Digital Book Publishing in Ghana: A Focus on Children's Ebooks

by

Lucy Afeafa Ry-Kottoh

A thesis submitted to the University of Stirling, in partial fulfilment of the requirement for the award of PhD in Publishing Studies

December 2017

DECLARATION

I declare that this PhD thesis titled *Digital Book Publishing in Ghana: A Focus on Children's Ebooks* is my own work. It has not been submitted to any other institution for the award of another degree or diploma.

Lucy Afeafa Ry-Kottoh   December 19, 2017

DEDICATION

To Henry, my husband

Thank you for your selflessness!

Your constant encouragement and all-round support made this PhD possible.

ACKNOWLEDGEMENTS

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ABBREVIATIONS AND ACRONYMS

BGL	Bureau of Ghana Languages
CODE	Canadian Organisation for Development through Education
CRDD	Curriculum Research Development Division
CSIR	Council for Scientific and Industrial Research
GAW	Ghana Association of Writers
GBDC	Ghana Book Development Council
GBPA	Ghana Book Publishers Association
GES	Ghana Education Service
GPC	Ghana Publishing Corporation
GUP	Ghana Universities Press
ISBN	International Standard Book Number
JHS	Junior High School
KNUST	Kwame Nkrumah University of Science and Technology
NBSSI	National Board for Small Scale Industries
NCA	National Communications Authority
NRCD	National Redemption Council Document
OUP	Oxford University Press
SHS	Senior High School

ABSTRACT

Adopting a mixed methods approach consisting of interviews, focus group discussions and surveys, this thesis investigates the state of digital publishing in Ghana within the context of Rogers' diffusion of innovation theory. With a focus on children's ebooks, it examines publishers', authors' and readers' levels of adoption of ebooks, and their motivations for, perceptions of, and challenges or barriers to, going digital or otherwise. It also assesses the state of digital infrastructure and human resource capacity in Ghana to support the growing ebook sector, and identifies the knowledge and skills deficit in the industry in order to inform the development of courses that will be incorporated into the BA Publishing Studies programme at Kwame Nkrumah University of Science and Technology (KNUST).

This thesis reveals that the level of adoption of ebook publishing among publishers and authors was relatively low given the interest demonstrated by young readers. The latter were very interested in ebooks and read mainly foreign content because it was freely available and accessible online. Publishers' and authors' motivations for publishing ebooks include visibility, the opportunity to reach a much wider audience, and the novelty of publishing digitally to keep abreast of current trends so as to transform the local industry. Some barriers to adoption identified were the cost associated with acquiring infrastructure, the security of online content, inadequate information about ebooks, non-use of ebooks, and infrastructural challenges such as inconsistent electricity supply and poor Internet penetration.

The thesis also identified an *awareness disconnect* between publishers and their local readers: publishers perceive ebooks to be for the international market and, as such, do not focus on promoting them in the local market; thus, local readers are not aware of the existence of ebooks. Expanding on Rogers' adoption categories, two new categories were created, *incidental adopters* and *perceptual late adopters*, to accommodate individuals who do not fall within Rogers' established adopter categories. To increase the spread of digital publishing and the uptake of ebooks in the Ghanaian book market, the thesis recommends the elimination of the barriers to adoption and, most importantly,

advocates training and skills development to reduce the knowledge and skills deficit gap among publishers and authors.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

According to Kulesz (2011), in Africa, the Arab world and India, digital technology has shaken the foundations of the book industry: children's publishing has been heavily affected by the uptake of tablets, mobile telephones and e-readers as children and teens discover mobile apps and other interactive tools, thus creating a new publishing scenario (para. 1). In Ghana, digital publishing is a relatively new phenomenon. Since 2009, the Ministry of Education has required school book publishers to include CD-ROM and audio versions along with their print publications. But digital publishing really began in 2010 with a collaboration between Worldreader, an international NGO, with the mission to bring digital books to every child and their family ([www.worldreder.org)](www.worldreder.org) and local publishers, after the publishers expressed interest in learning more about digital technology and its implications for the publishing industry (Zacarias, 2012, para. 2). This resulted in the organisation of workshops and seminars to educate publishers in ebook publishing, followed by a digitisation project that involved ten publishers whose backlist titles were digitised and distributed in three African countries (Ghana, Kenya and Uganda), with the aim of creating a new reading culture.

Commenting on the Worldreader evaluation report of the digitisation project, Zell (2013) revealed that 'the report did not offer a great deal in terms of the views and perspectives of the participating Ghanaian publishers, although it analysed factors that will affect the long-term sustainability of the use of e-readers. It also recognised that digital publishing reduced transportation cost, storage cost, paper/ink cost and the risks associated with conventional paper publishing' (p.8).

The popular perception is that reading habits among Ghanaian children of school age are falling, with Ofori-Mensah (2013) asserting that 'children graduating from basic

school can hardly be called literate' (p. 44). However, the iREAD Ghana Study[1] and the Worldreader Baseline Evaluation Report, a pilot study involving nine schools, revealed otherwise. The project provided government or public basic school students with electronic tablets that had the potential to store approximately a thousand ebooks. The study revealed that for 62.5% of their subjects, students did not own copies of the books needed for classroom use; they did not have access to books at home for 81.5% of their subjects; and 43% have never used a computer (http://ilcafrica.com/bannersiREAD_Baseline_ILCAfrica.pdf).

Despite these discouraging figures, the same report revealed that 97.6% of school students liked reading; 70% read for fun outside of school often and very often; 49.7% of the students read aloud to someone outside school often or very often; 43.9% listened to someone read aloud to them outside school often or very often; 61.6% talked to friends and family about what they were reading often or very often; and 54.2% of students enjoyed reading storybooks (http://ilcafrica.com/bannersiREAD_Baseline_ILCAfrica.pdf).

Thus, the report indicated that school books were largely unavailable, yet recorded impressive rates in reading habits. As Philips (2014) asserts, digital publishing and ebooks offer a 'tremendous opportunity for books and knowledge to spread in new ways across new networks. [So] countries without developed infrastructure for distribution of physical books can access content directly' (p. xiv). This makes a strong case for adopting digital publishing and ebooks in Ghana since the marketing and distribution infrastructure of physical books are still underdeveloped, sixty years after independence (discussed later in Chapter Four).

Literacy and education play an important role in publishing children's books: the level of education of parents and their children influences access to and the use of books. As Biamonte (2003) posited 'educated parents and their children's education provide a fundamental basis for the children book market' (p. 1). Literacy figures from the 2010

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[1]The iREAD Ghana Study[1] is a Global Development Alliance [GDA] initiative between the United States Agency for International Development [USAID]) and Worldreader that took place between 2010 and 2011 (https://www.devex.com).

Ghana Housing and Population Census revealed that 74.1% of Ghanaians aged 11 years and older were literate (literacy defined as the ability to read and write in any language) and 67.1% could read and write in English. There are, however, regional variations in these literacy levels, with three northern regions recording less than 50% of the population aged 11 and above being literate, while other regions have at least 69% (Ghana Statistical Service [GSS], 2012, p. 6).

A comparison of statistics from the 2000 and 2010 censuses revealed an increase in the literate population aged 15 years and above from 54.1% to 71.5% (GSS, 2012, p. 7). With this increase in the literate population, it is safe to conjecture that literacy rates would have increased in 2017, creating an opportunity for children's book publishers to explore.

This thesis examines the state of digital book publishing in Ghana with an emphasis on the availability of, access to, and use of children's ebooks among young readers between the ages of nine and thirteen. It evaluates the level of adoption of ebook technology within E.M. Rogers' (2003) diffusion of innovation theory, and evaluates Ghana's infrastructure and human resource capacity to support the emerging ebook sector. While Clark & Phillips (2014) assert that 'digital publishing is far more than just publishing eBooks' (p. 15), and Zhang (2010) posits that digital publications 'include ebooks, e-journals, digital newspapers, blogs, online music, mobile publications, Internet games, Internet comics, animation, Internet advertising and others' (p. 51–52), this research focuses on ebooks because of the interest the format has recently generated in the book industry, as well as their being the most common locally published digital product on the Ghanaian book market.

This chapter introduces my research into digital book publishing in Ghana with a focus on children's ebooks. It gives a brief background of Ghana and sets out the context within which the research was conducted: the purpose and scope, objectives, significance of the study and contribution to knowledge, theoretical framework as well as the structure of the thesis.

1.2 Background description of Ghana

The Republic of Ghana (formerly the Gold Coast) is named after the medieval West African Ghana Empire[2], and was the first place in sub-Saharan Africa where Europeans arrived to trade, first in gold and later in slaves. It became the first African nation in the region to attain independence from colonial power (the United Kingdom) on March 6, 1957 (http://www.bbc.co.uk/news/world-africa-13433790)

Modern Ghana occupies a land area of 238,533 km^2 (92,098 square miles) and is located between latitudes 5°–11° North and longitudes 3° West and 1°East. Ghana is bordered to the west by La Cote d'Ivoire, east by Togo, and Burkina Faso to the north and the Gulf of Guinea to the south. Its capital city is Accra.

Despite intermittent periods of military dictatorship, since 1992 Ghana has evolved into a stable and mature democracy and 'continues to show good performance on democratic governance, with a strong multiparty political system, growing media pluralism and strong civil society activism' (World Bank, 2014, para. 3). As a lower middle-income country, Ghana has a population of 28,834,000, a GDP of $42.69 billion, GDP growth of 3.6% and an inflation of 17.5%, with a life expectancy of 61 years for men and 63.9 years for women in 2017 (http://www.worldbank.org/ghana).

According to the United Nations Development Programme's (UNDP) Human Development Index[3], Ghana is ranked as a medium human development country (139 out of 188) (UNDP, 2016, p. 200). Its main exports are gold, cocoa, timber, tuna, bauxite, aluminium, manganese ore and diamonds. The official language spoken is English, which is the medium of instruction at all levels of education. Other widely spoken local languages include Akan, Ewe, Ga, Dagbani, Nzema and Hausa.

Ghana's education system has undergone several reforms since 1957 and comprises basic, secondary and tertiary levels. Basic education lasts eleven years: two years of kindergarten, six years of primary and three years of junior high, with pupils completing

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[2] The Empire became known in Europe and Arabia as the Ghana Empire by the title of its emperor, the Ghana (Warrior King). The Empire appears to have broken up following the 1076 conquest by the Almoravid General Abu-Bakr Ibn-Umar (Ghana Government Official Portal, 2014).

[3] Human development groups are rated as Very High, High, Medium and Low Human development.

basic education with the Basic Education Certificate Examinations (BECE). Secondary education lasts another three years after students write the West African Secondary School Certificate Examinations (WASSCE): passing the WASSCE is the basis for entry into tertiary education to obtain degrees, diplomas and other professional qualifications awarded by public and private universities, polytechnics and other training institutions.

In 2005, school fees were abolished and subsidies introduced at the basic level of education. This had a very positive effect on enrolment and in reducing gender gaps. In 2012, 'Ghana's net primary school enrolment and completion rates are more than 80%, far ahead of sub-Saharan African averages. Ghana is therefore making steady progress towards its Millennium Development Goals (MDGs) of universal primary education and gender equality in education' (UNICEF, 2012, p. 2). Despite this, the same UNICEF report revealed that 'early childhood education for children aged between four and five is not performing as well because demand outstrips supply: options for preschool teacher training are limited, while preschools and nurseries do not always adhere to the strictest child friendly standards' (UNICEF, 2012, p. 2).

The quality of education is another concern as 'proficiency levels for core subjects such as English and Mathematics are low'; many schools in rural Ghana do not have adequate structures to accommodate increased enrolment (UNICEF, 2012, p. 2) because of a lack of teachers and resources to incentivise teaching in rural areas. Despite this, Ghana is described as 'being rich in mineral resources, and endowed with a good education system and efficient civil service' (http://www.bbc.co.uk/news/world-africa-13433790)

Ghana has an Information Communications Technology (ICT) for Accelerated Development policy out of which the ICT for Education (ICT4Edu) policy has been developed. Although the ICT4Edu policy seeks to promote the use of technology in schools and learning, ebooks are not used in mainstream government or basic schools. The director of the Curriculum Research Development Division (CRDD) of the Ghana Education Service (GES) disclosed in response to a questionnaire for this research that some NGOs have been given permission to digitise materials that have been developed by the GES (C. Sam, 2016). Permissions to digitise materials were necessary because

CRDD is responsible for development, production and supply of school books to public basic schools. She further stated that there are also some ongoing pilot projects on the use of ebooks in some schools spearheaded by NGOs.

One example is the implementation of a USAID-funded project that promotes early grade reading through the introduction of Kindles in about 50 schools. Another is the pilot project of Raspberry Pi in some schools (C. Sam, 2016). The success of these government projects is likely to pave the way for the possible implementation of ebooks in the mainstream education system, assuming the barriers to the adoption of ebooks are eliminated, as discussed in Chapter Five.

The Ghanaian book industry's interest in digital or electronic publishing was evident in the themes of the Ghana International Books Fairs (GIBF) [4] from 2012 to 2017 which all had a digital or electronic publishing-related focus. (See Appendix One for GIBF themes from 2012 to 2017). During these fairs, workshops and seminars were given on effective ebook marketing, managing book publishing in the digital world, and e-learning for school children, among other topics.

In November 2014, Ghana's first independent online bookstore – azaliabooks.com – was launched to promote the work of writers, publishers, photographers and other professionals in the creative industries, offering all genres of ebooks for sale except for *Crayon*, a children's magazine which is free to access (http://www.azaliabooks.com).

1.2.1 Information Communication Technology (ICT) infrastructure

The emergence of both the Internet and digital technology have transformed book publishing, proffering advantages in speed, cost, interactivity and creativity. The Internet is considered ubiquitous; as Cope and Phillips (2006) posited, 'there is no almost place on earth where it is not possible to connect to the Internet' (p. x). This presupposes that

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[4] The Ghana International Book Fair is a trade fair organised by the Ghana Book Publishers Association (GBPA) in collaboration with Ghana Library Board, National Commission Culture, Copyright Society of Ghana, Ghana Book Development Council and Ghana Association of Writers. Beginning in 1994 as a biennial event and now an annual event since 2002, the Ghana International Book Fair (GIBF) offers African publishers trade opportunities and acts as a gateway to the West African book market.

online technologies should be widely adopted and ebooks easily accessible. However, the opposite is true.

As the first country in sub-Saharan African to launch a cellular mobile network in 1992, Ghana has developed one of Africa's most vibrant mobile markets (H. Lancaster, 2015, para. 3). ICT infrastructural development in Ghana has progressed in comparison to other low-income countries globally and is above the 1.1% penetration/adoption average for sub-Saharan Africa (http://www.ghana.gov.gh/index.php/about-ghana/ghana-at-glance). Although the ICT infrastructure continues to improve, Ghanaian book publishers have been slow to access and use digital publishing technologies because of the barriers and perceived challenges, as explored further in Chapter Five.

Investments to develop the ICT infrastructure to bridge the digital divide between Ghana and the developed world have included the development of a 600-kilometre stretch of fibre optic cable on a high transmission network. According to H. Lancaster (2015), 'the landing of two international submarine fibre optic cables in 2012 and 2013 has significantly increased bandwidth, leading to significant activity in the broadband sector' (para. 2). Ghana's fibre optics network was further expanded with the installation of a '800 kilometres Eastern Corridor Fibre Optic backbone that runs through 20 districts and over 120 towns and communities in Ghana with extension to the University of Health and Allied Sciences by government' (Acquaye, 2015, para. 3).

Investments in ICT infrastructure in turn enhance the digital communication infrastructure of Internet service providers, network computer systems, telecommunications companies, and those institutions which build the skills and competencies of individuals, all forming a backbone to support a growing ebook sector. Access to the Internet is by broadband or mobile data subscriptions in Ghana. In February 2017, Vodafone Ghana also launched Vodafone Fibre Broadband as part of its SuperNet Initiative aimed at providing ten times faster Internet connectivity. This fibre broadband is currently accessed by 1,000 homes connected within 20 communities across Ghana (Attakora, 2017, para. 4). By the end of November 2016, Ghana's mobile or cellular data subscription was 19,364,442 individuals with a penetration rate of 69.06% recorded for the month of November (National Communications Authority, 2017, p. 6).

Telecommunications companies operating in Ghana are Airtel, Expresso, Glo, Millicom (Tigo), Scancom (MTN) and Vodafone.

Table 1 below shows telecommunication companies, number of subscriptions, speed and their market share.

Table 1. Telecommunications companies

Telecommunications company	Subscriptions	Speed	Market Share
Airtel	2,971,378	2G/3.75 G	15.35%
Expresso	37,806	-	0.20%
Glo	245,874	3G	1.27%
Millicom (Tigo)	2,782,031	3G	14.37%
Scancom (MTN)	9,981,935	4G LTE	51.55%
Vodafone	3,345,418	Up to 43.2 mbps (on 3G)	17.28%

Compiled from National Communications Authority (2017) and companies' websites

In terms of access to telecommunications services, the 2010 census report revealed that 2.3% of households have fixed telephone lines and 7.9% own laptops. Greater Accra and Ashanti have a relatively higher proportion of households that own laptops or desktops (16.8% and 9.8% respectively). Of those aged 12 years and older, 47.8% own mobile phones and 7.8% use the Internet (Ghana Statistical Service, 2012, p. 14). Vodafone Ghana and Airtel are the only companies that provide fixed line services to the public. As at November 2016, the total subscriptions for fixed operations were 252,872 with Vodafone recording a total of 245,550 while Airtel recorded 7,322 individual subscriptions (National Communications Authority, 2017, p. 6).

Although these figures look modest compared to a country like Kenya that has more widespread computer, software, and Internet use (Cirera, Lage and Sabetti, 2016, p. 20), data on telecom subscriptions revealed that the industry is growing with a total mobile market penetration of 59.78% in March 2015 and 69.06% in November 2016 by

all six mobile data operators: Expresso, Millicom, Scancom, Vodafone, Airtel and Glo Mobile (National Communications Authority, 2017, p. 6). This continuous increase in mobile data market penetration is a positive indication of the availability and use of the digital communication infrastructure, thus creating an opportunity of which ebook publishers can take advantage.

Brocker (2012) has, however, observed that 'even though the figures for mobile phone and Internet users have steadily increased over the last few years, technical issues should still be kept in mind: only the latest smartphones have a big enough screen for reading an e-book; in rural areas network coverage is poor, downloading takes a long time and thus becomes costly; in addition, in rural areas there is often no electricity for charging phones or e-book readers' (p. 69). Another element in the infrastructure to support ebook publishing is electricity, as discussed below.

1.2.2 Electricity to support digital publishing and ebooks uptake

Governments since 1983 have lacked the capacity to solve the recurrent energy crisis in Ghana: The Provisional National Defence Council (PNDC) government in 1983, the National Democratic Congress (NDC) government from 1997 to 1998; the New Patriotic Party (NPP) government from 2002 to 2003 and 2006 to 2007 and again the NDC government in 2012 to 2015 (Edjekumhene, 2015, p. 3). Prior to the reform initiated in the electricity power sector, Edjekumhene, Amadu and Brew-Hammond (2002), stated that 'virtually all Ghana's electricity (about 99%) was produced from two hydro dams at Akosombo and Kpong. However, a prolonged drought in 1983 and 1984 severely curtailed the power generation capabilities of the plants as the water level in the Volta Lake reduced drastically beyond the minimum operating level' (p. 11). This led to a domestic load shedding exercise or rationing of electricity of six hours per day to keep up with the demand that had outstripped the supply.

Consequently, the need for an electric power sector reform to improve generation and access was further prioritised with the World Bank's condition attached to its continuous lending to Ghana (Edjekumhene et al, 2002, p. 1). The reform was 'to improve the financial performance or the extent to which the sector is covering its costs and contributing to future investments; supply side efficiency, with which the electricity

is produced and delivered to consumers and a demand side efficiency where the electricity is used by the final consumer' (World Bank, 1994, cited in Turkson, 2000, p. 7). This policy according to Edjekumhene et al (2002) 'meant that developing countries, the majority of whose power sector investments had been financed almost entirely by the World Bank had no other choice than [to] reform their power sectors if they were to continue to draw power sector investment credit from the World Bank' (p. 1).

Such reforms have been adopted but not without challenges. Although this position is worth exploring, it does not fall within the scope of my research. Industry commentators have suggested the need to increase the generation capacity to meet domestic needs, renegotiate contracts with the Volta Aluminium Company (VALCO) and the export market,[5] and secure funds to keep the Volta River Authority (VRA) and the Electricity Company of Ghana (ECG) financially buoyant to improve the energy situation. Thus, the ebook sector in Ghana has emerged into an improving but still inconsistent energy environment.

1.2.3 Human resources capacity and training

Publishing training and skills development takes place in the form of apprenticeships, seminars and workshops, short courses and academic qualifications. Apart from sporadic workshops organised by Worldreader to introduce local publishers to digital publishing and ebooks, and to encourage them to utilise the Worldreader platform, no institution offers regular training on a sustainable basis or provides continuous skill development in digital publishing. The few designers or ebook creators who work in the industry in Ghana acquired their skills abroad and through self-tutoring.

Institutions that offer publishing and publishing-related courses are mainly focused on print publishing and printing because digital publishing is relatively new in Ghana and, as a result, are yet to fully develop expertise in that regard. Therefore, the need exists to incorporate digital book publishing into the curricula of training

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[5] Ghana exported electric power to Togo through VRA.

institutions. Table 2 shows institutions that offer formal training in publishing and its related areas like printing, book design and illustration, and book marketing.

Table 2. Training institutions offering publishing and publishing-related courses

Institution	Training/Qualification
Department of Publishing Studies, KNUST	BA Publishing Studies/MA Publishing
	Short Courses based on Needs Assessment
Mountcrest University College (affiliated to KNUST)	BA Publishing Studies
Tema Technical Institute	Proficiency levels I and II for apprentices and master crafts persons in printing
Titus Glover Institute of Printing	As above
Comboni Printing School	As above
National Vocational Technical Institute	As above

Author's construct

1.3 Purpose and scope of research

Digital technology seems to be taking root in the Ghanaian publishing industry: the subject is reflected in seminars, conferences and the recent themes of the Ghana International Book Fair, while independent online bookstores like www.azaliabooks.com and www.pickreader.com continue to thrive. However, there is a lack of data on publishing activities in general and digital publishing in particular. Answers are required to some pertinent questions, namely, how many publishers have gone digital or adopted ebook publishing technology? What motivates them to do so? What challenges do they face? Have they achieved the benefits they envisaged? Are the children's ebooks produced by local publishers available and accessible? Is there adequate skilled human capital and other infrastructure to support digital publishing?

Research into the book industry in Ghana with a focus on children's ebooks requires a multifaceted approach that examines the environment within which publishing

occurs: the structures and processes, the activities of stakeholders and industry players, and an assessment of perceptions, opinions and attitudes within the industry towards the digital revolution. In May 2011, at a workshop held during the Nigeria Book Fair, Robert Cornford, Communications Manager of Oxfam GB stated that the publishing industry was 'on the brink of a major digital development, but is being held back by a mixture of uncertainty and practical constraints' (Cornford, 2011, para 1). Has the situation changed? How applicable is this to the Ghanaian industry? The overall purpose of this research is to investigate the current state of digital publishing in Ghana while focusing on the availability of, access to, and the use of children's ebooks.

This evidence-based study examines the state of digital book publishing in Ghana, focusing on children's digital publications. It investigates the level of adoption of digital technologies among Ghana's publishers within the context of E. M Rogers' (2003) *diffusion of innovation theory*, and discusses publishers' motivations, perceptions and challenges in going digital. It further assesses the state of the digital infrastructure and human resource capacity to support the ebook sector and identifies training needs to inform curriculum development at the Department of Publishing Studies at KNUST, discussed in Chapter Seven.

Children's literature is 'important because it is embedded in our cultural, educational and social thinking, central to the success of publishing and media, and crucial to our understanding of literacy and personal development' (Hunt, 2009, p. 12). Thus focussing on the availability of, access to, and use of children's ebooks is important. Furthermore, children's literature is 'not simplistic or marginal' but 'is shaped by wider socio-cultural changes and contributes to those changes' (Montgomery, 2009, p. 8–9). As Naomi Baron observed in her book *Words on Screen*, 'eBooks for children…has [sic] become a new frontier for publishers' (Baron, 2015, p. 12).

Children's ebooks were chosen as the area of focus because an initial survey revealed that the first ebook project to take place in Ghana was the digitisation of children's books published by local publishers. This project was carried out by Worldreader in collaboration with ten local publishers. Worldreader reported that over 200,000 ebooks (textbooks and story books) published by 500 African publishers

(including ten Ghanaian publishers) were made available to children.

While the report recognised that digital publishing reduces the cost associated with print publishing, and analysed the sustainability of the use of e-readers, it did not state the views and perspectives of the publishers who participated in the digitisation project (Zell, 2013, p. 8). My research in examining digital publishing discusses publishers' and authors' perceptions and motivations for going digital or otherwise.

After this Worldreader initiative, some publishers began to explore other means of going digital, with Azaliabooks, Smartline, Step Publishers and Sam-Woode leading the way. In April 2015, Tigo Ghana, a mobile telecommunications company, launched a mobile digital library to promote the digital inclusion of children in rural Ghana (www.myjoyonline.com/technology/). The Tigo digital library project is an example of the role telecommunications companies can play in promoting digital literacy among young readers by making ebooks accessible.

This study focuses on the availability of, access to, and use of ebooks among basic school children in Ghana. It also seeks to ascertain the kinds of ebooks the children read: whether these are, as Phillips (2014, p. xiii) described, **vanilla eBooks** (converted printed books), **enhanced eBooks** (with additional video and audio) and **born digital books** (developed for iPads and other electronic devices).

1.4 Research question

While digital publishing in Ghana may be described as emergent, with initiatives such as seminars, workshops on electronic publishing and digitisation projects carried out by NGOs, and with about thirteen publishing houses publishing ebooks, there is no literature that presents comprehensive empirical evidence on the state of digital publishing in Ghana.

Investment in information communication technology (ICT) infrastructure by Internet service providers, the government, telecommunications companies and training institutions, has created a conducive macro-environment for digital publishing. However, as with new opportunities such as those described by W. Thompson (2012), 'some would skirt around in fear, holding on to what they know while others will laud the changes,

embrace the possibilities and most will remain cautious although optimistic' (para. 2).

This research therefore investigates the current state of digital book publishing in Ghana and seeks to answer the question: *what is the state of digital book publishing in Ghana with reference to the availability of, access to, and use of children's ebooks?* In order to present a holistic view of digital publishing, data was collected from publishers, authors, content convertors/creators, online book retailers, librarians, head teachers and basic school children.

1.5 Research objectives

The overall purpose of this research is to present an overview of book publishing and to examine the state of digital book publishing in Ghana; focusing on the availability of, access to, and use of children's ebooks produced by Ghanaian publishers. To achieve this overall purpose, my research objectives were:

- To investigate the level of adoption of digital book publishing technologies within the context of Rogers' diffusion of innovation theory. To achieve this, the study assesses the level of adoption of ebook publishing among Ghanaian publishers to determine if digital publishing has 'disrupted' traditional print publishing based on their level of adoption. This thesis also discusses the perceptions and motivations of children's publishers and authors in going digital or otherwise, and the challenges inherent in doing so.

- To assess the level of awareness of, access to, and use of ebooks among young readers between the ages of nine and thirteen in Ghana. In achieving this objective, young readers' preferences of ebooks compared to printed books, and their perception of the possible adoption of electronic teaching and learning tools into the mainstream educational system (the Ghana Education Service) were discussed.

- To evaluate Ghana's infrastructure and its book industry's human resource capacity to support the emerging ebook sector. The success of any industry depends on the skills level of its workforce and the infrastructure that supports its activities, namely Internet access, coverage and cost, and level of e-commerce. As

part of assessing the infrastructure, the research examined the level of digitisation of school and public libraries and their role in promoting digital publishing and ebooks in Ghana.

Further, the skill/expertise deficit identified through interviews with publishers, authors and designers informed the development of a digital publishing course/module that will be incorporated into the BA Publishing Studies programme at KNUST.

My interest in carrying out this research stems from the position that digital publishing and ebooks can be used as important tools to complement the functions of print publishing and print books to improve access to content and promote digital literacy if they are well researched. Although there may be some challenges in adopting digital publishing and ebooks discussed later in the thesis, the advantages they proffer can be harnessed to improve access to books and other reading materials as well as offer variety and choice to readers/users of content.

1.6 Significance of study and contribution to knowledge

Digital publishing in Africa is under-researched. Apart from Gaigher, Le Roux and Bothma's (2014) study of the state of digital publishing in South Africa within the context and predictive value of disruptive technology, 'very little has been written in respect of the eBook market in Africa except for blogs and informal discussions' (Maepa, 2013, slide 2). Currently, no evidence-based study has been conducted to examine the level of adoption and diffusion of digital publishing technologies among Ghanaian publishers. There has been no attempt to investigate the awareness of, access to, or availability and use of ebooks among basic school children in Ghana (except for the iREAD Ghana project mentioned on p. 17 (http://ilcafrica.com/bannersiREAD_Baseline_ILCAfrica.pdf) neither has there been any evaluation of the infrastructure and human resource capacity to support ebook publishing.

Although some publishers in Ghana have ventured into ebook publishing, the non-availability of data on their activities and the lack of reliable literature only allowed for conjecture about the Ghanaian book industry. Most evidence is anecdotal: discussions about digital publishing in Africa mainly occur on social networking sites and personal blogs. Ogunlesi (2012) collated impressions of first time ebook publishers about the

prospects of digital book publishing in Africa, and Nawotka (2011) discussed the opportunities for ebook publishing in Africa, citing efforts by some governments and other institutions' initiatives to enhance literacy and introduce e-readers in some countries in Africa (para. 4). This study therefore moves the digital publishing discourse beyond the informal context (on social media sites and blogs) and situates it within the formal context (in a thesis), presenting literature that has been subjected to academic and scientific scrutiny, and which captures the state of digital publishing in Ghana.

Drawing on literature from an international perspective, research into digital publishing has focused on one aspect at a time: either on publishers or the technology. Tian and Martin (2010) discuss different technologies and their limitations, the risks and opportunities they offer, as well as giving insights into the business and technical issues that confront the Australian book industry. Gaigher, Le Roux and Bothma (2014) examine the state of digital publishing in South Africa within the context and predictive value of disruptive technology, and reveals that digital technology is indeed a disruptor within the traditional print publishing environment. Buschow, Nolle and Schneider's (2014) study of German book publishers' barriers to adopting ebooks, reveals that 'individual characteristics of management and the company's corporate culture strongly predict adoption. Also, organizational communication seems to be critical' (p. 63).

While these studies focus on publishers and technologies, my research did not seek data only from publishers but also from other stakeholders in the digital publishing value chain: authors, content creators/convertors, users, librarians and head teachers. It also assesses the infrastructural capacity of the industry, the skills levels of digital publishing personnel, the genres and themes of children's ebooks on the market, ebook availability and access to/use of these, as well as the motivation or otherwise of stakeholders in the adoption of digital technologies.

Updating the skills in digital publishing through training is relevant because appropriate use of technology has had a positive impact on society over the years. As Epstein (2001) asserted, 'The technology of the printing press enhanced the value of literacy, encouraged widespread learning and became the *sine qua non* of modern civilization. New technologies [like ebook publishing] will have an even greater effect,

narrowing the notorious gap between the educated rich and the unlettered poor…' (p. 31).
In this regard, this research will not only fill the gap created by inadequate literature on
digital publishing in Ghana but has also identified gaps in skills levels and training needs
in local publishing expertise, to address which a proposed course in digital publishing at
KNUST has been designed.

