|----------------------|----------------------|
| Information used in planning | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Information used in control | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |

- 2 -

(7) Do you use all the information contained in the internal accounting reports which you receive? YES/NO

IF NO: What is the reason (or reasons)?

- Some items are irrelevant to your decisions
 Level of reliability (credibility) of some items is unacceptable
 Amount of detail is too much
 Some items in the reports are badly organised
 Some items are out-dated
 Other; please specify

(8) How satisfied are you with the internal accounting reports which you receive?

| | Dissatisfied | | | Satisfied | | | Highly Satisfied |
|---------------------------------------|--------------|---|---|-----------|---|---|------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| <u>Use of the reports in planning</u> | | | | | | | |
| - Relevance | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Adequacy (amount of detail) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Timeliness | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Reliability (credibility) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Format | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Usefulness (overall rating) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Other? _____ | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| <u>Use of the reports in control</u> | | | | | | | |
| - Relevance | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Adequacy (amount of detail) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Timeliness | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Reliability (credibility) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Format | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Usefulness (overall rating) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Other? _____ | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

(9) How often do managers such as yourself ask for accountant's co-operation in the interpretation of the information contained in the internal accounting reports?

Never

Seldom

Occasionally

Frequently

(10) How closely do you feel your interpretation of the information contained in the internal accounting reports coincides with what accountants intend to communicate?

Not at
all

Somewhat
closely

Very
closely

1

2

3

4

5

6

7

- 3 -

(11) To what extent do you feel that accountants' co-operation with managers is necessary in the interpretation of the information contained in the internal accounting reports?

| | | | | | | | |
|---------------|---|---|---|----------|---|---|-------------------|
| Not at all | | | | Somewhat | | | Very necessary |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

(12) Do you feel that the accounting staff understands your evolving informational requirements?

| | | | | | | | |
|----------------|---------------|---|---|----------|---|---|-------------|
| | Not at all | | | Somewhat | | | Substantial |
| - For planning | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - For control | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

(13) Does the accounting staff co-operate with managers, such as yourself, in determining their accounting informational requirements? YES/NO

IF NO: Why not? Managers do not ask for accountants' co-operation
 It is the responsibility of another specialist; please specify
 Other; please state

(14) Were you consulted in any way about the format and content of the internal accounting reports which you receive?

You were consulted about:

(If you tick b, c, or d, please give the percentage)

| | | | | |
|----|--------------------------|---------------------|-----------|----------------------------|
| a. | <input type="checkbox"/> | All the reports | | |
| b. | <input type="checkbox"/> | Most of the reports | (70%-99%) | <input type="checkbox"/> % |
| c. | <input type="checkbox"/> | Some of the reports | (40%-69%) | <input type="checkbox"/> % |
| d. | <input type="checkbox"/> | Few of the reports | (1% -39%) | <input type="checkbox"/> % |
| e. | <input type="checkbox"/> | None at all | | |

(15) Do your principal subordinates know the content of the internal accounting reports which you receive?

The principal subordinates know the content of:

(If you tick b, c, or d, please give the percentage)

| | | | | |
|----|--------------------------|---------------------|-----------|----------------------------|
| a. | <input type="checkbox"/> | All the reports | | |
| b. | <input type="checkbox"/> | Most of the reports | (70%-99%) | <input type="checkbox"/> % |
| c. | <input type="checkbox"/> | Some of the reports | (40%-69%) | <input type="checkbox"/> % |
| d. | <input type="checkbox"/> | Few of the reports | (1% -39%) | <input type="checkbox"/> % |
| e. | <input type="checkbox"/> | None at all | | |

If they KNOW; how?

They receive a copy
 You discuss the content with them
 Other; please specify

(18) Assuming that you could have the internal accounting reports exactly as you would like them, how do you rate the reports as an indicator of their relative importance for planning and control?

The relative importance of the reports

- For planning
- For control

____ %
 ____ %
100 %

(19) In your opinion, are the information attributes below equally important when information is used: a. in planning? YES/NO b. in control? YES/NO

IF NO: Please rank these attributes in order of their importance, then give each a percentage so as to indicate its relative importance in planning and/or control according to your answer above.

| The Information Attributes | IF NO | | IF NO | |
|-----------------------------|-------------|---------------------|-------------|---------------------|
| | In Planning | In Control | In Planning | In Control |
| | Rank | Relative importance | Rank | Relative importance |
| Timeliness | ____ | ____ % | ____ | ____ % |
| Relevance | ____ | ____ % | ____ | ____ % |
| Adequacy (amount of detail) | ____ | ____ % | ____ | ____ % |
| Reliability (credibility) | ____ | ____ % | ____ | ____ % |
| Understandability | ____ | ____ % | ____ | ____ % |
| | | <u>100 %</u> | | <u>100 %</u> |

(20) Please indicate the degree of your agreement with each of the following statements:

| | Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---|---|---|---|---|---|---|----------------|
| A. In any evaluation of the effectiveness of an information system: | | | | | | | | | |
| -The key factor is users' satisfaction with the information provided | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| -It is necessary to determine whether the providers of the information have known the users' requirements precisely | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| -It is useful to know the views of assistant managers, as principal subordinates, regarding the information which has already been provided to managers | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| B. Managers' decision-making style should be taken into account when reports are designed | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| C. An information system can be more effective only if the resources allocated to running it are increased | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| D. The use of psychological tests to determine managers' decision-making styles is helpful in specifying the amount and mode of presentation preferred of the information required | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

- 7 -

(26) To what extent do you feel that accountants, as providers of information, know the decision-making style which you prefer?

Not at
all

Somewhat

Substantial

1

2

3

4

5

6

7

(27) How long have you been working: a. in this organisation?
b. in your present job?

Years Months

— —

— —

YOUR COMMENTS WOULD BE APPRECIATED

If you would like to make any further comments, please use the space below and any additional sheets, if required.

MANY THANKS FOR YOUR CO-OPERATION

Please return the completed questionnaire at your earliest convenience.

APPENDIX (6.7)

ASSISTANT MANAGER - QUESTIONNAIRE

Department of Accountancy and Business Law

Head of Department: Professor J. M. S. East

UNIVERSITY OF STIRLING STIRLING FK9 4LA SCOTLAND | TELEPHONE: STIRLING (0756) 3171

ALL INFORMATION WILL BE STRICTLY CONFIDENTIAL

ASSISTANT MANAGER - QUESTIONNAIRE

Research Into The Effectiveness Of
Management Accounting Systems

YOUR OPINIONS ARE OF UTMOST IMPORTANCE
Would you please share with us in this research project

To help in following-up replies, would you please
fill in the information below:

- (1) Respondent's name:
- (2) Job title:
- (3) Organisation name

If you would like a copy of the research findings,
please tick the box at the left.

This part will be detached before analysing the information contained in
this questionnaire.

WOULD YOU PLEASE READ THIS SHEET BEFORE COMPLETING THE QUESTIONNAIRE

A. HOW TO FILL IN THE QUESTIONNAIRE

- Please tick the space beside the appropriate alternative. Unless indicated, more than one space may be ticked.
- With other questions you will find numbers. Please ring the number which most indicates your opinion.
- Where space has been left, please write in your answers. Use additional sheets if required.

B. DEFINITIONS (for the purpose of this questionnaire)

- Management Accounting System: the internal accounting reports which provide managers with the accounting information needed for use in planning and control.
- The Effectiveness of the System: a measure for determining how satisfactory the system is in providing the specific information for which it is designed.
- The Manager: the direct superior to whom you are responsible.
- Manager's Decision Making Style: the strategy by which the manager operates to reach a decision or solve a problem.
 - The analytic style: who reduces a problem to a set of causal relationships and tries to find a solution by using formulae and models.
 - The heuristic style: who emphasizes workable solutions to solve problems. He solves problems through his common sense and relies more heavily on feedback.
- The Information Attributes:
 - Relevance: information is related to the decision in hand.
 - Adequacy: amount of detailed information is sufficient.
 - Reliability: confidence in the information. Credibility.
 - Understandability: to be understandable the information must be presented in organised form, in a simple language, and the terminologies used are not in difficult technical terms.
 - (Report Format)
 - Timeliness: information is available as and when required.
- Useful Information: information, if it is to be useful, should be relevant, adequate, reliable, understandable, and timely.

- 1 -

(1) Do the principal assistants of the manager know the content of the internal accounting reports which he receives?

The principal assistants know the content of:
(If you tick, b, c or d, please give the percentage)

- a. All the reports
- b. Most of the reports (70%-99%) %
- c. Some of the reports (40%-69%) %
- d. Few of the reports (1% -39%) %
- e. None at all

If you TICKED (e) please proceed to question No. (10) if you DID NOT, please continue.

- How do the principal assistants know the content of the reports?

- They receive a copy
- The manager discusses the content with them
- Other; please specify

(2) How do you feel about the attributes of the internal accounting reports which the manager receives?

| | 1 Inappropriate | | | 4 Appropriate | | | 7 Highly Appropriate |
|---------------------------------------|-----------------|---|---|---------------|---|---|----------------------|
| <u>Use of the reports in planning</u> | | | | | | | |
| - Relevancy | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Adequacy (amount of detail) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Timeliness | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Reliability (credibility) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Format | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Usefulness (overall rating) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Other? _____ | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| <u>Use of the reports in control</u> | | | | | | | |
| - Relevancy | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Adequacy (amount of detail) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Timeliness | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Reliability (credibility) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Format | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Usefulness (overall rating) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Other? _____ | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

(3) How do you feel about the amount of detailed information in the accounting reports which the manager receives?

| | 1 Too little | | | 4 About right | | | 7 Too much |
|----------------------------|--------------|---|---|---------------|---|---|------------|
| - Reports used in planning | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Reports used in control | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

(4) How do you feel about the frequency of the internal accounting reports which the manager receives?

The frequency is appropriate with respect to:
(If you tick b, c, or d, please give the percentage)

- a. All the reports
- b. Most of the reports (70%-99%) %
- c. Some of the reports (40%-69%) %
- d. Few of the reports (1% -39%) %
- e. None at all

(5) Assuming that the manager could have the internal accounting reports exactly as he would like them, how do you rate the reports as an indicator of their relative importance for planning and control?

The relative importance of the reports

- For planning %
- For control %
-
-
-
- 100 %

(6) In your opinion, are the following attributes below equally important when information is used: a. in planning? YES/NO
b. in control? YES/NO

IF NO: Please rank these attributes in order of their importance, then give each a percentage so as to indicate its relative importance in planning and/or control, according to your answer above.

| The Information Attributes | IF NO | | IF NO | |
|-----------------------------|--------------------------|-------------------------------------------------------|--------------------------|-------------------------------------------------------|
| | In Planning | | In Control | |
| | Rank | Relative importance | Rank | Relative importance |
| Timeliness | <input type="checkbox"/> | <input type="checkbox"/> % | <input type="checkbox"/> | <input type="checkbox"/> % |
| Relevance | <input type="checkbox"/> | <input type="checkbox"/> % | <input type="checkbox"/> | <input type="checkbox"/> % |
| Adequacy (amount of detail) | <input type="checkbox"/> | <input type="checkbox"/> % | <input type="checkbox"/> | <input type="checkbox"/> % |
| Reliability (credibility) | <input type="checkbox"/> | <input type="checkbox"/> % | <input type="checkbox"/> | <input type="checkbox"/> % |
| Understandability | <input type="checkbox"/> | <input type="checkbox"/> % | <input type="checkbox"/> | <input type="checkbox"/> % |
| | | <hr style="width: 50px; border: 0.5px solid black;"/> | | <hr style="width: 50px; border: 0.5px solid black;"/> |
| | | 100 % | | 100 % |

(7) Does the manager discuss his informational requirements with his principal assistants? YES/NO

IF YES: How satisfied are you with the manager's reliance on the views of his principal assistants in determining his accounting informational requirements?

| | Dissatis- fied | | Satis- fied | | Highly Satisfied |
|-----------------------|-------------------|---|----------------|---|---------------------|
| - For use in planning | 1 | 2 | 3 | 4 | 5 6 7 |
| - For use in control | 1 | 2 | 3 | 4 | 5 6 7 |

(10) Please indicate the degree of your agreement with each of the following statements.

| | Strongly Disagree | | | Neutral | | | Strongly Agree |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---|---|---------|---|---|----------------|
| A. In any evaluation of the effectiveness of an information system: | | | | | | | |
| - The key factor is users' satisfaction with the information provided | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - It is necessary to determine whether the providers of the information have known the users' requirements precisely | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - It is useful to know the views of assistant managers regarding the information which has already been provided to managers | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| B. Managers' decision-making style (analytic/heuristic) should be taken into account when reports are designed | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| C. An information system can be more effective only if the resources allocated to running it are increased | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| D. The use of psychological tests to determine managers' decision-making style is helpful in specifying the amount and mode of presentation preferred of the information required | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

(11) Does your organisation evaluate the management accounting system to determine its effectiveness? YES/NO/DON'T KNOW

IF YES:

- a. How does it do this?
- Questionnaire circulated among managers
 - Personal interviews with managers
 - Managers' complaints about reports
 - Review of the content and format of reports
 - Other; please state

b. How satisfied are you with the method(s) USED which you TIRED?

| | Dissatis- fied | | Satis- fied | | | Highly Satisfied | |
|----------------------------|-------------------|---|----------------|---|---|---------------------|---|
| - Questionnaire circulated | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Personal interviews | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Managers' complaints | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Review of the reports | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Other | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

- 5 -

- (12) From the practical and economic point of view, how frequently should the management accounting system be evaluated to determine its effectiveness?

Under special circumstances; please specify:

- When operations and activities change
 Computerisation of the current system, or part of it, or use
 " of a new model of computer
 When another additional information system is designed
 Other; please state

Periodically; please specify: quarterly
 twice a year
 yearly
 other; please specify

- (13) In your career, have you ever participated, by one way or another, in the design and development of an information system? YES/NO

- (14) Have you ever studied accountancy? YES/NO

- (15) How long have you been working:

| | Years | Months |
|--------------------------|----------------------|----------------------|
| a. in this organisation? | <input type="text"/> | <input type="text"/> |
| b. in your present job? | <input type="text"/> | <input type="text"/> |

YOUR COMMENTS WOULD BE MUCH APPRECIATED

If you would like to make any further comments, please use the space below and any additional sheets, if required.

MANY THANKS FOR YOUR CO-OPERATION

Please return the completed questionnaire at your earliest convenience.

APPENDIX (6.8)

MANAGEMENT ACCOUNTANT - QUESTIONNAIRE

Department of Accountancy and Business Law

Head of Department: Professor J. M. S. R. B.

UNIVERSITY OF STIRLING STIRLING FK9 4LA SCOTLAND | TELEPHONE: STIRLING (0736) 3171

ALL INFORMATION WILL BE STRICTLY CONFIDENTIAL

MANAGEMENT ACCOUNTANT - QUESTIONNAIRE

Research Into The Effectiveness Of
Management Accounting Systems

YOUR OPINIONS ARE OF UTMOST IMPORTANCE

Would you please share with us in this research project

To help in following-up replies, would you please fill
in the information below:

- (1) Respondent's Name:
- (2) Job title:
- (3) Organisation name

If you would like a copy of the research findings,
please tick the box at the left.

This part will be detached before analysing the information contained in this
questionnaire.

WOULD YOU PLEASE READ THIS SHEET BEFORE COMPLETING THE QUESTIONNAIRE

A. HOW TO FILL IN THE QUESTIONNAIRE

- . Please tick the space beside the appropriate alternative. Unless indicated more than one space may be ticked.
- . With other questions you will find numbers. Please ring the number which most indicates your opinion.
- . Where space has been left, please write in your answer. Use additional sheets if required.

B. DEFINITIONS (for the purpose of this questionnaire)

- . Management Accounting System: the internal accounting reports which provide managers with the accounting information needed for use in planning and control.
- . The Effectiveness of the System: a measure for determining how satisfactory the system is in providing the specific information for which it is designed.
- . Manager: an executive at middle management level who is involved extensively in tactical planning and management control and who makes operating and administrative decisions as part of his responsibilities.
- . Manager's Decision Making Style: the strategy by which the manager operates to reach a decision or solve a problem.
 - The analytic style: who reduces a problem to a set of causal relationships and tries to find a solution by using formulae and models.
 - The heuristic style: who emphasizes workable solutions to solve problems. He solves problems through his common sense and relies more heavily on feedback.
- . The Information Attributes:
 - Relevance: information is related to the decision in hand.
 - Adequacy: amount of detailed information is sufficient.
 - Reliability: confidence in the information. Credibility.
 - Understandability: to be understandable the information must be presented in organised form, in a simple language, and the terminologies used are not in difficult technical terms.
(Report Format)
 - Timeliness: information is available as and when required.
- . Useful Information: information, if it is to be useful, should be relevant, adequate, reliable, understandable, and timely.

(1) Do you feel that the amount of detailed information as specified exactly by managers represents their actual requirements?

The amount of detailed information as specified by managers is:

| | Less than their actual requirements | | | About equal to their actual requirements | | | Much more than their actual requirements | |
|----------------|-------------------------------------|---|---|------------------------------------------|---|---|------------------------------------------|--|
| - For planning | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| - For control | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

(2) Do you feel that the frequency of the internal accounting reports is what it should be?

The frequency is what it should be of:

(If you tick b, c, or d, please give the percentage)

- a. All the reports
- b. Most of the reports (70%-99%) %
- c. Some of the reports (40%-69%) %
- d. Few of the reports (1% -39%) %
- e. None at all

(3) In your organisation, managers (users of the information) may ask for a specific level of each report dimension mentioned below. To what extent do you feel that the specific level, as required by managers, of each dimension is reasonable?

| | Unreasonable | | | Reasonable | | | Very Reasonable |
|-----------------------------------------------------------------------------------------|--------------|---|---|------------|---|---|-----------------|
| <u>The level required by managers of the dimensions of the reports used in planning</u> | | | | | | | |
| - Level of Reliability (credibility) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Adequacy (amount of detail) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Relevance | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Format | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Timeliness | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - All dimensions (overall rating) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Other? _____ | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

The level required by managers of the dimensions of the reports used in control

| | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|
| - Level of Reliability (credibility) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Adequacy (amount of detail) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Relevance | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Format | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Timeliness | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - All dimensions (overall rating) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Other? _____ | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

- 2 -

- (4) To what degree do managers explain their evolving informational requirements to accountants?

Regarding the information required:

| | Not at all | | | Somewhat | | | Substantial | |
|----------------|------------|---|---|----------|---|---|-------------|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| - For planning | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| - For control | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

- (5) Do accountants participate with managers in determining their accounting informational requirements? YES/NO

IF NO: Why not? Managers do not ask for accountants' co-operation
 It is the responsibility of another specialist; please specify:
 Other; please state

- (6) To what extent do you feel that you know managers' decision-making style (analytic/heuristic)?

| Not at all | Somewhat | | | | | Very well | |
|------------|----------|---|---|---|---|-----------|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

- (7) How often do accountants co-operate with managers in the interpretation of the accounting information which they receive?

Never Seldom Occasionally Frequently

— — — —

- (8) To what extent do you feel that accountants' co-operation with managers is necessary in the interpretation of the information contained in the internal accounting reports?

| Not at all | Somewhat | | | | | Very necessary | |
|------------|----------|---|---|---|---|----------------|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

- (9) How closely do you feel that the managers' interpretation of the information provided coincides with what accountants actually intend to communicate?

| Not at all | Somewhat closely | | | | | Very closely | |
|------------|------------------|---|---|---|---|--------------|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

(10) You, as provider of the information, may have different views from managers regarding the information which should be provided. Please use the following scales to indicate how you feel about the information as specified exactly by managers in its relation to the decisions which they made. Judge the information specified on each of these scales in order by placing a check mark (x) in the appropriate space.

IMPORTANT!

- Make each item a SEPARATE and INDEPENDENT judgement.
- Note, the FAVOURABLE adjective is sometimes on the left and sometimes on the right.

NOW, how do you feel about the information as specified exactly by managers in its relation to the decisions they make?

a. Information specified by managers for use in planning

| | <u>very</u> | <u>quite</u> | <u>slightly</u> | <u>neutral</u> | <u>slightly</u> | <u>quite</u> | <u>very</u> | |
|--------------|-------------|--------------|-----------------|----------------|-----------------|--------------|-------------|---------------|
| Ordered | () | () | () | () | () | () | () | Disordered |
| Essential | () | () | () | () | () | () | () | Non-essential |
| Biased | () | () | () | () | () | () | () | Unbiased |
| Incomplete | () | () | () | () | () | () | () | Complete |
| Relevant | () | () | () | () | () | () | () | Irrelevant |
| Simple | () | () | () | () | () | () | () | Complex |
| Inaccurate | () | () | () | () | () | () | () | Accurate |
| Current | () | () | () | () | () | () | () | Out-dated |
| Well-timed | () | () | () | () | () | () | () | Ill-timed |
| Not required | () | () | () | () | () | () | () | Required |
| Inadequate | () | () | () | () | () | () | () | Adequate |

b. Information specified by managers for use in control

| | <u>very</u> | <u>quite</u> | <u>slightly</u> | <u>neutral</u> | <u>slightly</u> | <u>quite</u> | <u>very</u> | |
|--------------|-------------|--------------|-----------------|----------------|-----------------|--------------|-------------|---------------|
| Ordered | () | () | () | () | () | () | () | Disordered |
| Essential | () | () | () | () | () | () | () | Non-essential |
| Biased | () | () | () | () | () | () | () | Unbiased |
| Incomplete | () | () | () | () | () | () | () | Complete |
| Relevant | () | () | () | () | () | () | () | Irrelevant |
| Simple | () | () | () | () | () | () | () | Complex |
| Inaccurate | () | () | () | () | () | () | () | Accurate |
| Current | () | () | () | () | () | () | () | Out-dated |
| Well-timed | () | () | () | () | () | () | () | Ill-timed |
| Not required | () | () | () | () | () | () | () | Required |
| Inadequate | () | () | () | () | () | () | () | Adequate |

(11) Assuming that managers could have the internal accounting reports exactly as they would like them, how do you rate the reports as an indicator of their relative importance for managers in planning and control?

The relative importance
of the reports

- For planning
- For control

— %
— %
100 %

- (12) In your opinion, are the information attributes below equally important when information is used: a. in planning? YES/NO
 b. in control? YES/NO

IF NO: Please rank these attributes in order of their importance, then give each a percentage so as to indicate its relative importance in planning and/or control according to your answer above.

| The Information Attributes | IF NO | | IF NO | |
|-----------------------------|-------------|---------------------|------------|---------------------|
| | In Planning | | In Control | |
| | Rank | Relative importance | Rank | Relative importance |
| Timeliness | --- | --- | --- | --- |
| Relevance | --- | --- | --- | --- |
| Adequacy (amount of detail) | --- | --- | --- | --- |
| Reliability (credibility) | --- | --- | --- | --- |
| Understandability | --- | --- | --- | --- |
| | | 100 % | | 100 % |

- (13) Please indicate the degree of your agreement with each of the following statements:

| | Strongly disagree | | | Neutral | | | Strongly agree |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---|---|---------|---|---|----------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| A. In any evaluation of the effectiveness of an information system: | | | | | | | |
| - The key factor is users' satisfaction with the information provided | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - It is necessary to determine whether the providers of the information have known the users' requirements precisely | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - It is useful to know the views of assistant managers, as principal subordinates, regarding the information which has already been provided to managers | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| B. Managers' decision-making style (analytic/heuristic) should be taken into account when reports are designed | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| C. An information system can be more effective only if the resources allocated to running it are increased | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| D. The use of psychological tests to determine managers' decision-making style (analytic/heuristic) is helpful in specifying the amount and mode of presentation preferred of the information required | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

- 5 -

- (14) Does your organisation evaluate the management accounting system to determine its effectiveness? YES/NO

IF YES:

- a. How does it do this?
- Questionnaire circulated among managers
 - Personal interviews with managers
 - Managers' complaints about reports
 - Review of the content and format of reports
 - Other; please state

- b. How satisfied are you with the method(s) USED which you TICKED?

| | Dissatis- fied | | | Satis- fied | | | Highly Satisfied |
|----------------------------|-------------------|---|---|----------------|---|---|---------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Questionnaire circulated | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Personal interviews | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Managers' complaints | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Review of the reports | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| - Other | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

- (15) From the practical and economic point of view, how frequently should the management accounting system be evaluated to determine its effectiveness?

Under special circumstances; please specify:

- When operations and activities change
- Computerisation of the current system, or part of it, or the use of a new model of computer
- When another additional system is designed
- Other; please state

Periodically; please specify:

- quarterly
- twice a year
- yearly
- other; please specify

- (16) Have you ever studied Behavioural Accounting?
Psychology?

Yes No

- (17) How long have you been working:
- a. in this organisation?
- b. in your present job?

Years Months

- 6 -

YOUR COMMENTS WOULD BE MUCH APPRECIATED

If you would like to make any further comments, please use this space and any additional sheets, if required.

MANY THANKS FOR YOUR CO-OPERATION

Please return the completed questionnaire at your earliest convenience.

APPENDIX (6.9)

Modifying The Semantic Differential - The First Questionnaire

Cover Letter

Department of Accountancy and Business Law

Head of Department: Professor J M S Risk

UNIVERSITY OF STIRLING STIRLING FK9 4LA SCOTLAND | TELEPHONE: STIRLING (0786) 3171

Dear Sir,

As a user of information provided by your management information systems, we would appreciate your help and assistance by completion of the enclosed questionnaire.

Your co-operation in this investigation will be invaluable in a research into the effectiveness of management information systems being conducted at this University by Mr. M.M. Abdel-Meguid, a Ph.D. student.

As a matter of interest, your name was extracted from the ICMA list of members by Mr. Abdel-Meguid because of your obvious involvement in management information systems.

The attached questionnaire aims to define precisely the adjectives and their opposites of the different dimensions of each information attribute. This procedure represents an essential step of a technique which will be applied in a part of the research. This technique is called "semantic differential" which may be used to measure the meaning of a concept, e.g. "useful information", and the attitudes of individuals towards an object such as "management information systems".

Thanking you in anticipation for your time and effort,

Yours faithfully,

J.M.S. Risk

Cover Letter

Department of Accountancy and Business Law

Head of Department: Professor J M S Risk

UNIVERSITY OF STIRLING STIRLING FK9 4LA SCOTLAND | TELEPHONE: STIRLING (0786) 3171

Dear Sir,

As an individual involved in the preparation of management information, and provision to managers of their informational requirements, we would appreciate your help and assistance by completion of the enclosed questionnaire.

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Thanking you in anticipation for your time and effort.

Yours faithfully,

J.M.S. Risk

The Purpose of this part of the Research

The purpose of management information systems is to provide managers with useful information to help them make rational decisions to achieve the goals of a business organisation. The information provided by such systems should contain the following five attributes if it is to be useful.

1. Relevancy: information is relevant if it is associated with the action it is designed to facilitate or the result desired to be produced.
2. Reliability: for managers to have confidence in information it must be reliable.
3. Sufficiency: for information to be sufficient, an adequate quantity of it must be available relevant to the purpose.
4. Understandability: the manager is unable to comprehend the message or messages being communicated, if information is not understandable.
5. Timeliness: for information to be useful, it must be available on a timely basis.

The adjectives and their opposites of the different dimensions of each information attribute mentioned above is an essential part of the technique which will be applied as part of my empirical study. This technique, which is called "Semantic Differential", may be used to measure the meaning of a concept, e.g., "Useful information", and the attitudes of individuals towards an object such as "management information systems".

The main purpose of the attached questionnaire is to define precisely the adjectives and their opposites of the different dimensions of each information attribute.

INSTRUCTIONS

The attached questionnaire includes the five attributes of the information, i.e., relevancy, reliability, sufficiency, understandability, and timeliness. Each attribute is presented in a separate table. Each table includes the adjectives which are supposed to represent the different dimensions of the information attribute.

- (1) Please examine each table separately. If you think that there is an adjective (or adjectives) which does not represent a dimension of the information attribute, please mark it with an "X". For example, if you do not agree that the adjective "Favourable" represents a dimension of the information attribute "Relevancy", please mark it : Favou~~r~~able.
- (2) If you think that there are other different adjectives to be added in each table, and they represent other different dimensions of the information attribute, please add them. The adjectives which you may add should not be synonymous with the unmarked adjectives in the same table.
- (3) Finally, please write down in the opposites' section in each table the familiar and common opposites of the unmarked adjectives only. If possible, write more than one opposite of each unmarked adjective.

THANK YOU FOR YOUR EFFORT AND TIME

THE QUESTIONNAIRE

Please complete all the instructions for one table before going on to the next table. Once more, the instructions are as follows:

- (1) Mark "X" the adjectives which do not represent a dimension of the information attribute;
- (2) Add other different adjectives (they should not be synonymous with the others);
- (3) Write down the familiar and common opposites of the unmarked adjective (if possible more than one opposite of each unmarked adjective).