On a macro level, this research examines the environment within which
publishing takes place in Ghana with a focus on digital publishing. It examines the
current digital infrastructure: Internet coverage and capacity, the use of e-commerce, and
the human resource capacity that are all crucial to the success of a vibrant digital
publishing environment. Describing the attitudes of customers' use of credit and debit
cards in Nigeria, Ikpaahindi (2011) asserted that many potential customers either dislike
paying by credit card or indeed do not have one (slide 22). This situation not very
different from Ghana because of security concerns of online transactions.

On the micro level, this research analyses the perceptions, opinions and
motivations of authors, publishers, content developers, online retailers, users or readers of
ebooks and the role of libraries in an era in which 'the digital phenomenon has removed
restrictions where anyone with a computer, Internet access and interest can operate
online' (Benkler, 2006 p. 60). This evidence-based study also attempts to collect
information on the digital publishing output of Ghanaian publishers since 'reliable
statistical information about African book publishing output and aspects such as book
imports and exports for each country has always been chronically difficult to obtain and
the picture has become progressively worse in recent years' (Zell, 2013, p. 398).

This study therefore contributes to research in the field of publishing studies in
general and to literature on book publishing in Ghana in particular. It also builds the staff
expertise and competencies of the Department of Publishing Studies, KNUST, Ghana, to
run courses and to supervise students' research into digital publishing that is presently
lacking.

As a teacher on the publishing studies programme at KNUST and with my
interactions with some industry practitioners in the Ghana book industry, my position

may be likened to an embedded researcher described by Vindrola-Padros, Pape, Utley and Fulop (2016), as a 'researcher usually affiliated to an academic institution as well as an organisation outside of academia, thus working in the state of "in-between-ness"' (p. 7). Being an embedded researcher had both advantages and challenges in carrying out this research.

My knowledge of the industry was helpful in that I could draw on my knowledge and experience to make my arguments due to the lack of literature and industry information. My position also gave me access to key informants who otherwise may not have been receptive or willing to respond to questionnaire or interviews if I was not a lecturer on the publishing studies programme at KNUST, or had no links with the industry. While some respondents were entrusting and willing to share their perceptions and motivations because they considered me as stakeholder/researcher/trainer, others were somewhat hesitant probably because they knew me and where not certain if the information they gave would be used to their disadvantage.

My position also had the tendency to create a halo effect: 'where moderators and respondents have a tendency to see something or someone in a certain light because of a single, positive attribute' (Sarniak, 2015, para. 12). The lack of industry data posed as a challenge to verifying some responses from publishers considered as market leaders. Given that my research was not funded by a local stakeholder organisation, there were no obligations to 'guard' the data collected neither was there interference from any 'interested party' thereby allowing me report my findings as objectively as possible. Some respondents on the other hand, could have considered my position and knowledge of the industry to either withhold information they considered sensitive as there were instances where some respondents requested that some comments or responses are anonymised.

Generally, my position facilitated data collection and enabled me to get access to useful primary information to answer my research questions. The insider knowledge provided better 'understanding of the pressures and problems faced at different levels' (Vindrola-Padros, Pape, Utley and Fulop, 2016, p. 2) so recommendations can be made

appropriately. Further, my understanding of the industry enabled me to explain and interpret the data to reflect the meanings respondents intended to convey.

It also provided the opportunity for industry practitioners to make input into the design of courses thereby taking the collaboration between industry and academia a step further.

1.7 The conceptual framework: Rogers' diffusion of innovation (DOI) theory

Every study or research requires an outline or framework to guide the process of data collection and analysis. This research adopted both a deductive and inductive approach by using a mixed methods strategy in data collection and analysis (discussed further in the next chapter). While the first part of the research required a deductive approach to examine the state of digital book publishing in Ghana, the second part focused on children's ebooks in terms of their availability, accessibility and use by basic school children. This required an inductive approach where theory is built and based on the data gathered (Saunders et al, 2012, p. 48). This part of the research was exploratory in nature and therefore required no specific theory like the first part. As a social exploratory study, this research sought to ascertain how basic school children access, use and perceive ebooks. As Schutt (2006) stated, 'the goal is to learn "what is going on here?" and investigate social phenomena without explicit expectations' (p. 12).

Digital publishing is a new phenomenon that has changed the print publishing ecosystem. In adopting a deductive approach to examine the state of digital publishing in Ghana, there was the need for a change model or a theory to study the adoption process or the uptake of innovations. For the purpose of this research, four theories were considered: Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), Consumer Behaviour Theory (CBT), and Rogers' Diffusion of Innovation (DOI) theory.

The Technology Acceptance Model (TAM) designed by F. D. Davis in 1986 was used as a predictor of the use of information systems and, by extension, innovations. This model was primarily designed to predict individuals' intention to adopt or use a technology based on its 'perceived usefulness' and 'perceived ease of use' (Venkatesh & F. D. Davis, 2000, p. 187). Mathieson (1991) found that the TAM 'assumes that beliefs

about usefulness and ease of use are always primary determinants of use decisions' (p. 178) whereas Venkatesh and F. D. Davis (2000) stated that external variables such as the characteristics of the system, its development process, and training the individuals receive influence their intention to use the innovation (p. 187).

Similarly, the Theory of Reasoned Action (TRA) developed by Martin Fishbein and Icek Ajzen in 1967 is used to predict either behavioural intentions or the actual behaviour of individuals towards change or adoption of innovations (Madden, Ellen & Ajzen, 1992, p. 3). It can also be used to identify 'how and where' strategies for when a change in behaviour is required (Sheppard, Hartwick & Warshaw, 1988, p. 325). The Customer Behaviour Theory (CBT), on the other hand, emphasises the 'decisions individuals make in the selection, purchase, and use of, or disposal of, products or services, ideas or experiences to satisfy needs and desires' (Solomon et al, 2006, p. 6).

The diffusion of innovation theory is considered a useful model that guides technological innovations because it allows for modifications to incorporate new ways to meet the needs and expectations of the various adopters (Kaminski, 2011, para. 1). It was used in this study because it sets out the framework within which the individual's approach to innovations can be classified, stating why and how innovations are adopted within a social system; in this case, Ghana. Whereas diffusion of innovation has been used or applied in various fields of study or disciplines such as in agriculture (Rogers, 2003, p. xv); nursing informatics (Kaminski, 2011, para. 1); intervention development/ health programming (Dearing, 2004, p. 1); and political science (Valente and R. L. Davis, 1999, p. 55); this is the first time it has been used in publishing studies.

From a deductive point of view, this study employed Rogers' (2003) diffusion of innovation theory to examine the level of adoption of digital publishing in Ghana. Diffusion of innovation theory was chosen because it clearly outlines the attributes of an innovation and describes adoption categories that enable easy classification and evaluation. While the other theories focus on predictive factors, this research focuses on 'what is' or 'what has' influenced the adoption or non-adoption of the digital publishing and ebooks in Ghana.

Diffusion of innovation describes a process by which an innovation (a perceived new idea, practice or object) is communicated (diffused) through certain channels over time within a social system. The elements of the theory are the innovation itself, communication channels, time, and the social system within which the innovation is diffused (Rogers 2003, p. 35). This research investigates the level of adoption of digital book publishing and ebooks (the innovation) in Ghana (the social system). It will also ascertain when the innovation was first introduced (time) and the channels by which it was communicated to potential adopters.

Adoption or diffusion of an innovation is influenced by the attributes of the innovation. According to Rogers (2003), how stakeholders perceive the innovation is influenced by attributes such as its *relative advantage, compatibility, complexity, trialability* and *observability* (pp. 15 -16). These attributes are described in Table 3.

Table 3. Attributes that influence the adoption of innovation

Attribute	Description
Relative advantage	• The degree to which an innovation is perceived as better than the one it intends to replace. This may be measured in economic terms, but prestige, convenience and satisfaction are also important factors. ➢ The greater the perceived relative advantage of an innovation, the more rapid its rate of adoption will be.
Compatibility	• The degree to which an innovation is perceived to be consistent with the existing values, past experiences, and needs of potential adopters. ➢ An idea that is incompatible with the values and norms of a social system is not likely to be rapidly adopted.
Complexity	• The degree to which an innovation is perceived as difficult to understand and use. ➢ Innovations that are easily understood by most members of a social system are rapidly adopted.
Trialability	• The degree to which an innovation may be experienced on a limited basis. ➢ New ideas that allow tests on a pilot or trial basis will generally be adopted more quickly.
Observability	• The degree to which the results of an innovation are visible to others.

> ➢ The easier it is for individuals to see the results of an innovation, the more likely they are to adopt.

Adapted from Rogers, E. M. (2003). Diffusion of Innovations. (5th ed.). New York: Free Press

Rogers (2003) further stated that the decision to innovate goes through five stages: knowledge, persuasion, decision, implementation and confirmation (p. 169). This is visually represented in Figure 1.

Figure 1. Decision-making stages in adopting innovation

Knowledge
First exposure to innovation but lack of knowledge about it.

Persuasion
Interest in innovation; actively seek details and related information about it.

Decision
Consider the merits and demerits of innovation and decide to accept or reject it.

Implementation
Employ the innovation to a varying degree depending on the situation and its usefulness. Seek more information.

Confirmation
Final decision to use the innovation. (Intrapersonal and inter-personal).

Adapted from Rogers, E. M. (2003). Diffusion of Innovations. New York: Free Press

At the *knowledge* stage, individuals are exposed to the innovation but lack knowledge about it. Those who become interested in the innovation and actively seek out information about it are described as being at the *persuasion* stage. At the *decision* stage, they consider the merits and demerits of the innovation and decide to either adopt or reject it. Those who consider the innovation as advantageous and proceed with adoption to varying degrees are at the *implementation* stage. When individuals finally decide to adopt or use the innovation, they are at the *confirmation* stage.

There are three main approaches to adopting an innovation. When individuals make the decision themselves, it is *optional*; when all the individuals in the social system do it, it is *collective;* and when a few individuals make the decision on behalf of the entire social system, it is *authority* (Rogers, 2003, p. 28). Adoption of innovation is categorised under the labels of innovators, early adopters, early majority, late majority, laggards or late adopters (Rogers, 2003, p. 282–284). The characteristics of these categories are represented in Table 4.

Table 4. Adoption categories and characteristics

Innovators	Early Adopters	Early Majority	Late Majority	Laggards/ Late Adopters
Venturesome and interested in new ideas Have substantial resources to absorb possible losses from unprofitable innovation Understand and apply complex technical knowledge Accept occasional setbacks	Good knowledge about the innovation Respected by peers and regarded as successful in terms of the use of innovation They approve innovation by adopting it	Deliberate for a while before adopting a new idea Interact frequently with peers but are seldom opinion leaders Follow with a deliberate willingness in adopting innovations but seldom lead	Sceptical and slow to adopt innovation until most of the members in their social system have done so Adoption may be an economic necessity or because of peer pressure Adoption occurs when uncertainty about the innovation is removed	Traditional in approach and usually late in adopting innovation Suspicious of innovation and agents of change Limited resources also account for late adoption since they want to be sure the new idea will not fail

Adapted from Rogers, E.M. (2003). Diffusion of Innovations. New York: Free Press

This thesis argues that the level of adoption of ebook publishing influences the state of digital book publishing in Ghana. This includes the following: firstly, the level of awareness of publishers, authors and readers with regard to ebook publishing and ebooks; secondly, their perceptions, motivations, and actual and perceived challenges impact on the level of adoption as well as the infrastructure and human resource capacity to support the emerging ebook sector.

1.8 Structure of the thesis

This thesis is organised into eight chapters.

This chapter introduces the research; states the objectives for the study, the significance of the study; and gives the context and conceptual framework within which the research has been conducted (Rogers' diffusion of innovation theory (2003)).

Chapter Two discusses the methodology and research approach (pragmatism), and the adoption of the mixed methods research design chosen because of the exploratory nature of the work. The lack of data warranted the use of questionnaire, interviews and focus group discussions.

Drawing on scholarship from around the world, Chapter Three reviews literature pertaining to digital publishing and ebooks; their benefits, challenges and adoption; the diffusion of digital publishing technologies; attitudes and perceptions towards digital publishing and ebooks; children's literature and book publishing; access to and use of ebooks; and the role of libraries in promoting children's books and publishing.

Chapter Four examines book publishing in Ghana, beginning with a historical overview; describes the role and activities of Christian missionaries; and summarises colonisation and its influence on the development of publishing in Ghana. It further discusses stakeholder institutions and key issues that impact on the Ghanaian book industry.

Chapter Five assesses the level of adoption of digital book publishing technologies among publishers and authors using Rogers' (2003) adoption categories as a basis of assessment.

Based on the results of focus group discussions in five basic schools, Chapter Six discusses the awareness level of, access to, and use of ebooks among young readers in Ghana. Readers' preferences are also discussed and their perceptions about adopting ebooks into mainstream education in Ghana is presented.

Chapter Seven evaluates Ghana's digital communications infrastructure and the book industry's human capacity to support a growing ebook sector.

Based on information on the skills deficit identified by authors and publishers, a course in digital book publishing has been designed and is intended to be incorporated into the curriculum of the publishing programme the Kwame Nkrumah University of Science and Technology, (KNUST) Kumasi, Ghana.

Chapter Eight concludes the thesis by synthesising the findings, restating the main objectives and arguments, and suggesting further research. Finally, it gives recommendations to the Ghanaian book industry and academia.

CHAPTER TWO
METHODOLOGY

2.1 Introduction

To achieve the overall objective of examining digital book publishing in Ghana with a focus on children's ebooks, an appropriate methodology is required to achieve the research objectives already stated in Chapter One. Methodology as Greene (2006) posits, involves four domains in a social inquiry: philosophical assumptions and stances; inquiry logics; guidelines for practice; and socio-political commitments in science (p. 93, 94). These domains provide a framework for carrying out academic research.

This chapter describes the research philosophy and research design, study population, data collection techniques, and analysis of these. While the deductive approach relies on existing theory to shape one's approach to qualitative research, with an inductive approach, there is the need to build a theory that is adequately grounded on the data collected (Saunders, Lewis &Thornhill, 2012, pp. 143, 144).

Yin (2014) suggested that the use of existing theory to formulate research questions and objectives requires using the theoretical framework to organise and direct data analysis (p. 38). However, Bryman (1988) opined that the prior specification of theory is not advisable since it has the tendency to introduce 'a premature closure on the issues under investigation' (p. 81). The views of respondents may also be completely different from a study influenced by a specific theory, therefore making the use of theory in a qualitative research contentious. In this research however, as already mentioned, Rogers' diffusion of innovation theory was used to formulate questions, and organise and analyse data.

2.2 Research philosophy

The philosophical commitments we make through our choice of research strategy have a significant impact not only on what we do but how we understand what we are

investigating (Johnson & Clarke, 2006, in Saunders, Lewis &Thornhill, 2012, p. 128). From an ontological point of view, my research has components that can be examined or discussed from both the objectivist and subjectivist points of view. The digital publishing process and its infrastructure can be discussed from an objective perspective because the processes or elements and infrastructure required are universal: the digital publishing process usually begins with authorship or idea generation, progresses through editorial and production to distribution and sale; the infrastructure required to support the digital publishing will include electricity, Internet access, e-commerce, skilled human resources and adequately priced reading devices. In this regard, the process and infrastructure exist external to, and independent of, social actors (Saunders, Lewis & Thornhill, 2012, p. 131). From a subjectivist point of view, where social phenomena are created from perceptions, consequent actions of social actors, and the continual revision of social phenomena (Saunders et al, 2012, p.132), this thesis discusses the perceptions and motivations of social actors like publishers, authors, users of ebooks, and other stakeholders as they engage in the digital publishing process.

This research adopted a pragmatic philosophy because of its exploratory and explanatory nature. As Saunders, Lewis and Thornhill (2012) posit, there are many ways of interpreting the world and undertaking research; no single point of view can ever give the entire picture and that there may be multiple realities (p. 130). Pragmatism 'approaches research in terms of "the practical outcomes of their use"… it takes the research problem as its starting point and gauges the values of any particular approach or method primarily in terms of how well the outcomes work in practice' (Denscombe, 2010, p. 128). Similarly, 'pragmatists consider the research question to be more important than either the method they use or the worldview that is supposed to underlie the method. Most good researchers prefer addressing their research questions with any methodological tool available' (Tashakkori & Teddlie, 1998, p. 21).

However, Denscombe (2010) cautioned that pragmatism must not be seen 'as an approach that entirely side-steps the need for researchers to engage with matters of ontology or epistemology. Although it stresses that social research should not be shackled by its philosophy, it also calls on researchers to avoid any naïve assumptions regarding

the knowledge produced by their research' (p. 130). To answer the research questions, Rogers' diffusion of innovation theory was used to examine the level of adoption of digital technologies (ebook publishing) among book publishers in Ghana as well as to ascertain if digital book publishing is a 'disruptive technology' within the Ghanaian publishing context. This is because the level of adoption of digital publishing within the traditional publishing industry determines, to a large extent, whether digital publishing is disruptive or not.

2.3 Research strategy

According to Esseh (2011), 'when investigating a field in which little or no previous research has been conducted, it is necessary to employ an appropriate empirical research method capable of eliciting useful and accurate information from the target population (p. 112). A *mixed methods approach* was adopted for this study. This approach is consistent with pragmatism as it combines elements of qualitative and quantitative research for the purposes of breath and depth of understanding and corroboration (Johnson, Onwuegbuzie and Turner, 2007, pp.113, 122) to effectively find practical solutions to problems through collecting credible and reliable data (Kelemen & Rumens, 2008, p. 159). As Denscombe (2010) asserts, 'the traditional dualism between quantitative and qualitative research is regarded as not helpful. Good research should focus on possibilities of integrating quantitative and qualitative approaches rather than keeping them separate' (p. 129).

Adopting a mixed method approach for this research is consistent with similar studies conducted on digital publishing by Tian and Martin (2010) in Australia and Gaigher, Le Roux and Bothma (2014) in South Africa. While Tian and Martin used surveys and case studies, Gaigher, Le Roux and Bothma used surveys of and interviews with South African trade publishers to evaluate the state of digital publishing within the context and predictive value of disruptive technology theory. Similarly, in her study 'User perceptions of eBooks versus printed books for class reserves in an academic library', Rojeski (2012) used a mixed methods research design comprising survey, focus groups and usage analysis. According to Tashakkori and Teddlie (2003), mixed methods research is useful because it answers research questions that other methods cannot,

provides better inferences, and gives the opportunity to present diversity and divergent views (p. 14).

As Bulmer and Warwick (1993) also stated, 'the case for multiple data sources is especially strong in the developing countries for the simple reason that the data collected by any one method is often subject to substantial errors' (p. 288). Further, Bryman (2008) also lists several justifications stated by researchers for adopting mixed methods for their research. These include answering different research questions, confirming and discovering new positions, triangulation or testing greater validity among others (p. 91)

As already stated in Chapter One, there is a lack of credible quantitative data on the Ghanaian book industry in the form of industry statistics. Adopting a mixed methods approach permits the collection of primary quantitative data to contextualise the research, as well as qualitative data to describe, examine and analyse the Ghanaian book industry, ebook publishing practices, questions of availability and access, infrastructure and human resources capacity.

The mixed methods research design is illustrated in Figure 2 on the next page.

Figure 2. The mixed methods research design
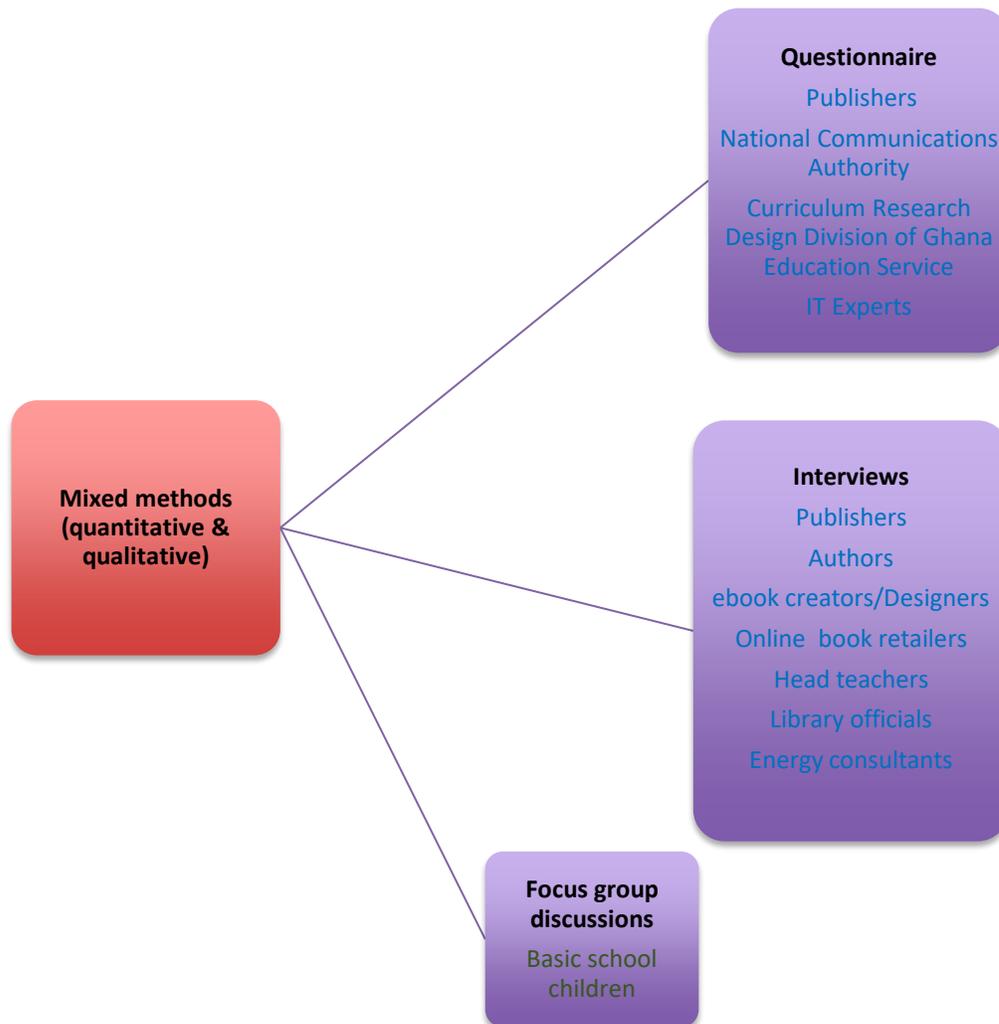
Source: Author's construct

From the figure above, the mixed methods approach adopted leans heavily on the qualitative side because of the exploratory nature of the research. Saunders et al (2009) posited that no research strategy is superior to another: 'what is important is not the label that is attached to a particular strategy, but whether it will enable you to answer your particular research question(s) and objectives' (p. 141).

2.4 Study population

The study population was heterogeneous, comprising various stakeholders in the publishing value chain. Table 5 explains the numbers and reasons for selection:

Table 5. Study population, numbers and reasons for selection

Sample	Number	Reasons for selection
Authors	• Twelve	• Originators of content to be published in print or digital or both. • Potential publishers of their own work using digital technologies.
Publishers	• Forty	• Add value to author's work through publishing. • Potential adopters or non-adopters of digital publishing. • May be impacted by disintermediation in digital publishing.
Designers/Content creators	• Three	• Are acquainted with the various technologies, formats and platforms. • Use digital technologies to create ebooks based on the demands of the market.
Online distributors/ Vendors	• Three	• Point of access and distributors of ebooks. • Source of information on patronage of local ebooks since they have a record of purchase, views, downloads etc.
Head teachers	• Two	• Gatekeepers who influence the use or non-use of ebooks in schools.
Library officials: Greater Accra Regional Manager of Ghana Library Board **President, Ghana Library Association**	• Two	• Gatekeepers who influence the stocking and use of ebooks in libraries.
Basic school children	• Forty-four	• Users/potential users of ebooks. 'The best people to provide information on the children's perspective, action and attitudes are children themselves. Children provide reliable responses if questioned about events that are meaningful to their lives.' (Scott, 2008, p. 88).
Curriculum Research Development Division (CRDD), Ghana Education Service	• One	• Formulators of educational policy.
National Communications Authority	• One	• Regulates communications industry.

IT Specialists	• Five	• Have knowledge about ICT infrastructure and are also users.
Energy Consultant	• One	• Knowledgeable on energy issues and the state of Ghana's energy crises.

Source: Author's construct

2.5 Data collection

This thesis was written using both primary and secondary material after seeking ethical clearance from the Faculty of Arts and Humanities' Ethical Committee because human subjects including children were involved in data collection (See Appendix Five for Ethic Forms and Approval). The sampling method used in data collection was mainly purposive for the selection of all respondents, with the exception of participants of the focus group discussions, who were randomly selected by the head teachers of the basic schools that agreed to participate in the research.

Participants were purposively selected on the basis that 'they can purposefully inform an understanding of the research problem and central phenomenon in the study' (Creswell, 2007, p. 125). This sampling method was suitable for this study because based on the job titles and experiences of the respondents, they were best suited to provide important information that could not be derived from other sources. The purpose of randomly selecting the participants of the focus group discussions was to ensure that 'each element had an equal chance of selection independent of any other event in the selection process' (Babbie, 2005, p. 196). The schools selected to participate in the focus group discussions were also purposively selected due to non-response from the schools that were initially randomly selected. The schools that responded to the permission letters were those that participated in this research.

2.5.1 Primary data

The primary data used in this thesis comprised of responses from *questionnaires*, *semi-structured interviews* and *focus group discussions.* The survey method of collecting data using a questionnaire was chosen because according to Babbie (2005), 'survey research is probably the best method available to the social researcher who is interested in collecting original data for describing a population too large to observe directly' (p. 252). The

questionnaire for publishers was pretested and some questions amended to make their meaning clearer. In the course of carrying out this research however, informants such as the Director of Curriculum Research Development Division of the Ghana Education Service, the National Communications Authority, and various IT specialists, all of whom were originally targeted to be interviewed, requested questionnaires instead for the sake of convenience and saving time.

Sixty questionnaires were distributed to print and digital publishers registered with the Ghana Book Publishers Association (GBPA). For practical reasons of saving time and costs, and to achieve a high response rate, the questionnaires were distributed to publishers who attended meetings of the GBPA Secretariat between February and April 2016. Nineteen were returned at the end of these meetings with the other twenty-one subsequently returned electronically as a scanned email attachment. The questionnaires gathered quantitative data from both traditional and digital publishers about their activities. Prior to this the only data available on publishing activities was the publishers' directory, a list of names and contact details of members of the GBPA.

Following this, semi-structured interviews were conducted with twelve print and digital publishers after administering the questionnaire. The interviews were designed to gather information on publishers' strategies, motivations, challenges, and possible barriers to adopting digital publishing technology among the print publishers. The interview questions probed the values, opinions and attitudes of the individual informants to complete the narrative (Courtois & Turtle, 2008, p. 161). Other respondents interviewed were authors, library officials, head teachers, designers/content creators, online vendors, and one energy consultant.

Twelve authors were sampled using the snowball method, then interviewed. Seven of these authors had published both printed books and ebooks and the other five had published only printed books. Data collected from these authors were on the subjects and themes of their books, and their motivations, challenges, opinions and perceptions about digital publishing in Ghana.

Due to the limited expertise available in digitising content, only three designers or

content creators were interviewed. These interviewees were also purposively sampled and interviewed to gather information on the current technologies available to them, common ebook formats used, and their level of expertise. The feedback received on current skills levels and deficits in knowledge and expertise informed the design of the course in digital publishing to be incorporated into the Publishing Studies programme at KNUST, as already mentioned.

Representatives from the only three online retailers in Ghana – Worldreader, Azaliabooks.com and Pickreader.com – were also interviewed to gather information on the patronage of Ghanaian publishers and consumers, as well as their practices, strategies and challenges, if any.

Only two head teachers were willing to be interviewed on the use of ebooks in their schools. This was because the practice was non-existent, and the other head teachers whose schools participated in the focus group declined to participate in the research since they stated they had nothing to say on the subject. Other informants were the Greater Accra Regional Director of the Ghana Library Board and the President of Ghana Library Association, who were interviewed to ascertain the level of digitisation in public and school libraries. The interviews revealed there was no digitisation in school and public libraries and as a result, there was no reason to proceed with the survey of school and public libraries as originally intended.

As already discussed, interviews with informants from CRDD and NCA and IT experts were replaced with questionnaires owing to informants' availability. These were completed and returned by email. This change in the initial plan became a limitation because it did not present the opportunity for follow-up questions to further probe responses, which conducting an interview would have given.

Data was also collected from basic school children through *focus group discussions.* Focus group (also called group interviewing) is a qualitative method 'based on structured, semi-structured and unstructured interviews' that 'allow researchers to question systematically and simultaneously several individuals' (Babbie, 2005, p. 316). The choice of focus group discussions was for practical reasons of interacting and

gathering data first-hand about the experience of basic school children in terms of their access to, use of, and perceptions about, ebooks.

Although it may be argued that participants for a focus group may not be likely to be 'chosen through rigorous probability sampling' (Babbie, 2005 p. 317) and may not be statistically representative because the sample numbers are small and peculiar (Stewart, Shamdasani and Rook, 2007, p. 39), the advantages of focus groups include capturing real life data in a social environment, flexibility, high face validity, speedy results and low cost (Krueger, 1988, p. 47). Other advantages according to Kitzinger (1995) are that they 'can encourage participation from those who are reluctant to be interviewed on their own (such as those intimidated by the formality and isolation of a one to one interview) as well as encourage contributions from those who may feel they have nothing to say' (p. 300).

In research conducted by C. Hall and Coles (1999) on children's reading choices in England, the data collection tools were a questionnaire and 'holding discussions with a large number of children…' (p. i) which is similar to a focus group. Likewise, in this research, five focus groups were engaged, drawn from five basic schools in Accra and Kumasi. These two cities were selected based on their developed ICT and mobile telephone infrastructure that are capable of supporting digital publishing and ebook reading.

Whitehead, Capey, Maddren and Wellings (1977) in Fischer (1998) observed that the type of school has a powerful potential influence on a child (p. 63). The general perception in Ghana is that private basic schools are well resourced and better supervised and are attended by children from middle- to high-income families. Public basic schools (state or state-assisted) are considered to be generally under-funded by government, less resourced, inadequately supervised and are attended by those from lower-income families. Thus, participants for the focus groups were drawn from both private and public schools. Presenting views from both private and public schools will portray a holistic and realistic situation in terms of awareness of, access to, and use of ebooks among young readers.

Letters of permission were written, and consent forms given to heads of schools and parents explaining the purpose of the research and seeking consent for the participation of their pupils and children/wards. This was important because apart from it being a requirement to meet the ethical standard of research, the head teachers and parents were gatekeepers in gaining access to the young readers who were part of the informants required for this research.

Forty-four young readers drawn from upper primary (that is from primary 4 to junior high school), participated in the focus group discussions. These participants were between the ages of nine and thirteen, with a minimum of seven and maximum of twelve members in a group. The focus group discussions were augmented by practical sessions in which preloaded ebooks on an iPad and smartphone were presented to the participants, who took turns in demonstrating their skill of use; I observed to ascertain the participants' familiarity and use of the devices and ebooks. This interaction was useful to both users and non-users of ebooks since it gave the participants who were not aware of ebooks the opportunity to see and read them for the first time. Situating the practical session after the focus group discussion was appropriate since it limited the *observer effect* where participants behave differently because they know they are being observed.

2.5.2 Secondary data

This thesis also relied on the use of secondary material and grey literature (in the literature review) to support the arguments made. Publications from the Ghana Statistical Services, Ministry of Communication, The Word Bank and other relevant publications are cited in the thesis. The lack of industry statistics on book publishing in Ghana posed a challenge as already mentioned in Chapter One.

2.6 Data analysis

The findings of this research were analysed using both quantitative and qualitative approaches of presenting data using tables, graphs and charts, as well as quotations from interviews and focus group responses. Out of the sixty questionnaires that were administered to publishers in Accra and Kumasi, forty were returned, giving a response rate of 66.7%. The data was analysed using Microsoft Excel for clear and easy

understanding based on the following variables of interest for this study: publishers' socio-demographic characteristics, kinds of publications that are digitised, avenues for access, level of adoption of ebook technology, among others.

Qualitative data from all interviews and focus group discussion were transcribed and analysed based on what Krueger and Casey (2009) describe as abridged transcripts in which 'irrelevant conversations are removed' such as 'the introduction and first question' … 'excessive moderator directions' and 'comments that don't directly relate to the purpose of the study' (p. 117). They recommend this approach to transcription when the transcriber 'thoroughly understands the purpose of the study… preferably the analyst. In essence, the researcher is doing analysis while listening to the recording and transcribing only those comments that will be useful' (p. 118). Similarly, as Lee and Fielding (2004) write, 'the choice of a particular transcription method usually involves a trade-off between time and cost constraints and the demands of theory development' (p. 533).

Whereas Krueger and Casey (2009) recommended concurrent data collection and analysis as the fieldwork progresses to improve data collection (p. 117), the focus group discussions were completed before the data were analysed. However, there were debriefing sessions after each focus group discussion to identify the main issues or themes, significant points, and anything that needed to be changed before the next focus group discussion. The results were presented in tables, graphs, charts and narratives.

2.7 Limitations of the research

Although a mixed methods approach was suitable for this study because of its exploratory nature and lack of industry statistics, a longitudinal study could also have been used since it allows 'the collection of data at different points in time so the same phenomenon can be observed over a period of time' (Babbie, 2005, p. 105).

There were instances where data collection instruments had to be adapted from interviews to questionnaires because the informants were no longer available for interviews, preferring to return their responses by electronic means. Interview schedules were therefore adapted into questionnaires for officials at the National Communications Authority (NCA) and the Curriculum Research Development Division (CRDD) of the

Ghana Education Service. This new approach limited the possibility to probe further into their responses or ask follow-up questions.

Although it is unusual to use primary data (like the response of the director of the CRDD) in the introductory chapter of a thesis, the inadequate literature on digital publishing and ebooks in Ghana necessitated the use of primary data to lay the groundwork for my research.

Funding restrictions and time constraints were also a limitation to the scope of the sample size from which data was collected. In this study, only twelve authors were interviewed, seven of whom have published ebooks. The number of authors who participated in this research was small and therefore their responses cannot be generalised to reflect the perceptions and experiences of the whole industry. However, they give an indication of relevant issues that affect Ghanaian authorship. Future research will therefore require a larger sample size to draw upon diverse opinions and enrich the findings.

Dealing with inconsistent data or information, for example, reporting common knowledge with no documented reference was also a challenge. I realised that some information given by child respondents regarding their use of ebooks appeared inconsistent since some could not substantiate or share their experiences during the discussion. As a researcher using child respondents, ethical consideration limited my ability to probe further so as not to upset them in trying to extract more information than they were willing to share. I therefore had to work with the responses they gave.

In the absence of any documented or archival evidence, data was validated through follow-up interviews. Some respondents (publishers and authors) were more comfortable speaking off the record about their perceptions on some issues. They agreed to share information after I gave them the assurance that the responses they considered 'sensitive' would be anonymised. Some respondents feared being quoted or misquoted.

My personal knowledge of the industry and some facts were also presented as common knowledge and as such were not referenced or explained since there were no references to support these. In instances where some form of literature was discovered

but appeared out-dated, it was still used because the situations described are still relevant. For example, Segbawu, (2001) writing about book distribution in Ghana asserts, the Ministry of Education's Supplies and Logistics Division (SLD) is the largest organisation that supplies and delivers textbooks in Ghana in terms of volume and value (p. 38). This assertion is still accurate today, with government supplying textbooks to public schools. This is why local publishers look forward to bidding for government contracts to produce books for basic schools. One successful contract for a local publisher turns their publishing fortunes around and allows them to invest in other non-performing publications.

Some respondents were unable to complete and return the questionnaires despite persistent follow-up, while prospective interviewees cancelled appointments at short notice. Nevertheless, the experience gained in carrying out this research has been valuable because of the opportunity it has afforded to interact with Ghanaian publishers, and to acquire first-hand information and a new perspective on publishing in Ghana in general, and on digital publishing in particular.

2.8 Conclusion

This chapter has described the research philosophy (pragmatism) and discussed the mixed methods research strategy adopted for this research. In this chapter, I have also discussed the study population, explaining the reasons for selection, the data collection and analysis methods as well as the limitations within which this research was carried out.

Data derived from both the primary and secondary sources (i.e. from the questionnaires, interviews, focus group discussions, secondary material and grey literature) have helped to: ascertain the level of adoption of ebook publishing; measure access to, and use of, children's ebooks among young Ghanaian readers; examine the infrastructure and skill level in the digital book publishing sector; and provide an overview of digital publishing of children's ebooks.

CHAPTER THREE
LITERATURE REVIEW: DIGITAL PUBLISHING AND CHILDREN'S EBOOKS

3.1 Introduction

As with all new phenomena, digital publishing has generated a lively discourse among industry players and publishing academics, focusing on its characteristics, merits, drawbacks, and its role within the traditional print publishing industry. I have argued in *Common Knowledge* that 'while digital publishing has diffused well into countries in the global north, the situation in developing countries in the south cannot be ascertained because of the lack of research and in the case of Ghana, information on digital publishing and its impact is practically non-existent' (Ry-Kottoh, 2016, p. 8). Research on the state of digital book publishing in Ghana and the level of adoption of digital publishing technologies is therefore important to contribute much-needed literature in the field.

According to Chen (2003), the book industry has undergone rapid reconfiguration since the introduction of digital technologies (p. 8). The industry has evolved over the years since Gutenberg's invention of movable type and now 'with the advent of the Internet and the World Wide Web and the digitization of everything from content creation and editorial, to printing and distribution, technology now pervades the book industry' (Tian & Martin, 2010 p. 154). According to Carreiro (2010), 'The most recent wave to rock the book industry is the electronic book or e-book which arguably caused the greatest transformation to the long-established publishing industry since Gutenberg and his printing press' (p. 220).

Today, 'a book is no longer a physical thing. A book is what a book does…a book in this definition does not have to be printed. It can be rendered in many ways, including electronic-visual and audio (talking books). A book [is] not a thing. It is a textual form, a way of communicating. A book is not a product. It is an information architecture' (Cope, 2001, pp. 6–7). This redefinition of 'the book', as well as the new way it is published [digital publishing] in Ghana, is the subject of research in this thesis.

Literature discusses digital publishing and ebooks as two inseparable phenomena in contemporary publishing although digital publishing encompasses more than ebooks. Whereas digital publishing can exist without ebooks, ebooks cannot exist without digital publishing. This chapter therefore discusses digital publishing in tandem with ebooks. The inadequate literature on digital publishing activities in Africa and Ghana mentioned earlier in this chapter necessitated that I substantially draw on international scholarship to discuss digital publishing and ebooks in this thesis. Also, inadequate literature on children's (those aged nine to thirteen) use of ebooks necessitated drawing on literature that pertained to young people like undergraduates because that was what was available at the time of conducting this research to discuss access and use of ebooks as is discussed in sub-section 3.8.2.

This chapter reviews literature focussing on the definition of digital publishing and ebooks; global digital book publishing; the benefits and challenges of digital publishing; attitudes and perceptions towards digital publishing and ebooks; adoption and diffusion of digital publishing and ebooks, and the future of the book, regardless of format. It also discusses access to and use of children's ebooks, and the role of libraries in promoting access to ebooks. Lastly, it identifies the gaps in the literature and draws a conclusion justifying the need for this research.

3.2 Digital publishing and ebooks

Digital publishing 'is dependent on the World Wide Web as its communication channel, producing digital content based on either domestic or global platforms, published and distributed online, with provision for the establishment of digital database facilities for future re-use' (Liu & Rao, 2005 in Tian & Martin, 2010, p. 152). It can also mean 'creating, producing and delivering content that may never appear on a printed page, or if it does, is likely to emerge as a print-on-demand as just one of many options... Now readers expect content to find them or [to] be findable by them wherever they happen to be. This means content syndication, mobile delivery, search engine optimisation and a strong and useful presence on social networks' (O'Reilly, 2009, para. 1 & 2).

Although Carreiro argues that ebooks do not have a concrete definition and evidence suggests that such a definition will be varied or ever-changing (Carreiro, 2010, p. 221), Martin and Tian (2010) define 'eBooks as electronic books as well as digital versions of printed books that are generally downloaded from the Internet and read on a screen; like on a computer, tablet, smartphone or specific eBook reader' (p. 6). Monica Landoni's definition however broadens the description to encompass *content, format* and *mode of delivery* and *hardware* when she describes it as 'an object, container and content where information is organized and structured so that it can be presented to readers in order to facilitate consultation' (Landoni, 2003, p. 23).

Citing Arthur Attwell of Electric Book Works in Cape Town, a publisher of both print and electronic books, Turner (2010) described ebooks as 'one small application of digital publishing which is really a grand process of putting the world of letters onto the Internet' (para. 2). These varied definitions of ebooks that variously emphasise content, format, mode of delivery, hardware, or all these, have prompted studies arguing for a specific definition of ebook as opposed to the digital book (Rowberry, 2015, p. 290). Proffering a new definition, he defined ebooks as a 'subset of digital books that focus on the manipulation of reading preferences and cross-device compatibility… primarily [to be] read whilst other formats may focus on multimodality' (Rowberry, 2015, p. 303).

While Rowberry's definition may be geographically specific to European or Anglo-American publishing, the closet definition of ebook that lends itself to Ghanaian publishing is Martin and Tian's (2010) definition of ebooks, i.e. 'electronic books or digital versions of printed books downloaded from the Internet, or preloaded on reading devices and read on computers, tablets, smartphones or dedicated eBook readers' (p. 6). In defining the term 'ebook' for the purpose of this research, ebooks are *books made up of text and/or illustrations with or without multimedia capability that are accessed [for free or paid to view] through the Internet or preloaded on any device which permits reading on a screen.*

It is important to distinguish between *digitisation of publishing* and *digital publishing*. While the digitisation of publishing refers to how technology influences publishing operations, digital publishing focuses on the processes which eventually

produce a digital product such as an ebook. Rowberry (2015) distinguished digitisation from digitalisation when he explained the former as 'conversion of books to a digital format' and the latter as a 'shift to digital workflows in the publication, distribution, and reception of books both digital and physical' (p. 2).

Similarly, Thompson (2005) emphasised this distinction by explaining the digitisation of publishing as how technology has impacted on publishing operations, and digital publishing as the process that eventually produces a digital product like an ebook (p. 312). In the same vein, Brennen and Kriess (2014) contributed to the distinction between these two concepts when they defined digitisation 'as the material process of converting individual analogue streams of information into digital bits' and digitalisation as 'the way in which many domains of social life are restructured around digital communications and media infrastructure' (para. 2 & 3).

Given this distinction above, it is common for publishing houses to digitalise some or all of their business operations but not digitise their product, as in converting their printed books into ebooks. Writing on the impact of digitisation on publishing, Thompson (2005) discusses the different levels at which digitisation has affected publishing: the level of *operating systems*; the level of *content management and manipulation*; the level of *marketing and service provision*; and the level of *content delivery* (p. 312).

He explained *operating systems* to mean 'the management systems, information systems and other back-office activities like financial data, information on production and others that have been codified and digitized and are accessible within the organisation' (p. 312). *Content management and manipulation* entail 'the acquisition and development of text, illustration and other media content that publishers digitize and are able to deliver in several media as publishers add value to the author's creative work' (p. 312).

The online presence publishers have through their websites creates not only an environment where their lists are advertised and promoted but also serves as a means by which they provide a range of support services for customers. 'This electronic communication is used to interact with actual and potential authors and customers, at the

level of *marketing and service provision.* The level of *content delivery* also focuses on the content and end-product of the publishing process where publishers are not limited to print but have options: eBooks with enhances features of audio, video and other creative and interactive functions' (p. 315).

According to F. W. Lancaster (1995), digital technology in publishing has evolved over the years using computers to generate print publications, to distribute text electronically similar to the print versions, and to generate born-digital publications (pp. 518 - 519. However, the following process is also valid: the generation of complete digital publications, the distribution of text electronically similar to the print versions, and the use of computers to generate print publications. This means the process goes both ways. Digital publishing today has emerged from 'typesetting, word processing, desktop publishing and development of databases' (F. Hall, 2013, p. 7).

3.2.1 Global digital book publishing

The history of digital publishing encapsulates the emergence of CD-ROMs for use on desktop computers (Vassilou & Rowley, 2008, p. 357; Thompson, 2005, p. 316) Several histories of digital publishing and ebooks all give different points of origin. While the theory of portable electronic books according to Ardito (2000) evolved as far back as the late 1960s and early 1970s long before personal computers became popular with the mass public (para. 13), The 1999 Seybold Report on Internet Publishing cited in Ardito (2000) stated that the ebook concept started in 1968 with Alan Kay's Dynabook, a portable interactive personal computer featuring a flat panel display and wireless communication (para. 13). Pettenati (2001) also asserted that the first electronic publications were plain text e-mails in the 1980s, sent to subscribers through a mailing list, and abandoned when more effective media for publishing and distribution were introduced in the 1980s and 1990s (p. 1).

Michael Hart's Project Gutenberg, begun in 1971, is an intervention that did not only promote large-scale digitisation but created wider access to digital books: from digitising 1,000 titles between 1971 and 1996 to 30,000 titles in 2015 (Rowberry, 2015, p. 290) albeit without controversy. Similarly, Google Books did not only attract

controversy but a lawsuit in 2005 over allegations of copyright infringement because of 'scanning and copying without authorisation and "free riding" on content by monetizing traffic' (Rosenblatt, 2009, slide 2).

In the United Kingdom, an early initiative can be traced to the Oxford Text Archive in 2006. Originally founded by Lou Burnard, it offered 2,500 resources in different formats and 25 languages including the Bible, dictionaries and other texts in the public domain (Vassilou & Rowley, 2008, p. 4). Other experiments with ebooks were Sony's Data Discman released in the1990s, which was not successful because of a lack of infrastructure to support it (Rowberry, 2015, p. 290); NuvoMedia's Rocket eBook in 1998; and Soft Books Press's SoftBook, EveryBook, and software for downloading and reading on personal digital assistants (Shaver & Shaver, 2003, p. 73).

As Darnton (2009) observes, digital publishing has gone through 'an initial phase of utopian enthusiasm, a period of disillusionment, (and) a new tendency toward pragmatism' (p. 69). Today, industry watchers are cautious in their predictions about the role and growth of ebooks. Digital publishing has been discussed within the context of disintermediation, convergence and as a disruptive innovation. Although technology can serve as an enabler in terms of production, distribution, and facilitation of new products like ebooks, it can also be a source of disintermediation with, for example, the potential of empowering authors and thus having a significant impact on the publishing value chain (Tian & Martin, 2010, p. 4). In bypassing the traditional players in the publishing value chain and opening the gates to new ones, authors can now sell their books directly to readers; readers, in turn do not need 'bricks and mortar' bookshops and can invest in the production of new titles through crowd funding; and technology companies can now run their own publishing operations.

As Benkler (2006) observed, 'the digital phenomenon has removed restrictions where anyone with a computer, Internet access and interest can operate online' (p. 60). Similarly, in discussing how digital technologies have disrupted the communications circuit in the twenty-first century, Squires and Ray Murray (2013) stated that 'the development of digital publishing via eBooks, along with platforms provided by retailers and distributors for their sale and delivery has increased exponentially the possibilities for

publishing without a publisher' (p. 6). Also, digital publishing permits authors, editors and designers to be more involved in producing the final copy as design and production boundaries are removed (Clark & Phillips, 2008 p. 141). While this may have 'empowered' the players in the industry to produce and distribute content, it has brought into sharp focus the issue of control and quality.

The disintermediation that digital publishing brings according to Bhaskar (2013) 'is not an abstract or trivial possibility but a live threat to traditional publishers of all kinds' (p. 29), and has generated discourse on the role of publishers in contemporary publishing. M. Davis (2015) has argued that 'traditional forms of media gatekeeping have been rendered obsolete and the defining participating hierarchies of "old media" flattened' (p. 512). As a result, publishers are being challenged to demonstrate their relevance to their readers who now turn to a digital environment to find content (O'Leary, 2012, p. 10).

Whatever position is taken on the role digital publishing plays in eliminating the gatekeeping role of the publisher, it is worth noting that the liberal nature of publishing also permits print self-publishing (where literary entrepreneurs can publish without any form of control so long as there are ideas and a market for their publications). Therefore, the issue of quality can just be problematic with print publishing as it is with digital publishing assuming the print publishing process always has sufficient quality assurance. The only difference would be with the scale, and visibility of sub-standard digital publications because of their instant access and spread across various networks.

The publisher's relevance in today's digital age and its loss of control is not an entirely new debate or discussion. Even before the digital revolution, self-print publishing excluded publishers from the process where authors become publishers of their own work. This is a common phenomenon in Ghana, where some teachers convert their teaching notes into 'textbooks' for their students, or religious leaders and motivational speakers turn their sermons into religious and motivational books. As Squires and Ray Murray (2013) posited, 'Self-publishing is by no means new, but digital technologies – and new business models based on them – have offered opportunities for authors to do without traditional publishers' (p. 6).

As a disruptive technology that emerges and displaces the current technology in established markets (Christensen, 1997, p. 184), digital publishing was projected to take over the publishing industry, displacing print publishing, with ebooks taking over the book market. On the other hand, as a feature of disruptive technology, it was expected to initially underperform compared to established technologies that serve the mainstream market because they do not satisfy the minimum requirements that are most valued by mainstream customers (Danneels, 2004, p. 247).

Gaigher, Le Roux and Bothma's (2014) study of the state of digital publishing in South Africa within the predictive value of disruptive technology theory reveals that 'most South African Publishers are not yet reaping the benefits of a shorter publishing value chain. The initial cost of acquiring new resources to shorten the supply chain would be very high as it entails much training, new staff and implementing a new business model…most publishers are hesitant to do this until the future of the market share of e-books becomes less of a gamble' (p. 283). As a result, the majority of publishers surveyed combine and outsource most of the production and distribution processes and intend to publish both print and electronic content, with the rest only publishing a selection of their frontlist digitally, taking into consideration the genre and market for the book and not shelf life, printing cost and digital rights management (p. 284).

This supports Meadow's (2010) position that publishers make decisions to publish based on cost versus revenue (http://www.teleread.com/ebooks/digital-publishing-about-economics-forrester-analyst-james-maquiver-says/). Gaigher, Le Roux and Bothma concluded that the problems the publishers were experiencing were characteristic of industries faced with disruptive technology, and suggested strategies and recommendations based on the disruptive technology theory for publishers who intend to venture into digital publishing.

The ecosystem in which digital publishing and ebooks thrive operates in a space where new and old media converge. This digital space allows for the combination of different features such as text, sound, video, pictures and animation on a platform. The presence of different media on the same reading/mobile devices (except dedicated e-readers) means ebooks have to compete with games, newspapers, magazines, social

media and video for users' attention. This carries both advantages and disadvantages in that while those who accidentally find ebooks (as revealed in my focus group discussion described in Chapter Six) have the opportunity to explore while using other media, hence reading, there is also competition from the other media for users' attention unless the ebook is interactive, entertaining and has features to engage the reader as much as the other media.

Convergence with other media means publishers need to look beyond the traditional functions of the book; to educate, inform and inspire, as well as to entertain. For Ghanaian print publishers who already have promotion and distribution challenges, competing with other media requires well thought-out strategies if digital publishing and ebooks are to thrive. Adopting digital publishing and ebooks requires publishers and users to pay attention to the issue of media convergence.

3.3 Benefits of digital publishing and ebooks

The benefits of digital publishing can be assessed from the publisher's and the user's point of view. From the user's point of view, the value of content within the remit of digital technology can be characterised by the following: ease of access, updatability, scale, searchability, intertextuality and multimedia (Thompson, 2005, p. 318). Digitally published content has the advantage of *ease of access*: compared to printed books, online content can be accessed anywhere, anytime, by multiple users, although some ebooks have geographical restrictions (such as Usborne's ebooks which are currently unavailable in the United States but which can be purchased in Canada, Australia and other English-speaking regions (www.usborne.com)).

The *updatability* feature of digital content means it 'can be updated quickly, frequently and relatively cheaply…which is an important trait and can add real value' (Thompson, 2005, p. 319). The ability to provide a large amount of information within the online environment gives online content a *scale* that physical publications cannot match. 'By providing scale, that is access to very large quantities of data or content, the content providers (or intermediaries) can add real value' (p. 319). Another feature that makes online content appealing is its *searchability* feature. Allowing users 'to search a digitized corpus of material using a search engine based on keywords or names is

infinitely quicker and more powerful than the traditional search mechanisms employed in printed texts and the search capacity can be extended to much larger quantities of content' (p. 320).

The *intertextuality* feature of ebooks allows users to 'refer to other materials through conventional literary devices such as references, footnotes (or endnotes) and bibliographies. Through the reference function, online publications can be made dynamic by using hot links to enable readers to move to other pages and sites and resources' (p. 320). The *multimedia* feature also allows content providers to incorporate various forms of media, such as visual images, video and audio (p. 320). However, Thompson's features of updatability and scale have not necessarily translated into the real-world economics of book publishing. Also, intertextuality and multimedia – especially streaming video and audio – have not really worked in practice.

Similarly, Shaver and Shaver (2003) described digital publishing as offering opportunities for 'unprecedented levels of accuracy and interactivity' by allowing for updates and correction of errors to be reflected in future copies, a feature particularly useful in scholarly publications (p. 75). Baubin and Hofbauner (1996) posited that digital publishing offers 'additional value to the end user, giving a high degree of content availability (anytime, anywhere consumption), interactivity, transparency and multimedia formats' (p. 14). These features are both attractive and convenient and could contribute to overcoming resistance to adopting digital publishing practices.

Hernon, Hopper, Leach, Saunders and Zhang (2006), listed the advantages of ebooks as convenience, economy, portability, and materials being more up to date (p. 6). Further, a collection of ebooks requires minimal storage space on any reading device compared to storing printed editions. Shiratuddin, Landoni, Gibb and Hassan (2003) have noted that students can build personalised digital libraries (p. 7) and once students can connect to the technology, they become enthusiastic and enjoy it (Simon, 2002, p. 53). However, the cost of acquiring reading devices, network connectivity and other costs of access need to be taken into consideration when arguing the merits of ebooks.

From the publisher's or producer's point of view, digital publishing also has the advantage of lower manufacturing cost. 'Digital delivery does not require paper, printing, binding and shipping' (Shaver and Shaver, 2003, p. 75). Giving examples from the United States, Schuyler (1998), stated that Futurebook was able to reduce the cost of a book by 75% ($6 vs $24) while maintaining royalty levels for authors (para. 7). Greco (1997) also asserts that printed book returns that averaged nearly 24% in the late 1980s were eliminated by going digital (p. 28). As Shaver and Shaver (2003) further stated, 'inventories, back orders and out-of-stock situations can be eliminated, freeing capital for investment into new projects' (p. 75). This position however, is contradicted by the responses of Ghanaian publishers who participated in this research, as they mentioned cost as one of the barriers to adopting digital publishing indicated in Chapter Five.

According to Prickitt (2014), digital media allows for creativity and freedom in places and situations where information dissemination is controlled. In her article 'Does digital storytelling work best in a crisis?', in *Publishing Perspectives*, Lyndee Prickitt relates how digital storytelling presented a unique opportunity to communicate urgency during a crisis and across cultures through her project weareangry.net wherein text, video recordings, vox pops and photos were used in her own words:

> To tell a new kind of story. Because of adding to the piles of reports and editorials, I wanted to write a poignant fictional narrative from the point of view of a victim - a woefully disregarded and unheard voice in patriarchal India. But I also wanted to capture the real swell of anger that was marking a turning point in my adopted country, where modern and medieval knock against each other every day… print publishing can only do that to a point. Multimedia tools that lend themselves to digital publishing allow content creators/developers to communicate and achieve the effect they intend to achieve (Prickitt, 2014, para. 4).

Lemken (1999) also wrote that ebook technology should 'fill the gulf between printed and digital information' (p. 4) in the sense that it combines the positive attributes of a printed book with the capabilities of computers, incorporating text, pictures, and other media like sound and narration (Maynard and McKnight, 2001, p. 32), making it attractive especially for children who learn better by visualisation (Maynard, 2010, p. 239).

In the same way, the benefits of digital publishing include instant ordering and delivering, and the incorporation of sound and multimedia features. 'EBooks allow for full-text search capabilities, automatic linking to electronic dictionaries, and the ability to change the font size for the visually impaired' (Bunnelle, 2000, in Shaver and Shaver, 2003, p.76). Producing publications in Ghana for the visually impaired is an area not explored by many publishers therefore investing in ebook publishing could also serve the purpose of reaching this audience.

3.4 Challenges with digital publishing

While the cost of printing, paper, binding, physical warehousing and distribution are eliminated in digital publishing, other operational costs like investing in 'new systems for eBook production, archiving and distribution will need to be developed' (Gaigher, Le Roux, & Bothma, 2014, p. 268) and 'the costs associated with building systems and managing content in digital formats are much higher than many people assumed in the 1990s and in most cases the revenues have come nowhere near to covering the costs' (Thompson, 2005, p. 5). Although this situation may have changed in developed countries like the United Kingdom and the United States since Thompson's work, this can be said to persist in many developing economies like Ghana and is discussed in Chapter Five under challenges of digital publishers.

This invariable replacement of one kind of cost with another is one of the reasons Ghanaian publishers are reluctant to invest in new digital technologies and would rather subcontract digital projects and their promotion to third parties and only expect their revenues. There are also the invisible infrastructural costs that impact on the environment through ebook publishing. The server farms or data centres of industry giants like Amazon and Google have environmental costs worth considering due to the amount of energy they use and the carbon dioxide emitted into the atmosphere.

According to Jonathan Nimrodi, the heat generated by these server farms can be used to 'heat buildings in cold climates, thus reducing the energy consumption of conventional heaters' (Nimrodi, 2014, para. 5). But are they used to heat buildings or are they only emitted into the atmosphere? He further states that large data centres have the capacity of using as much electricity as a small town in the United States (Nimrodi, 2014,

para 6). Just as print publishing negatively impacts on the environment because trees are cut to produce paper, so ebook publishing relies heavily on a large digital infrastructure to create, store and disseminate content.

Publishers and authors also face the challenges of copyright, fair use and content control. These concerns are not geographic-specific and therefore are concerns for content creators and owners in both developed and developing economies. These challenges can potentially discourage publishers from venturing into digital publishing thereby stifling the growth of the ebook market.

Compatibility across platforms is another issue that raises concerns. As Shaver and Shaver (2003) observed, 'while digital delivery systems are not incompatible with the business model of producing and delivering content to consumers at the macro level, there is likely to be considerable internal resistance to the inherent conflicts at the micro level. Strong arguments on relative advantages may overcome the reservations about compatibility but such conflicts slow the willingness to adopt' (p. 76).

According to Chen and Zhou (2011) cited in Sun (2012), 'eBooks bring about visual fatigue; a change from paper to computer screen and difficulties in taking notes can make readers unfocused, tired and distracted' (p. 67). Similarly, the size of the screen of reading devices is also a concern, as readers' experiences with reading on small computer screens were considered tiring, less efficient and even 'painful' (Lam, Lam, Lam, and McNaught, 2009, p. 31; Wilson, 2003, p. 11). But there are alternatives to smaller screens, tablets, personal computers, laptops and dedicated e-readers. In any case, if movies or videos are watched on these devices as well as actions such as typing and reading, can users not read 'books' on them?

Further, the quality of content of digital products has also raised questions about digital publishing as it has disintermediated the traditional publishing process and allows the publisher's role to be circumvented. With the gatekeeping role of the publisher diminished, 'the more self-created contented that gets dumped on the Internet, the harder it becomes to distinguish the good from the bad – and to make money on any of it' (Keen, 2007, p. 31). Other concerns also include the patronage of digital products like

ebooks and their role in the network global economy where the commodification of data and of users' social lives and labour are used exploitatively to gain dominance by big data companies (M. Davis, 2015, p. 515).

The perception that the Internet must offer free content is worrisome for publishers who publish for profit or enter territories where piracy is rife. Piracy has always been a challenge for publishers and authors across the world, with developing economies being no exception, even before the digital revolution. The Global eBook Report (2013) reported that:

> Many authors who do not have regular income other than from their writing have good reason to be worried. In Germany, more than 1,500 such authors protested, shouting 'We are the creators! Against stealing intellectual property' ("Wir sind die Urheber! Gegen den Diebstahl geistigen Eigentums!"), and found many more who followed their call (p. 8).

The situation described above does not only frustrate creativity but also hampers the growth of the book market. Concerns abound about preserving intellectual property within a medium in which access is instant and at the click of a button, and where the perception persists that online content is, or should be, free. Clark and Phillips (2008) have queried how publishers who have developed strong brands sell content to consumers when they [consumers] are reluctant to pay for content although publishers have developed good business models for online services sold to an institutional market of companies and libraries (p. 71).

The issue of digital rights management technology as Biglione (2012) posited 'has been dominated by emotional hyperbolic rhetoric on both sides of the debate' (p. 57). While digital publishers insist on tight digital rights management, Carreiro (2010) contended that digital rights management slows the growth of the ebook market, sometimes preventing users from printing, emailing and sharing ebook content (p. 225). F. Hall (2013) has also described the managing of rights as 'a particularly knotty problem in the electronic environment' (p. 21). She describes it as 'cumbersome' and that it 'can annoy customers when a user key is required to gain access to a variety of data in controlling access, tracking usage and collecting revenue' (p. 21).

However, protecting the ownership of creative work requires that some form of protection be put in place. While DRM proves to be a good and necessary thing for publishers (Carreiro, 2010, p. 226), (although not all publishers use it), it also can cause challenges for users because DRM-protected books can only be accessed via approved devices (Griffrey, 2010, p. 8) thereby limiting access. Unlike printed books that can easily be traded in for others, or shared, the restriction on DRM-protected books prevents sharing. This defeats the purpose of the book as described by Thompson (2012) as 'a social object that can be shared with others, borrowed and returned, added to a collection, displayed on a shelf, cherished as something valued by its owner and taken as a sign of who they are and what matters to them, a token of their identity' (p. 316). As the ebook evolved from being just a digital version of a printed book to include animation, sound, video and various levels of interactivity (Thompson, 2005, p. 320) so did the perception and attitude towards the technology that created these products.

3.5 Attitudes and perceptions towards digital publishing and ebooks

Attitudes and perceptions about digital publishing and ebooks are mixed: some views are positive, others sceptical. Citing a Centre for Information Behaviour and Evaluation Research Report (CIBER, 2008), Van der Velde and Ernst (2009) suggested ebooks will be 'the next publishing success story with spectacular demand simply because of the enormous size of the population hungry for highly digested content' (p. 570). They further revealed that in a study conducted by Springer among students and academic staff on access to ebooks in Turkey, Greece and Germany, ebooks were not cannibalising printed books; rather, there was growth in Springer's printed book sales in countries with large ebook penetration. In the same study, they disclosed that 'Although Springer eBooks are very successful, Springer has recognised the value of print and started 'my copy', a heavily discounted print-on-demand books for Springer ebook customers' (p. 570). This indicates a continuous preference for print or physical books.