THE TABLES

The information provided to managers, if it is to be useful, should be:

RELEVANT (Related to the decision at hand. You cannot make the decision without it)

| The Adjectives | The familiar and common opposites |
|----------------|-----------------------------------|
| 1. Essential | 1. |
| 2. Relevant | 2. |
| 3. Required | 3. |
| 4. | 4. |
| 5. | 5. |
| 6. | 6. |

RELIABLE (Credible. You have confidence in it)

| The adjectives | The familiar and common opposites |
|----------------|-----------------------------------|
| 1. Accurate | 1. |
| 2. Confirmed | 2. |
| 3. Unbiased | 3. |
| 4. | 4. |
| 5. | 5. |
| | 6. |

The information provided to managers, if it is to be useful, should be:

SUFFICIENT (The quantity of the information provided is enough for making the decision)

| The Adjectives | The familiar and common opposites |
|----------------|-----------------------------------|
| 1. Complete | 1. |
| 2. Enough | 2. |
| 3. | 3. |
| 4. | 4. |
| 5. | 5. |
| 6. | 6. |

UNDERSTANDABLE (The information presented is in organised form, in a simple language, and the terminologies used are familiar)

| The Adjectives | The familiar and common opposites |
|----------------|-----------------------------------|
| 1. Orderly | 1. |
| 2. Familiar | 2. |
| 3. Simple | 3. |
| 4. | 4. |
| 5. | 5. |
| 6. | 6. |

TIMELY (The information is available on a timely basis)

| The Adjectives | The familiar and common opposites |
|----------------|-----------------------------------|
| 1. Current | 1. |
| 2. Well-timed | 2. |
| 3. | 3. |
| 4. | 4. |
| 5. | 5. |
| 6. | 6. |

THANK YOU FOR YOUR CO-OPERATION

Please return the Questionnaire only.

APPENDIX (6.10)

Modifying The Semantic Differential - The Second Questionnaire

Cover Letter

Department of Accountancy and Business Law

Head of Department: Professor J M S Risk

UNIVERSITY OF STIRLING STIRLING FK9 4LA SCOTLAND | TELEPHONE: STIRLING (0786) 3171

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As a matter of interest, your name was extracted from the ICMA list of members by Mr. Abdel-Meguid because of your obvious involvement in management information systems.

The attached questionnaire aims to define precisely the adjectives and their opposites of the different dimensions of each information attribute. This procedure represents an essential step of a technique which will be applied in a part of the research. This technique is called "semantic differential" which may be used to measure the meaning of a concept, e.g. "useful information", and the attitudes of individuals towards an object such as "management information systems".

Thanking you in anticipation for your time and effort,

Yours faithfully,

J.M.S. Risk

Cover Letter

Department of Accountancy and Business Law

Head of Department: Professor J.M.S. Risk

UNIVERSITY OF STIRLING STIRLING FK9 4LA SCOTLAND | TELEPHONE: STIRLING (0786) 3171

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As a matter of interest, your name was extracted from the ICMA list of members by Mr. Abdel-Meguid because of your obvious involvement in management information systems.

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Yours faithfully,

J.M.S. Risk

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The purpose of management information systems is to provide managers with useful information to help them make rational decisions to achieve the goals of a business organisation. The information provided by such systems should contain the following five attributes if it is to be useful.

1. Relevancy: information is relevant if it is associated with the action it is designed to facilitate or the result desired to be produced.
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3. Sufficiency: for information to be sufficient, an adequate quantity of it must be available relevant to the purpose.
4. Understandability: the manager is unable to comprehend the message or messages being communicated, if information is not understandable.
5. Timeliness: for information to be useful, it must be available on a timely basis.

The adjectives and their opposites of the different dimensions of each information attribute mentioned above is an essential part of the technique which will be applied as part of my empirical study. This technique, which is called "Semantic Differential", may be used to measure the meaning of a concept, e.g., "Useful information", and the attitudes of individuals towards an object such as "management information systems".

The main purpose of the attached questionnaire is to define precisely the adjectives and their opposites of the different dimensions of each information attribute.

INSTRUCTIONS

The attached questionnaire includes the five attributes of the information, i.e., relevancy, reliability, sufficiency, understandability, and timeliness. Each attribute is presented in a separate table. Each table includes thirteen words. Only a few of these words are closely related to the information attribute, in the sense that they, directly or indirectly, represent the different dimensions of the information attribute. The other words in the same table are completely unrelated to the attribute.

- (1) In each table, please circle the word or words that you think are closely related to the information attribute, i.e. they, directly or indirectly, represent the different dimensions of the attribute.
- (2) Please write down in the 'opposites' section in each table, the familiar and common opposites of the circled words only. If possible, write more than one opposite of each circled word.

THANK YOU FOR YOUR EFFORT AND TIME

The information provided to managers, if it is to be useful, should be:

RELEVANT (Related to the decision at hand. You cannot make the decision without it)

| The Words | The familiar and common opposites |
|---------------|-----------------------------------|
| 1. Confirmed | 1. |
| 2. Well-timed | 2. |
| 3. Essential | 3. |
| 4. Accurate | 4. |
| 5. Simple | 5. |
| 6. Familiar | 6. |
| 7. Orderly | 7. |
| 8. Complete | 8. |
| 9. Current | 9. |
| 10. Enough | 10. |
| 11. Required | 11. |
| 12. Relevant | 12. |
| 13. Unbiased | 13. |

RELIABLE (Credible. You have confidence in it)

| The Words | The familiar and common opposites |
|----------------|-----------------------------------|
| 1. Simple | 1. |
| 2. Confirmed | 2. |
| 3. Familiar | 3. |
| 4. Required | 4. |
| 5. Accurate | 5. |
| 6. Current | 6. |
| 7. Relevant | 7. |
| 8. Orderly | 8. |
| 9. Unbiased | 9. |
| 10. Essential | 10. |
| 11. Enough | 11. |
| 12. Well-timed | 12. |
| 13. Complete | 13. |

(Please turn the page)

The information provided to managers, if it is to be useful, should be:

SUFFICIENT (The quantity of the information provided is enough for making the decision)

| The Words | The familiar and common opposites |
|---------------|-----------------------------------|
| 1. Orderly | 1. |
| 2. Simple | 2. |
| 3. Complete | 3. |
| 4. Unbiased | 4. |
| 5. Required | 5. |
| 6. Essential | 6. |
| 7. Familiar | 7. |
| 8. Enough | 8. |
| 9. Well-timed | 9. |
| 10. Confirmed | 10. |
| 11. Current | 11. |
| 12. Accurate | 12. |
| 13. Relevant | 13. |

UNDERSTANDABLE (The information presented is in organised form, in a simple language, and the terminologies used are familiar)

| The Words | The familiar and common opposites |
|---------------|-----------------------------------|
| 1. Enough | 1. |
| 2. Simple | 2. |
| 3. Well-timed | 3. |
| 4. Orderly | 4. |
| 5. Accurate | 5. |
| 6. Confirmed | 6. |
| 7. Current | 7. |
| 8. Required | 8. |
| 9. Essential | 9. |
| 10. Familiar | 10. |
| 11. Unbiased | 11. |
| 12. Complete | 12. |
| 13. Relevant | 13. |

(Please turn the page)

The information provided to managers, if it is to be useful, should be:

TIMELY (The information is available on a timely basis)

| The Words | The familiar and common opposites |
|---------------|-----------------------------------|
| 1. Complete | 1. |
| 2. Relevant | 2. |
| 3. Well-timed | 3. |
| 4. Unbiased | 4. |
| 5. Accurate | 5. |
| 6. Simple | 6. |
| 7. Familiar | 7. |
| 8. Essential | 8. |
| 9. Confirmed | 9. |
| 10. Current | 10. |
| 11. Enough | 11. |
| 12. Orderly | 12. |
| 13. Required | 13. |

THANK YOU FOR YOUR CO-OPERATION

Please return the Questionnaire only.

APPENDIX (6.11)

Coding Frame - Manager's Questionnaire

(1)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|----------------|--------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| A* | 001 | Questionnaire Number - Card | 001- 067/1-4 | 1-4 | (1) | 9 |
| B* | 002 | Respondent Group: Manager Assistant Accountant Head of M.A. Dept. | 1-4 1 2 3 4 | 5 | (1) | 9 |
| C* | 003 | Organisation Number | 1-31 | 6-7 | (1) | 0 |
| D* | 004 | Organisation Size: Under 5,000 5,000, less than 10,000 10,000 and more | 1-3 1 2 3 | 8 | (1) | 9 |
| E* | 005 | Mailing: First Mailing Second Mailing | 1/2 1 2 | 9 | (1) | 9 |
| F* | 006 | Like a Copy of The Findings (Yes/No) | 2/1 | 10 | (1) | 9 |
| G ⁺ | 007 | Comments: No Comments Comments About The System Comments About The Answers Comments About The System And Answers | 1-4 1 2 3 4 | 11 | (1) | 9 |
| (20) | 008 | The Key Factor Is User | 1-7 | 12 | (1) | 9 |
| | 009 | The Provider of Information | 1-7 | 13 | (1) | 9 |
| | 010 | The Principal Subordinates | 1-7 | 14 | (1) | 9 |
| | 011 | Decision-Making Style | 1-7 | 15 | (1) | 9 |

* Added to each case (questionnaire)

+ The last page on the questionnaire (open-ended question)

(2)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|------------|--------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------|------|----------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (20) | 012 | The Resources Allocated | 1-7 | 16 | (1) | 9 |
| | 013 | Psychological Tests | 1-7 | 17 | (1) | 9 |
| (22) | 014 | The Frequency Suggested of Evaluation - Special Only (Yes/No) | 2/1 | 18 | (1) | 9 |
| | 015 | The Frequency Suggested of Evaluation - Periodically | 2/1 | 19 | (1) | 9 |
| | 016 | The Frequency Suggested of Evaluation - Special and Periodically | 2/1 | 20 | (1) | 9 |
| | 017 | Periodically (Suggested Evaluation): Quarterly Twice a year Yearly Other | 1-4 1 2 3 4 | 21 | (1) | 9 |
| (21) | 018 | Does Your Organisation Evaluate The System? (Yes/No/DN) | 2/1/8 | 22 | (1) | 9 |
| | 019 | Method Used in Evaluation: 1. Questionnaire 2. Interviews 3. Manager's Complaints 4. Review 5. Other | 6-62 2 4 8 16 32 | 23-24 | (1) | 9 |
| | 020 | Questionnaire (Yes/No) | 2/1 | 25 | (1) | 9 |
| | 021 | Interviews | 2/1 | 26 | (1) | 9 |
| | 022 | Managers' Complaints | 2/1 | 27 | (1) | 9 |

(3)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|-------------------------------------------------|------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| | 024 | Other | 2/1 | 29 | (1) | 9 |
| | 025 | Satisfaction With Questionnaire | 1-7 | 30 | (1) | 9 |
| | 026 | Satisfaction With Interviews | 1-7 | 31 | (1) | 9 |
| | 027 | Satisfaction With Complaints | 1-7 | 32 | (1) | 9 |
| | 028 | Satisfaction With Review | 1-7 | 33 | (1) | 9 |
| | 029 | Satisfaction With Other | 1-7 | 34 | (1) | 9 |
| H* | 030 | The Organisation Actually Evaluates (Yes/No) | 2/1 | 35 | (1) | 9 |
| (17)† | 031 | Essential - SD Planning | 1-7 | 36 | (1) | 9 |
| | 032 | Relevant - SD Planning | 1-7 | 37 | (1) | 9 |
| | 033 | Required - SD Planning | 1-7 | 38 | (1) | 9 |
| | 034 | Unbiased - SD Planning | 1-7 | 39 | (1) | 9 |
| | 035 | Accurate - SD Planning | 1-7 | 40 | (1) | 9 |
| | 036 | Complete - SD Planning | 1-7 | 41 | (1) | 9 |
| | 037 | Adequate - SD Planning | 1-7 | 42 | (1) | 9 |
| | 038 | Ordered - SD Planning | 1-7 | 43 | (1) | 9 |
| | 039 | Simple - SD Planning | 1-7 | 44 | (1) | 9 |

* Extracted from the questionnaire of Head of Management Accounting Department

† SD = Semantic Differential

(4)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|-----------------------------------------------|--------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (17) | 040 | Current - SD Planning | 1-7 | 45 | (1) | 9 |
| | 041 | Well-timed - SD Planning | 1-7 | 46 | (1) | 9 |
| | 042 | Essential - SD Control | 1-7 | 47 | (1) | 9 |
| | 043 | Relevant - SD Control | 1-7 | 48 | (1) | 9 |
| | 044 | Required - SD Control | 1-7 | 49 | (1) | 9 |
| | 045 | Unbiased - SD Control | 1-7 | 50 | (1) | 9 |
| | 046 | Accurate - SD Control | 1-7 | 51 | (1) | 9 |
| | 047 | Complete - SD Control | 1-7 | 52 | (1) | 9 |
| | 048 | Adequate - SD Control | 1-7 | 53 | (1) | 9 |
| | 049 | Ordered - SD Control | 1-7 | 54 | (1) | 9 |
| | 050 | Simple - SD Control | 1-7 | 55 | (1) | 9 |
| | 051 | Current - SD Control | 1-7 | 56 | (1) | 9 |
| | 052 | Well-timed - SD Control | 1-7 | 57 | (1) | 9 |
| (18) | 053 | Reports Importance - Planning Points | 01-.99 | 58-60 | (1) | 9 |
| | 054 | Reports Importance - Control Points | 01-.99 | 61-63 | (1) | 9 |
| (19) | 055 | Attributes Importance in Planning (Yes/No) | | 64 | (1) | 9 |
| | 056 | Attributes Importance in Control (Yes/No) | 2/1 | 65 | (1) | 9 |

(5)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|----------------------------------------|---------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| | 058 | Relevance Rank - Planning | 1-5 | 67 | (1) | 9 |
| | 059 | Adequacy Rank - Planning | 1-5 | 68 | (1) | 9 |
| | 060 | Reliability Rank - Planning | 1-5 | 69 | (1) | 9 |
| | 061 | Understandability Rank - Planning | 1-5 | 70 | (1) | 9 |
| | 062 | Timeliness Rank - Control | 1-5 | 5 | (2) | 9 |
| | 063 | Relevance Rank - Control | 1-5 | 6 | (2) | 9 |
| | 064 | Adequacy Rank - Control | 1-5 | 7 | (2) | 9 |
| | 065 | Reliability Rank - Control | 1-5 | 8 | (2) | 9 |
| | 066 | Understandability Rank - Control | 1-5 | 9 | (2) | 9 |
| | 067 | Timeliness Points - Planning | .01-.96 | 10-12 | (2) | 9 |
| | 068 | Relevance Points - Planning | .01-.96 | 13-15 | (2) | 9 |
| | 069 | Adequacy Points - Planning | .01-.96 | 16-18 | (2) | 9 |
| | 070 | Reliability Points - Planning | .01-.96 | 19-21 | (2) | 9 |
| | 071 | Understandability Points - Planning | .01-.96 | 22-24 | (2) | 9 |

(6)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------|-------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (19) | 072 | Timeliness Points - Control | .01-.96 | 25-27 | (2) | 9 |
| | 073 | Relevance Points - Control | .01-.96 | 28-30 | (2) | 9 |
| | 074 | Adequacy Points - Control | .01-.96 | 31-33 | (2) | 9 |
| | 075 | Reliability Points - Control | .01-.96 | 34-36 | (2) | 9 |
| | 076 | Understandability Points - Control | .01-.96 | 37-39 | (2) | 9 |
| | (27) | 077 | Time In Organisation | 00.08- 45.00 | 40-44 | (2) |
| 078 | | Time In Job | 00.08- 45.00 | 45-49 | (2) | 99 |
| 079 | | Time In Organisation: Under 1 year 1 - 5 Over 5 - 10 Over 10 - 15 Over 15 - 20 Over 20 - 25 Over 25 | 1-7 1 2 3 4 5 6 7 | 50 | (2) | 9 |
| 080 | | Time In Job: Under 1 year 1 - 5 Over 5 - 10 Over 10 - 15 Over 15 - 20 Over 20 - 25 Over 25 | 1-7 1 2 3 4 5 6 7 | 51 | (2) | 9 |
| (2) | | 081 | Amount of Detail - Planning | 1-7 | 52 | (2) |

(7)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|--------------------------------------------------------------------------------------------------------|------------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (2) | 082 | Amount of Detail - Control | 1-7 | 53 | (2) | 9 |
| (5) | 083 | Satisfaction With The Frequency: All-Reports Most-Reports Some-Reports Few-Reports None | 1-5 5 4 3 2 1 | 54 | (2) | 9 |
| | 084 | Percentage of Most (Frequency) | 70-99 | 55-56 | (2) | 9 |
| | 085 | Percentage of Some (Frequency) | 40-69 | 57-58 | (2) | 9 |
| | 086 | Percentage of Few (Frequency) | 1-39 | 59-60 | (2) | 9 |
| (8) | 087 | Satisfaction With Relevance - Planning | 1-7 | 61 | (2) | 9 |
| | 088 | Satisfaction With Adequacy - Planning | 1-7 | 62 | (2) | 9 |
| | 089 | Satisfaction With Timeliness - Planning | 1-7 | 63 | (2) | 9 |
| | 090 | Satisfaction With Reliability - Planning | 1-7 | 64 | (2) | 9 |
| | 091 | Satisfaction With Format - Planning | 1-7 | 65 | (2) | 9 |
| | 092 | Satisfaction With Usefulness - Planning | 1-7 | 66 | (2) | 9 |
| | 093 | Satisfaction With Other - Planning | 1-7 | 67 | (2) | 9 |

(8)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|------------------------------------------------------------------------------------------|------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| | 095 | Satisfaction With Adequacy - Control | 1-7 | 69 | (2) | 9 |
| | 096 | Satisfaction With Timeliness - Control | 1-7 | 70 | (2) | 9 |
| | 097 | Satisfaction With Reliability - Control | 1-7 | 5 | (3) | 9 |
| | 098 | Satisfaction With Format - Control | 1-7 | 6 | (3) | 9 |
| | 099 | Satisfaction With Usefulness - Control | 1-7 | 7 | (3) | 9 |
| | 100 | Satisfaction With Other - Control | 1-7 | 8 | (3) | 9 |
| (23) | 101 | Past Experience in System Design (Yes/No) | 2/1 | 9 | (3) | 9 |
| (24) | 102 | Studied Accountancy (Yes/No) | 2/1 | 10 | (3) | 9 |
| I* | 103 | The System Is Actually Periodically Evaluated (Yes/No) | 2/1 | 11 | (3) | 9 |
| J* | 104 | The Organisation Uses Methods For Making Sure The System Meets The Managers' Needs | 2/1 | 12 | (3) | 9 |

* Extracted from the questionnaire of Head of Management
Accounting Department

(9)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|-----------------------------------------------------------------------------------------------|-------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (9) | 105 | Ask for Accountants' Interpretation Never Seldom Occasionally Frequently | 1-4 1 2 3 4 | 13 | (3) | 9 |
| (10) | 106 | Closeness of Interpretation | 1-7 | 14 | (3) | 9 |
| (11) | 107 | Necessity of Accountants' Interpretation | 1-7 | 15 | (3) | 9 |
| (12) | 108 | Accountants' Understanding of Needs - Planning | 1-7 | 16 | (3) | 9 |
| | 109 | Accountants' Understanding of Needs - Control | 1-7 | 17 | (3) | 9 |
| (13) | 110 | Accountants' Co-operation in Determining Needs | 2/1 | 18 | (3) | 9 |
| | 111 | Reason for Lack of Co-operation: Managers Do Not Ask Responsibility of Another Other | 1-3 1 2 3 | 19 | (3) | 9 |
| 26 | 112 | Accountants Know The Style | 1-7 | 20 | (3) | 9 |
| (1) | 113 | Accounting Function - Points | 0-99 | 21-22 | (3) | 9 |
| | 114 | Own Function - Points | 0-99 | 23-24 | (3) | 9 |
| | 115 | Other Function - Points | 0-99 | 25-26 | (3) | 9 |
| (3) | 116 | Number of Reports Received Weekly | 1-12 | 27-28 | (3) | 99 |

(10)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|---------------------------------------------|------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (3) | 117 | Number of Reports Received Monthly | 1-18 | 29-30 | (3) | 99 |
| | 118 | Number of Reports Received Quarterly | 1-10 | 31-32 | (3) | 99 |
| | 119 | Number of Reports Received Bi-Annually | 1-10 | 33-34 | (3) | 99 |
| | 120 | Number of Reports Received Annually | 1-10 | 35-36 | (3) | 99 |
| | 121 | Number of Reports Received Other | 0-10 | 37-38 | (3) | 99 |
| | 122 | Managers Receive Reports Weekly (Yes/No) | 2/1 | 39 | (3) | 9 |
| | 123 | Managers Receive Reports Monthly | 2/1 | 40 | (3) | 9 |
| | 124 | Managers Receive Reports Quarterly | 2/1 | 41 | (3) | 9 |
| | 125 | Managers Receive Reports Bi-Annually | 2/1 | 42 | (3) | 9 |
| | 126 | Managers Receive Reports Annually | 2/1 | 43 | (3) | 9 |
| | 127 | Managers Receive Reports Other | 2/1 | 44 | (3) | 9 |
| (4) | 128 | Information Overload (Yes/No) | 2/1 | 45 | (3) | 9 |
| | 129 | Overload - Weekly (Yes/No) | 2/1 | 46 | (3) | 9 |

(11)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (4) | 130 | Overload - Monthly | 2/1 | 47 | (3) | 9 |
| | 131 | Overload - Quarterly | 2/1 | 48 | (3) | 9 |
| | 132 | Overload - Bi-Annually | 2/1 | 49 | (3) | 9 |
| | 133 | Overload - Annually | 2/1 | 50 | (3) | 9 |
| | 134 | Overload - Other | 2/1 | 51 | (3) | 9 |
| (6) | 135 | Conducting An Expanded Search - Planning: Never Seldom Occasionally Frequently | 1-4 1 2 3 4 | 52 | (3) | 9 |
| | 136 | Conducting An Expanded Search - Control Never Seldom Occasionally Frequently | 1-4 1 2 3 4 | 53 | (3) | 9 |
| (7) | 137 | Use All The Information Contained (Yes/No) | 2/1 | 54 | (3) | 9 |
| | 138 | Reasons of Non-Use of The Information 1. Irrelevant 2. Reliability 3. Amount of Detail 4. Presentation 5. Out-dated | 6-62 2 4 8 16 32 | 55-56 | (3) | 9 |
| | 139 | Unused Information - Irrelevant (Yes/No) | 2/1 | 57 | (3) | 9 |

(12)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|----------------------------------------------------------------------------------------------------|------------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (7) | 140 | Unused Information - Reliability | 2/1 | 58 | (3) | 9 |
| | 141 | Unused Information - Detail | 2/1 | 59 | (3) | 9 |
| | 142 | Unused Information - Organisa- tion | 2/1 | 60 | (3) | 9 |
| | 143 | Unused Information - Outdated | 2/1 | 61 | (3) | 9 |
| | 144 | Unused Information - Other | 2/1 | 62 | (3) | 9 |
| | 145 | Unused Information - Number of Reasons Mentioned | 1-5 | 63 | (3) | 9 |
| (14) | 146 | Consulted About The Reports: All-Reports Most-Reports Some-Reports Few-Reports None | 1-5 5 4 3 2 1 | 64 | (3) | 9 |
| | 147 | Percentage of Most (Consulted) | 70-99 | 65-66 | (3) | 9 |
| | 148 | Percentage of Some (Consulted) | 40-69 | 67-68 | (3) | 9 |
| | 149 | Percentage of Few (Consulted) | 1-39 | 69-70 | (3) | 9 |
| | 150 | Subordinates Know The Content: All-Reports Most Some Few None | 1-5 5 4 3 2 1 | 5 | (4) | 9 |
| (15) | 151 | Percentage of Most (Know) | 70-99 | 6-7 | (4) | 9 |

(13)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (15) | 152 | Percentage of Some (Know) | 40-69 | 8-9 | (4) | 9 |
| | 153 | Percentage of Few (Know) | 1-39 | 10-11 | (4) | 9 |
| | 154 | Subordinates Know The Content - How? 1. Receive a Copy 2. Discuss The Content 3. Other | 6-14 2 4 8 | 12-13 | (4) | 9 |
| | 155 | Subordinates Know - Receive a Copy (Yes/No) | 2/1 | 14 | (4) | 9 |
| | 156 | Subordinates Know - Discuss the Content | 2/1 | 15 | (4) | 9 |
| | 157 | Subordinates Know - Others | 2/1 | 16 | (4) | 9 |
| | (16) | 158 | Discuss The Decisions: All-Decisions Most Some Few None | 1-5 5 4 3 2 1 | 17 | (4) |
| 159 | | Percentage of Most (Discuss) | 70-99 | 18-19 | (4) | 9 |
| 160 | | Percentage of Some (Discuss) | 40-69 | 20-21 | (4) | 9 |
| 161 | | Percentage of Few (Discuss) | 1-39 | 22-23 | (4) | 9 |
| (25) | 162 | Manager Style (A - B) | 1/2 | 24 | (4) | 9 |

(14)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|-------------------------|------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (25) | 163 | Degree of Manager Style | 1-6 | 25 | (4) | 9 |
| | | Strongly A | 1 | | | |
| | | Quite A | 2 | | | |
| | | Slightly A | 3 | | | |
| | | Slightly B | 4 | | | |
| | | Quite B | 5 | | | |
| | | Strongly B | 6 | | | |

APPENDIX (6.12)

Coding Frame - Assistant Manager's Questionnaire

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| A* | 001 | Questionnaire Number - Card No. | 068- 118/1-3 | 1-4 | (1) | 9 |
| B* | 002 | Respondent Group: Manager Assistant Accountant Head of M.A. Dept. | 1-4 1 2 3 4 | 5 | (1) | 9 |
| C* | 003 | Organisation Number | 1-31 | 6-7 | (1) | 0 |
| D* | 004 | Organisation Size: Under 5,000 5,000, less than 10,000 10,000 and more | 1-3 1 2 3 | 8 | (1) | 9 |
| E* | 005 | Mailing: First Mailing Second Mailing | 1/2 1 2 | 9 | (1) | 9 |
| F* | 006 | Like a Copy of The Findings (Yes/No) | 2/1 | 10 | (1) | |
| G† | 007 | Comments: No Comments Comments About The System Comments About The Answers Comments About The System and Answers | 1-4 1 2 3 4 | 11 | (1) | 9 |
| (10) | 008 | The Key Factor Is User | 1-7 | 12 | (2) | 9 |
| | 009 | The Provider of Information | 1-7 | 13 | (2) | 9 |
| | 010 | The Principal Subordinates | 1-7 | 14 | (1) | 9 |
| | 011 | Decision-Making Style | 1-7 | 15 | (1) | 9 |

* Added to each case (questionnaire)

† The last page on the questionnaire (open-ended question)

(2)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (10) | 012 | The Resources Allocated | 1-7 | 16 | (1) | 9 |
| | 013 | Psychological Tests | 1-7 | 17 | (1) | 9 |
| (12) | 014 | The Frequency Suggested of Evaluation - Special Only (Yes/No) | 2/1 | 18 | (1) | 9 |
| | 015 | The Frequency Suggested of Evaluation - Periodically | 2/1 | 19 | (1) | 9 |
| | 016 | The Frequency Suggested of Evaluation - Special and Periodically | 2/1 | 20 | (1) | 9 |
| | 017 | Periodically (Suggested Evaluation): Quarterly Twice a year Yearly Other | 1-4 1 2 3 4 | 21 | (1) | 9 |
| (11) | 018 | Does Your Organisation Evaluate the System? (Yes/No/ DK) | 2/1/8 | 22 | (1) | 9 |
| | 019 | Method Used In Evaluation: 1. Questionnaire 2. Interviews 3. Managers' Complaints 4. Review 5. Other | 6-62 2 4 8 16 32 | 23-24 | (1) | 9 |
| | 020 | Questionnaire (Yes/No) | 2/1 | 25 | (1) | 9 |
| | 021 | Interviews | 2/1 | 26 | (1) | 9 |
| | 022 | Managers' Complaints | 2/1 | 27 | (1) | 9 |

(3)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|-------------------------------------------------|------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (11) | 023 | Reviews | 2/1 | 28 | (1) | 9 |
| | 024 | Other | 2/2 | 29 | (1) | 9 |
| | 025 | Satisfaction With Questionnaire | 1-7 | 30 | (1) | 9 |
| | 026 | Satisfaction With Interviews | 1-7 | 31 | (1) | 9 |
| | 027 | Satisfaction With Complaints | 1-7 | 32 | (1) | 9 |
| | 028 | Satisfaction With Review | 1-7 | 33 | (1) | 9 |
| | 029 | Satisfaction With Other | 1-7 | 34 | (1) | 9 |
| H* | 030 | The Organisation Actually Evaluates (Yes/No) | 2/1 | 35 | (1) | 9 |
| (9)† | 031 | Essential - SD Planning | 1-7 | 36 | (1) | 9 |
| | 032 | Relevant - SD Planning | 1-7 | 37 | (1) | 9 |
| | 033 | Required - SD Planning | 1-7 | 38 | (1) | 9 |
| | 034 | Unbiased - SD Planning | 1-7 | 39 | (1) | 9 |
| | 035 | Accurate - SD Planning | 1-7 | 40 | (1) | 9 |
| | 036 | Complete - SD Planning | 1-7 | 41 | (1) | 9 |
| | 037 | Adequate - SD Planning | 1-7 | 42 | (1) | 9 |
| | 038 | Ordered - SD Planning | 1-7 | 43 | (1) | 9 |
| | 039 | Simple - SD Planning | 1-7 | 44 | (1) | 9 |

* Extracted from the questionnaire of Head of Management Accounting Dept.