Arguing for the printed book, Darnton (2009) posits that books' 'extraordinary staying power… has proven to be marvellous machine – great for packaging information, convenient to thumb through, comfortable to curl up with, superb for storage and remarkably resistant to damage' (p. 68). Similarly, Thompson (2012) stated that:

The print-on-paper book has certain qualities that are valued by readers and that the eBook can never capture or reproduce. The book is an aesthetically pleasing form, a work of art in its own right with a stylish cover and attractive design which is gratifying to hold, open and to own. It is also exceptionally user-friendly: nothing is easier than turning the pages of a book and reading clear text on white paper. The eyes are not strained and you can move back and forth. It never runs out of batteries, it never freezes up and doesn't break if you drop it (p. 316).

Darnton (2009), again in supporting the argument for printed books, quoted Bill Gates as saying:

Reading off the screen is still vastly inferior to reading off paper. Even I, who have expensive screens and fancy myself as a pioneer of this web lifestyle, when it comes to something over about four or five pages, I print it out and I like to have it to carry around with me and annotate. And it's quite a hurdle for technology to achieve to match that level of usability (p. 69).

Such arguments may be tenable in the developed West, or in other countries where books are in abundance and accessible, and where readers can choose between physical books and ebooks according to their preferences. But in other environments where access is limited, the primary focus is usually on the content or the function of the book: to educate, inform, entertain and inspire. The smell of pages, whether they can be touched or downloaded from the Internet, is of secondary importance.

Arguing for the merits of digital publishing, Carreiro (2010) stated that 'the World Wide Web has freed publishing distribution models from the "shackles" of print and paper' (p. 223). Indeed, in Ghana, where paper, ink and binding materials are imported and therefore attract taxes, thus making the cost of producing print publications locally higher than the cost of importing books, eliminating these components saves publishers not only taxes, but pre-production and post-production storage costs.

Although the merits of digital publishing are laudable, its adoption has been viewed with caution and scepticism. As Clark & Phillips (2008) have stated:

The failure of multimedia publishing reinforced many publishers' sceptical view of new media publishing and negatively coloured many senior managements' responses to the news of eBook growth in the USA in the late 1990s. If the business model for multimedia publishing on disk was loss making, they argued,

what hope would there be for publishing on the Internet, a generally free medium devaluing the price of information, with few viable business models selling content… the Internet dot-com bubble of the late 1990s which saw investments pouring into many start-up companies that later became worthless (p 30).

Therefore, it is only a quick turnaround time on ebook projects for digital publishers and a consistent increase in ebooks sales that will propel a rapid adoption of digital publishing and ebooks.

3.6 Adoption and diffusion of digital publishing technologies

According to Buschow, Nolle and Schneider (2014), 'one of the most significant discussions in the media industry is currently the challenge of technological innovations, understood as doing new things or doing things in new ways enabled by new technology' (p. 63). Adopting new technologies is the decision to make full use of an innovation as the best course of action available (Rogers, 2003, p. 168). Whereas adoption entails an individual process and the stages adopters go through from the initial exposure to the innovation, diffusion is a group phenomenon that suggests how the innovation is spread (Rogers, 2003, pp. 168, 221). This research examines individual Ghanaian publishers' level of adoption of ebook publishing and concludes by determining the level of diffusion or spread in the whole industry.

New technologies or innovations are described or perceived as radical innovations that change industries. New technologies have been also described as 'breakthrough' by (Nayak and Ketteringham, 1994, p. 1); 'revolutionary' by (Abernathy and Clark, 1985, p. 12); and 'discontinuous innovation' by (Tushman and Anderson, 2004, p. 35). These descriptions suggest how innovations are perceived and influence their adoption. Rogers (2003) observed that 'many technologists believe that advantageous innovations will sell themselves, that the obvious benefits of a new idea will be widely realised by potential adopters and the innovation will diffuse rapidly. Seldom is this the case. Most innovations, in fact, diffuse at a disappointingly slow rate at least in the eyes of the inventors and technologists who create the innovations and promote them to others' (p. 7). Similarly, Mierzejewska (2010) also noted that 'managers tend to resist technological advances and are not able to avoid organisational inertia' (p. 51).

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This, therefore, suggests that beyond the obvious requirements like a well-developed infrastructure, skills, and the availability of the technology itself, there are still barriers to adoption and use of new technologies like digital publishing and ebooks. For instance, one would expect that in developed economies like Germany that have a well-developed digital infrastructure, the ebook market would be buoyant, but as revealed by Wischenbart (2011), the market share for ebooks was 1% (p. 8) with 1.2% of all published books available as ebooks despite being the second biggest book market in Europe (Buschow, Nolle & Schneider, 2014, p. 63). Similarly, Google and Amazon's heavy investments in digitisation projects, apparently setting up the infrastructure for digital publishing to take root in the United States and the United Kingdom, have not attracted many adopters of digital publishing and ebooks because publishers still resist the ebook model. This resistance among Western publishers suggests therefore that the adoption of ebooks is not only influenced by the availability of infrastructure but also by publishers' preferences and perceptions, among other variables. Ghanaian publishers are, however, yet to fully explore this foreign infrastructure.

Whereas Thompson (2005) identified four levels at which digitisation affects the publishing business: operating systems, content management and manipulation, marketing and service provision, and content delivery (p. 312), not many publishing businesses have digitalised their operations across all the four levels as will be discussed in Chapter Five. For a company to survive a disruptive technology as Danneels (2004) contended, the organisation's size, its resources, and the allocation process are all crucial since large companies are impeded by bureaucracy and stakeholder expectations (p. 248). This implies that small and medium-sized companies like publishing businesses in Ghana (see Chapter Four for details on the scale of publishing business operations) are better positioned to survive disruptive technology.

3.7 Print books (pbooks), electronic books (ebooks) and the future of the book
With the debate that surrounded digital publishing and the future of the book now abating, publishers can now focus on the aspects of digitisation they find useful for their business strategy because it is evident that printed books will continue for some time to come. Describing the situation in the United States book industry in 2005, Thompson

(2005) stated that, while in 2000, PriceWaterhouseCoopers forecast that consumers would be spending $5.4 billion on ebooks, and ebooks would have a market share of 17%; and while Arthur Andersen also predicted the ebook market would increase from $2.3 billion to $3.4 billion, representing 10%; publishers who experimented with producing ebooks were disappointed by the very low levels of take up (p. 310).

Also in the United Kingdom, print or physical books continue to outperform digital books. In 2014, Nielsen's Books and Consumer survey revealed printed books outsold digital books in the first half of the year, with ebook sales accounting for 23% of unit sales in the first six months of 2014; paperback remained the most popular format with 42% of unit purchases and hardcover at 25% (Fallon, 2014, para. 2). Similarly, although the invoiced value of all books (physical and digital) rose 5.6% to £3.5billion in 2016, physical books increased 7.6% in sales while digital books decreased 2.8% (https://www.publishers.org.uk/resources/uk-market/pa-stats-snapshots/). It is, however, noteworthy that these data are not conclusive since major players like Amazon do not fully disclose data on their ebook sales.

From the foregoing, the initial optimistic projections about the performance of ebooks need to be realistically reviewed based on the current trends given that there are still boundaries to adopting digital publishing and ebooks. That said, as Carreiro (2010) posits, 'with the eBook still at its growth stage, there is much work left to be done' (p. 219) and many other book industries the world over, especially those in the developing economies, have to catch up with their more developed counterparts.

According to Zell (2013), 'the general consensus among some African publishers seems to be that digital and print publications will go hand in hand in the foreseeable future. Many observers also believe that, for the moment at least, the conventional book continues to have numerous practical advantages over the ebook and that as a format, the book remains flexible, accessible, and still relatively cheap' (p. 18). The operational cost of going digital is another issue of concern. As Gordon, King and Dyck (2008) noted, traditional publishing companies' moves to digital publishing require reorganisation and huge investment (p. 71).

Also, in their discussion of digital publishing in South Africa, Gaigher, Le Roux and Bothma, (2014) argued that, 'as long as digital publishing remains a niche market, [the] costs involved do not justify overturning publishers' existing business models entirely and publishers are likely to invest enthusiastically in eBooks only once the market grows to its significant size and scope' (p. 284). This appears consistent with some Ghanaian publishers' perceptions discussed in Chapter Five, that cost of adopting digital publishing may outweigh any potential revenue from ebooks.

From a user's perspective, the cost of hardware (computers, reading devices) and software (applications and content) can pose challenges to the majority of the audience Ghanaian publishers may intend to reach. For example, rechargeable batteries power reading devices but they need electricity to charge dead batteries. With the energy crises that have hit Ghana in recent years, and inadequate power supplies in parts of other African countries, regular and consistent reading of ebooks might be a challenge. For instance, these energy issues have exposed the *One Laptop Per Child* initiative to, as Owusu-Ansah and Asante (2015) describe, 'lack of infrastructure, power supply and qualified tutors' (p. 2), as well as the usual politicisation of such initiatives in Ghana (an area beyond the scope of this research).

3.8 Children's books

Tracing the origins of children's publications, as with tracing the origins of other inventions, is always debatable. While Reynolds (1998) stated that British publishers led the world in producing books for children in the nineteenth century, making all kinds and genres of books of all qualities for various groups of readers (p. 20), Grenby (2009) makes a case for the primacy of French children's literature that existed earlier but was underdeveloped due to the 'lack of copyright laws, a more rigidly hierarchical society and the Jesuit domination of schools and the chaos caused by its sudden end' (p. 40). According to Reynolds (1998), after the Second World War, British publishers of children's books were:

> Motivated by a mixture of altruism (publishing for children was a Good Thing because it gave pleasure and helped to instil appropriate values during a time that society was recovering from the effects and disruptions of war); rivalry (if one publisher had a children's list others would too); business acumen (the child

reader of today will become the adult reader of tomorrow), and even domestic pragmatism (sometimes books were 'tried out' on children and in a few cases children's lists became the responsibility of family members (p. 26).

The above provides an interesting basis on which Ghanaian publishers' motives for children's publishing can be discussed. Reynolds (1998) observed that the publication of certain children's books was profitable: for example, 'Enid Blyton produced much of her work in the late 1930s and 1940s and was successful in amassing considerable profits for herself and her publishers' (p. 21). But the development and publishing of children's literature was hampered by the fact that it was not considered prestigious as Reynolds (1998) citing Felicity Hughes (1978) revealed: 'children's literature became *déclassé* – regarded as if it were done by those who could not write any better for those who could not read any better – at the fin de siècle' (p. 21).

This perception influenced the academic study of children's literature until the 1970s. As stated by Maybin and Watson (2009), 'The academic study of children's literature has only become firmly established relatively recently; until the 1970s, it tended to be dismissed as trivial, easy, often ephemeral and fundamentally 'childish'. While adults might recall with pleasure the books they read as children, the idea that children's books could be studied seriously, for what they said about literature or indeed, about children, was a radical one, which has taken time to gain ground' (p. 1). This position gradually changed so that by the turn of the twentieth century, the British children's publishing industry had been transformed and gained high visibility (Squires, 2009, p. 183) so that, 'A market which has traditionally been seen as mostly a matter of maintenance and republishing past established titles suddenly expanded into publishing new titles at an unprecedented rate' (Maybin & Watson, 2009, p. 2).

It is worth noting that 'children's literature is not merely one of the roots of western literature and culture, but a foundation of shared intergenerational national and international culture, a barometer of beliefs and anxieties about children and childhood and a body of literature with its own genres, classic texts and avant-garde experiments' (Maybin & Watson 2009 p. 1). Children's publications have now gained recognition and are published by the 'specialist divisions of major consumer book publishers and independent publishers' (Clark & Phillips 2008, p. 53).

Writing on how to approach the study of children's books, Tessa Rose Chester suggested that 'children's books can be studied by author, illustrator, or publisher; by theme, for example, the animal story or fantasy; by literary form, such as the novel, poetry or the nursery rhyme: by the physical form, for example, the movable – plus any combination of these' (Chester, 1989, p. 12). In terms of design, children's books are made attractive to enable young readers to explore in different ways: 'pop-ups, opening flaps, scanimations (a technology to make pictures move on a page) are all ways to make books more interactive and engaging' (Landoni, 2010, p. 26). She further stated that, 'as young children are supervised by an adult (teachers, educators or parents, or older siblings) in their interaction with a book, the experience becomes a social moment where the physical book acts as a trigger for further communication and exchange of opinions beneficial to emotional and intellectual growth' (p. 26).

3.8.1 Children's ebooks

According to Landoni (2010), 'children approach books as objects (containers) as well as content, and are as curious and engaged by appearance and presentation as they are about content' (p. 26). With the advent of ebooks, they now 'encounter onscreen reading in both formal educational settings as well as in other digital communication media in their daily recreational activities' (Vanderschantz & Timpany, 2012, p. 3). Ebooks also 'allow users to do more than simply read the book because they offer increased levels of interactivity through simple features such as being able to check the meaning of a word by simply highlighting it' (Maynard, 2010, p. 239). However, with the advent of ebooks wherein young readers can access content independent of parents, teachers or librarians, the 'exchange of opinions beneficial to emotional growth' (Martens, 2016, p. 15) can easily be compromised. Young readers can now easily access books that may not be suitable for improving their 'minds and subsequently their lives' (Martens, 2016, p. 15). As revealed later in this thesis in Chapter Six, children in upper primary were reading Dan Brown's *Angels and Demons (*2000) and by E. L James' *Fifty Shades Darker* (2012).

Studies on children's interests and attitudes towards books in general, and ebooks in particular, unearthed interesting findings: a project that explored Iranian children's design ideas and conceptualisation in making their own books revealed that children like

ebooks based on their personal needs and interest (Matloob, 2015, p. 59); and young children who enjoy reading do it more frequently and become skilled at it (National Literacy Trust, 2007, p. 1). This is an indication that, when children have access to books and are encouraged to read, they enjoy them and improve their reading habits as they grow. Stauffer (2007) has, however, argued that some evidence suggests that children's attitudes towards reading become negative as they grow (p. 141), and children who watch more television and take part in 'organised activities' do less voluntary reading (McKool, 2007, p. 111).

Interactive ebooks combine text, audio, video, special effects and gaming, thus enabling users to be involved in the story (Warren, 2010, p. 41). This is appealing to children. As Clark and Phillips (2008) stated, 'the text and illustrations of children's books must excite and appeal to children of different age groups, and at different levels of reading skill and comprehension. They must also appeal to adults in the supply chain (the major non-book and book retailers, wholesalers and book clubs) and to adults who buy or influence choice (parents, relations, librarians and teachers)' (p. 53).

In Africa and in Ghana, the development of children's books and publishing, like other categories of publishing, has been at the centre of education and literacy development, and was initially influenced by missionary activities and colonisation. Although children's publishing falls under trade or consumer publishing in other parts of the world, in Ghana it is a hybrid of trade and educational publishing, encompassing textbooks or schoolbooks, supplementary readers approved by the Ghana Education Service (GES) and general fiction and non-fiction books.

With about a third of publishers registered with the Ghana Book Publishers Association (GBPA) publishing children's books, it is reasonable to agree with Meshark Asare when he stated in an interview with *Publishing Perspectives* that:

> Children's literature now stands fully recognised by the publishing industry, education and the public in Africa and Ghana and not merely the extension to some adult project and publishers who are dedicated publishers of children's books are emerging in various African countries (Asare in Abram, 2014, para. 19).

He further added that:

> It will still be quite a while before we attain the levels of sophistication and flair of Europe, America and Asia but there is no shortage of talent and determination (Asare in Abram, 2014, para. 19).

Asare further observed that about 60% of current children's literature is either folk tale retold or folk narrative-inspired. Countries like Ghana, Nigeria and Kenya have had folk narratives absorbed into digital media: video, TV, film and audio discs (Asare, in Abram 2014, para. 18). This is corroborated by Stephens' (2009) position when he asserted that 'Throughout the world, literature for children originates with retelling and adapting the familiar stories of culture – folk tales, legends and stories about historical and fictional individuals memorialised for their heroism or holiness, adventurousness or mischief' (p. 91). This may be because oral traditions are easier to translate to into multimedia formats that incorporate sound, and motion than text, which is more often considered canonised pieces of work that have to be preserved in their 'original state'.

3.8.2 Access and use of ebooks

Ebooks are regarded as providing a new way to read and have the potential to alter reading habits, influence peoples' intellectual lives, and change reading experiences (Brown, 2001, p. 390). As Asunka (2013) asserts, ebooks are gradually playing an important role in teaching and learning as they increase access to timely and diverse materials (p. 39). This has the propensity to improve literacy and raise educational standards.

The use of ebooks is difficult to measure when compared to printed books. In their paper, *Analysis of E-Book use: The case of ebrary,* Al, Soyal and Tonta (2010) posit that while the use of printed books can be measured by the number of loans or in-library use, ebooks can only be measured by access statistics (p. 4). They define access in ways such 'as print, view or download', further stating that 'access statistics provided by ebook vendors differ in this respect' (p. 4). This presupposes that while a vendor may categorise 'access' as printing, others will by viewing or downloading. Other ways include accessing Advance Reading Copies through platforms like Jellybooks in return for reading data that are made available for authors and publishers ([www.jellybooks.com)](www.jellybooks.com). In

this thesis however, 'access' and 'use' of ebooks was determined based on users' responses, in this case, the response of basic school children through focus group discussions.

The features of ebooks identified as the most preferred are looking up words in the glossary, the ability to highlight and annotate (Simon, 2001, p. 3), and their use for research, teaching and learning (Milloy, 2008, p. 12) Reading patterns can also be used to establish the use of ebooks. In their study *Establishing a reading pattern of eBook use among undergraduate students in Malaysia: A case for to know is to use,* Ismail and Zainab (2005) revealed a low use of ebooks although students were aware of ebooks (p. 18). The reasons for the low usage are varied but the common ones stated include stress induced by reading for a long time on screen, the small screen sizes of reading devices, challenges with browsers, slow loading times and navigating problems (Maynard, 2010, p. 244; Gibbon, 2001, p. 4; Chu, 2003, p. 343), with males more inclined to adopt ebooks (e-textbooks) than females (Brunson, 2008, p. 13; Milloy, 2008, p. 7).

In a study that explored Ghanaian undergraduates' awareness, experiences and perceptions of ebooks with regard to their acceptance of e-textbooks as an eventual replacement of physical textbooks, Asunka (2013) revealed that students had a fair idea of what ebooks were, defining them as 'electronic versions of physical books that can be accessed and read online through a computer, PDA, eBook reader and so forth' (p. 44). They acknowledged their potential benefits but were strongly averse to their use and other Internet-based electronic resources in place of printed books for academic purposes. He opined that they regarded ebooks simply as content read on a screen and not as a file format or reading device. The medium by which ebooks are accessed and used are important to its adoption since affordability is an important factor.

3.8.3 The role of libraries in promoting access to ebooks

School and public libraries have supported the dissemination and use of children's books as they play their roles as institutional buyers from publishers and lenders to readers. Librarians have a strong influence on the success of children's publishing as revealed by Reynolds (1998) when she described the situation in the 1960s in the United Kingdom where they influenced content, appearance and values systems of late twentieth century

publishing for young people (p. 27). Similarly, Baldini and Martens, (2016) have also described libraries as 'leading advocates for early literacy and closing the word gap. Because they serve all populations, they can make a significant impact on families, especially in lower socio-economic status populations' (p. 13). In promoting digital publishing, therefore, the role libraries play in stocking digital versions and e-lending to patrons, especially those with lower socio-economic status, cannot be overlooked.

Although some publishers have online sites to promote their publications direct to consumers, engage with them and solicit feedback, libraries have always connected books to readers and created reading communities, both physical and online (Platt, 2011, p. 252). He further stated that although there is a misconception among some publishers that libraries are out to compete with their online retail sales, libraries like the New York Public Library give to the e-patron the opportunity to buy titles while giving the library 'a small percentage as credit towards future e-content purchase… and the publisher gets a percentage of the sale as well' (p. 249).

What then is the state of school and public libraries in Ghana? Are they digitised? Do they stock digital collections? How do they support digital publishing? These questions are answered in the next chapter.

3.9 Current gaps in the literature

The main study conducted on digital publishing within the African context has been Gaigher, Le Roux and Bothma's (2014) study of South African trade publishers in which they portray the state of digital publishing in South Africa and evaluate it within the predictive value of disruptive technological theory. They conclude that the problems publishers were experiencing were characteristics of industries faced with disruptive technology (p. 286). Their study focused only on publishers and not on other players in the publishing value chain, such as authors, online retailers, and users/readers of ebooks.

Other gaps in literature relating to digital publishing within the African context include a lack of writing on authorship or commissioning, editorial and production, marketing, sales and distribution, infrastructure capacity to support digital publishing, and human resource capacity. However, in terms of ebooks use, studies such as *E-books*

in academic libraries (Bennett and Landoni, 2005); *Use of e-books in an academic and research environment: A case study from the Indian Institute of Science Program* (Anuradha and Usha, 2006); *Analysis of E-book use: The case of Ebrary* (Al, Soyal, and Tonta, 2010); *A survey of e-book awareness and usage among students in an academic library* (Abdullah and Gibb, 2006); and *The viability of e-textbooks in developing countries: Ghanaian students' perceptions* (Asunka, 2013) all reveal a low usage of ebooks.

While Ismail and Zainab (2005) revealed that the majority of the Malaysian students in the study preferred printed books (p. 1), A survey of ebook usage and perceptions at University of Liverpool published by Springer in 2010 revealed a high level of use among students and lecturers (p. 4). Do these situations still persist? Are there any genres of books that are preferred in digital format? Although a few studies such as *The progression of digital publishing: Innovation and the e-volution of e-books* (Warren, 2010) and *Developing an educational e-book for fostering kindergarten children's emergent literacy* (Shamir & Korat, 2007), focus on ebook use among younger children can their findings be applied or extended to older children like those in upper primary and junior high school in Ghana? There is, therefore, a need to focus on older children to ascertain if there are similarities or differences in their preferences.

Also, in stating the limitations of their research, *German book publishers' barriers to disruptive innovations: the case of ebook adoption*, Buschow, Nolle and Schneider (2014) disclosed that although the description of the adopters group was successful, the non-adopters were not sufficiently characterised due to a smaller number of cases within the latter group (p. 74). This, therefore, calls for research that will involve larger numbers of non-adopters so as to ascertain their perceived barriers to adopting new technologies.

3.10 Conclusion

Digital publishing is continuing to evolve within the web environment, with the application of social media to source and curate content, and the growth of self-publishing opportunities (F. Hall, 2013, p. 6). This offers opportunities for further experimentation and research for both industry and academia. As with all technologies, disintermediation, control and other challenges should not deter Ghanaian adopters. Digital publishing and ebooks are here to stay and will continue to develop and evolve: as Phillips (2014) states, 'the whole debate over print vs digital is over. Reading on a screen is here and the arrival of mobile devices and eReaders means it is happening all around us – on the train, at the bus stop and on the beach' (p. xii).

Digital publishing and ebooks are no longer novelties, they offer opportunities to rapidly disseminate knowledge and promote literacy. In this regard, there is the need for research into all aspects of digital publishing in Ghana to inform both industry and academia as they strategise to achieve their goals. In order to adapt and innovate, players in the publishing ecosystem need to build capacities and embrace digital technology.

CHAPTER FOUR
BOOK PUBLISHING IN GHANA

4.1 Introduction

This chapter describes and discusses book publishing in Ghana. Bgoya et al (1997) observed that 'publishing in different parts of the world differs very little in some ways and very much in others: there are no specifically African publishing processes, neither are there any specifically European or American publishing processes' (p. 5). Book publishing in Ghana is not very different from publishing in other parts of the world, although it has its peculiarities. It is therefore important to draw on international examples as they can provide a useful basis or framework for discussion.

This chapter draws largely on secondary literature; primary data (responses from the questionnaire administered, and interviews with authors and publishers); my experience of teaching publishing courses for over a decade and interactions with industry stakeholders to discuss and describe book publishing in Ghana. As discussed in Chapter Two, the primary data presented on publishing is based on the responses of 40 out of 58 active publishers registered with the Ghana Book Publishers Association[6] (GBPA).

This chapter presents a historical overview of book publishing, focussing on the role missionary and colonial activities played in book publishing prior to Ghanaian independence. It also discusses the more recent activities of the current players in the digital book market in Ghana including Worldreader and Azaliabooks.com, as well as mainstream publishers and new entrants like Pickreader.com, Hetura books (who describe themselves as contemporary publishers) and Leti Arts, a game company that creates interactive content. Although video and mobile games and apps do not fall within the scope of this research, Leti Arts is discussed in this chapter because of its interactive digital stories, comics and collaborations with players in the ebook sector.

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[6] The GBPA directory lists 91 member publishers but only 58 are actively publishing as revealed in interview with the immediate past-President of GBPA.

Finally, this chapter discusses the role of stakeholders, including the Publishing Studies programme at Kwame Nkrumah University of Science and Technology (KNUST); the influence of government policy and processes on the industry; and issues raised by publishers and authors that impact on the industry.

4.2 A historical overview

It is widely accepted that book publishing in Ghana was introduced through the influence of the colonisation of Gold Coast (now Ghana) and the work of Christian missionaries who, in their quest to spread the gospel, taught indigenous people to read and write in English. Eventually, they saw the need to adopt certain local languages as a means of expanding their evangelistic efforts and by 1850, produced spelling and reading books in Twi, Ga and Ewe. The first hand-written newspaper, the *Accra Herald* was produced between 1858 and 1859 and by 1874, *The Gold Coast Times*, a bi-monthly printed newspaper, had been introduced (Djoleto, 1985, p. 1).

Although it is not clear in which exact year the printing press was introduced in Ghana, Djoleto (1985) states that mostly newspapers and periodicals were printed in Gold Coast between 1859 and 1874. A few books were also produced for local schools and religious use (p. 1). According to Zell (1995) 'the missionaries were the first publishers in a modern sense, bringing with them presses' (p. 367). Because Christianity, according to Nyarko (1980), is 'a very bookish religion, these presses were established primarily to print religious literature and to instruct new converts in the fundamental book of the religion, the Bible' (p. 241).

Subsequently, their activities expanded to include general books: the Basel Presbyterian mission published Carl Reindorf's *History of the Gold Coast and Asantee* in 1875, and Christaller's *Grammar and Dictionary of the Asante and Fante Language called Tschi* (Nyarko, 1980, p. 241). As Djoleto (1985) points out, the foundations of the publishing industry were being laid gradually, with the expansion of Christian missionary work, the development of education, and the increase in government business all contributing to the growth in the number of printing presses during the second half of the nineteenth century (p. 2). Writing on the history of Oxford University Press (OUP) and its activities in Africa, D'arcy Nell (2013) stated that by the mid-nineteenth century there

was a clear demand from mission stations, schools, teacher training colleges, public and personal libraries, and learned societies in Africa for Oxford and Claredon Press books (p. 722).

Between 1907 and 1928, and then again between 1932 and 1940, there was further significant growth in the printing industry corresponding to an increase in governmental, industrial and commercial activities (Djoleto, 1985, pp. 2, 3) as the demand for, and use of, printed materials grew. British publishers such as OUP, Longman and Macmillan were the first to open branches in Ghana and other African countries. In 1950, OUP opened an office and bookshop to serve the newly established University College of the Gold Coast. In 1952, the office and bookshop were elevated to become a branch, with its manager, C. O. Botchway, and four staff selling books to schools, teacher training colleges and booksellers in Gold Coast and Sierra Leone (D'arcy Nell, 2013, p. 733).

Owing to the high demand for Oxford and Claredon Press books because of the lack of expertise to produce books locally, most schoolbooks were imported from Britain. Alemna and Dodoo (2006) write that 'before independence, almost all the textbooks used in schools were imported from Britain but it was soon discovered that was not helpful to the nation' (para. 6). Dissatisfaction was growing among academics and social and political thinkers about the nature and perspective of the content within these textbooks. As Zell aptly describes:

> In the early days of their operations, much of the content of these books reflected colonialist attitudes or the market was flooded with special 'African editions'. This frequently amounted to no more than putting an African face on the cover of a book, or other minor cosmetic changes--resulting in a broadside of books which were insensitive to African needs, frequently not suitable to the environment of an African child, or portraying stereotyped images of Africa. It was not until the late 1960s that the metropolitan firms started to reduce this one-way traffic and began to develop books originated in Africa, and written by African authors (Zell, 1995, p. 367).

The further growth of printing in the mid-twentieth century was facilitated by the rapid expansion of indigenous authorship, publishing, manufacturing and distribution capabilities, and mass reading. The need for a publishing industry to promote indigenous

voices and their stories was becoming evident, driven by the establishment of independence in 1957. As Altbach (1998) has argued, 'books are a key part of national development, and [it] is simply not enough to have access only to imported books which were created abroad for different purposes. Third world nations require books that reflect their emerging needs, which only they can determine' (p. 162).

After Ghana achieved independence in 1957, the state became actively involved in the creation and distribution of books and took control over textbook publishing. According to Brickhill (1998), this 'was not as irrational as it appears today in the era of free market economics' (p. 111). The state had a 'monopoly to provide sufficient, appropriate, inexpensive (or free) textbooks for schools, invariably coupled with a new Africa-centered curriculum' (Brickhill, 1998, p. 111). Ghanaians and other African authors were commissioned to write either alone or in groups based on new syllabuses designed for Ghana (Djoleto, 1985, p. 13). Writing on postcolonial literature in Africa, Caroline Davis states that:

> In part of the wider intellectual search for an identity independent of the European powers, these new African authors sought to modify, subvert or reverse the prevailing discourse about Africa; readdressing African history and culture, focusing on the formerly silenced and marginalised from a wide variety of perspectives (Davis, 2016, p. 2)

The post-independence era described by Caroline Davis did not only open the floodgates for new African writers into the literary space but with it came an unspoken mandate to inform and educate the reading public about the ills of colonialisation, and to promote nationalism through education. During that period, Brickhill (1998) writes that:

> Education was a highly charged political issue in postcolonial Africa [including Ghana]. To most Africans, colonial education had been "a tool of the oppressor". Having been denied access to equal (or any) education in the past except in a few mission schools, many Africans felt they had been "educated" to perpetuate colonial rule and subjected to insidious anti-African attitudes in textbooks (p. 112).

Brickhill adds that nation-building after independence 'meant correcting the injustices of the past as the hunger for education was overwhelming in new African states. Politically, education had to serve the needs of "the people" where the inherited system had been

designed to exclude this' (Brickhill, 1998, p. 112). This perception provided a strong basis for developing indigenous authorship and publishing; as Zegeye & Vambe (2006) argue, publishing was considered 'as a special area that was not expected to produce knowledge but to be a conveyor belt of information developed in other climates or, in most cases, if publishing was in the hands of Africans, it first imagines its readers as Europeans' (p. 336).

In 1965, the Ghana Publishing Corporation (GPC) was established as a state publisher with the 'objective of publishing educational and scholarly works, while promoting and interpreting Ghanaian culture' (Darko-Ampem, 2002, para. 4). The GPC was considered one of the largest state publishing enterprises in Africa, carrying out publishing, printing and distribution functions (Darko-Ampem, 2002, para. 5) as well as offering training opportunities for indigenous publishers and publishing contracts with foreign publishers (Cabutey-Adodoadji, 1984, p. 141).

Although the establishment of the GPC was considered as an opportunity to advance indigenous publishing, the presence of foreign publishing businesses remained significant in Ghana. According to D'arcy Nell (2013), Macmillan signed agreements with the government of Ghana and other African governments to establish and run state publishing houses to develop educational publishing programmes (p. 748). These agreements, according to Chakava (1996), were of little benefit to these countries and were terminated within the first ten years of their existence (p. 149). Similarly, writing about the collaboration between local and foreign companies or agencies, Brown (1975) in Darko-Ampem (2002), states that most agreements tended to favour the foreign companies, leaving the local publishing and printing presses at a disadvantage (para. 5).