† SD = Semantic Differential

(4)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|-----------------------------------------------|-----------------------------------------|-------------------------|-------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (9) | 040 | Current - SD Planning | 1-7 | 45 | (1) | 9 |
| | 041 | Well-timed - SD Planning | 1-7 | 46 | (1) | 9 |
| | 042 | Essential - SD Control | 1-7 | 47 | (1) | 9 |
| | 043 | Relevant - SD Control | 1-7 | 48 | (1) | 9 |
| | 044 | Required - SD Control | 1-7 | 49 | (1) | 9 |
| | 045 | Unbiased - SD Control | 1-7 | 50 | (1) | 9 |
| | 046 | Accurate - SD Control | 1-7 | 51 | (1) | 9 |
| | 047 | Complete - SD Control | 1-7 | 52 | (1) | 9 |
| | 048 | Adequate - SD Control | 1-7 | 53 | (1) | 9 |
| | 049 | Ordered - SD Control | 1-7 | 54 | (1) | 9 |
| | 050 | Simple - SD Control | 1-7 | 55 | (1) | 9 |
| | 051 | Current - SD Control | 1-7 | 56 | (1) | 9 |
| | 052 | Well-timed - SD Control | 1-7 | 57 | (1) | 9 |
| | (5) | 053 | Reports Importance - Planning Points | 01-.99 | 58-60 | (1) |
| 054 | | Reports Importance - Control Points | 01-.99 | 61-63 | (1) | 9 |
| (6) | 055 | Attributes Importance In Planning (Yes/No) | 2/1 | 64 | (1) | 9 |
| | 056 | Attributes Importance In Control (Yes/No) | 2/1 | 65 | (1) | 9 |

(5)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|----------------------------------------|---------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (6) | 057 | Timeliness Rank - Planning | 1-5 | 66 | (1) | 9 |
| | 058 | Relevance Rank - Planning | 1-5 | 67 | (1) | 9 |
| | 059 | Adequacy Rank - Planning | 1-5 | 68 | (1) | 9 |
| | 060 | Reliability Rank - Planning | 1-5 | 69 | (1) | 9 |
| | 061 | Understandability Rank - Planning | 1-5 | 70 | (1) | 9 |
| | 062 | Timeliness Rank - Control | 1-5 | 5 | (2) | 9 |
| | 063 | Relevance Rank - Control | 1-5 | 6 | (2) | 9 |
| | 064 | Adequacy Rank - Control | 1-5 | 7 | (2) | 9 |
| | 065 | Reliability Rank - Control | 1-5 | 8 | (2) | 9 |
| | 066 | Understandability Rank - Control | 1-5 | 9 | (2) | 9 |
| | 067 | Timeliness Points - Planning | .01-.96 | 10-12 | (2) | 9 |
| | 068 | Relevance Points - Planning | .01-.96 | 13-15 | (2) | 9 |
| | 069 | Adequacy Points - Planning | .01-.96 | 16-18 | (2) | 9 |
| | 070 | Reliability Points - Planning | .01-.96 | 19-21 | (2) | 9 |
| | 071 | Understandability Points - Planning | .01-.96 | 22-24 | (2) | 9 |

(6)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------|-------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (6) | 072 | Timeliness Points - Control | .01-.96 | 25-27 | (2) | 9 |
| | 073 | Relevance Points - Control | .01-.96 | 28-30 | (2) | 9 |
| | 074 | Adequacy Points - Control | .01-.96 | 31-33 | (2) | 9 |
| | 075 | Reliability Points - Control | .01-.96 | 34-36 | (2) | 9 |
| | 076 | Understandability Points - Control | .01-.96 | 37-39 | (2) | 9 |
| | (15) | 077 | Time In Organisation | 00.08- 45.00 | 40-44 | (2) |
| 078 | | Time In Job | 00.08- 45.00 | 45-49 | (2) | 99 |
| 079 | | Time In Organisation: Under 1 year 1 - 5 Over 5 - 10 Over 10 - 15 Over 20 - 25 Over 25 | 1-7 1 2 3 4 6 7 | 50 | (2) | 9 |
| 080 | | Time In Job: Under 1 year 1 - 5 Over 5 - 10 Over 10 - 15 Over 15 - 20 Over 20 - 25 Over 25 | 1-7 1 2 3 4 5 6 7 | 51 | (2) | 9 |
| (3) | | 081 | Amount of Detail - Planning | 1-7 | 52 | (2) |
| | 082 | Amount of Detail - Control | 1-7 | 53 | (2) | 9 |

(7)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|---------------------------------------------|-------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (4) | 083 | Satisfaction With The Frequency | 1-5 | 54 | (2) | 9 |
| | | All-Reports | 5 | | | |
| | | Most-Reports | 4 | | | |
| | | Some-Reports | 3 | | | |
| Few-Reports | | 2 | | | | |
| | | None | 1 | | | |
| | 084 | Percentage of Most (Frequency) | 70-99 | 55-56 | (2) | 9 |
| | 085 | Percentage of Some (Frequency) | 40-69 | 57-58 | (2) | 9 |
| | 086 | Percentage of Few (Frequency) | 1-39 | 59-60 | (2) | 9 |
| (2) | 087 | Satisfaction With Relevance - Planning | 1-7 | 61 | (2) | 9 |
| | 088 | Satisfaction With Adequacy Planning | 1-7 | 62 | (2) | 9 |
| | 089 | Satisfaction With Timeliness - Planning | 1-7 | 63 | (2) | 9 |
| | 090 | Satisfaction With Reliability - Planning | 1-7 | 64 | (2) | 9 |
| | 091 | Satisfaction With Format - Planning | 1-7 | 65 | (2) | 9 |
| | 092 | Satisfaction With Usefulness - Planning | 1-7 | 66 | (2) | 9 |
| | 093 | Satisfaction With Other - Planning | 1-7 | 67 | (2) | 9 |
| | 094 | Satisfaction With Relevance Control | 1-7 | 68 | (2) | 9 |

(8)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|---------------------------------------------------------------------------------------|------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (2) | 095 | Satisfaction With Adequacy - Control | 1-7 | 69 | (2) | 9 |
| | 096 | Satisfaction With Timeliness- Control | 1-7 | 70 | (2) | 9 |
| | 097 | Satisfaction With Reliability - Control | 1-7 | 5 | (3) | 9 |
| | 098 | Satisfaction With Format - Control | 1-7 | 6 | (3) | 9 |
| | 099 | Satisfaction With Usefulness - Control | 1-7 | 7 | (3) | 9 |
| | 100 | Satisfaction With Other - Control | 1-7 | 8 | (3) | 9 |
| (13) | 101 | Past Experience in Systems Design (Yes/No) | 2/1 | 9 | (3) | 9 |
| (14) | 102 | Studied Accountancy (Yes/No) | 2/1 | 10 | (3) | 9 |
| I* | 103 | The System Is Actually Periodically Evaluated (yes/No) | 2/1 | 11 | (3) | 9 |
| J* | 104 | The Organisation Uses Methods To Make Sure The System Meets The Manager's Needs | 2/1 | 12 | (3) | 9 |
| (7) | 105 | Manager Discusses His Needs (Yes/No) | 2/1 | 13 | (3) | 9 |
| | 106 | Satisfaction With Manager's Reliance - Planning | 1-7 | 14 | (3) | 9 |

* Extracted from the questionnaire of Head of Management Accounting Department.

(9)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|-----------------------------------------------------------------------------------|------------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (7) | 107 | Satisfaction With Manager's Reliance - Control | 1-7 | 15 | (3) | 9 |
| (1) | 108 | Assistants Know The Content: All-Reports Most Some Few None | 1-5 5 4 3 2 1 | 16 | (3) | 9 |
| | 109 | Percentage of Most (Know) | 70-99 | 17-18 | (3) | 9 |
| | 110 | Percentage of Some (Know) | 40-69 | 19-20 | (3) | 9 |
| | 111 | Percentage of Few (Know) | 1-39 | 21-22 | (3) | 9 |
| | 112 | Assistants Know - How? 1. Receive a Copy 2. Discuss The Content 3. Other | 6-14 2 4 8 | 23-24 | (3) | 9 |
| | 113 | Assistants Know - Receive a Copy (Yes/No) | 2/1 | 25 | (3) | 9 |
| | 114 | Assistants Know - Discuss | 2/1 | 26 | (3) | 9 |
| | 115 | Assistants Know - Other | 2.1 | 27 | (3) | 9 |
| (8) | 116 | Manager Discusses The Decisions All-Decisions Most Some Few None | 1-5 5 4 3 2 1 | 28 | (3) | 9 |
| | 117 | Percentage of Most (Decisions | 70-99 | 29-30 | (3) | 9 |

(10)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|--------------------------------|-------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (8) | 118 | Percentage of Some (Decisions) | 40-69 | 31-32 | (3) | 9 |
| | 119 | Percentage of Few (Decisions) | 1-39 | 33-34 | (3) | 9 |

APPENDIX (6.13)

Coding Frame - Management Accountant's Questionnaire

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| A* | 001 | Questionnaire Number - Card | 119- 172/1-3 | 1-4 | (1) | 9 |
| B* | 002 | Respondent Group: Manager Assistant Accountant Head of M.A. Dept | 1-4 1 2 3 4 | 5 | (1) | 9 |
| C* | 003 | Organisation Number | 1-31 | 6-7 | (1) | 0 |
| D* | 004 | Organisation Size: Under 5,000 5,000, less than 10,000 10,000 and more | 1-3 1 2 3 | 8 | (1) | 9 |
| E* | 005 | Mailing: First Mailing Second Mailing | 1/2 1 2 | 9 | (1) | 9 |
| F* | 006 | Like a Copy of the Findings (Yes/No) | 2/1 | 10 | (1) | 9 |
| G† | 007 | Comments: No Comments Comments About The System Comments About The Answers Comments About The System and Answers | 1-4 1 2 3 4 | 11 | (1) | 9 |
| (13) | 008 | The Key Factor Is User | 1-7 | 12 | (1) | 9 |
| | 009 | The Provider of Information | 1-7 | 13 | (1) | 9 |
| | 010 | The Principal Subordinates | 1-7 | 14 | (1) | 9 |
| | 011 | Decision-Making Style | 1-7 | 15 | (1) | 9 |

* Added to each case (questionnaire)

† The last page on the questionnaire (open-ended question)

(2)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (13) | 012 | The Resources Allocated | 1-7 | 16 | (1) | 9 |
| | 013 | Psychological Tests | 1-7 | 17 | (1) | 9 |
| (15) | 014 | The Frequency Suggested of Evaluation - Special Only (Yes/No) | 2/1 | 18 | (1) | 9 |
| | 015 | The Frequency Suggested of Evaluation - Periodically | 2/1 | 19 | (1) | 9 |
| | 016 | The Frequency Suggested of Evaluation - Special and Periodically | 2/1 | 20 | (1) | 9 |
| | 017 | Periodically (Suggested Evaluation): Quarterly Twice a year Yearly Other | 1-4 1 2 3 4 | 21 | (1) | 9 |
| (14) | 018 | Does Your Organisation Evaluate The System? (Yes/No) | 2/1 | 22 | (1) | 9 |
| | 019 | Method Used In Evaluation: 1. Questionnaire 2. Interviews 3. Managers' Complaints 4. Review 5. Other | 6-62 2 4 8 16 32 | 23-24 | (1) | 9 |
| | 020 | Questionnaire (Yes/No) | 2/1 | 25 | (1) | 9 |
| | 021 | Interviews | 2/1 | 26 | (1) | 9 |
| | 022 | Managers' Complaints | 2/1 | 27 | (1) | 9 |

(3)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|-------------------------------------------------|------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (14) | 023 | Reviews | 2/1 | 28 | (1) | 9 |
| | 024 | Others | 2/1 | 29 | (1) | 9 |
| | 025 | Satisfaction With Questionnaire | 1-7 | 30 | (1) | 9 |
| | 026 | Satisfaction With Interviews | 1-7 | 31 | (1) | 9 |
| | 027 | Satisfaction With Complaints | 1-7 | 32 | (1) | 9 |
| | 028 | Satisfaction With Review | 1-7 | 33 | (1) | 9 |
| | 029 | Satisfaction With Other | 1-7 | 34 | (1) | 9 |
| H* | 030 | The Organisation Actually Evaluates (Yes/No) | 2/1 | 35 | (1) | 9 |
| †(10) | 031 | Essential - SD Planning | 1-7 | 36 | (1) | 9 |
| | 032 | Relevant - SD Planning | 1-7 | 37 | (1) | 9 |
| | 033 | Required - SD Planning | 1-7 | 38 | (1) | 9 |
| | 034 | Unbiased - SD Planning | 1-7 | 39 | (1) | 9 |
| | 035 | Accurate - SD Planning | 1-7 | 40 | (1) | 9 |
| | 036 | Complete - SD Planning | 1-7 | 41 | (1) | 9 |
| | 037 | Adequate - SD Planning | 1-7 | 42 | (1) | 9 |
| | 038 | Ordered - SD Planning | 1-7 | 43 | (1) | 9 |
| | 039 | Simple - SD Planning | 1-7 | 44 | (1) | 9 |

* Extracted from the questionnaire of Head of Management Accounting
Department

† SD = Semantic Differential

(4)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|-----------------------------------------------|-----------------------------------------|-------------------------|-------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (10) | 040 | Current - SD Planning | 1-7 | 45 | (1) | 9 |
| | 041 | Well-Timed - SD Planning | 1-7 | 46 | (1) | 9 |
| | 042 | Essential - SD control | 1-7 | 47 | (1) | 9 |
| | 043 | Relevant - SD Control | 1-7 | 48 | (1) | 9 |
| | 044 | Required - SD Control | 1-7 | 49 | (1) | 9 |
| | 045 | Unbiased - SD Control | 1-7 | 50 | (1) | 9 |
| | 046 | Accurate - SD Control | 1-7 | 51 | (1) | 9 |
| | 047 | Complete - SD Control | 1-7 | 52 | (1) | 9 |
| | 048 | Adequate - SD Control | 1-7 | 53 | (1) | 9 |
| | 049 | Ordered - SD control | 1-7 | 54 | (1) | 9 |
| | 050 | Simple - SD Control | 1-7 | 55 | (1) | 9 |
| | 051 | Current - SD Control | 1-7 | 56 | (1) | 9 |
| | 052 | Well-timed - SD Control | 1-7 | 57 | (1) | 9 |
| | (11) | 053 | Reports Importance - Planning Points | .01 - .99 | 58-60 | (1) |
| 054 | | Reports Importance - Control Points | .01 - .99 | 61-63 | (1) | 9 |
| (12) | 055 | Attributes Importance In Planning (Yes/No) | 2/1 | 64 | (1) | 9 |
| | 056 | Attributes Importance in Control (Yes/No) | 2/1 | 65 | (1) | 9 |