It is important to note that not only did Africans consider these management agreements unfavourable to local companies; some British publishers such as OUP and Longman also considered the agreement between Macmillan and their African partners unfair, since it gave Macmillan undue advantage and monopoly over the lucrative educational publishing markets not only in Ghana but in Uganda, Zambia and Tanzania (D'arcy Nell, 2013, p. 748). In an OUP internal publication cited in *The History of Oxford University Press. Volume III. 1896 to 1970*, this position was satirised:-

It transpires that Waxvillians have reached agreement with no less than nine African governments by which totopolistic state publishing houses are to be set up with the assistance of Waxvillian money and technical knock-not. The object is the discouragement of truly indigent authorship and replacement of textbooks, hitherto written by neo-colonialists educational officials with pirated adaptions by those same officials only writing under indigene names (cited in D'arcy Nell, 2013, p. 748).

With such an evident level of rivalry and mistrust among the foreign publishers in Africa, it was only a matter of time until active foreign participation in the Ghanaian book industry came to an end.

4.3 Contemporary book publishing

Contemporary publishing in Ghana can be traced back to 1951 when the Accelerated Development Plan for Education in Ghana was published. This policy facilitated the establishment of local publishing businesses. As these increased in number, there was a need for an institution to oversee the development, production and distribution of books. The Ghana Book Development Council (GBDC) was thus established in 1975 to serve as part of the Ministry of Education with a remit to advise the government on book development. Its mandate was to co-ordinate all groups and individuals in the book industry to ensure an effective book development system (http://www.gbdc.gov.gh/ghana-book-development-council).

In 1975, in an attempt to indigenise some sectors of the Ghanaian economy, the then military government of Ghana introduced the Ghana Investment Policy Decree (N.R.C.D. 329). This sought to reserve some sectors of the economy for Ghanaian companies only, and to allow mixed Ghanaian and foreign company ownership in others. Book publishing and printing fell into the former category (Ghanaian Investment Policy Decree, 1975). Overseas publishing houses were thus banned from engaging in publishing in Ghana. As a result, local offices of British publishers were transformed into indigenous publishing houses operated by Ghanaians (Djoleto, 1985, p. 13). While this process was considered an opportunity to develop an indigenous book industry, its main challenge was the lack of local expertise to kickstart an industry that had hitherto been

dominated by foreign publishers. The Bureau of Ghanaian Languages[7] (BGL), Waterville, Ghana Universities Press and Afram Publications, are examples of publishing houses that were established before the Investment Policy Decree of 1975. Sedco, Edupress, Adwinsa and several other publishing enterprises were established thereafter.

Presently, foreign publishers do not operate directly with local publishers, but in partnership. For instance, Longman Publishing Group (part of Pearson Publishing) partners with Sedco Publishers to publish textbooks produced by organisations such as the Mathematics Association of Ghana (MAG), Ghana Association of Science Teachers (GAST), Ghana Association of French Teachers (GAFT), Agricultural Science Teachers Association of Ghana (ASTAG), and Ghana Association of Teachers of English (GATE) (http://sedco-longman.com/index.php?option=com_content&view=article&id=1&Itemid=17).

The publisher Smartline represents Scholastic, while Sam-Woode, the only limited liability publishing company listed on the Ghana Stock Exchange, represents Sterling Publishing. These publishers also obtain licences to adapt and publish books from other countries. It is also common to see foreign printers from Asia working in some printing houses in Accra such as the Type Company, Buck Press and other printing presses that carry out security printing services.

In terms of scholarly publishing, Ghana Universities Press (GUP) was established in 1962 as a consortium publisher for the first three universities created in Ghana: the University of Ghana, Kwame Nkrumah University of Science and Technology, and the University of Cape Coast. Its remit is to publish scholarly works from these universities as well as from the Council for Scientific and Industrial Research (CSIR), after the recommendation of the Report of the Commission on University Education in Ghana 1960–1961 (Darko-Ampem, 2003, p. 101).

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[7] The Bureau of Ghana languages was established in 1951 by the government to publish in some Ghanaian languages, mainly Akwapem-Twi, Mfantse, Asante-Twi, Nzema, Ga, Ewe, Dagbani, Gonja, Dangme, Dagaare, and Kasem. BGL translates from English into these languages and vice-versa. http://www.ghanaculture.gov.gh/modules/mod_pdf.php?sectionid=602

4.3.1 Children's book publishing

Children's book publishing in Ghana is fairly recent. Before the arrival of the missionaries and colonialists in the fifteen century who introduced written children's literature and formal education, parents and grandparents drew upon the rich traditions of Ghanaian folklore to entertain and educate both young and old through oral storytelling (Komasi, 2007, p. 45). This formed the basis of indigenous authorship after independence in 1957. Before independence, any form of children's publishing that took place was through importation of schoolbooks from overseas and subsequently through foreign publishers like OUP, Longman and Macmillan (already discussed in section 4.2).

Even after independence, the development of indigenous children's book publishing delayed as foreign publishers continued to play a major role in the Ghanaian book industry; publishing and distributing books. As already discussed, these books were considered as not reflective of the cultural and social values of the country. In attempt to indigenise sectors of the economy including the book industry, the Ghana Investment Policy Decree (N.R.C.D. 329) was introduced in 1975. Children's book publishing has grown steadily over the years. A third of Ghanaian publishers are registered with GBPA, publishing textbooks and supplementary readers for children. This confirms the assertion of Meshack Asare (the first African and Ghanaian writer to win the NSK Neustadt Prize for Children's Literature) referred to earlier on page 78.

4.3.2 Publishing genres

While the survey responses of the forty publishers who participated in this research revealed a strong output of children's publications (see Table 6), it would also be fair to say that most Ghanaian publishers are generalist, i.e. those 'who want to establish the volume of their business through a broad range of titles' (Bgoya et al, 1997, p. 5).

Table 6. Table showing genres published by respondents

Genres	Number of publishers
Adult fiction	15
Young Adult fiction	12
Children's textbooks	20
Supplementary readers	20
Non-fiction	20
Textbooks for senior high schools	16
Academic books	14
Poetry	7
Religious books	4
Comics	2

Source: Author's fieldwork

The table above indicates that out of the forty publishers who responded to the questionnaire, twenty publish children's textbooks, supplementary readers and non-fiction; sixteen publish textbooks for senior high school; fifteen produce adult fiction; fourteen publish academic books; twelve produce young adult fiction; seven poetry; four publish religious books, and two publish comics. Although this survey did not find many mainstream publishers producing religious books, the market for Christian literature is buoyant, with many pastors either self-publishing their work or establishing publication units and bookshops attached to their churches.

Common publishing models are traditional print publishing, self-publishing and vanity publishing. The next sub-section discusses publishing workflows and how publishing activities are organised.

4.3.3 Publishing workflows

Workflows typical of the traditional print, self-publishing and vanity publishing routes are illustrated in Figure 3.

Figure 3. Traditional book publishing workflow
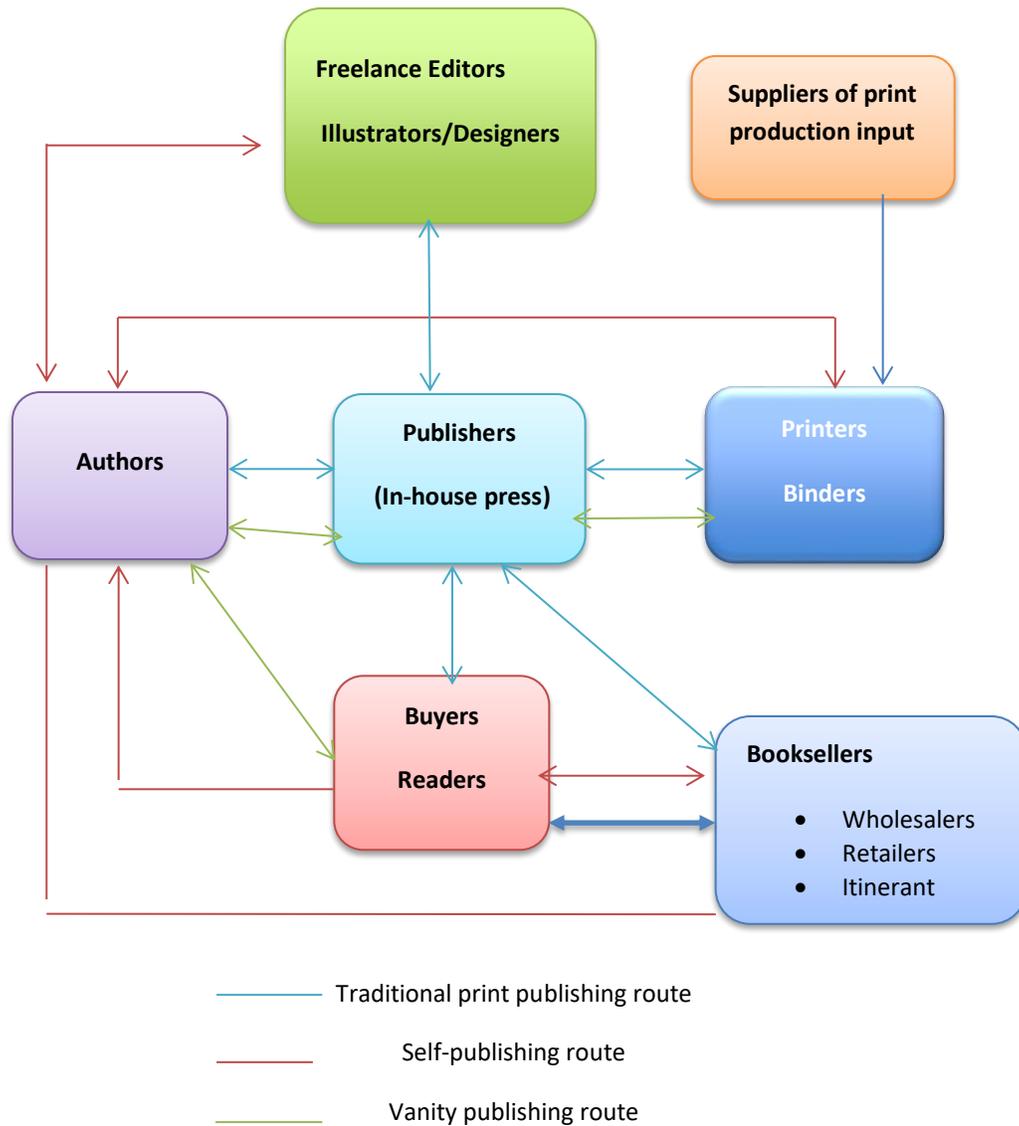
Source: Author's Construct

The blue lines show the traditional print publishing route where authors give publishing rights to publishers who employ the services of editors, designers, and printers to publish their authors' work. These services and expertise can either be found in house or sub-

contracted by publishers to freelance service providers. It is common for textbook publishers to own their printing press: Adwinsa Publications, Sam-Woode, Boison Publications and Good Shepherd Publications all print their work in house in order to control the content of their textbooks. Other publishers such as Kwadwoan and Afram buy print from China, India and Malaysia because they value the high quality of printing from these countries.

The red lines show the self-publishing route, where authors manage their own publishing projects and buy editorial, design and print services as required to produce their content. The booksellers, buyers and readers connect directly with authors as the diagram shows.

The green line shows the vanity publishing route where authors use the services of publishers, pay the full production cost for their books, but are responsible for the marketing and distribution of the published books.

4.3.3.1 Publishing organisation

Publishing is usually organised along line functions: editorial, production and marketing although the marketing function is mainly distribution and sales. A typical Ghanaian publishing house has a structure like the one in Figure 4.

Figure 4. A typical organogram of Ghanaian publishing houses
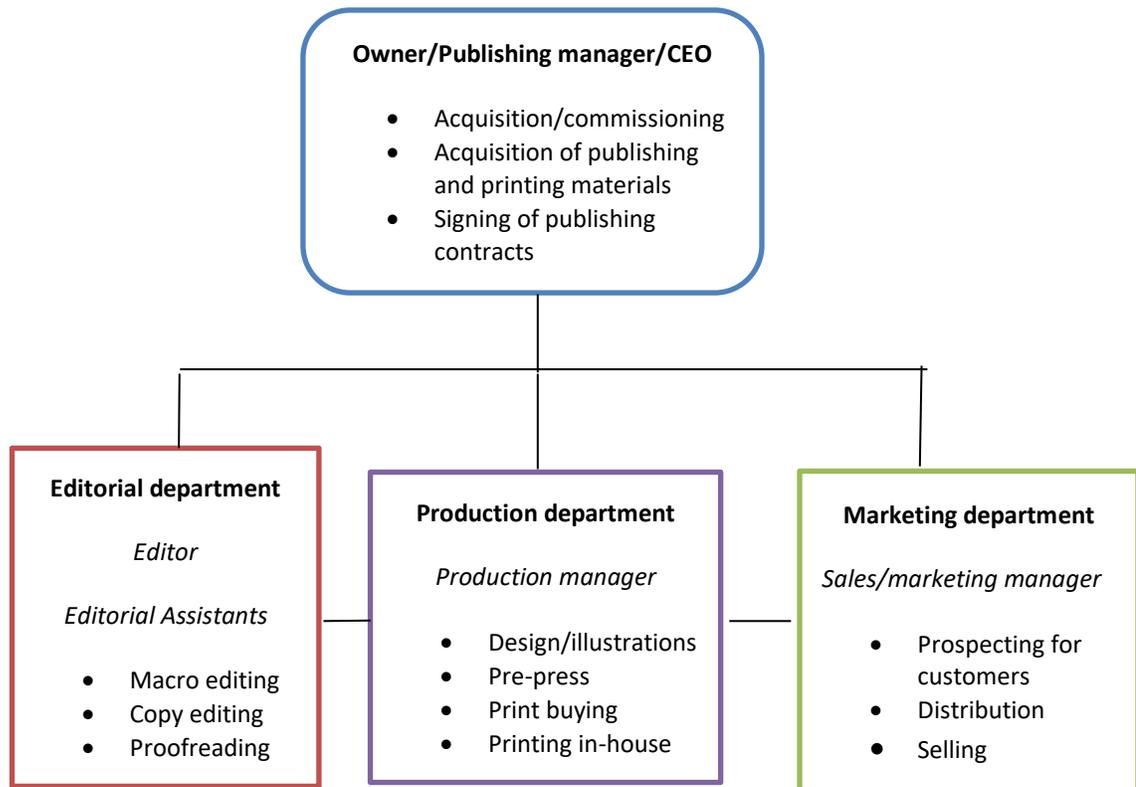
Source: Author's construct

As Figure 4 shows, the owners, publishing managers or CEOs do not only manage the businesses but also carry out major editorial functions such as acquisition and commissioning; they also make the decision to publish or not; act as procurement managers; and buy publishing and printing services. This is mainly because their businesses are usually micro - or small-scale as illustrated in Figure 5. As a result, they maintain close control over the major functions in their organisations.

In such organisations, the editors focus mainly on shaping the manuscripts through developmental editing, copy-editing and, in some instances, proofreading. The production managers supervise the design and illustration, pre-press and printing processes whether it is carried out in house or by external service-providers. Sales and marketing staff generally focus on taking orders, distribution and selling. Market research and book promotion is discussed later in this chapter.

During the interviews for this study, it was observed that many of the publishers viewed their service (publishing) and their products (books) from a purely commercial and profit-making perspective. The emphasis on publishing as a cultural industry and the book as a cultural product was minimal. This notwithstanding, some authors and publishers have won continental literary awards like the Noma Award[8] and the Burt Award for African Literature[9]

In 1982, Meshack Asare's *The Brassman's Secret*, published by Edupress, won the Noma Award; in 1983, it was won by Austin N. E. Amissah's *Criminal Procedure In Ghana,* published by Sedco; and in 1997, Albert Adu Boahen's *Mfantsipim And The Making Of Ghana: A Centenary History, 1876–1976,* published by Sankofa Educational Publishers, was the winner. Ruby Goka, a multiple Burt Award winner has won prizes with her books: *Mystery Of The Haunted House,* published by Sub-Saharan Publishers in 2010; and *When The Shackles Fall*, *Perfectly Imperfect* and *Plain Yellow,* all published by Techmate Publishers in 2012, 2013 and 2014 respectively.

It is relatively easy to start a publishing business in Ghana. There are few entry barriers (Woll, 2014, p. xxi) except for registration of the business with the Registrar General's Department and the Ghana Revenue Authority (a requirement all Ghanaian businesses must meet). The National Board for Small Scale Industries (NBSSI, 1990) classifies Ghanaian businesses as *microbusinesses* employing between one and nine employees; *small businesses,* employing ten to twenty-nine; *medium-scale businesses*, employing thirty to ninety-nine; and *large-scale businesses*, employing over one hundred employees.

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[8] The Noma Award ran from 1980 to 2009 and recognised publishing excellence in Africa (Ofori-Mensah, 2013).

[9] The Burt Award for African literature is a Canadian Organisation for Development through Education (CODE) sponsored literary prize that recognises excellence in young adult fiction from Tanzania, Ethiopia, Ghana and Kenya. The award addresses the ongoing shortage of relevant quality books for young people in Africa while at the same time promoting the love of reading and learning. The award consists of a publishing contract. (http://www.codecan.org/burt-award-africa) Retrieved on November 2, 2016.

The responses from the forty publishers revealed that nineteen publishers operated microbusinesses, thirteen small, six medium-scale, and two large-scale businesses, based on the NBSSI categorisation. Figure 5 on the next page illustrates this.

Figure 5. Publishing business operations in Ghana in 2016
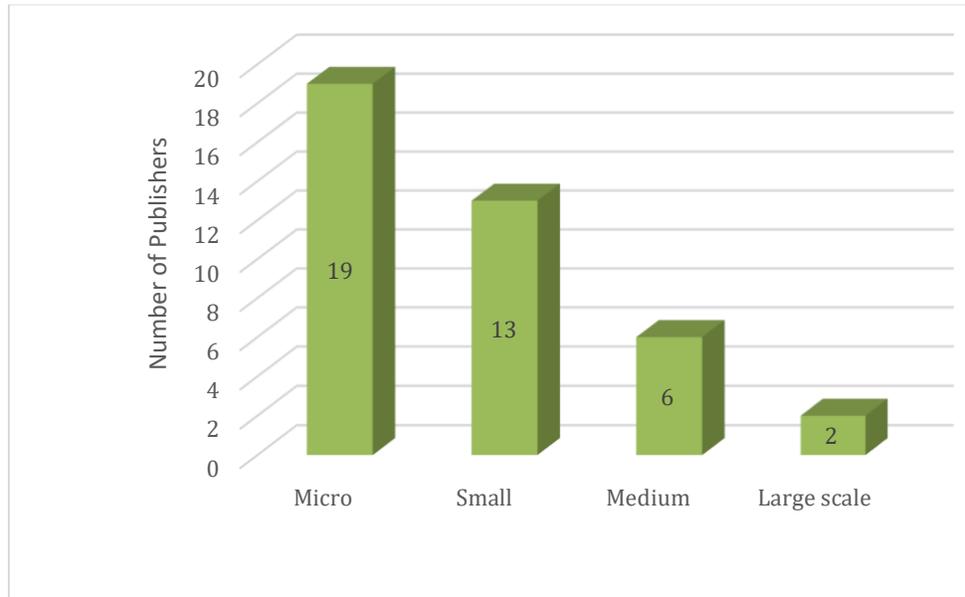
Source: Author's fieldwork

From Figure 5, it can be seen that Ghanaian publishing enterprises are predominantly micro- and small businesses, confirming Altbach's (1992) observation that publishing companies in Africa are generally small (p. 3). It is, however, interesting to note his observation is still valid after twenty-five years. Why publishing businesses are still predominately micro- and small businesses is not covered by the scope of my research but is worthy of attention in any future research. Also, out of the forty publishers that participated in this study, twenty-five (62%) described themselves as print publishers while fifteen (38%) described themselves as both print and digital publishers, with none being exclusively digital publishers. Figure 6 on the next page displays this in a pie chart.

Figure 6. Description of publishing activities in Ghana in 2016
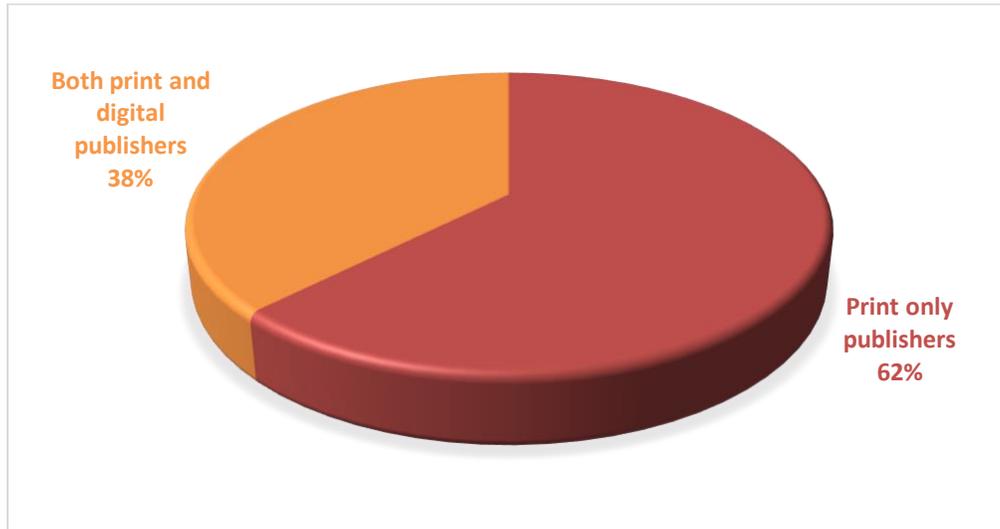
Source: Author's fieldwork

This pie chart indicates that print publishing is still prevalent among Ghanaian publishers but digital publishing is beginning to gain ground. The publishers' level of adoption and perceptions of digital publishing is discussed in the next chapter. The common publishing models that exist are traditional print publishing, self-publishing in print, and vanity publishing; digital self-publishing options are yet to be explored because of the lack of information on the various online self-publishing platforms available. This, therefore, requires information exchange and training to create awareness as is explored further in Chapter Seven.

4.3.4 Digital publishing and ebooks

The first attempt to publish ebooks in Ghana was initiated by Smartline Publishers which, according to its CEO, 'happened by default' in 2008 while working on a joint project with a Danish company to create publications for visually impaired readers. In an interview with the CEO of Smartline Publishers, Elliot Agyare disclosed that:

> The software we used [Calibre] generates braille and other ebook formats like EPUB, MOBI etc. So, we tried both braille and ebooks and we saw how easy it was. The myth about ebooks was erased, so we trained staff to use Calibre. That was how we became forerunners. It wasn't because we had foresight, it was just by default (E. Agyare, February 24, 2016).

Following Smartline's experience with ebooks, other experiments with digitisation happened in 2009, when school book publishers such as Aki-Ola publishers and Woeli Publishing Services began supplementing print copies of their ICT and integrated science textbooks with CD-ROMs in order to fulfil the Ministry of Education's (MOE) requirements for supplying textbooks to schools. This was followed by the iREAD Ghana Study in 2010 (mentioned in Chapter One) which revealed that children read and responded well when books were in their native language or when books from their country were put on reading devices.

The results of this study became the basis on which the collaboration between Worldreader and about ten Ghanaian publishers was initiated. In this project, publishers provided content (mainly their backlist children's titles) for Worldreader to digitise and distribute on preloaded Kindles to three African countries (Ghana, Kenya and Uganda). The aim was to create a new reading culture and to ascertain how children would react to electronic reading devices (J. Botwey, Worldreader Ghana Office, February 10, 2016).

Although this research focuses on ebooks, it is important to note that other digital products like audio books had earlier been introduced into the Ghanaian publishing industry. In 1999, Mmofra Foundation, a not-for-profit organisation, in collaboration with Afram Publications and the Estate of Efua Sutherland, locally published the first audiobooks: *Tahinta! A Rhythm Play for Children* and *Voice in the Forest* in 2006 (http://mmofraghana.org/our-work/made-by-mmofra/). Other audio book initiatives such as Literacy Bridge's Talking Book[10], 'an object about the size of an alarm clock that serves as something of a cross between an eBook reader and a Ted Talk' (Dawber, 2015, para. 2) followed with a programmable audio computer that shares locally relevant knowledge and improves literacy (http://www.literacybridge.com). The talking books have mainly disseminated content on health, family issues, sexual health, agriculture and business education to communities in rural Ghana (Dawber, 2015, para. 3).

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[10] Literacy Bridge is a public charity incorporated in the state of Washington in the United States of America. Its mission is to improve the health, income and quality of life for the world's most underserved communities by providing life –changing knowledge through innovative technology (www.literacybridge.org).

Currently, about thirteen mainstream publishers still use the Worldreader platform to publish their ebooks. The positive feedback and increase in access to Worldreader's e-readers and its reading app (targeted at young readers) led to the creation of a mobile app in 2014 (intended for the general public of all ages). Although this research identified thirteen mainstream publishers of children's ebooks, only nine were available to be interviewed. However, data on the other four were gathered from their websites and third parties such as the online bookstores/platforms on which their ebooks were sold. (See Table 7 below for the list of mainstream publishers of children's ebooks and the platforms on which they sell their content.)

Table 7. List of children's ebook publishers and their selling/access platforms

	Name of Publisher	Selling/Access Platforms
1	Aabok Publishers	Worldreader, Amazon via Worldreader
2	Adaex Educational Publications	Worldreader, Amazon via Worldreader
3	Adwinsa Publications	Worldreader, Amazon via Worldreader
4	Afram Publications	Worldreader, Amazon via Worldreader, Azaliabooks
5	EPP Books Services	Worldreader, Azaliabooks
6	Peggy Oppong Books	Amazon
7	Sam-Woode	Worldreader, Amazon via Worldreader
8	Sedco Publishers	Worldreader, Amazon via Worldreader
9	Smartline Publishers	Worldreader, Amazon, Azaliabooks
10	Step Publishers	Worldreader, Amazon, Azaliabooks
11	Studio Brian Communications	Worldreader, Amazon via Worldreader, Azaliabooks
12	Sub-Saharan Publishers	Worldreader, Amazon via Worldreader
13	Woeli Publishing Services	Worldreader, Amazon via Worldreader

Source: Author's construct (see Appendix 4 for details on titles and themes of some of these publishers).

Although thirteen local publishers have published ebooks, only ten publishers of ebooks responded to my survey. From Table 7, it is evident that the Worldreader platform is the most popular digitising and online distribution outlet among Ghanaian publishers. This is mainly because of Worldreader's initial digitisation project with which publishers were involved.

The Worldreader platform allows publishers' content to be accessed on Amazon because Worldreader partners with Amazon by loading and distributing content exclusively on Amazon's Kindle. Beyond Worldreader, Smartline and Step Publishers are the only mainstream publishers who deal directly with Amazon. It is important to note that publishers who attempted to go onto Amazon directly encountered what one publisher described as 'a cumbersome process', which included opening a dollar bank account in the United States then waiting for 90 days to get the ebooks on Amazon's bookshelf. This 90-day waiting period defeats the advantage of instant ordering and delivering of digital books as stated by Bunnelle (2000), in Shaver and Shaver, 2003, p. 76). Publishers give non-exclusive rights to Worldreader and Azaliabooks; that implies they (publishers) can explore other platforms if they wish. Figure 7 below shows the Worldreader website and some advertised ebooks.

Figure 7. Screenshot of some children's ebooks on Worldreader
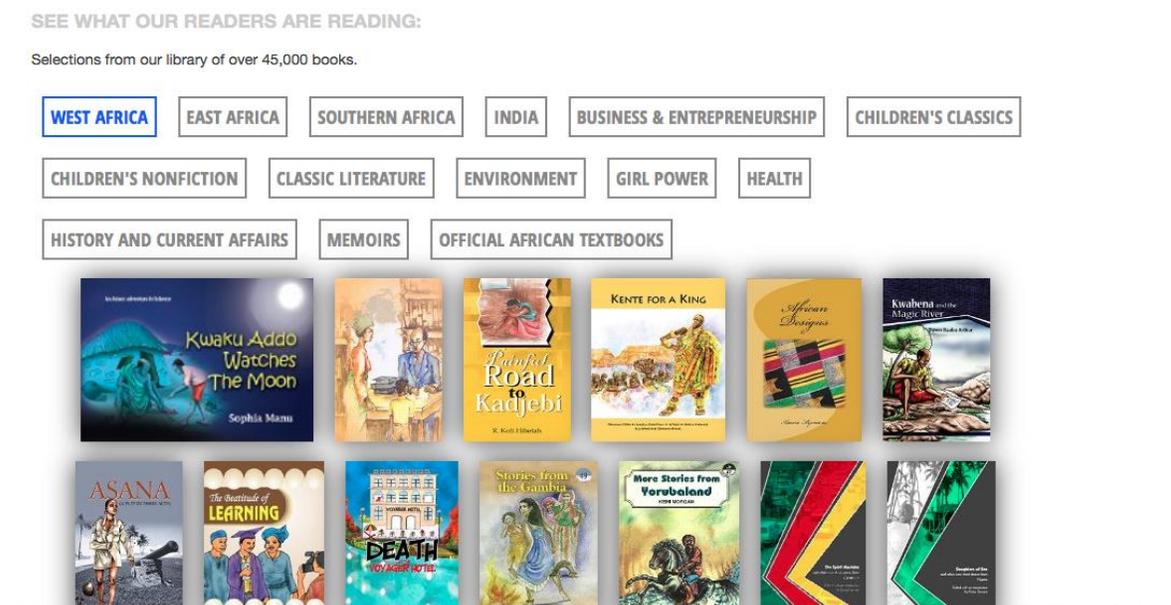
Figure 7 shows a varied collection of children's ebooks from the whole of Africa and India, including classics, non-fiction, history and current affairs among others.

Figure 8 below shows some Ghanaian children's ebooks on Worldreader.

Figure 8. Screenshot of some Ghanaian children's ebooks on Worldreader
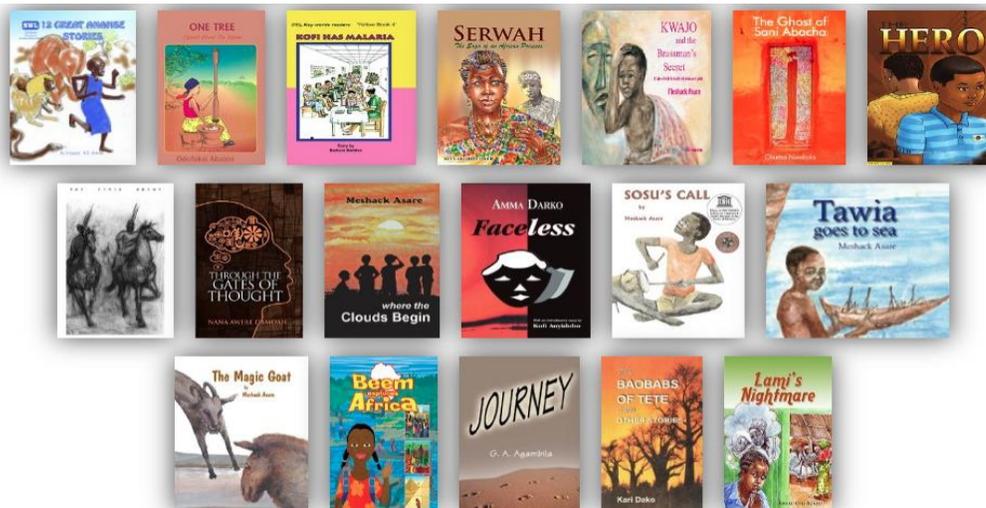
Explore the books in our library using our Book Tool (*beta*).

Although the ebooks on Worldreader are free to access, the lack of promotion to readers affects the rate of uptake (although young readers have a penchant for accessing free content, as discussed in Chapter Six). Worldreader's promotion strategy has mainly been aimed at publishers: by getting publishers to digitise their books and use their platform, Worldreader can reach institutional buyers like Ghana Library Board which supports literacy projects in deprived rural communities through the Worldreader project. A strong promotion strategy is important to increase awareness and use of the platform.

Azaliabooks is also one of the major stakeholders in Ghana's ebook sector. It is a subsidiary of Type Company, a design, print and finishing company that expanded its business portfolio to include digital publishing (http://www.typecompany.com). Jemimah Alemna from Azaliabooks disclosed in an interview that Type Company diversified into

the digital market because they realised that 'customers were reducing the number of print copies and instead requesting soft or digital copies (to circulate digitally) in addition to the reduced number of print copies (J. Alemna, Content Manager, March 9, 2016).

This demand for digital copies suggested a growing market for digital content hence the investment into Azaliabooks. The company approached 'all known publishers and authors' (J. Alemna, Content Manager, March 9, 2016), shared their vision, discussed terms, and signed up some publishers and authors. Their non-exclusive publishing rights agreement with their content suppliers means publishers and authors can digitally publish their content on other platforms.

Figure 9. Screenshot of some children's books on Azaliabooks.com

Screenshot from Azaliabooks.com accessed on February 21, 2017

Figure 9 above shows more foreign children's ebooks than indigenous ones. Azaliabooks and Pick Reader cited low patronage of their platform by publishers and authors mentioned earlier. This position resonates with the founder of Nouvelles Editions Numeriques Africaines (NENA) a children's company in Senegal when he stated that:

The great challenge at present is to convince African publishers to switch to digital. There is a potential for several thousand titles created by African authors and publishers. Imagine the day when all of these titles are gathered together in one place: readers across the world who are interested in African issues could meet up there and the whole of African literature would be highlighted, instead of getting lost amid the plethora of offerings on Amazon or the iBookStore (Octavio, 2011, para.15).

Digital publishing and ebooks are not adequately promoted in Ghana. Promotion is key in creating awareness about any product or service. The lack of well-planned promotion strategies that target local consumers discussed later in this chapter shows in the statements publishers and authors receive from vendors, which show consumers making purchases from countries such as Belgium, United Kingdom, United States, Switzerland, Nigeria, Kenya, Tanzania and other African nations, but not Ghana.

Another reason accounting for low uptake of indigenous ebooks is that authors and publishers seem to have relinquished promotion of their ebooks to the distribution platforms or vendors. This makes promotion one-sided, thereby creating an *awareness disconnect* between Ghanaian publishers and authors on one side and their intended audience – young Ghanaian readers – on the other. Azaliabooks, for instance, blames the low patronage of their platform on the free legal downloads and free pirated downloads to which consumers have access as revealed by its content manager (J. Alemna, Content Manager, March 9, 2016).

Electronic publishing company Pick Reader began its operations in 2016 offering digitised past papers and exam questions, ebooks, e-newspapers and e-magazines. They work with 'publishers, authors and booksellers to advance the transformation of books from print to digital' (http://www.pickreader.com). Their services have not been well used by publishers and authors because they are new in the industry and have not adequately promoted their services, many publishers and authors being unaware of their existence. Pick Reader, however, believes that the lack of patronage of its online platforms is a result of publishers being out of touch with technology, coupled with their fear of dishonest dealings by online platforms withholding sales information from them (J. Ntiamoah Marfo, Manager, Pick Reader, December 1, 2016).

Figure 10 below shows a screenshot of the Pick Reader platform advertising its ability to protect ebooks with a DRM.

Figure 10. Screenshot of Pick Reader website advertising its DRM features
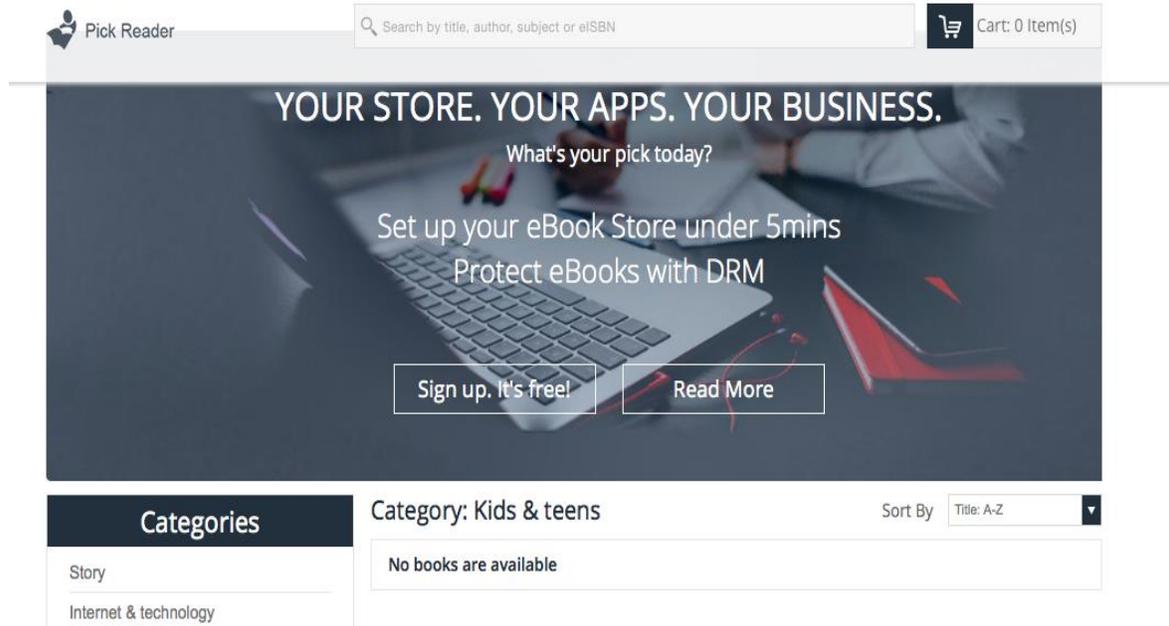
Screenshot from www.pickreader.com

The games industry is also beginning to make inroads into children's education and entertainment sector with Leti Arts leading the way. Leti Arts builds interactive digital comics which portray African heritage and heroes in a twenty-first century setting accessible on iPads and mobile phones.

In retelling African narratives, Leti Arts draws on legends and myths from all over Africa, creating superheroes from the main characters. Their franchise, *Africa's Legends*, portrays fantasy characters such as Ananse and Bukom Fighters from Ghana, Pharaoh from Egypt, Masai Warrior from Kenya, and Somalia Pirate from Somalia to create interactive stories (E. Tawia, February 11, 2016). Figure 11 on the next page shows images of Leti Arts' *Africa's Legends* web page.

Figure 11. Screenshot of Leti Arts website showing some of its *Africa's Legends*
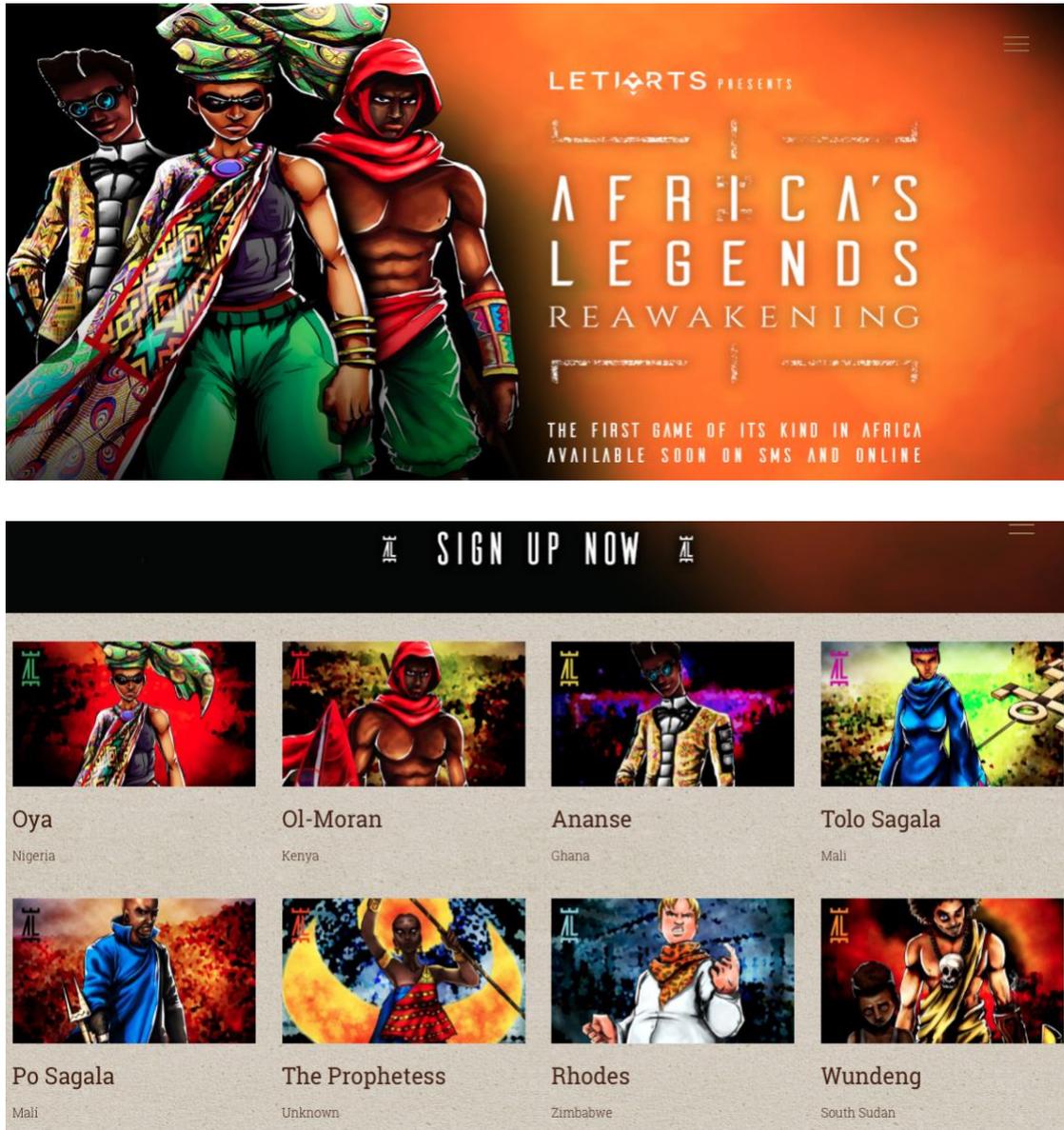
Screenshot from Letiarts.com

The content of *Africa's Legends* is targeted at six to twelve-year-olds and can be accessed across platforms such as Windows, Android, and IOS. Users can go to the Google Play store and search for the *Africa's Legends* app which enables users to download the first ten chapters of content for free. Comics like *Ananse: The Origin* sell for $2.99 on Amazon's comiXology.com.

Leti Arts also collaborates with Vodafone Foundation and other non-governmental organisations to build games and interactive stories around their 'causes' and advocacy initiatives to effect behavioural change. Such collaboration is an example of the opportunity digitalisation offers 'as different services converge through common infrastructure' (Brennen & Kreiss, 2014, para. 1).

4.3.5 Ghana Book Publishers Association (GBPA)

Stakeholder associations representing publishers, authors, printers, booksellers and libraries all promote their causes, although some are more active than others. The Ghana Book Publishers Association (GBPA) is one of such.

The GBPA is a trade association established in 1975 to promote the interest of publishers and energise the book publishing industry in the national interest. The GBPA organises training, capacity building, trade promotions and fairs, documentation and research (www.ghanabookpublishers.org). Writing on the state of book publishing in Ghana, Offei (1996) revealed that a few years after its inception, the association became burdened with challenges to the point that 'members were weary of paying their dues' (para. 4). This stifled the Association's activities until 1991, when the Canadian Organisation for Development through Education (CODE) helped reorganise the association through capacity building in the form of seminars, book fairs, workshops and the provision of office equipment (Brocker, 2012, p. 20).

The GBPA collaborates with other industry stakeholders to organise seminars, training and book fairs, and to engage government in formulating policies that impact positively on the book industry, such as the National Textbook Policy. The Association is governed by a Council, a General Assembly and a Secretariat, and has three levels of membership: corporate, individual and associate.

- **Corporate membership** is open to Ghanaian publishers registered with the Registrar General Department and who have published at least three books.
- **Individual membership** is open to individuals in managerial positions in the industry with three years' professional experience.

- **Associate membership** welcomes people with special skills co-opted by GBPA and students of recognised tertiary institutions studying publishing or publishing-related programmes. These individuals have no voting rights. (www.ghanabookpublishers.org)

Calls have been made from both academia and industry to move GBPA beyond just a trade association to a more professional association, one that will regulate practitioners in the industry and instil a high level of professionalism, similar to others such as the Ghana Medical Association and the Ghana Institute of Engineers. Apart from an initial motion to compile a document for parliamentary consideration, scant progress has been made in this regard.

4.4 Authorship

The Ghana Association of Writers (GAW) plays an important role in promoting authorship. GAW started as a 'Writers' Circle', then became the Ghana Writers' Society in 1957, and eventually became the Ghana Association of Writers. The association brings together all writers and creators of literary content in Ghana, to create a forum for the study of Ghana's literary heritage and promote the exchange of ideas. It protects and advances the interests of Ghanaian writers, fosters the development of good literature in Ghanaian and foreign languages, and encourages the study, documentation and preservation of oral traditions and cultural elements (www.ghanawriters.org/)

As with other stakeholder associations in Ghana, after periods of intermittent dormancy from its inception, GAW is now beginning to make an impact in the industry with the introduction of a literary evening programme dubbed GAW Sunday, organised on the last Sunday of every month. This brings the work of writers to the general public and also serves as a literary platform for new writers to learn from the works and experiences of those more established.

Another of its projects is the Ghana Association of Writers Book Festival (GAWBOFEST), an annual celebration that brings together authors, publishers, illustrators, booksellers, book designers, librarians, teachers, parents, children and readers

to celebrate books, reading, writing, storytelling and creativity. Ghana Association of Writers School Outreach Programme (GAWSOP) was introduced in schools in 2013 to inculcate reading habits and enhance writing skills of students in secondary schools through the formation of reading and writing clubs. GAW also collaborates with the Pan African Writers' Association (PAWA) and the Ghana Center of Poets, Editors and Novelists (PEN), a branch of the oldest international writers' association formed to protect and promote writers and carry out beneficial projects (www.ghanawriters.org/).

Although Altbach (1999) asserted that 'local authorship is most likely in indigenous languages' (p. 2), indigenous authorship in Ghana has mainly been in English, underlining the strong influence the official language has had on the development of authorship and publishing since colonisation. However, past government policies to promote instruction in local languages at the basic school level (from primary one to three) saw children's books originally written in English translated into some local languages such as Asante Twi, Akwapim Twi, Fanti, Ewe and Dangbe. Appendix Three provides a list of children's ebooks published in English and translated into some local languages by Ghanaian publishers.

Literary agents do not exist in Ghana; authors deal directly with publishers or in most cases self-publish. This phenomenon may change as the industry grows and becomes more professional. Writing about the business of publishing in the United Kingdom, Squires (2009) revealed 'the rise of literary agents is linked to the cultural shift of conglomerate finance and the changing book retail environment and the growth in professionalism and business-based practice in nineteenth- and twentieth-century Britain' (pp. 34–35).

As mentioned earlier, the lack of industry data results in the need to draw on some primary data to discuss authorship. Most Ghanaian authors write on a part-time basis. Out of the twelve authors interviewed, eight write on a part-time basis and four on a full-time basis. Two of the full-time writers and one of the part-time writers are self-published. These authors' writing experience ranges from less than five years to twenty years, with the majority having between five and ten years' writing experience.

Figure 12 below provides a diagrammatic representation of authors' writing experiences.

Figure 12. Authors' writing experience in years
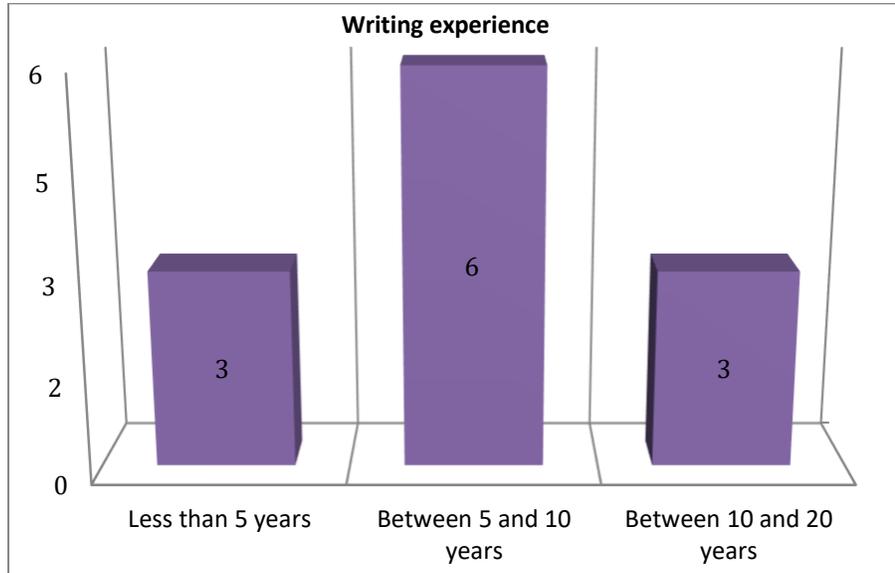
Source: Author's fieldwork

As mentioned earlier in this chapter, the dominance of folk tales in children's publications is confirmed by my research. Figure 13 on the next page illustrates authors' responses to the question 'What themes do you publish?'

Figure 13. Themes or sub-genres authors publish

Sub genres/themes

- ■ 6 Folk tales
- ■ 1 Poetry
- ■ 1 Textbooks
- ■ 1 Historical fiction
- ■ 1 Picture books and puzzles
- ■ 2 Contemporary themes
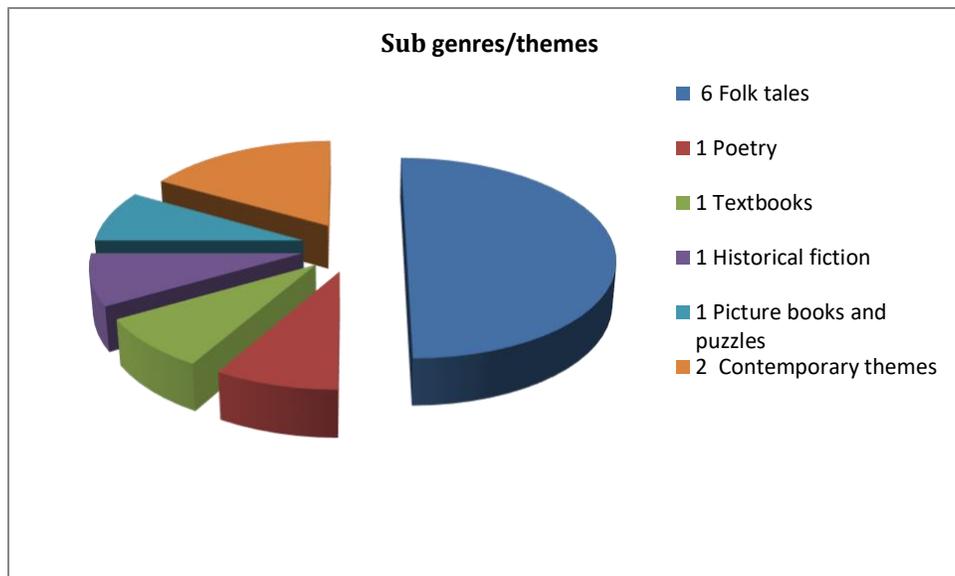
Source: Author's fieldwork

Figure 13 shows that six authors write and publish folklore, two write on contemporary themes, while the others each write poetry, textbooks, historical fiction, picture books and puzzles. The authors who participated in the study gave their reasons for writing as to meet the need of students, for financial benefit, to take advantage of an opportunity in the market, being commissioned by publishers, and giving something back to society in acknowledgement of the education and training they had received:

> I teach in a primary school. I realised that many children had challenges reading and pronouncing words. So, with the training I had received I decided to write a book on phonics. That is how I began writing (V. Akoto, March 15, 2016).

> My children couldn't get Ananse stories [11] to read. When we were growing up, we had these stories. I couldn't get any for them after combing through the whole of Accra. I knew a few of the Ananse stories myself so I started putting them together, I spoke to a few friends who knew others and retold them to me (G. Ankrah, April 1, 2016).

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[11] Ananse stories are popular Ghanaian folk tales created around the spider (Ananse) in the Akan language.

The responses of V. Akoto and G. Ankrah indicate that their motivation to write was borne from the desire to meet a need: in the case of Akoto, to help children with phonics, while Ankrah wrote and compiled Ananse stories to entertain and inspire children. Authors like A. A. Adjei write for financial rewards as indicated below:

> The theme I choose to write on is based on how much money I can make out of them. I am not a talented writer in any shape or form, publishing is a fluke. But when I know I will make money from them, I write (A. A. Adjei, April 2, 2016).

A. A. Adjei, a best-selling self-publisher, was quick to add that she built two houses from a book that sold a million copies and therefore considered writing and publishing lucrative. Others like K. Cudjoe write because they are commissioned by publishers. He disclosed that 'the publishers come to me anytime they need books to submit for government tender to supply school books (K. Cudjoe, April 1, 2016). Another author, P. Woode, revealed that:

> There was a call for books by the British Council. They wanted story books to distribute nationwide so here was this huge demand and I was thinking wow! I was working for my father's publishing house at the time. We didn't have story books at the time. I put an advertisement in the newspapers asking for submissions. What I got were not good at all. There was only one good one from all the lot. So, I wrote two stories and submitted them and they were selected (P. Woode, March 2, 2016).

A. Kwafo, on the other hand, writes because of the publishing training she received and sees writing as an opportunity to give back to society books that will contribute to improving literacy.

In choosing publishers for their work, authors consider the following attributes: the publishers' lists; the services they offer; and the quality of their output. Authors also consider the quality of the publicity their books would potentially receive if published; royalties (which range between 6% and 12%); and recommendations from organisers of prizes and awards programme. For example, Ruby Goka disclosed during an interview that the organisers of that literary award recommended Sub-Saharan Publishers (the prize package included a publishing contract with that publisher).

4.5 Printing

The printing sector is actively represented in the publishing industry and offers various services including security printing: the printing of documents that contain security features to validate their authenticity like cheques, passports and certificates. The Ghana Printers' and Paper Converters' Association (GPPCA) is a trade association established in 1980 and is the 'official mouthpiece of Ghanaian industries using paper and paper products as their basic raw materials' (http://ghanaprinters.com). Although some publishers bemoan local print quality in an interview, one satisfied self-publisher praised the print quality offered by Ghanaian printers when she noted that:

> My expectations for publishing in print have been met. Because I was initially told it was the Chinese who delivered good print jobs and that local printers did not deliver good quality print. But I found this printing press that does a good job. My only challenge is because I don't print many copies, (just 1000) I end up paying so much for my work (V. Akoto, March 15, 2016).

4.6 Marketing, promotion, and distribution

Whereas effective book distribution is considered one of the main challenges for publishing, not only in the Third World but in virtually every country (Arboleda, 1998, p. 75), the situation in Africa and in Ghana is complicated by a lack of market research which is important to help publishers to 'keep themselves in touch with the needs and wants of those who buy or use their goods and services' (Baverstock, 2015, p. 47). In 1997, Bgoya et al wrote that 'market research is rarely done in the African publishing industry' (p. 55). Similarly, Chakava (1996) posited that 'African publishers lack strategic and planned promotional campaigns. Some do not print extra covers for promotional purposes and in some cases, there is little or no advance information about an impending publication' (p. 117).

Unfortunately, almost two decades after Bgoya et al and Chakava's publications, the situation still persists, with the Ghanaian book industry being a typical example. Although publishers agree that market research is important to acquire insight into the market, many are not committed to investing in it, no matter how little money it might

require. As Baverstock (2015) suggested, 'market research does not have to be expensive or extensive to be useful' (p. 46).

Whereas marketing departments exist in many publishing houses, their main functions are usually order taking, distribution and selling. The lack of market data, therefore, leaves one to wonder if the basis on which publishing decisions are made is anything other than intuition. Little wonder that many publishers find educational publishing attractive because of the ready market and hope to win government contracts for textbooks supply.

As Wiggans (2000) has suggested, 'the philosophy of "this is what we want to sell" needs to be replaced by "what is it that people wish to read"' (p. 10). In terms of promotion, publishers, including self-published authors, do not adequately promote and publicise their books by exploring different book promotion strategies such as advertising, catalogues, author visits, social media and others. The most common means of promotion in Ghana is to get books onto the booklist of schools or to gain government approval through the Ministry of Education. As a self-published author stated that:

> I promote my books personally with the occasional help from my friends. I target the directors of private schools who are the main decision makers with regards to the books they use or head teachers who are influential in getting the books on their book lists or recommending them to pupils (V. Akoto, March 15, 2016).

A publisher also stated that:

> We have been going to schools to promote our books to the extent that the titles get on their booklist. That's our prayer! Once the books get on the list we are sure that parents and pupils will find the books (K. O. Amponsah, February 23, 2016).

Another author who uses traditional publishers also self-promotes and personally sells his books. In an interview, J. Borboye disclosed that:

> I go out to promote and sell myself. I personally sold 800 copies of one title and 5,000 copies of another. My publishers pay royalty and 25% sales commission on the books I sell. To be honest with you, I make more money selling than from the royalties (J. Borboye, February 15, 2016).

Although marketing does not attract much publisher attention and investment, book fairs are an important and a regular feature on the publishers' calendar. The Ghana International Book Fair is a trade fair organised by GBPA in collaboration with the Ghana Library Board, National Commission on Culture, Copyright Society of Ghana, Ghana Book Development Council, and the Ghana Association of Writers. It offers trade opportunities for exhibitors and visitors. The Fair began in 1994 as a biennial event and has been an annual event since 2002; it attracts both local and international exhibitors.

Publishers offer buyers various sales arrangements. This research has revealed that credit sales are the most common, followed by discounts, then full price, multi-buy, subscription and the use of vouchers. Figure 14 below shows the sales arrangements publishers give their customers.

Figure 14. Sales arrangements publishers offer to customers
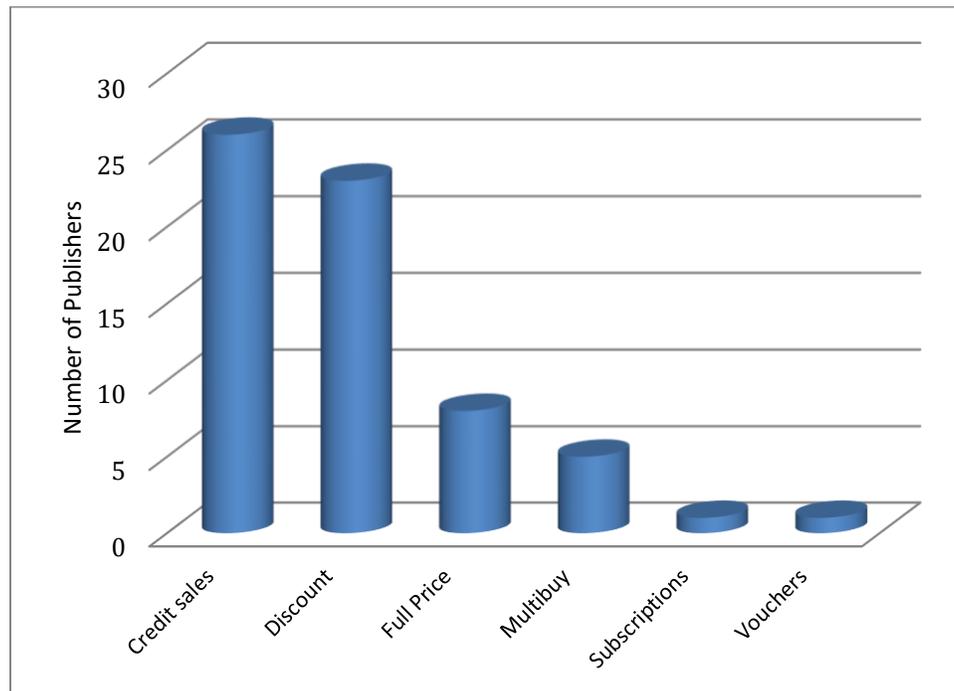
Source: Author's fieldwork

Figure 14 reveals that credit sale is the most common sales arrangement offered by the forty publishers who responded to the survey, attracting the highest response from

twenty-six publishers. This is followed by discount offers given by twenty-three publishers, then full price by eight, multi-buy five, with subscription and vouchers by one publisher.

Access to books and reading impacts on publishing whether print or electronic (Zell, 2013, p. 19). However, bookshops in the Third World, according to Altbach (1992), are 'inadequate and with low income, many rural communities are not in the position to purchase books and therefore remain underserved' (p. 11). Whereas bookshop chains like EPP Books, Readwide, Challenge and Kingdom Books have had a positive impact on the industry by making books available to the public, itinerant booksellers who ply their trade everywhere have generated a mixed reaction from industry watchers. According to Opoku-Amankwa, Mahama, and Ry-Kottoh (2012):

> Itinerant booksellers also have both positive and negative impact on the book trade in Ghana. While some see their activities as highly commendable and must be encouraged, some mainstream publishers and bookshop owners see them as a serious threat to the book industry because they are perceived as flooding the market with substandard books, which raises a lot of concern about professionalism in the industry (p. 9).

Unlike the publishers' and printers' associations, the Ghana Booksellers' Association seems dormant. Its activities, according to Teye-Adi (1997) in Opoku-Amankwa, Mahama, and Ry-Kottoh, 2012, p. 252), are mainly concentrated in the capital cities. There is scant information about its activities, making it difficult to evaluate its impact.

4.7 Government's role in publishing

The government in Ghana has an important role in the development of publishing. As Altbach (1998) posited, 'publishing is closely linked to culture and to education, and these are deeply rooted in national goals' (p. 161). Thus, the government's role is crucial because of the imposed tariffs, duties and restrictions on imports which have a direct impact on publishing (Altbach, 1992, p. 9). Publishers must compete with lower-priced imported books because these come in tax-free, whereas their locally produced books tend to be expensive due to the high taxes (between 28% to 40%) on paper and other printing materials. To remain competitive, Ghanaian publishers buy print abroad to cut down on production costs, to the detriment of the local printing industry.

While the government's role in publishing is considered by some as interfering and stifling private enterprise, others praise its role and expect more active involvement with a 'decisive role in supporting publishing, especially for minority groups as part of promoting the cultural heritage of the nation' (Altbach & Teferra, 1998, p. xv).

Commenting on the role of government in promoting publishing, the president of the GBPA stated that:

> The government has such a critical role, I think the government should be more interested in who is doing publishing in this country, because if you are going to do any social engineering, publishers are the people you talk to, so they create books that have a nation building orientation (E. Agyare, February 24, 2016).

The government plays a major role in the textbook sector since it is the principal buyer and supplier of textbooks in the country. Large government orders have made textbook publishing a vibrant sector of publishing in Ghana, creating an enormous opportunity and a ready market for publishers who can meet this demand. According to Segbawu (2001), the Ministry of Education's Supplies and Logistics Division (SLD) is the largest organisation supplying and delivering books in Ghana (p. 38). Segbawu's assertion is as accurate today as it was in 2001; some industry watchers consider this phenomenon as emasculating the business of private booksellers and distributors who are unable to match the ministry's logistics and coverage. Textbook publishers, however, eagerly look forward to government purchase as the National Textbook Policy requires the government to source textbooks from local publishers. The policy was introduced in November 2003 and allowed local publishers to participate in the supply of textbooks. It became necessary to equip schools with standardised texts based on a reviewed curriculum to facilitate effective teaching and learning (National Book Policy, 2006, p. iii). Thus, publishers submit proposals and bid for government tenders to supply textbooks and other learning materials to basic schools.