(5)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|----------------------------------------|---------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (12) | 057 | Timeliness Rank - Planning | 1-5 | 66 | (1) | 9 |
| | 058 | Relevance Rank - Planning | 1-5 | 67 | (1) | 9 |
| | 059 | Adequacy Rank - Planning | 1-5 | 68 | (1) | 9 |
| | 060 | Reliability Rank - Planning | 1-5 | 69 | (1) | 9 |
| | 061 | Understandability Rank - Planning | 1-5 | 70 | (1) | 9 |
| | 062 | Timeliness Rank - Control | 1-5 | 5 | (2) | 9 |
| | 063 | Relevance Rank - Control | 1-5 | 6 | (2) | 9 |
| | 064 | Adequacy Rank - Control | 1-5 | 7 | (2) | 9 |
| | 065 | Reliability Rank - Control | 1-5 | 8 | (2) | 9 |
| | 066 | Understandability Rank - Control | 1-5 | 9 | (2) | 9 |
| | 067 | Timeliness Points - Planning | .01-.96 | 10-12 | (2) | 9 |
| | 068 | Relevance Points - Planning | .01-.96 | 13-15 | (2) | 9 |
| | 069 | Adequacy Points - Planning | .01-.96 | 16-18 | (2) | 9 |
| | 070 | Reliability Points - Planning | .01-.96 | 19-21 | (2) | 9 |
| | 071 | Understandability Points - Planning | .01-.96 | 22-24 | (2) | 9 |

(6)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------|-------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (12) | 072 | Timeliness Points - Control | .01-.96 | 25-27 | (2) | 9 |
| | 073 | Relevance Points - Control | .01-.96 | 28-30 | (2) | 9 |
| | 074 | Adequacy Points - Control | .01-.96 | 31-33 | (2) | 9 |
| | 075 | Reliability Points - Control | .01-.96 | 34-36 | (2) | 9 |
| | 076 | Understandability Points - Control | .01-.96 | 37-39 | (2) | 9 |
| | (17) | 077 | Time In Organisation | 00.08- 45.00 | 40-44 | (2) |
| 078 | | Time In Job | 00.08- 45.00 | 45-49 | (2) | 99 |
| 079 | | Time In Organisation: Under 1 year 1 - 5 Over 5 - 10 Over 10 - 15 Over 15 - 20 Over 20 - 25 Over 25 | 1-7 | 50 | (2) | 9 |
| | | | 1 | | | |
| | | | 2 | | | |
| | | | 3 | | | |
| | 4 | | | | | |
| | 5 | | | | | |
| | 6 | | | | | |
| 080 | Time In Job: Under 1 year 1 - 5 Over 5 - 10 Over 10 - 15 Over 15 - 20 Over 20 - 25 Over 25 | 1-7 | 51 | (2) | 9 | |
| | | 1 | | | | |
| | | 2 | | | | |
| | | 3 | | | | |
| | | 4 | | | | |
| | | 5 | | | | |
| | | 6 | | | | |
| (1) | 081 | Amount of Detail - Planning | 1-7 | 52 | (2) | 9 |
| | | | | | | |

(7)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|----------------------------------------|-------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (1) | 082 | Amount of Detail - Control | 1-7 | 53 | (2) | 9 |
| (2) | 083 | Satisfaction With The Frequency | 1-5 | 54 | (2) | 9 |
| | | All-Reports | 5 | | | |
| | | Most-Reports | 4 | | | |
| | | Some-Reports | 3 | | | |
| | | Few-Reports | 2 | | | |
| | | None | 1 | | | |
| | 084 | Percentage of Most (Frequency) | 70-99 | 55-56 | (2) | 9 |
| | 085 | Percentage of Some (Frequency) | 40-69 | 57-58 | (2) | 9 |
| | 086 | Percentage of Few (Frequency) | 1-39 | 59-60 | (2) | 9 |
| (3) | 087 | Rating of Relevance - Planning | 1-7 | 61 | (2) | 9 |
| | 088 | Rating of Adequacy - Planning | 1-7 | 62 | (2) | 9 |
| | 089 | Rating of Timelines - Planning | 1-7 | 63 | (2) | 9 |
| | 090 | Rating of Reliability - Planning | 1-7 | 64 | (2) | 9 |
| | 091 | Rating of Format - Planning | 1-7 | 65 | (2) | 9 |
| | 092 | Rating of All Dimensions - Planning | 1-7 | 66 | (2) | 9 |
| | 093 | Rating of Other - Planning | 1-7 | 67 | (2) | 9 |
| | 094 | Rating of Relevance - Control | 1-7 | 68 | (2) | 9 |
| | 095 | Rating of Adequacy - Control | 1-7 | 69 | (2) | 9 |

(8)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|------------------------------------------------------------------------------------------|-------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (3) | 096 | Rating of Timeliness - Control | 1-7 | 70 | (2) | 9 |
| | 097 | Rating of Reliability - Control | 1-7 | 5 | (3) | 9 |
| | 098 | Rating of Format - Control | 1-7 | 6 | (3) | 9 |
| | 099 | Rating of All Dimensions - Control | 1-7 | 7 | (3) | 9 |
| | 100 | Rating of Other - Control | 1-7 | 8 | (3) | 9 |
| (16) | 101 | Studied Behavioural Accounting (Yes/No) | 2/1 | 9 | (3) | 9 |
| | 102 | Studied Psychology | 2/1 | 10 | (3) | 9 |
| | 103 | Studied Behavioural Accounting and Psychology | 2/1 | 11 | (3) | 9 |
| J* | 104 | The Organisation Uses Methods For Making Sure the System Meets the Managers' Needs | 2/1 | 12 | (3) | 9 |
| (7) | 105 | Ask for Accountant's Interpretation: Never Seldom Occasionally Frequently | 1-4 1 2 3 4 | 13 | (3) | 9 |
| (9) | 106 | Closeness of Interpretation | 1-7 | 14 | (3) | 9 |
| (8) | 107 | Necessity of Accountants' Interpretation | 1-7 | 15 | (3) | 9 |

* Extracted from the questionnaire of Head of Management Accounting Department

(9)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|--------------------------------------------------------------------------------------------------|--------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (4) | 108 | Accountants' Understanding of Needs - Planning | 1-7 | 16 | (3) | 9 |
| | 109 | Accountants' Understanding of Needs - Control | 1-7 | 17 | (3) | 9 |
| (5) | 110 | Accountants' Co-operation In Determining Needs | 2/1 | 18 | (3) | 9 |
| | 111 | Reason for Lack of Co-operation: Managers Do Not Ask Responsibility of Another Other | 1-3 1 2 3 | 19 | (3) | 9 |
| (6) | 112 | Accountants Know The Style | 1-7 | 20 | (3) | 9 |

APPENDIX (6.14)

Coding Frame -
Questionnaire For Head of Management Accounting Department

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| A* | 01 | Questionnaire Number - Card No. | 173-198 /1-2 | 1-4 | (1) | 9 |
| B* | 02 | Respondent Group Manager Assistant Accountant Head of M.A. Dept. | 1-4 1 2 3 4 | 5 | (1) | 9 |
| C* | 03 | Organisation Number | 2-31 | 6-7 | (1) | 0 |
| D* | 04 | Organisation Size: Under 5,000 5,000, less than 10,000 10,000 and more | 1-3 1 2 3 | 8 | (1) | 9 |
| E* | 05 | Mailing: First Mailing Second Mailing | 1/2 1 2 | 9 | (1) | 9 |
| F* | 06 | Like a Copy of The Findings (Yes/No) | 2/1 | 10 | (1) | 9 |
| G | 07 | Comments: No Comments Comments About The System Comments About The Answers Comments About The System and Answers | 1-4 1 2 3 4 | 11 | (1) | 9 |
| (14) | 08 | The Key Factor is User | 1-7 | 12 | (1) | 9 |
| | 09 | The Provider of Information | 1-7 | 13 | (1) | 9 |
| | 10 | The Principal Subordinates | 1-7 | 14 | (1) | 9 |
| | 11 | Decision-Making Style | 1-7 | 15 | (1) | 9 |

* Added to each case (questionnaire)
The last page on the questionnaire (open-ended question)

(2)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|-----------------------------------------------------------------------------------------|-------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (14) | 12 | The Resources Allocated | 1-7 | 16 | (1) | 9 |
| | 13 | Psychological Tests | 1-7 | 17 | (1) | 9 |
| (17) | 14 | The Frequency Suggested of Evaluation - Special Only (Yes/No) | 2/1 | 18 | (1) | 9 |
| | 15 | The Frequency Suggested of Evaluation - Periodically | 2/1 | 19 | (1) | 9 |
| | 16 | The Frequency Suggested of Evaluation - Special and Periodically | 2/1 | 20 | (1) | 9 |
| | 17 | Periodically (Suggested Evaluation): Quarterly Twice a year Yearly Other | 1-4 1 2 3 4 | 21 | (1) | 9 |
| (1) | 18 | System Computerised: Completely Partially Not at all | 1-3 1 2 3 | 22 | (1) | 9 |
| (2) | 19 | Other Information Function (Yes/No) | 2/1 | 23 | (1) | 9 |
| | 20 | Number of Information Functions One More Than One | 1-2 1 2 | 24 | (1) | 9 |
| | 21 | Function Tiele (One or More): 1. MIS 2. Information and Stats. 3. Others | 6-14 2 4 8 | 25-26 | (1) | 9 |

(3)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (2) | 22 | MIS (yes/No) | 2/1 | 27 | (1) | 9 |
| | 23 | Information and Statistics | 2/1 | 28 | (1) | 9 |
| | 24 | Other | 2/1 | 29 | (1) | 9 |
| | 25 | The Manager Is Responsible To: Chief Executive Finance Director Other | 1-3 | 30 | (1) | 9 |
| | | | 1 | | | |
| | | | 2 | | | |
| 26 | The Interpretation of The System With Other Function: Completely Partially Separate System | 1-3 | 31 | (1) | 9 | |
| | | 1 | | | | |
| | | 2 | | | | |
| (3) | 27 | Strategic Planning - Points | 0-100 | 32-34 | (1) | 9 |
| | 28 | Tactical Planning - Points | 0-100 | 35-37 | (1) | 9 |
| | 29 | Management Control - Points | 0-100 | 38-40 | (1) | 9 |
| | 30 | Operational Control - Points | 0-100 | 41-43 | (1) | 9 |
| (4) | 31 | The Organisation Evaluates The System (Yes/No) | 2/1 | 44 | (1) | 9 |
| | 32 | The System is Evaluated To Determine: 1. Effectiveness 2. Efficiency 3. Review | 6-14 | 45-46 | (1) | 9 |
| | | | 2 | | | |
| 4 | | | | | | |
| 33 | Effectiveness (Yes/No) | 2/1 | 47 | (1) | 9 | |

(4)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (4) | 34 | Efficiency | 2/1 | 48 | (1) | 9 |
| | 35 | Review | 2/1 | 49 | (1) | 9 |
| (5) | 36 | The Frequency of Evaluation - Special Only (Yes/No) | 2/1 | 50 | (1) | 9 |
| | 37 | The Frequency of Evaluation - Periodically | 2/1 | 51 | (1) | 9 |
| | 38 | The Frequency of Evaluation - Special and Periodically | 2/1 | 52 | (1) | 9 |
| | 39 | Periodically (System Evaluation) Quarterly Twice a year Yearly Other | 1-4 1 2 3 4 | 53 | (1) | 9 |
| (6) | 40 | Methods Used In Evaluation: 1. Questionnaire 2. Interviews 3. Managers' Complaints 4. Review 5. Other | 6-62 2 4 8 16 32 | 54-55 | (1) | 9 |
| | 41 | Questionnaire (Yes/No) | 2/1 | 56 | (1) | 9 |
| | 42 | Interviews | 2/1 | 57 | (1) | 9 |
| | 43 | Managers' Complaints | 2/1 | 58 | (1) | 9 |
| | 44 | Review | 2/1 | 59 | (1) | 9 |
| | 45 | Other | 2/1 | 60 | (1) | 9 |

(5)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (6) | 46 | Satisfaction With Questionnaire | 1-7 | 61 | (1) | 9 |
| | 47 | Satisfaction With Interviews | 1-7 | 62 | (1) | 9 |
| | 48 | Satisfaction With Complaints | 1-7 | 63 | (1) | 9 |
| | 49 | Satisfaction With Review | 1-7 | 64 | (1) | 9 |
| | 50 | Satisfaction With Other | 1-7 | 65 | (1) | 9 |
| (7) | 51 | The Effectiveness Criteria: 1. Managers' Satisfaction 2. Decisions Outcomes 3. Other | 6-14 2 4 8 | 66-67 | (1) | 9 |
| | 52 | Managers' Satisfaction (Yes/No) | 2/1 | 68 | (1) | 9 |
| | 53 | Decisions Outcomes | 2/1 | 69 | (1) | 9 |
| | 54 | Other | 2/1 | 70 | (1) | 9 |
| | 55 | Report Issued On The Effectiveness (Yes/No) | 2/1 | 5 | (1) | 9 |
| | 56 | The Report Points Out: 1. Weaknesses 2. Qualitative Terms 3. Quantitative Terms 4. Comparison 5. Other | 6-62 2 4 8 16 32 | 6-7 | (2) | 9 |
| | 57 | Weaknesses (Yes/No) | 2/1 | 8 | (2) | 9 |
| | 58 | Qualitative Terms | 2/1 | 9 | (2) | 9 |

(6)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|--------------------------------------------|------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (7) | 59 | Quantitative Terms | 2/1 | 10 | (2) | 9 |
| | 60 | Comparison | 2/1 | 11 | (2) | 9 |
| | 61 | Other | 2/1 | 12 | (2) | 9 |
| (9) | 62 | Who Does Evaluate The System? | 6-62 | 13-14 | (2) | 9 |
| | | 1. Internal Auditors | 2 | | | |
| | | 2. Management Accountants | 4 | | | |
| | | 3. System Designers | 8 | | | |
| | | 4. Outside Consultants | 16 | | | |
| | | 5. Others | 32 | | | |
| | 63 | Internal Auditors (Yes/No) | 2/1 | 15 | (2) | 9 |
| | 64 | Management Accountants | 2/1 | 16 | (2) | 9 |
| | 65 | System Designers | 2/1 | 17 | (2) | 9 |
| | 66 | Outside Consultants | 2/1 | 18 | (2) | 9 |
| | 67 | Other | 2/1 | 19 | (2) | 9 |
| (10) | 68 | Managers Participation In System Design | 1-7 | 20 | (2) | 9 |
| (11) | 69 | System Meets Managers Needs (Yes No) | 2/1 | 21 | (2) | 9 |
| | 70 | Methods Used: | 6-14 | 22-23 | (2) | 9 |
| | | 1. Questionnaire | 2 | | | |
| | | 2. Discussions | 4 | | | |
| | | 3. Other | 8 | | | |
| | 71 | Questionnaire (Yes/No) | 2/1 | 24 | (2) | 9 |

(7)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|----------------------------------------------------------------------------------------------|------------------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (11) | 72 | Discussions | 2/1 | 25 | (2) | 9 |
| | 73 | Other | 2/1 | 26 | (2) | 9 |
| | 74 | Satisfaction With Questionnaire | 1-7 | 27 | (2) | 9 |
| | 75 | Satisfaction With Discussions | 1-7 | 28 | (2) | 9 |
| | 76 | Satisfaction With Other | 1-7 | 29 | (2) | 9 |
| | 77 | The Frequency of The Method Used - Special Only | 2/1 | 30 | (2) | 9 |
| | 78 | The Frequency of The Method Used - Periodically | 2/1 | 31 | (2) | 9 |
| | 79 | The Frequency of The Method Used - Special and Periodically | 2/1 | 32 | (2) | 9 |
| | 80 | The Frequency of The Method Periodically: Quarterly Twice a year Yearly Other | 1-4 1 2 3 4 | 33 | (2) | 9 |
| | (12) | 81 | Managers Complained (Yes/No) | 2/1 | 34 | (2) |
| 82 | | Procedure Followed to Reveal (Yes/No) | 2/1 | 35 | (2) | 9 |
| (13) | 83 | Obtaining Subordinates Views (Yes/No) | 2/1 | 36 | (2) | 9 |

(8)

| Quest. No. | Data Element | | Code | Column & Card Number | | Missing Values |
|---------------|--------------|-----------------------------------------------------------------------------------------|---------------------|-------------------------|------|-------------------|
| | Var No. | Name | | Column | Card | |
| | | | | | | |
| (13) | 84 | Method Used: 1. Questionnaire 2. Interviews 3. Other | 6-14 2 4 8 | 37-38 | (2) | 9 |
| | 85 | Questionnaire (Yes/No) | 2/1 | 39 | (2) | 9 |
| | 86 | Interviews | 2/1 | 40 | (2) | 9 |
| | 87 | Other | 2/1 | 41 | (2) | 9 |
| (15) | 88 | Determining Managers' Style (Yes/No) | 2/1 | 42 | (2) | 9 |
| | 89 | Method Used In Determining Style 1. Psychological Tests 2. Interviews 3. Other | 6-14 2 4 8 | 43-44 | (2) | 9 |
| | 90 | Psychological Tests (Yes/No) | 2/1 | 45 | (2) | 9 |
| | 91 | Interviews | 2/1 | 46 | (2) | 9 |
| | 92 | Other | 2/1 | 47 | (2) | 9 |
| (16) | 93 | Styles Affect The Reports Design | 1-7 | 48 | (2) | 9 |

APPENDIX (7.2)

Second Request For Co-operation Sent To Individuals
Participating In The Research Project*Department of Accountancy and Business Law**Head of Department: Professor J M S Risk*

UNIVERSITY OF STIRLING STIRLING FK9 4LA SCOTLAND | TELEPHONE: STIRLING (0786) 3171

Research Project into The Effectiveness of Management Accounting Systems

Recently Mr J A Stitt, a Senior Lecturer at this University, and I sent you a copy of the enclosed questionnaire, together with a letter requesting your co-operation in the above project.

I realise the demands upon your time must be many and varied, but as the success of the project depends entirely upon an adequate response by willing participants, I would be grateful if you could see your way to dealing with the matter at your early convenience.

Yours sincerely,

M. Meguid
Researcher

APPENDIX (8.1)

T-Test Of The Differences Between Senior Managers' And
Assistant Managers' Views On The Degree of Presence
Of The Information Attributes

| The Information Used | Relevance | Sufficiency | Timeliness | Reliability | Understandability (Format) |
|----------------------|-----------|-------------|------------|-------------|----------------------------|
| <u>In Planning</u> | | | | | |
| T-value | 1.88 | 1.80 | 1.48 | 2.71 | 0.84 |
| Degrees of freedom | 111 | 111 | 111 | 111 | 111 |
| Significance | 0.06 | 0.08 | 0.14 | 0.01 | 0.40 |
| <u>In Control</u> | | | | | |
| T-value | 0.79 | 0.87 | 1.17 | 1.80 | 1.92 |
| Degrees of freedom | 115 | 115 | 115 | 115 | 115 |
| Significance | 0.43 | 0.39 | 0.24 | 0.08 | 0.06 |

APPENDIX (8.2)

Chi-Square Test Of The Differences Between Senior Managers' And
Assistant Managers' Views On The Degree of Presence
Of The Information Attributes

| The Information Used | Relevance | Sufficiency | Timeliness | Reliability | Understandability (Format) |
|----------------------|-----------|-------------|------------|-------------|----------------------------|
| <u>In Planning</u> | | | | | |
| Chi-square | 11.25 | 5.24 | 2.25 | 6.51 | 0.98 |
| Degrees of freedom | 2 | 2 | 2 | 2 | 2 |
| Significance | 0.00 | 0.07 | 0.33 | 0.04 | 0.61 |
| <u>In Control</u> | | | | | |
| Chi-square | 0.48 | 0.15 | 0.11 | 8.50 | 2.45 |
| Degrees of freedom | 2 | 2 | 2 | 2 | 2 |
| Significance | 0.79 | 0.93 | 0.95 | 0.01 | 0.29 |

APPENDIX (8.3)

Management Accountants' Ratings Of The Levels Required By Senior
Managers Of The Attributes Of The Information Needed For
Use In Planning

| Attributes | Frequency of Responses* | | | | | | |
|-------------|-------------------------|---|----|----|----|----|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | % | % | % | % | % | % | % |
| Relevance | - | 6 | 15 | 48 | 11 | 15 | 6 |
| Sufficiency | - | 2 | 26 | 37 | 15 | 15 | 6 |
| Timeliness | - | 6 | 28 | 32 | 15 | 11 | 9 |
| Reliability | - | 2 | 7 | 48 | 19 | 17 | 7 |
| Format | - | 4 | 17 | 44 | 13 | 13 | 9 |

* A 7-point scale was used where 1 = unreasonable, 4 = reasonable and 7 = highly reasonable.

APPENDIX (8.4)

Management Accountants' Ratings Of The Levels Required By Senior
Managers Of The Attributes Of The Information Needed For
Use In Control

| Attributes | Frequency of Responses* | | | | | | |
|-------------|-------------------------|----|----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | % | % | % | % | % | % | % |
| Relevance | - | 4 | 26 | 30 | 17 | 17 | 7 |
| Sufficiency | - | 4 | 15 | 37 | 24 | 13 | 7 |
| Timeliness | - | 11 | 13 | 37 | 17 | 11 | 11 |
| Reliability | - | 2 | 9 | 35 | 19 | 24 | 11 |
| Format | - | 6 | 15 | 50 | 13 | 7 | 9 |

* A 7-point scale was used where 1 = unreasonable, 4 = reasonable and 7 = highly reasonable.

APPENDIX (8.5)

The Influence Of Previous Experience In Information Systems
Design On Assistant Managers' Views On The Information Provided

| Group | The Overall Satisfaction† | | | | | |
|------------------------------------|---------------------------|------|---------|------|---------|------|
| | Planning | | Control | | Overall | |
| | Mean* | S.D. | Mean* | S.D. | Mean** | S.D. |
| (1) Who had previous experience | 4.19 | .91 | 4.09 | 1.12 | 4.12 | .94 |
| (2) Who had no previous experience | 4.20 | .92 | 4.40 | .79 | 4.26 | .82 |
| T value | .04 | | .96 | | .49 | |
| Degrees of freedom | 45 | | 47 | | 45 | |
| Significance*** | .97 | | .34 | | .63 | |
| Chi-square | .30 | | 1.84 | | 1.44 | |
| Degrees of freedom | 2 | | 2 | | 2 | |
| Significance | .86 | | .40 | | .49 | |

† A 7-point scale was used.

* The mean scores of the five information attributes.

** The mean scores of assistant managers' views on the attributes of both the information provided for planning and control.

*** Two-tailed test.

APPENDIX (8.6)

Comparison Between The Satisfaction Of Assistant Managers Who Have Studied Accounting And Those Who Have Not Studied Accounting

| Group | The Overall Satisfaction† | | | | | |
|---------------------------------|---------------------------|------|---------|------|---------|------|
| | Planning | | Control | | Overall | |
| | Mean* | S.D. | Mean* | S.D. | Mean** | S.D. |
| (1) Have studied accounting | 4.16 | 1.06 | 4.01 | 1.21 | 4.09 | 1.09 |
| (2) Have not studied accounting | 4.18 | .83 | 4.26 | .93 | 4.19 | .79 |
| T-value | .07 | | .81 | | .38 | |
| Degrees of freedom | 46 | | 48 | | 46 | |
| Significance*** | .47 | | .21 | | .35 | |
| Chi-square | 2.09 | | .78 | | 7.94 | |
| Degrees of freedom | 2 | | 2 | | 2 | |
| Significance | .35 | | .68 | | .02 | |

† A 7-point scale was used.

* The mean scores of the five information attributes

** The mean scores of assistant manager's satisfaction with the attributes of both the information provided for planning and control.

*** One-tailed test

APPENDIX (8.7)

The Relationship Between Assistant Managers' Service
Period In The Present Organisation And
Their Evaluation Of The Information Provided

| Group | The Overall Satisfaction † | | | | | |
|----------------------------------------------------|----------------------------|------|---------|------|---------|------|
| | Planning | | Control | | Overall | |
| | Mean* | S.D. | Mean* | S.D. | Mean** | S.D. |
| (1) Service period is not more than 15 years | 4.16 | .96 | 4.01 | .93 | 4.09 | .91 |
| (2) Service period is more than 15 years | 4.18 | .86 | 4.32 | 1.09 | 4.22 | .88 |
| T value | .08 | | 1.07 | | .50 | |
| Degrees of freedom | 46 | | 48 | | 46 | |
| Significance | .94 | | .29 | | .62 | |
| Chi-square | 1.12 | | .60 | | .06 | |
| Degrees of freedom | 2 | | 2 | | 2 | |
| Significance | .57 | | .74 | | .97 | |

† A 7-point scale was used.

* The mean scores of the five information attributes.

** The mean scores of assistant manager's satisfaction with the attributes of both the information provided for planning and control.

APPENDIX (8.8)

The Relationship Between Assistant Managers' Service
Period In The Present Job And Their Evaluation Of
The Information Provided

| Group | The Overall Assessment [†] | | | | | |
|---------------------------------------------------|-------------------------------------|------|---------|------|---------|------|
| | Planning | | Control | | Overall | |
| | Mean* | S.D. | Mean* | S.D. | Mean** | S.D. |
| (1) Service period is not more than 5 years | 4.14 | 1.01 | 4.18 | 1.34 | 4.14 | 1.00 |
| (2) Service period is more than 5 years | 4.25 | .65 | 4.20 | .78 | 4.19 | .65 |
| T value | .41 | | .08 | | .20 | |
| Degrees of freedom | 46 | | 48 | | 46 | |
| Significance | .69 | | .94 | | .84 | |
| Chi-square | .40 | | .60 | | .00 | |
| Degrees of freedom | 2 | | 2 | | 2 | |
| Significance | .82 | | .74 | | 1.00 | |

† A 7-point scale was used.

* The mean scores of the five information attributes.

** The mean scores of assistant manager's satisfaction with the attributes of both the information provided for planning and control.

APPENDIX (8.9)

The Demographic Characteristics Of Senior Managers By The Degree Of Accountants' Co-operation
In Determining The Informational Requirements

| Group Did Accountants Co-operate? | Service period in the present organisation | | Service period in the current job | | Consultation on reports design* | | | Previous experience in information systems design | | Have Studied Accounting | | Decision- making style** | |
|-----------------------------------------|--------------------------------------------------|------------------|-----------------------------------------|------------------|---------------------------------------|--------|----------|---------------------------------------------------------|---------|-------------------------------|---------|--------------------------------|--------|
| | Average Years | Average Years | Average Years | Average Years | N+F % | S % | M+A % | Yes % | No % | Yes % | No % | A % | H % |
| No | 7.03 | | 1.78 | | 66 | 17 | 17 | 83 | 17 | 17 | 83 | 33 | 67 |
| Yes | 20.13 | | 3.93 | | 28 | 23 | 49 | 86 | 14 | 35 | 65 | 17 | 83 |
| <hr/> | | | | | | | | | | | | | |
| T (or chi-square) value | 2.27 | | 1.49 | | | | 3.97 | .17 | | .21 | | | .19 |
| Degrees of freedom | 65 | | 64 | | | | 2 | 1 | | 1 | | | 1 |
| Significance | .03 | | .14 | | | | .14 | .68 | | .65 | | | .66 |

* N+F = were not consulted at all or consulted about few reports;

S = were consulted about some reports;

M+A = were consulted about most or all of the reports.

** A = Analytic; H = Heuristic.

APPENDIX (8.10)

The Demographic Characteristics Of Senior Managers In Organisations Which Actually Evaluate/Do Not Evaluate The Systems' Effectiveness

| Group | Service period in the present organisation | | Service period in the current job | | Consultation on reports on design* | | | Previous experience in information systems design | | Have Studied Accounting | | Decision-making style** | |
|--------------------------|--------------------------------------------|--|-----------------------------------|--|------------------------------------|-----|-------|---------------------------------------------------|------|-------------------------|------|-------------------------|-----|
| | Average Years | | Average Years | | N+F % | S % | M+A % | Yes % | No % | Yes % | No % | A % | H % |
| Do not actually evaluate | 19.76 | | 4.86 | | 34 | 31 | 35 | 86 | 14 | 32 | 68 | 15 | 85 |
| Actually evaluate | 19.17 | | 2.88 | | 25 | 16 | 59 | 90 | 10 | 34 | 66 | 25 | 75 |
| T(or chi-square) value | .17 | | 2.35 | | 4.02 | | | .02 | | .01 | | | .41 |
| Degrees of freedom | 59 | | 58 | | 2 | | | 1 | | 1 | | | 1 |
| Significance | .87 | | .02 | | .13 | | | .86 | | .93 | | | .52 |

* N+F = were not consulted at all or consulted about few reports;

S = were consulted about some reports;

M+A = were consulted about most or all of the reports.