Commenting on why publishers always vie for government tenders, the general manager of Adwinsa Publications, publishers of children's educational books, stated that 'when it comes to government purchase, it is always good news' (K. O. Amponsah, February 23, 2016). The publishing manager of Winmat Publishers also stated that:

That's the only way you can get some purchases. That is the fastest way to make money. Government does not allow individual publishers to supply directly to government public schools, and they are a big market (Publishing Manager, Winmat Publishers, February 19, 2016).

This has therefore indirectly affected the development of trade publishing since publishers seem to pay more attention to textbook or school book publishing at the expense of the development of other genres. Although the textbook policy created a platform from which the National Book Policy was drawn in 2006, this latter policy is yet to be operational although it has been distributed to industry stakeholders such as the GBPA. The policy is expected to address the objectives outlined in the Education Strategic Plan (ESP 2003–2015) and would, among other things: promote book production, making books more available and affordable; foster a reading culture irrespective of age; promote indigenous authorship; create a conducive environment for local publishers to develop business; and create an environment for a sustainable system of book distribution

(http://www.ghanabookpublishers.org/nationalbookpolicy/downloads.pdf)

Some aspects of implementing the textbook policy, such as opening tenders for publishers to bid for the supply of textbooks for government schools, has generated controversy, with publishers questioning the ways in which book contracts were awarded and pointing to the perceived interference of government officials. In 2014, the lack of transparency that tainted the textbook bidding process led to threats by the GBPA to sue the Ministry of Education for not following due process (Citifmonline.com, March 2014). Publishers' concerns and suspicions of the selection process were borne out to some degree when, in 2015, an Integrated Science book that had been selected by the Ministry of Education was found to contain fundamental errors. The teachers rejected it and appealed for the book to be withdrawn. The basis on which the book in question was selected is still obscure. Addressing these concerns is important as it will boost the confidence of publishers and help grow the industry since all eligible publishers (bidders) will feel they were given equal opportunities.

4.7.1 Libraries' role in promoting access to books

Libraries have an invaluable role in making content available to readers free of charge, and in encouraging all forms of reading. In Ghana, school and public libraries are supported and regulated by the Ghana Library Authority (GhLA) – formerly the Ghana Library Board – which was established using a generous contribution of £1,000 donated by the late Rt. Rev. John Orfeur Aglionby, Anglican Bishop of Accra, and the Government of Ghana. The Authority's aim is to support formal and informal education through the provision of reading materials such as books, periodicals and other non-book materials as well as to act as a centre for information and data collection, processing, storage and dissemination for the general public. It oversees a network of ten regional libraries and fifty-three branch libraries (www.ghla.org.gh).

Agyei-Gyane (2009) reports that, 'Ghana has been the pioneer in public librarianship in West Africa' (p. 113). The country had the best public library networks in Africa but due to underfunding and neglect, services deteriorated. Funding support came from the Carnegie Year 2000 Public Library Revitalization Programme, which covered seven African countries including Ghana (Darko-Ampem, 2002, para. 15). Currently, few basic schools have functioning and well-equipped libraries but some initiatives from individuals and institutions such as Ghana Library Association, the Department of Publishing Studies (KNUST), and others have introduced reading clubs with the setting up of *box/mobile libraries* to meet the library needs of some basic schools. The *box library* is usually a collection of books donated in large wooden boxes that are usually kept in the head teacher's office and loaned out to pupils. In an interview, Professor Perpetua Sakyiwa Dadzie, president of Ghana Library Association, disclosed that the library association adopts some deprived schools that do not have libraries, then establishes reading and book clubs to encourage reading (P. S. Dadzie, February 22, 2016).

The Ghana Library Authority also supports reading clinics, reading and book clubs through the provision of reading materials that are acquired with funds from the Ghana Educational Trust (GET) Fund and the Government of Ghana (GOG). In an interview, the Greater Accra Regional Director of Ghana Library Authority stated that 'a

lot of people are interested in reading and organising reading clinics but do not have the financial support. And that is where we come in' (G. Amarteifio, February 21, 2016).

In terms of the digitisation of Ghanaian school and public libraries, the president of the Library Association stated in an interview that 'we are not there yet. We first have to get the children reading printed books, then there is also the need for a Kindle or any reading device' (P. S. Dadzie, February 22, 2016). However, she added that regional public libraries in Ho (the capital city of Volta Region) have received funding from MTN and Ghana Investment Fund for Electronic Communication (GIFEC) to introduce computers. Also, commenting on the role of GIFEC's support to libraries, G. Amarteifio disclosed that:

> They [GIFEC] are helping us with computers. They have supplied computers to nine regional libraries, ten mobile libraries, and thirty-four branch libraries...

> We go to schools that are underserved in terms of ICT education. Although ICT is taught in schools, children in the underserved communities do not have access to computers. Some have only seen them in textbooks, those who may have seen real computers may not have touched or handled them. So, we go there with our mobile libraries and teach them how to use computers (G. Amarteifio, February 21, 2016).

The introduction of ICT education to these underserved communities has altered the role of libraries from simply making reading materials available to also disseminating new technology. Beyond the introduction of ICT skills to the underserved communities, the Ghana Library Authority's plans to digitise public and school libraries are yet to come to fruition because of inadequate government funding and budgetary allocations. The support the Library Authority receives from some private organisations according to the Greater Accra Regional Director of Ghana Library Authority is used to meet other needs. As state-funded institutions, libraries are not permitted to charge for the services they provide. The state therefore must increase funding or alternatively, the Library Authority must find innovative ways to attract more funding from the private sector to carry out projects like digitisation.

Currently, libraries are not in the position to support digital publishing because they do not have the technology and capability to stock digital collections. When it does

happen, digitised state school and public libraries will not only support digital publishing because it is an important component in the publishing infrastructure, and will also influence the level of ebook adoption in schools.

4.7.2 Copyright

Ghana is a signatory to international copyright laws and conventions and has its own law (Copyright Law of 2005 [Act 690] that replaced the Copyright Law of 1985). The international copyright agreements Ghana has ratified include the following:

1. The Convention Establishing the World Intellectual Property Organisation (WIPO)
2. The Universal Copyright Convention (UCC)
3. The Berne Convention for the Protection of Literary and Artistic Works
4. The World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)
5. The African Regional Intellectual Property Organization (AIRIPO)
6. The WIPO Copyright Treaty
7. The WIPO Performances and Phonogram Treaty (ratified by Ghana Parliament and yet to be lodged with WIPO)

([http://www.ghanabookpublishers.org/book/COPYRIGHT.pdf)](http://www.ghanabookpublishers.org/book/COPYRIGHT.pdf)

The Copyright Law of 2005 [Act 690] is enforceable during the author's lifetime and 70 years after his or her death. Like other copyright laws, authors enjoy both economic and moral rights to the following protected by the copyright law: literary works, artistic works musical works, sound recordings, audio-visual works, choreographic works, derivative works, computer software or programmes. Copyright owners also have the following exclusive rights:

- To reproduce the work in any manner or form;
- To translate, adapt and arrange or transform any part of the work;
- To perform publicly or broadcast the work to the public;

- To distribute originals to the public or copies of the work by way of first sales or transfer of ownership, and

- To rent originals or copies commercially to the public.

(http://www.ghanabookpublishers.org/book/COPYRIGHT.pdf)

4.8 Issues and challenges

Although the copyright law seeks to protect intellectual property, its enforcement has been fraught with challenges with piracy going unhindered. As Brocker (2012) stated, 'piracy is a serious issue in Ghana; copyright is often infringed but is not dealt with effectively' (p. 20). The major challenge has been resourcing the enforcement agencies to carry out criminal and civil enforcement. Institutions to monitor book production activities are also inadequately resourced. For example, the George Padmore Research Library on African Studies serves as a national library and repository for Ghana's literary output. It compiles the Ghana National Bibliography (GNB) and is the national agency for International Standard Bibliographic Description (ISBD), International Standard Book Number (ISBN), International Standard Serial Number (ISSN) and International Standard Music Number (ISMN) (Krampah, 2012, para. 8, 9); yet it does not have computers to collate and process the data.

During the fieldwork for this research, it was discovered that the George Padmore Research Library had no mechanism to collate and monitor how many books are published in a year, or how many ISBNs have been used beyond just issuing the numbers. This lack of data means one is unable to ascertain the level of book production let alone accurately situate our position in the knowledge system of the world: whether we are still at the peripheries or are moving towards the centre of the knowledge system.

A reason for piracy is the perceived limited access to some literary works. Thus, in the name of 'fair use', copyright is infringed in the form of illegal photocopying. In terms of enforcement, Panethiere (2005) posits that 'law enforcement authorities do not have the power to investigate criminal infringements of intellectual property or to themselves initiate criminal actions unless a rights holder has first complained' (p. 33).

These restrictions, coupled with the reluctance of some rights holders to pursue the infringers because of a lack of faith in the Ghanaian legal system, are common sentiments shared by authors and publishers when I interact with them in the course of my work as a teacher on the Publishing Studies programme at the Kwame Nkrumah University of Science and Technology (KNUST). Panethiere (2005) further stated that, 'the combined effect of low penalties and restriction on the investigative power of law enforcement is inevitably to reinforce the view in some quarters that intellectual property offences are low priority' (p. 33).

Publishers and authors face several challenges that, when addressed, will promote a better framework for indigenous print and electronic publishing. The expectations of publishers and authors for venturing into book publishing are mixed. While some expectations are met, others are not. Some issues publishers and authors raised during the research are discussed briefly:

4.8.1 Monitoring sales

The monitoring of sales of printed books in Ghana's print book distribution infrastructure is difficult. Commenting on the situation during an interview, an author stated that 'you see, publishers won't even allow you to see what goes on. There is no mechanism to check how many print copies they have sold (J. Borboye, February 15, 2016). Beyond the sales report publishers and booksellers give authors, authors are unable to independently monitor or verify the sales figures unless they are involved in the personal selling of their books. This can be frustrating for authors, especially when they think their books are selling well but then receive a report indicating otherwise.

The lack of monitoring goes beyond authors' inability to track sales. It is not uncommon to find institutions established to collect data and monitor activities in the book industry that are unable to perform their duties as required due to lack of resources (see the George Padmore Research Library example already mentioned). In this digital era, where national institutions are digitising their operations under the e-government initiative, the George Padmore Library for African Studies (at the time of conducting the fieldwork for this research) had no computers and kept records in books. As a result, there is no database for Ghana's book production output. Authors and researches

therefore can only rely on the scanty and unverified information publishers provide as they see fit.

4.8.2 Publishing contracts

Publishing contracts are important legal documents which authorise publishers to produce authors' work; both publishers and authors must understand and accept the terms of the contract. In this research, about half of the respondents did not sign any written contract and those who did were not entirely sure about its content or did not pay attention to the details. In a particular case, the contract did not have an expiry date and therefore lasted forever. As one author who had published both print and electronic books revealed: 'I found out years later after signing a contract with a publisher that he had publishing rights indefinitely because it had no end. My nephew who is a lawyer was the one who pointed this out to me. It just means I have to be careful next time' (G. Ankrah, April 1, 2016).

Whether such a situation was due to a lack of knowledge about legal issues in publishing on the part of the publisher, or whether it was plain cheating, was not ascertained during this research. However, there is evident need for training for authors and publishers: publishers need to know their legal responsibilities towards authors, and authors need to know their rights.

4.8.3 Low skill and competence levels

The deficit in skills levels is another challenge for publishers in Ghana. Publishers expect that the personnel they employ, especially those with university degrees, will have certain basic skills to equip them for their roles. However, some publishers have had reason to complain about some of the staff they have employed. According to the CEO of Smartline Publishers:

> My expectation is that once they [graduates from the publishing programme at KNUST] come in they must have full awareness of the trends in the market or industry so when they come in they are fully prepared to start working on some of the books (CEO, Smartline Publishers, February 24, 2016).

The lack of graduates' awareness of industry and market trends identified by this publisher raises the question about how the Publishing Studies programme is perceived:

as a general academic programme, as a professional programme designed to meet the needs of the Ghanaian book industry, or as a combination of both.

An earlier pilot study conducted in 2015 revealed that publishing professionals and academics in Ghana perceived the publishing programme at KNUST as both an academic and a professional programme. To continue to meet the industry's expectation requires more emphasis on identifying skills deficits in the industry and updating curricula to meet these. This research has identified knowledge and skills areas in which publishers require training and forms the basis on which the course in digital publishing has been designed as is discussed in Chapter Seven.

The editorial quality of Ghanaian books is also an issue. The availability of professional editors is important for locally produced books to compete favourably in foreign markets. The three-times Burt Award Winner Ruby Goka disclosed that 'anytime you submit a book, it comes back with one issue or the other… getting professional editors is a challenge… the book may have gone through several editors but the final copy comes out and you still see a few errors' (G. Goka, March 31, 2016). The lack of local expertise in editing, especially in science and mathematics means publishers like Winnat Publishers have to rely on editorial expertise from the United Kingdom because of its former association with Macmillan.

Getting the editorial quality right is important and requires training and improving the skills levels in the Ghanaian book industry. The president of GBPA stated that 'if our books can easily travel across borders, then what it means is that my book should be as competitive as any other book that has been produced out there' (E. Agyare, February 24, 2016). Also, the editorial quality of books can be affected by the speed with which some publish textbooks and supplementary readers to meet the deadlines to supply. As a commissioned textbook author indicated:

> It's only when the call for government tender is out that publishers rush to commission authors, giving them a short time like months to research and write a good manuscript. This can be challenging to an author who has a full-time job, like teaching (K. Cudjoe, April 1, 2016).

The rush to commission and produce textbooks without rigorous editorial scrutiny exposes users to unacceptable and, in some cases, debatable content, resulting in the call to remove some textbooks from the list of approved books (as previously discussed in this chapter). How such books made the list in the first place is a subject worth investigating.

Publishers, especially small publishers, face challenges with limited access to credit and the lack of capital, with commercial banks charging high interest rates of 25% to 30%:

> Without access to finance, publishers have to reinvest profits to fund their publishing programmes and marketing. This reduces working capital and limits business expansion. The resultant squeeze on cash flow also prevents many publishers from extending credit on attractive terms to booksellers, especially for export purposes (Makotsi & Musonda, 2000, p. 9).

As one publisher lamented, 'people don't understand what we do. At times, when you write to the bank for credit, you have to go explain the business to them since they think we just print… just one or two banks understand how publishing works and are willing [to give you credit]' (K. Adjepong, February 19, 2016).

Other issues that were raised include the small size of the market for books and the lack of reading habits among Ghanaian readers.

4.9 The Publishing Studies Programme at Kwame Nkrumah University of Science and Technology (KNUST), Kumasi

The Publishing Studies (formerly Book Industry) programme at KNUST plays a key role in training and skills development in book publishing and its related fields for industry. Established in October 1984 as the first degree-awarding institution in publishing in sub-Saharan Africa, this initial joint collaboration between UNESCO and the Government of Ghana has over the years offered training in publishing, printing, book design and illustration, entrepreneurship and small business management, among other subject areas. The Department of Publishing Studies runs a four-year undergraduate degree programme with students majoring in publishing management or administration, printing technology or book design and illustration.

Although the department faces the challenge of handling large student numbers without the equivalent infrastructure and staff, the programme's popularity and impact on industry encouraged the introduction of a two-year postgraduate programme in 2008 after experimenting with a one-year postgraduate diploma in publishing. The undergraduate programme is now offered in two streams: the regular and parallel BA Publishing Studies programme. The regular BA Publishing Studies programme is non-fee paying for Ghanaian students while the parallel programme offers a fee-paying option for students who although qualified to pursue a bachelor's degree in Publishing Studies were unable to make the cut off aggregate for the programme. The department has also partnered with the African Publishers' Network (APNET) to run short courses for publishing professionals across the continent.

4.10 Conclusion

Book publishing in Ghana has evolved over the years, from the dominance of foreign publishers as a result of colonisation, through independence and the influence of state publishing to the birth of independent indigenous publishing. Interventions from government and stakeholder associations coupled with external supports from some foreign institutions have all contributed to the state of book publishing in Ghana today.

The dynamic nature of the industry requires publishers to be able to adapt and learn quickly because changes in the external business environment, whether political, economic, social, cultural or technological, inevitably impact on their operations.

As the GBPA president stated:

I think we need to up our game. We have the stories but we have documented very little. Even our independence has very little written about it. Look at our oral traditions, still, there is so much that has not been written, so we have the stories, the world is looking for. So, once we up our game a little bit (our publishing processes) I think we can do well (GBPA President, February 24, 2016).

Although children's book publishing has grown focusing mainly on folk tales and textbooks, there is the need for publishers to look beyond textbooks and focus on other literary genres to promote the holistic growth of the book industry. Emphasis must be placed on literacy programmes and literacy products must be strongly promoted. The

long overdue National Book Policy requires an update even before its implementation to make provisions for ebooks, as is discussed in the following chapters. Implementing the policy will help to improve publishing output as well as channel increased funding to libraries for equipment and expansion. The expansion of libraries must also include automation and ultimately the stocking of electronic resources. The reasons for the continuing non-implementation of the National Book Policy is an area worth researching.

For book publishing in Ghana to play its role in enriching culture, improving education and ultimately promoting national development, attention must be given to all aspects of publishing. This requires a multifaceted approach that encourages funded research into several areas of the industry by training and research institutions; giving institutional support to writers and publishers of literary works to make the genre commercially attractive; building capacity to keep book professionals abreast with new trends; and adequately resourcing institutions like the George Padmore Library to collate accurate data on the book industry.

CHAPTER FIVE

PUBLISHERS' AND AUTHORS' LEVEL OF ADOPTION OF EBOOK PUBLISHING

5.1 Introduction

This chapter draws on primary data and secondary material to examine publishers' and authors' levels of awareness and adoption of ebook publishing within Rogers' diffusion of innovation theory. The chapter discusses publishers' perceptions, motivations, promotion strategies, challenges and barriers to ebook publishing or digital book publishing (used interchangeably); and also, their various online activities. It also investigates authors' levels of awareness and adoption of ebooks, and their strategies for the future. All the publishers and authors who participated in the research were aware of ebooks but not many had published ebooks.

5.2. Publishers' online presence

A strong online presence and effective use of social media can connect publishers with their authors, readers and service providers to build a thriving publishing ecosystem. Responses from the survey revealed that most publishers have websites, email accounts and use social media. When publishers were asked whether they use any social media, thirty-three publishers representing 84% responded *yes* and five publishers representing 13% responded *no*. The response of two publishers representing 3% was not determined because the question was unanswered. Figure 15 on the next page shows publishers' online presence and use of social media.

Figure 15. Publishers' online use of social media
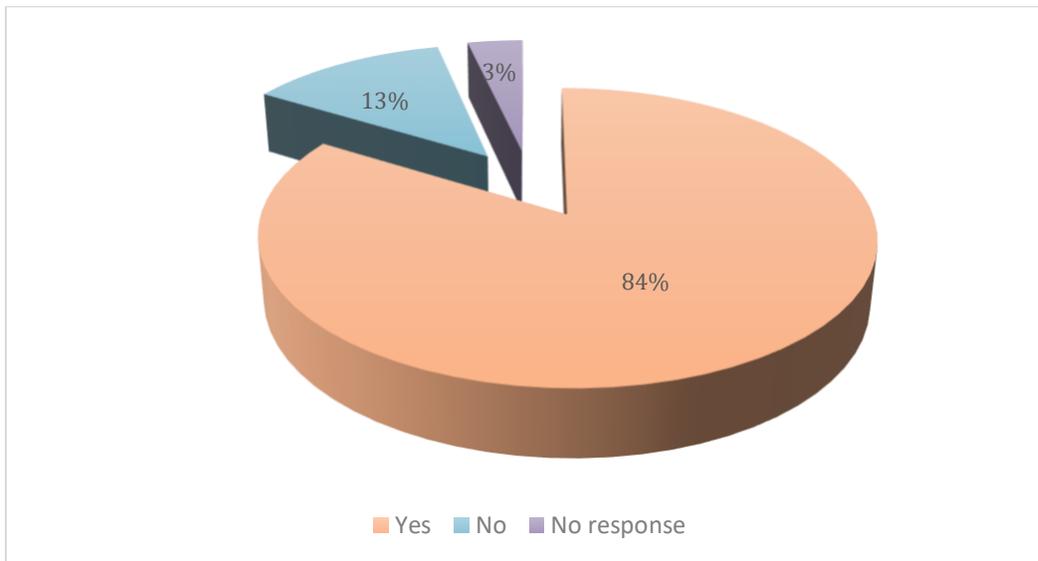
Source: Author's fieldwork

Although the majority of publishers indicated they had an online presence and used social media, it was observed that many of these websites were not functional, with links to some of them broken. Some were 'under reconstruction' and those that were active, while advertising both print and ebooks, did not have the capacity to engage their audiences or handle electronic transactions. In some cases, customers could place orders for printed books online but had to pay in cash upon delivery. Publishers' online activities were therefore mainly to advertise their businesses and products.

Figure 16 on the next page shows the social media platforms most commonly used by publishers.

Figure 16. Social media platforms used by publishers
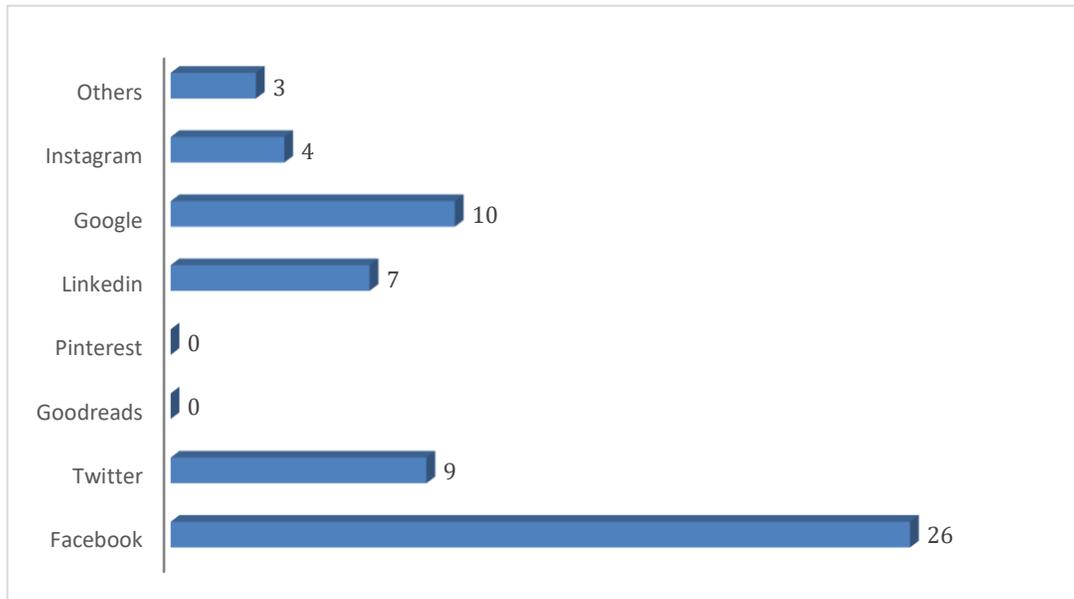
Source: Author's fieldwork

Responses from publishers revealed that the most frequently used social media platform was Facebook (26) followed by Google plus (10), Twitter (9), LinkedIn (7), Instagram (4) and WhatsApp (3). Publishers did not use Goodreads and Pinterest and therefore had no responses. 'Others' was included as an option in the questionnaire to solicit responses from publishers about platforms they used but which were not in the list provided. Three respondents ticked 'others' but did not provide the names of these.

5.3 Publishers' awareness and adoption of digital publishing (ebooks)

The level of awareness of an innovation influences the decision to adopt or not. How an innovation is communicated within a social system and how stakeholders perceive this innovation is influenced by its attributes already discussed in Chapter One. Apart from Smartline Publishers' initial experiment with ebooks in 2008 as discussed in Chapter Four, other publisher members of the Ghana Book Publishers Association (GBPA) first heard about ebooks in 2011 through seminars and workshops held by Worldreader at the inception of their digitisation project involving ten children's book publishers (discussed

in Chapter Four). One of the purposes of this research is to ascertain the level of adoption of ebook publishing in the intervening years.

In order to determine the level of adoption of ebook technology among mainstream children's book publishers, a table was created based on E. M. Rogers' (2003) decision to innovate model illustrated in Figure 1. Publishers' responses are presented in Table 8 below.

Table 8. Awareness and adoption table

	Yes	No
I am aware of digital book (ebook) publishing technology.	40	0
I am interested in digital publishing and actively seeking details and related information.	26	14
I have considered the merits and demerits of ebook technology and have adopted it.	12	28
I have considered the merits and demerits of ebook technology and I am not interested in adopting it.	6	34
I have considered the merits and demerits of ebook technology and am undecided about it.	6	34
I am actively publishing ebooks.	10	30

Source: Author's fieldwork

Whereas all forty publishers knew about ebooks, twelve stated they had adopted ebook publishing but only ten were actively publishing ebooks. Twenty-six were interested and actively seeking information on it. This situation presents the opportunity for exchange of information and more targeted training within the industry. Although ten publishers stated they were actively publishing ebooks, it was observed during follow-up interview that not many of them were conversant with the digital book publishing process. However, they were content to use the services of third parties like Worldreader and Azaliabooks to digitise and distribute their content.

The response of six publishers showed they were undecided and/or not interested in adopting ebooks. Since this piece of data was derived from the responses from the

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questionnaire, it was difficult to clarify this issue because the responses were anonymous and there was no opportunity to ask a follow-up question.

In terms of access, publishers who participated in this research asserted that their ebooks could be accessed on their company websites, Amazon.com, Azaliabooks.com, school libraries, and the Worldreader platform. However, the reference to their websites and libraries as points of access was found to be inaccurate since the ebooks are only advertised online, with no capacity to download them or pay for them, as mentioned earlier. And as discussed in Chapter Four, school libraries do not yet have the capability and systems to stock ebooks. A possible explanation for listing school libraries as one of the points of access could be because of the Worldreader literacy project in which ebooks were preloaded onto the Worldreader Kindle and donated to schools. This, therefore, raises the question of publishers' understanding of the term 'access to ebooks', since advertising on company websites does not equate to granting access.

To ascertain the genres of books that mainstream publishers published digitally, the ten publishers 'actively publishing' indicated that they published children's textbooks and supplementary readers. Seven out of ten publish adult fiction, another seven produce young adult books, five publish non-fiction, four produce academic books, and four, poetry. The genre least published was textbooks for senior high school, attracting a response from two publishers.

Figure 17 on the next page provides a visual representation of digitally published genres.

Figure 17. Genres published digitally by publishers

Genre	Value
Poetry	4
Academic books	4
Textbooks for Senior High Schools	2
Nonfiction	5
Children's textbooks	10
Children's suplementary readers	10
Young adult	7
Adult fiction	7
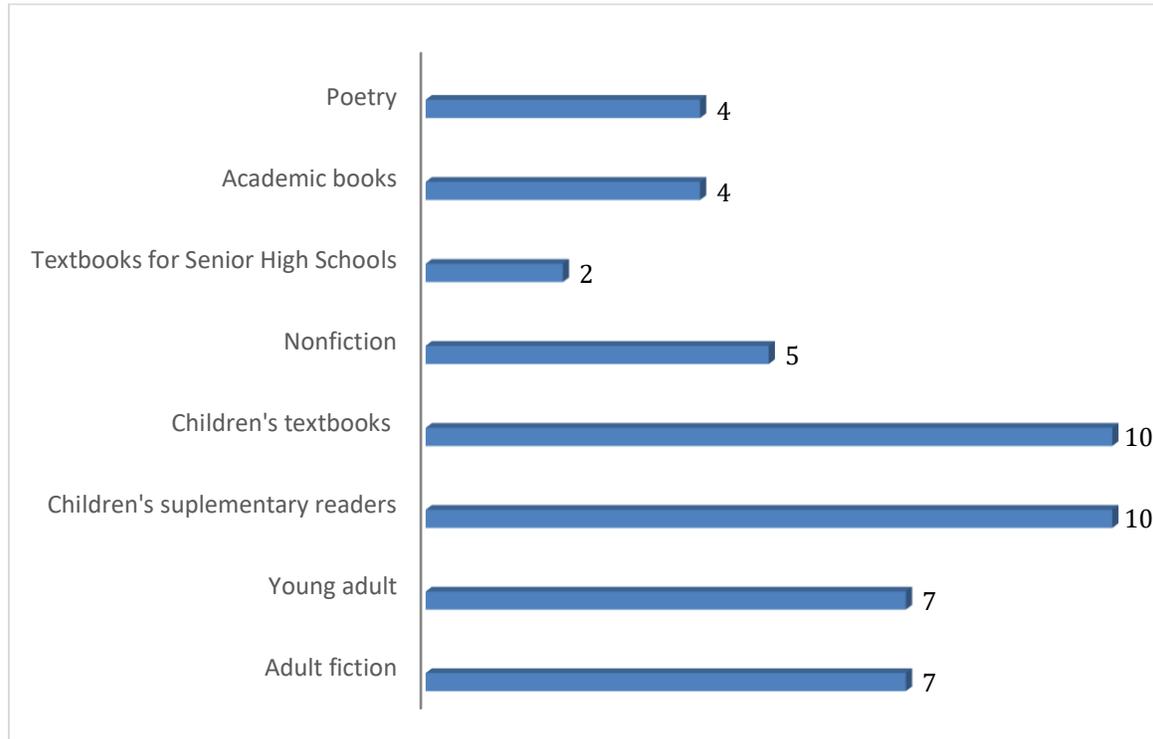
Source: Author's fieldwork

The response illustrated in the chart above indicates that children's textbooks were published digitally. This appears to contradict the fact that Ghanaian schools which adopt the Ghana Education Service (GES) curricula do not use ebooks, while private international schools use foreign ebooks based on the British or American curricula. A possible explanation could be that these digitised children's textbooks were, again, those preloaded onto the Worldreader Kindles, as discussed above.

This study also reveals that English language textbooks are the most published in ebook format, attracting responses from five publishers, followed by Social Studies (2), French (2), Ghanaian language (2), Religious and Moral Education (2), Citizenship Education (2), Information Communication Technology (ICT) (2), Mathematics (1), Science (1), and Art Education (1). The publishers indicated that these ebooks had hypertext, sound, animation, voice-over narration, and interactivity features. See Figure 18 below for the visual presentation of textbooks published digitally.