** A = Analytic; H = Heuristic.

APPENDIX (8.11)

The Demographic Characteristics Of Senior Managers In Organisations Which Periodically
Periodically Evaluate/Do Not Periodically Evaluate, The Systems' Effectiveness

| Group | Service period in the present organisation | | Service period in the current job | | Consultation on reports design* | | | Previous experience in information systems design | | Have Studied Accounting | | Decision-making style** | |
|------------------------------|--------------------------------------------|--|-----------------------------------|--|---------------------------------|-----|-------|---------------------------------------------------|------|-------------------------|------|-------------------------|-----|
| | Average Years | | Average Years | | N+F % | S % | M+A % | Yes % | No % | Yes % | No % | A % | H % |
| Do not periodically evaluate | 16.76 | | 2.31 | | 23 | 15 | 62 | 88 | 12 | 39 | 62 | 23 | 77 |
| Periodically evaluate | 29.63 | | 5.25 | | 33 | 17 | 50 | 100 | - | 17 | 83 | 33 | 67 |
| T (or chi-square) value | 2.31 | | 2.50 | | .32 | | | - | | .29 | | 0.00 | |
| Degrees of freedom | 30 | | 29 | | 2 | | | - | | 1 | | 1 | |
| Significance | .03 | | .02 | | .85 | | | .51 [†] | | .59 | | 1.00 | |

* N+F = were not consulted at all or consulted about few reports;

S = were consulted about some reports;

M+A = were consulted about most or all of the reports.

** A = Analytic; H = Heuristic.

† Fisher's exact test.

APPENDIX (8.12)

Assistant Managers' Overall Satisfaction Measured By
The Semantic Differential

| Information Provided For | Semantic Differential Scores | | | |
|--------------------------|------------------------------|------|--------|----------|
| | Mean | S.D. | Median | Skewness |
| Planning* | 4.90 | .92 | 4.98 | -.21 |
| Control** | 4.94 | .92 | 5.01 | -.61 |

T value = .32;

degrees of freedom = 45;

significance = .75

* 5 respondents (10% of 51) did not complete the scales used

** 4 respondents (8% of 51) did not complete the scales used

APPENDIX (8.13)

Semantic Differential Mean Scores Of Senior Managers - By Scale

| Scale | Mean | S.D. | Median | Skewness |
|------------------------------------------|------|------|--------|----------|
| <u>Information Provided For Planning</u> | | | | |
| Essential/Non-essential | 6.00 | 1.39 | 6.53 | -1.41 |
| Required/Not required | 5.88 | 1.42 | 6.39 | -1.15 |
| Ordered/Disordered | 5.68 | 1.33 | 6.00 | - .96 |
| Relevant/Irrelevant | 5.67 | 1.50 | 6.12 | -1.01 |
| Accurate/Inaccurate | 5.35 | 1.40 | 5.78 | - .78 |
| Unbiased/Biased | 5.24 | 1.36 | 5.30 | .04 |
| Adequate/Inadequate | 5.14 | 1.68 | 5.00 | - .82 |
| Well-timed/Ill-timed | 5.08 | 1.50 | 5.50 | - .40 |
| Current/Out-dated | 4.79 | 1.73 | 5.17 | - .31 |
| Complete/Incomplete | 4.77 | 1.69 | 5.00 | - .18 |
| Simple/Complex | 4.27 | 1.64 | 4.21 | - .09 |
| <u>Information Provided For Control</u> | | | | |
| Essential/Non-essential | 5.97 | 1.41 | 6.47 | -1.48 |
| Relevant/Irrelevant | 5.71 | 1.42 | 6.04 | -1.41 |
| Ordered/Disordered | 5.66 | 1.33 | 5.98 | - .82 |
| Required/Not required | 5.62 | 1.58 | 6.13 | -1.01 |
| Accurate/Inaccurate | 5.55 | 1.37 | 5.90 | -1.29 |
| Unbiased/Biased | 5.37 | 1.36 | 5.69 | - .17 |
| Adequate/Inadequate | 5.20 | 1.60 | 5.74 | - .65 |
| Complete/Incomplete | 5.03 | 1.60 | 5.52 | - .51 |
| Well-timed/Ill-timed | 4.79 | 1.69 | 4.67 | - .23 |
| Current/Out-dated | 4.46 | 1.95 | 4.22 | - .11 |
| Simple/Complex | 4.32 | 1.70 | 4.12 | .05 |

APPENDIX (8.14)

Assistant Managers' Satisfaction With The Attributes Of The Information Provided For Planning Measured By The Semantic Differential

| Attributes-Scales | Semantic Differential Score | | | |
|-------------------------------------------------------------------------------------------------|-----------------------------|------|--------|----------|
| | Mean | S.D. | Median | Skewness |
| (1) <u>Relevance</u> Essential/Non-essential Required/Not required Relevant/Irrelevant | 5.65 | 1.19 | 5.94 | -.78 |
| | 5.78 | 1.51 | 6.25 | -1.84 |
| | 5.65 | 1.46 | 6.03 | -1.06 |
| | 5.50 | 1.55 | 5.94 | -1.02 |
| (2) <u>Reliability</u> Accurate/Inaccurate Unbiased/Biased | 4.47 | 1.12 | 4.50 | -.08 |
| | 4.57 | 1.57 | 4.75 | -.30 |
| | 4.37 | 1.48 | 4.07 | -.30 |
| (3) <u>Sufficiency</u> Adequate/Inadequate Complete/Incomplete | 4.69 | 1.40 | 5.02 | -.85 |
| | 4.74 | 1.53 | 5.36 | -.65 |
| | 4.63 | 1.57 | 5.00 | -.56 |
| (4) <u>Understandability</u> Ordered/Disordered Simple/Complex | 4.75 | 1.04 | 4.75 | -.36 |
| | 5.22 | 1.30 | 5.73 | -.90 |
| | 4.28 | 1.54 | 4.12 | .10 |
| (5) <u>Timeliness</u> Well-timed/Ill-timed Current/Out-dated | 4.95 | 1.45 | 4.92 | -.46 |
| | 4.65 | 1.65 | 5.25 | -.39 |
| | 4.52 | 1.50 | 4.83 | -.42 |

APPENDIX (8.15)

Assistant Managers' Satisfaction With The Attributes Of The Information Provided For Control Measured By The Semantic Differential

| Attributes-Scales | Semantic Differential Score | | | | |
|-------------------------------------------------------------------------------------------------|-----------------------------|------|--------|----------|-------------------------|
| | Mean | S.D. | Median | Skewness | |
| (1) <u>Relevance</u> Essential/Non-essential Relevant/Irrelevant Required/Not required | 5.79 | 1.13 | 6.00 | -1.56 | -1.84 -1.25 -1.43 |
| (2) <u>Reliability</u> Accurate/Inaccurate Unbiased/Biased | 4.49 | 1.06 | 4.53 | -.14 | .46 -.03 |
| (3) <u>Sufficiency</u> Adequate/Inadequate Complete/Incomplete | 4.78 | 1.43 | 5.07 | -.62 | -.64 -.46 |
| (4) <u>Understandability</u> Ordered/Disordered Simple/Complex | 4.92 | .93 | 4.93 | -.12 | -1.07 -.04 |
| (5) <u>Timeliness</u> Well-timed/Ill-timed Current/Out-dated | 4.37 | 1.45 | 4.56 | -.31 | -.52 -.04 |

APPENDIX (8.16)

The Consistency In Management Accountants' Views On The
 Information Required By Senior Managers
 (The Correlation Between The Semantic Differential
 And The Direct Approach Results)

| Information Required | Rele- vance | | Relia- bility | | Suffi- ciency | | Format | | Timeli- ness | |
|-------------------------|----------------|----------|------------------|----------|------------------|----------|--------|----------|-----------------|----------|
| | r | α | r | α | r | α | r | α | r | α |
| For Planning | .44 | .00 | .04 | .39 | .33 | .01 | .19 | .09 | .25 | .04 |
| For Control | .52 | .00 | .25 | .04 | .38 | .00 | .40 | .00 | .49 | .00 |

APPENDIX (8.17)

Respondents' Views On The Statement Of "The Resources Allocated To Running The Information Systems"

| Group | Frequency of Responses* | | | | | | | Mean | S.D. | Median | Skewness |
|------------------------|-------------------------|----|----|----|----|---|----------------|------|------|--------|----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| Senior Managers | 30 | 36 | 15 | 13 | 2 | 2 | 3 [†] | 2.37 | 1.41 | 2.06 | 1.37 |
| Assistant Managers | 20 | 33 | 14 | 14 | 4 | 8 | 8 [†] | 3.04 | 1.85 | 2.41 | .86 |
| Management Accountants | 28 | 15 | 24 | 11 | 13 | 6 | 4 [†] | 2.98 | 1.74 | 2.81 | .55 |
| Heads of M.A.D. | 31 | 15 | 19 | 19 | 12 | 4 | - | 2.77 | 1.56 | 2.70 | .33 |
| All Respondents | 27 | 27 | 18 | 14 | 7 | 5 | 4 [†] | 2.76 | 1.66 | 2.37 | .89 |

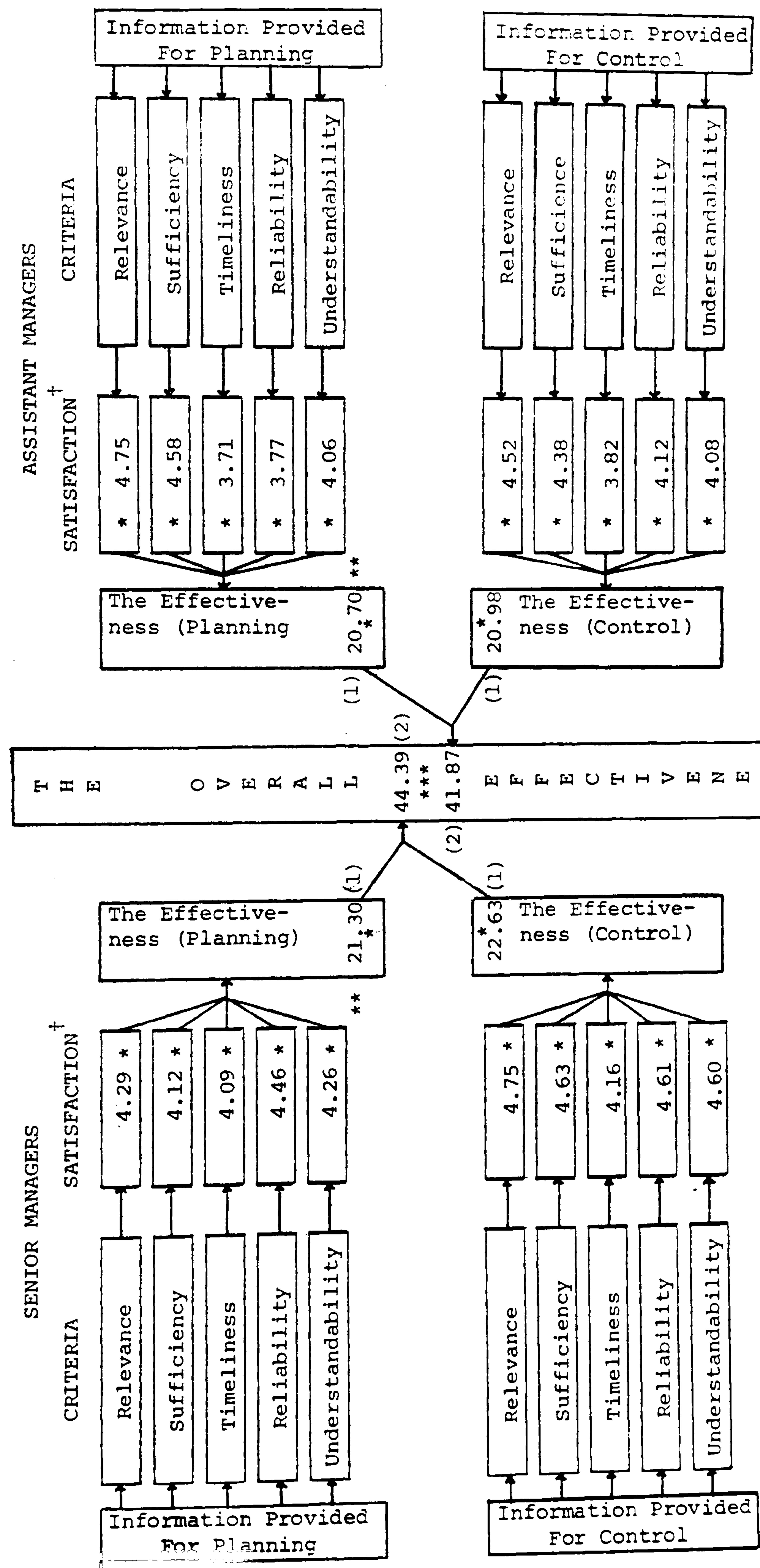
Chi square = 8.29; degrees of freedom = 6; significance = .22

F ratio = 2.05; degrees of freedom = (3,194); significance = .11

* A 7-point scale was used where 1 = strongly disagree; 4 = neutral; 7 = strongly agree.

† Total is not 100 due to rounding.

The Overall Effectiveness Of The Management Accounting Systems



+ A 7-point scale was used
 * Weighting
 (1) Total of the scores of the five attributes after each was weighted by its weight and multiplied by 5.
 ** Minimum score = 5; maximum score = 35; mid-point = 20
 *** Minimum score = 10; maximum score = 70; mid-point = 40
 (2) Total of the scores of the effectiveness in planning and control after each was weighted by its weight and multiplied by 2.

APPENDIX (8.19)

The Results of Examining The Difference In The Effectiveness Of The Systems
From Senior Managers' And Assistant Managers' Perspective By The
Industrial Classification Of The Organisations

T-test Of The Difference In The Effectiveness

| Industrial Classification | In Planning* | | In Control* | | Overall* | |
|-----------------------------|--------------|--------|-------------|--------|----------|--------|
| | t | d.f. α | t | d.f. α | t | d.f. α |
| Transport and Communication | .63 | 41 .53 | 1.51 | 44 .14 | 1.18 | 40 .24 |
| Gas, Electricity and Water | .32 | 15 .75 | .39 | 15 .71 | .27 | 15 .79 |
| Other | .17 | 48 .87 | .58 | 49 .56 | .69 | 45 .50 |

* t = t value; d.f. = degrees of freedom; α = significance