Figure 18. Textbooks published digitally
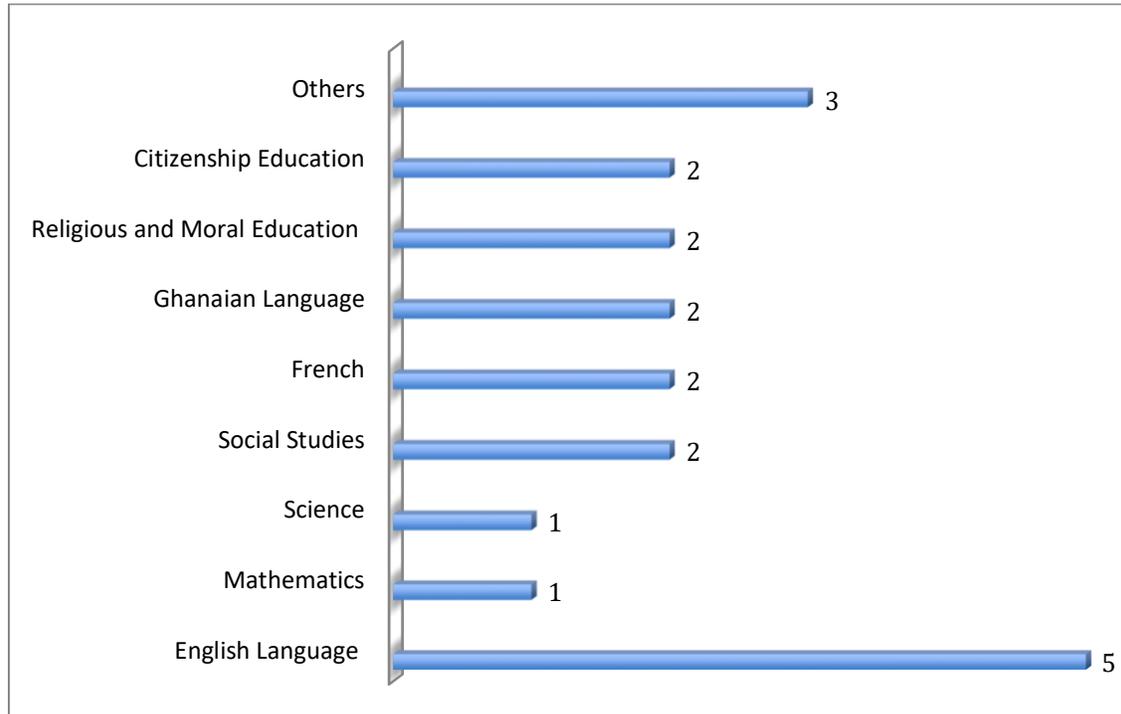
Source: Author's fieldwork

5.4 Publishers' perceptions about digital publishing and ebooks

Publishers' perceptions about digital book publishing and ebooks to a large extent influence their level of adoption. Ghanaian publishers have several perceptions about publishing digitally and selling content online in the form of ebooks. The interview responses of the publishers who participated in this study were analysed and categorised based on the attributes of innovation discussed in Chapter One:

5.4.1 Relative advantage

Publishers agreed that digital book publishing and ebooks have the advantage of being complementary to print publishing and 'print-on-paper' books. Some publishers, like the publishing manager of Winmat Publishers, found the ebook appealing because 'it is easy to access, buy, and read. These days I hardly buy printed books. I read digital books. If it's on my phone I can read at night without disturbing the family by keeping the light on' (K. Adjepong, February 19, 2016).

Also, all publishers agreed that their ebooks have the potential to reach a much wider audience than their printed books, both now and in the future. The general manager of Afram Publications stated that their decision to publish ebooks was 'to reach out to a larger market and explore financial gains' (H. Tagoe, March 25, 2016), with publishers like Adwinsa, Step Publishers and Smartline, who have all published ebooks, already receiving sales from Nigeria, Tanzania, Kenya, United States, United Kingdom, Belgium, and other countries. It was interesting to find that publishers held the perception that ebooks were for the foreign market while printed books were for the local market. Sam Nyarko Mensah, Publications Officer at Step Publishers, stated that:

> We realised that one way to get our books to the other parts of the world was to do ebooks since we knew our print books could not reach everywhere. So, we were not so bothered when we received our sales report from Amazon and realised patronage and sales were from other parts of the world than locally (S. Nyarko Mensah, February 15, 2016).

Although ebooks are perceived to be for the foreign or international market, publishers did not market and promote their ebooks to the international market in any form. Rather, they relied on online vendors and distributors to promote them. For instance, when asked, 'How do you promote your ebooks?' the general manager of Adwinsa Publications responded that:

> Our focus is on our core business that is on print. Because we do not have expertise in that area, [digital publishing and ebooks] it is okay to let Worldreader or Azalia handle all that and just give us our royalties or earnings. We promote our print books by going to schools and persuade the head teachers to get them on their book list. When that happens, we get the books to bookshops and then relax; because the children are expected to buy them, parents will go looking for copies (K. Oppong Amponsah, February 23, 2016).

Relinquishing responsibility for promotion to online vendors limits the exposure the ebooks will have, although they are assumed to be 'out there', online, for everyone to see. Ebooks were also considered complementary to printed books because of unrestricted geographical access and were considered an additional revenue stream, leaving the publishers to concentrate on their core business of print publishing.

Publishers' concentration on print as their core business means investment in digital infrastructure will be limited to online book vendors and distributors like

Azaliabooks, Worldreader, Pick Reader and others who may consider digital publishing to be potentially profitable enough to invest in it.

The ease with which sales records can be monitored was mentioned in Chapter Four as an advantage of ebooks over printed books. The transparent nature of the sales reports generated by online platforms are preferred to those from publishers and bookstores on printed book sales. Generally, the printed book distribution and sales infrastructure in Ghana is not automated, leaving publishers and authors to rely on unverifiable data or records because they have no capacity to independently verify these.

5.4.2 Compatibility

Adopting digital publishing and ebooks does not contravene any social values of educating, informing, entertaining and inspiring readers, and earning an income from producing creative work. These values are usually consistent with publishers' and authors' values of producing books. Publishers who have produced ebooks alongside their printed books see them as complementary since they provide opportunities to increase earnings from another revenue stream. This position resonates with Hans Zell's observation that the consensus among some African publishers is that ebooks and printed books will coexist well into the future (Zell, 2013, p. 19).

5.4.3 Complexity

In terms of complexity, respondents did not find creating ebooks complex, except non-adopters who had inadequate and in some cases, no knowledge about the ebook making process. Publishers like Jojo Ampah CEO of Yen-Timtim asserted that creating ebooks was not a complex process. All that it required was 'the right software to handle the different features like pictures to suit multiple platforms and the training to use them' (J. Ampah, January 13, 2017).

5.4.4 Trialability

The potential market for books can be tested on different platforms before fully integrating their production into the publisher's operations. The interest in and use of ebooks among young readers (discussed in Chapter Six) affords publishers the opportunity to produce ebooks on a trial basis using either the Azaliabooks, Worldreader

or Pick Reader platforms. As one publisher disclosed in interview: 'I will go into ebooks next year to "test the pulse" and see, since I am aware the "big schools" are introducing their pupils and students to ebooks' (K. Amankwah, February 3, 2016). These 'big schools' are international or private schools that teach foreign British or American curricula. The schools are usually in major cities like Accra and Kumasi and attract children from wealthy families and the foreign expatriate community. These are well-resourced institutions and are therefore able to incorporate ebooks and other digital content into their teaching and learning. Testing the market through such trials or pilot schemes will give publishers the confidence to proceed with a full adoption.

5.4.5 Observability

The visible success of ebooks and how this is observed and communicated within the industry will influence their rapid diffusion and uptake in Ghana. As one publisher stated: 'If people see Azaliabooks owning an aircraft, they will know how profitable the ebooks business is, and will all want to go into ebooks' (CEO, Studio Brian Communications, March 1, 2016). Similarly, the Country Director of Literamed Publications asserted that in terms of adoption, Ghanaian publishers were at the periphery because 'those who went on board have not shared much of their success stories with the rest' (S. Brobbey, December 12, 2016), making communication an important tenet in promoting the diffusion of ebook publishing.

To summarise, publishers are aware of ebook publishing although not many have adopted it. They are, however, actively seeking information about ebook publishing (as Table 8 shows). Publishers percieve digital book publishing as complemetary to print publishing owing to: the ease of access of ebooks; the potential to reach a wider audience, particularly the foreign market; and the opportunity it affords publishers to earn additional income. Further, ebook publishing is compatible with print publishing in that both models promote the social values of education, information, entertainment, inspiration and earning income from creativity.

Other issues publishers were concerned about that do not fall within the remit of Rogers' categorisations, was the freedom digital publishing affords in that anyone with access to a computer and the Internet can publish virtually anything online. This carries

the risk of lowering standards of content because of the lack of due process and scrutiny afforded by the conventional editorial process. As the former publishing manager of Sam-Woode observed:

> Any avenue that is safe for exposure is worth exploring. You can't do only traditional stuff in today's IT world. My only worry is now, people self-publish. Straight away, they go digital and miss out on the 'in-between' of what makes a book a really good book and I worry about that. It means so much 'junk' will go out there. Before, when you pick a book, you were sure you were reading something good, more like reading from the Bible because the book has gone through some scrutiny. It's like watching TV these days. Everything is out there. No one is censoring anything, bad language, bad typos etc. in going digital, I will want my manuscript to go through the scrutiny of editorial and production before it comes out as a digital product. Not self-publish digitally (P. Woode, March 2, 2016).

This position resonates with what Shirky (2008) described as an era where 'everyone is a media outlet' and has resulted in 'the mass amateurization of efforts previously reserved for media professionals' (p. 55). Control and scrutiny in themselves do not guarantee high quality if the level of expertise of the one scrutinising [in this case the publisher] is inadequate. In a liberal industry like publishing where anyone can be a publisher so long as they have capital, an idea they believe will sell, and a medium to reach their customers, controlling what is published is an impossible task. The customer's role in deciding what is 'good' or 'bad' when validating a book is as important as that of the publisher in today's digital environment.

The study also revealed that many publishers and authors were not aware that Ghanaian children knew about and were reading ebooks since no research or data was available in this regard. During the fieldwork, many publishers asked, 'apart from children in the big schools, do Ghanaian children read ebooks?' In Chapter Six, this study shows that not only were children in schools within the Ghana Education System aware of ebooks, but they also read them (although the ebooks were mainly foreign and free).

5.5 Publishers' adoption categories

Adopting an innovation is not necessarily 'a passive role of just implementing a standard template of a new idea' as Rogers (2003) asserts, but 'actively participating in customising the innovation to fit adopters' unique situation' (p. 17). Interviewing the

publishers revealed that although they were interested in adopting digital publishing and ebooks, only a few had actively embraced the innovation. The respondents are categorised based on their responses during interviews as follows.

The *innovators* actively publishing ebooks were Smartline, Step Publishers and Sam-Woode. Only Smartline and Step Publishers have the in-house expertise to digitise content into different file formats like EPUB and MOBI for ebooks on Azaliabooks, Worldreader and Amazon. The *innovators'* publishing contracts had an electronic publishing clause that gave digitisation rights to publishers to produce ebooks. These publishers also had third party agreements with Azaliabooks and Worldreader that gave non-exclusive rights to them, thereby allowing the publishers to publish the ebooks on other platforms. Other publishers, however, do not have an electronic publishing clause in their publishing contract but digitise authors' work without permission. An author who wanted to remain anonymous revealed that her publisher had digitised her books and sold them on Amazon without her permission. Such situations, apart from being unethical, violate copyright laws and generate conflict in author–publisher relationships.

Adaex Educational Publishers, Afram Publishers, Adwinsa Publications, and Studio Brian Communications fall into the category of *early adopters*. They have a good knowledge of digital publishing and ebooks, and are known by other publishers to have produced ebooks. Their level of success is unknown due to their unwillingness to disclose exact data about their earnings from ebooks, but they admitted 'it is not bad' and 'it's something good'. Since there is no data to show volume of sales and revenue from their ebooks, one can only take these responses to mean these publishers had made at least some gains from going digital.

Publishers such as Top Facts, Frangipani, Winmat Publishers, Boison Publications, Sosfac Publications, Milakat Enterprise, Vimesh Publications and Buck Press and MJP Books may be considered as *perceptual late adopters*; my addition to Rogers' adoption categories. *Perceptual late adopters* are individuals who appear interested in adopting the innovation but are sceptical and slow to adopt. However, since at the time of evaluation they were only interested in the adoption but had not yet adopted; and since there is no guarantee that they will do so in the future; and because

they are not actually resistant to the innovation, they cannot be classified as late majority or laggards/late adopters as per Rogers' adopter categories. These individuals may be following on the path of adoption, but they are not there yet, or they may never make the decision to adopt, hence they become *perceptual late adopters*.

For publishers in this category, eliminating barriers in the external business environment can have a positive influence on adopting digital publishing. As the CEO of Top Facts Publishers, K. Amankwah observed, Ghanaians are still 'hooked onto printed books and may adopt ebooks with time… getting access to the gadgets [reading devices] too is another issue, then the knowledge about them [ebooks] is not widely spread' (K. Amankwah, February 3, 2016).

The adoption categories of publishers are visually represented in Figure 19 below.

Figure 19. Publishers' adoption categories
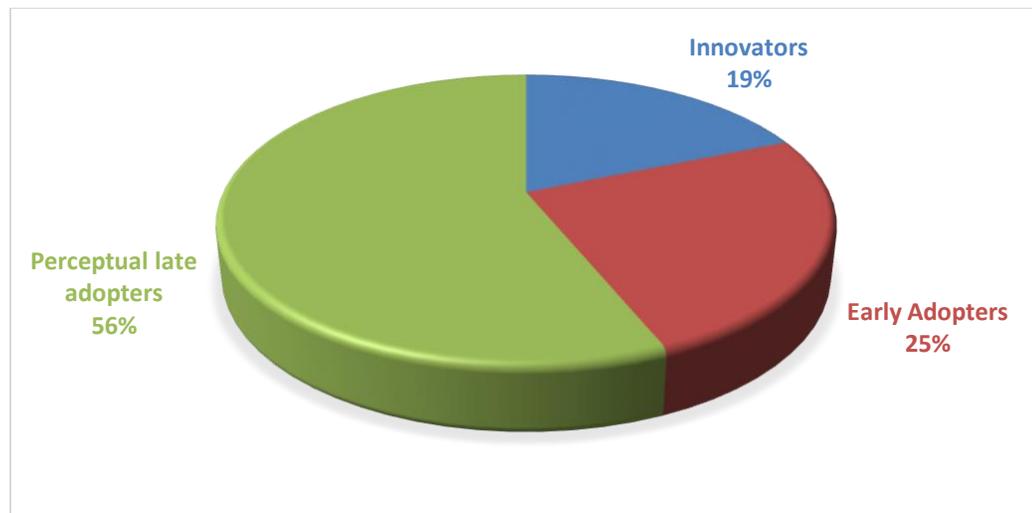
Source: Author's Fieldwork

5.6 Publishers' motivations for publishing ebooks

Publishers who digitised their books gave various reasons for doing so. Asare Konadu Yamoah, Managing Director of Adaex Educational Publishers, was motivated to go digital as a means of transforming the industry; others, such as Studio Brian

Communications and Pick Reader, publish ebooks for the novelty of doing so. Publishers were willing to 'try the new way of publishing books and reach a much wider audience than print books can reach', and 'keep abreast of the time' (H. N. Abbey, CEO of Studio Brian Communications, March 1, 2016). In addition, 'with reading devices like smartphones penetrating the market widely, ebook publishing becomes the new way to go' (J. Ntiamoah Marfo, Manager of Pick Reader, December 1, 2016).

As mentioned in Chapter Four, Worldreader played a major role in getting publishers to digitise their books. Apart from being motivated to participate in the Worldreader project, publishers like Adwinsa, Afram, Step, Smartline, and Sam-Woode decided to try ebooks because it is a new trend that had several benefits and does not interfere with the process of producing printed books and the revenues gained from them. In Sam Nyarko Mensah's words:

> We realised that it was a new trend and avenue to sell more books. It is more like being approached by several bookshops willing to sell your books but in this case, it is a different platform and in another format. You don't lose anything; in fact, you gain (S. Nyarko Mensah, Step Publishers, February 15, 2016).

Notwithstanding their motivations for publishing ebooks, publishers identified challenges and barriers to the spread of ebook publishing. These are discussed in the next subsection.

5.7 Publishers' barriers and challenges to publishing ebooks

As with all publishing business models, ebook publishing carries a certain amount of risk. The reasons that account for publishers' reluctance to go digital include the cost of adoption, the security of intellectual property, the non-use of ebooks in schools that teach Ghana Education Service (GES) curricula, and a lack of knowledge about digital publishing.

5.7.1 Cost

Financial constraint was the primary reason holding many publishers back from going digital. The cost of digitisation software was raised by five publishers (Adaex Educational Publishers, Top Facts, Boison Publications, Vimesh Publications and Step Publishers) as a potential deterrent for going digital. Although there are third parties available to digitise their content, such as Azaliabooks, Worldreader or Pick Reader,

some publishers perceive producing ebooks as expensive and prefer to wait until they can afford to do it.

In interview, the content manager of Azaliabooks revealed that the annual maintenance charges paid to IT Consortium (the software company that created and manages its website and online storefront) are paid in US dollars, as are the charges for its DRM system and the fees it pays for Adobe Content Server. Currency exchange fluctuations affect costs, putting Azaliabooks and indeed any potential online vendor at a disadvantage if, or when, the Ghana cedi[12] depreciates.

Another element of cost was 'redoing' the books to meet the needs of the online audience. A publisher who wanted to remain anonymous disclosed:

> If we have to do ebooks, we have to redo our content, paying a lot more attention to editorial issues and redesign to meet international standards. And all that will be expensive; that is, if we have to digitise what we already have. But going forward, we have to invest a little more in what we do so we can confidently go online… and you see, because a lot of the content on the Ghanaian book market is not original, some publishers will not want to go digital and expose themselves (Anonymous, February 29, 2016).

Thus, the issue of reworking backlist titles to meet acceptable standards raises concerns of cost, quality of local publications, and also using other peoples' creative and intellectual work without their permission; in other words, piracy. Plagiarism and piracy are important issues that must be addressed by individual authors, publishers, the ebook platforms and even government. Authors and publishers in particular must be willing to acquire the knowledge and skills to enable them to create and publish work, confident in the originality and ownership of the styles and narratives therein.

The lack of quality in print publications is likely to affect their digital versions. Commenting on the kind of illustrations in some Ghanaian children's books, Kwabena Owusu, an IT expert at Leti Arts, described them as 'too archaic to compare or compete with illustrations in foreign publications' (K. Owusu, February 11, 2016). In his opinion, 'the lack of adherence to any publishing standards means anyone can put out anything

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[12] The cedi is the unit of currency in Ghana. One cedi = 0.23 US dollar (at November 5, 2017).

and call it a book so long as people are willing to buy it'. This, according to Owusu, is a common phenomenon in textbook publishing where 'some teachers convert their teaching notes to "textbooks" without following any standards, which are then bought by students because they need to pass their school examinations' (K. Owusu, February 11, 2016).

In addition, speaking about financial constraints, V. Akoto, a self-publisher, stated in interview that:

> Presently, I self-finance my publishing projects. All the books I have published so far were from my own coffers. I haven't been able to access any loan yet…I want the hard copies to go first, and then, that will bring in the money, then in following year, I can add the soft copies[13] (V. Akoto, March 15, 2016).

Incentivising ebook publishing through access to credit is one way self-publishers like Vivian Akoto and others may be encouraged to write and produce ebooks. A few companies have tried publishing and distributing digitally but were unsuccessful because of the cost involved. After the initial start-up with free trial software, many could not keep up after the trial period expired, as Jemimah Alemna, Content Manager at Azaliabooks, disclosed in an interview. A company like Kenkenya, for instance, approached some Ghanaian publishers in 2013 and signed contracts to digitise their books but 'nothing came out of it' as disclosed by the immediate past-President of the Ghana Book Publishers Association (A. Konadu Yamoah, March 29, 2016).

5.7.2 Security of online content

Security of content online is another barrier to attracting some publishers to go digital with their publications. Ghanaian publishers who have ventured into digital publishing have only produced digital supplementary readers and not many textbooks. Those who have digitised their textbooks are producing backlist titles from which they have made profits, intended for deprived communities on the Worldreader project. This is because

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[13] 'Soft copies' used here by this author means ebooks and not paperbacks as her publications were already in paperback.

publishers are sceptical about the safety of their content in the digital environment. One publisher stated that:

> It is not safe. Already our books are being pirated all over the place. So, we shall not put our textbooks on any website (K. Agyapong, Publishing Manager, Winmat Publishers, February 19, 2016).

Another said:

> When Worldreader approached us to digitise our books, we were a bit sceptical because we were not sure how safe our books would be out there. So, we tried them with some of our old story books; books from which we have made a lot of money so if something goes wrong, we will not lose out (K. O. Amponsah, General Manger, Adwinsa Publications, February 23, 2016).

The CEO of Frangipani Books declared in interview that 'I don't want my intellectual property stolen. In fact, I am afraid!' (A. A. Adjei, April 2, 2016). E. Boison of Boison Publications also raised concern about the security of their content should they go digital.

This makes piracy an issue of concern for both print and digital content. As Bhaskar asserts: 'Piracy remains an emotive issue, with swathes of the IP industries predictably viewing it as a mortal threat to be stamped out at all cost, matched against a broad coalition of free-thinking lawyers, artists and content consumers who see copyright and, occasionally, remuneration, as an out-dated constraint on the flow of artistic and intellectual goods (Bhaskar, 2013, p. 72).

Such perceptions raise issues with digital rights management infrastructure. The publishers' concerns with online security presented the opportunity to explain how digital rights management (DRM) works to protect unauthorised access to online content, since many respondents assumed everything online could be freely accessed.

Another concern was the security of online transactions. Commenting on safeguarding online transactions and protecting consumer information, K. Owusu pointed out that more theft or loss of peoples' money in Ghana has been from forgery and deals gone bad than it has been with errant online transactions; there is no evidence for any Internet fraud (K. Owusu, February 11, 2016). This position, however, does not allay the fears of potential customers who are still cautious about carrying out online transactions.

5.7.3 Inadequate information about ebooks

Inadequate, or lack of, information about ebooks also serves as a barrier to their adoption. Several publishers did not know about any of the online platforms in Ghana, which suggests the need for improved promotion strategies to inform publishers, authors and readers about available products (ebooks) and services (digital publishing). In addition, publishers first want to 'see and hear' about the success stories of authors and publishers who have gone digital to be persuaded about the merits of doing so themselves, as already mentioned in this chapter.

5.7.4 Non-use of ebooks in schools

Although textbook publishing is regarded as the most vibrant sector of publishing in Ghana because of its ready market, schools that teach the Ghana Education Service curriculum do not use ebooks and as a result, school libraries and public libraries do not stock ebooks. Some publishers of textbooks and supplementary readers disclosed that since their target market was public schools (who do not currently use ebooks) there was no need to go digital until ebooks are adopted for teaching and learning. This, therefore, places a responsibility on government to formulate an ebook policy that permits the Ghana Education Service curriculum-based schools to use ebooks to encourage indigenous publishers to publish ebooks.

Beyond policy, investment in infrastructure to improve access to reading devices and computers is also paramount. Presently, teachers and publishers consider the number of computers available in schools inadequate: each student does not have access to a computer. Since students are not allowed to use electronic devices such as mobile phones in school, many young readers can only access ebooks at home, and if they can afford it. There is also the issue of Internet access and cost, which is discussed in more detail in Chapter Seven, which examines the digital infrastructure to support ebook publishing.

5.7.5 Maintaining the status quo

Managerial preference for printed books as a way of maintaining the status quo also came across as a barrier to adopting ebook publishing. As E. Boison of Boison Publications stated, 'we do not plan to do ebooks at all. In fact, it has not come up for discussion. We

are comfortable with hard copy books. Perhaps we will try it in the next decade or so. Depending on how things go' (E. Boison, Manager, Boison Publications, March 24, 2016). In addition, publishers were of the opinion that authors were more comfortable with print publications and were not willing to try ebooks.

As the CEO of Hetura Books, Jonathan Adjokpe. disclosed: 'many people, especially the old-time authors, would not buy into the whole online thing. It is rather the new (young) authors who are showing interest in online publishing' (J. Adjokpe, March 8, 2016). This allusion to the influence of age on the adoption of innovation is consistent with Bantel and Jackson's (1989) study which suggested that younger managers had better cognitive abilities to make decisions about innovation than older managers (p. 120). Similarly, younger managers were perceived to be more receptive to new ideas, more willing to take risks, and may have been more conversant with new technologies than older managers (Hambrick & Mason, 1984, p. 198). As a publisher whose company is owned by an elderly man revealed in interview, '… we have lost out [of ebook publishing] because of the attitude of our management at the head office' (Anonymous, December 12, 2016). This suggests that publishing businesses run by younger managers are more likely to adopt ebook publishing than those run by older managers.

5.7.6 Infrastructural challenges

Publishers also considered the internal infrastructural challenges of hosting their own online store and online payment as a challenge to going digital. E. Boison commented:

> It's a new area. We have to set up our own website, and a means of taking our money and all that. Because we haven't gone into it, we don't know how it's going to be. And since we don't know much about all that, we are comfortable with the print copies (E. Boison, Manager, Boison Publications, March 24, 2016).

Another infrastructural challenge mentioned was the inconsistent supply of electricity. Although Ghana's energy crisis has improved since this data was collected, inconsistent supply of electricity was stated as one of the barriers to a strong ebook sector. This is because a consistent supply of electricity does not only improve access to ebooks, but also plays an important role in the economic success of a country (Blair, 2015, para. 8).

5.8 Publishers' successes with ebooks

The degree of success with ebooks among publishers varies. While some publishers assert that they have yet to see real benefits, others stated 'it's not bad', 'it's okay, seeing you don't do much in terms of marketing and once in a while, when you least expect it, you get a check from your vendor' (K. O. Amponsah, General Manager, Adwinsa Publications, February 23, 2016). Other responses were 'revenue generation has been a little slow but we have had some interesting income from ebooks which shows the possibilities are good if we explore it properly' (CEO, Smartline, February 24, 2016). The general manager of Afram Publications also stated that ebook publishing has been:

> Quite ok. Some books are doing better than others. The books that move keep moving while the ones that are at the bottom of the list remain there… Perhaps, some advertisement will help the ones at the bottom of the list move (H. Tagoe, General Manager, Afram Publications, March 25, 2016).

Others also consider ebook publishing to be a good thing because sales and revenue from their ebooks have not cannibalised that of their printed books. However, level of success with ebook publishing cannot be ascertained because of publishers' unwillingness to disclose their ebook earnings, except for comments like 'it is not bad', 'quite ok', and 'it's something good'. Only Step Publishers gave a rough estimate of their earnings from ebook sales when it disclosed that 'it is good because sometimes we get $1,000 per quarter from one platform' (S. Nyarko Mensah, February 15, 2016). With no data to show sales and revenues from ebooks, it can only be conjectured that, based on the responses 'not bad' and 'something good', publishers have made some gains in going digital.

In terms of the countries from which the ebooks were bought, Step Publishers mentioned the following: Kenya, South Africa, Nigeria and Tanzania (through the Worldreader platform), with sales also from Switzerland, United Kingdom, United States and Belgium, through Amazon. This seems to suggest that ebook consumers in Africa tend to access ebooks through Worldreader while European and American customers access them through Amazon.

5.9 Promotion strategies

Book promotion in Ghana is generally inadequate as discussed earlier in Chapter Four. Ebook publishers have no promotion strategy but rely on the promotion activities (if any) of the online platform(s) on which their ebooks are distributed. As a result, they do not sell much (in some cases, nothing at all) on platforms like Amazon. The Publications Officer at Step Publishers emphasised the need for publicity and promotion when he stated that:

> We need to give publicity to our ebooks. During the 2014 Bookfair, for instance, we just had a small poster [print] informing patrons that we had digitised our books and they could be found on Worldreader/Amazon and Azalia. … very small, imagine if we had bigger posters or even banners advertising our ebooks and even show how they can be accessed, it will be very good. This would not have been the situation if there was a department, or personnel solely assigned to ebook publishing (S. Nyarko Mensah, February 15, 2016).

When publishers with a decent infrastructure at their disposal do not adequately promote books, the authors who solely depend on them for this service are likely to end up unnoticed and forgotten. Effective book promotion requires a concerted effort of publishers, authors, distributors and sellers. Speaking about the author's responsibility in book promotion, the CEO of Hetura Books observed that:

> Most authors have not branded themselves enough to get people to trust them and want to go looking for their books online and authors also don't publicise their books. So, one of the things we [Hetura Books] are trying to do for them now is getting some very powerful[14] parts of their book redesigned and broadcast on social media (J. Adjokpe, CEO, Hetura Books, March 8, 2016).

The lack of vigorous publicity and promotion of ebooks by Ghanaian publishers means many Ghanaian readers/consumers are less likely to know about the existence of ebooks published in Ghana (as my focus group discussion revealed in Chapter Six). This has created what I describe as an *awareness disconnect* between local publishers and local readers; one of the reasons Ghanaian young readers tend to gravitate towards foreign

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[14] 'Powerful', as used here within the Ghanaian context, suggests pages or portions that will catch the reader's attention.

ebooks is because they are not aware of the existence of local ebooks, as discussed in the next chapter.

To summarise, Ghanaian publishers' motivations to publish ebooks have been driven by a willingness to experiment with the 'new trend' of publishing, and a desire to transform their business models, thereby impacting greatly on the Ghanaian publishing industry. Publishers have also wanted to reach a wider audience through devices such as smartphones which are widely used in Ghana and which enable access to ebooks. The challenges and barriers to ebook publishing include the cost of adoption, security of online content, inadequate information about ebooks, the non-use of ebooks in schools, maintaining the status quo, and infrastructural challenges. The response from ebook publishers suggests that some of their ebooks were doing well on the market, although they were not willing to give specific data. As with their printed books, publishers do not adequately promote their ebooks; they appear to have relinquished responsibility for promotion to the online vendors or platforms on which their ebooks are sold.

The next section focuses on authors: their online presence; level of awareness and adoption; perceptions; motivations; and barriers and challenges to adopting ebooks are discussed. As mentioned in Chapter Two, only twelve authors were available for interview for this research and many had not published ebooks; their responses to some questions were therefore not exhaustive, making the following section quite short.

5.10 Authors' awareness and adoption

Twelve authors participated in this study. In terms of online presence, all twelve authors had an email account; nine were on Facebook, mainly for social media interactions, with five of them announcing their books on Facebook on first publication. These authors do not engage with readers online (even on Facebook) because they rely on publishers and online vendors to promote their books, and also because they do not have any expertise in online marketing and promotion.

All authors interviewed were aware of ebooks but only seven had published ebooks. Four out of the five who had not published ebooks were not aware that ebooks were published at all in Ghana, while others knew of just one or two local ebook

publishers. Three out of the twelve authors had less than five years' writing experience, six had between five and ten years' and the remaining three between ten and twenty years' writing experience. The first time these authors became aware of ebooks was between 2013 and 2015. Two authors disclosed that they had been approached by individuals acting as agents or representatives for independent online self-publishing platforms such as Kids Books Group.

It was interesting to note that even authors who had published ebooks were not as familiar with the digital publishing process as they are with the print publishing process. As a result, their perceptions about digital publishing and ebooks were limited, as discussed in section 5.11

The genres most published as ebooks by the authors interviewed were Ghanaian folk tales followed by contemporary themes, picture books, historical fiction, textbooks and poetry. Like the publishers, the main digital publishing routes these authors used were Worldreader, Azaliabooks and agents or third parties who publish on behalf of authors on digital self-publishing platforms. A typical agreement between an author and agent is 70:30. The agent creates an account as the 'author' on the self-publishing platform and receives 70% of the revenue from the sale of the ebook; from this, the agent pays 70% to the real author, and retains 30% for themselves.

In the case of the author E. Appiah Boakye, the agent handled all the editorial and layout responsibilities and uploaded the content online. Another author, M. Amedofu, on the other hand, handled all the editorial and production responsibilities to the camera-ready stage before submitting the work to the agent, who only uploaded it online. These authors used third parties mainly because they were not aware of the existence of independent digital self-publishing platforms and did not consider themselves capable of self-publishing online.

Although the authors who participated in this research indicated that they were interested in knowing about the digital book publishing process, publishers like Step Publishers and Hetura Books observed the opposite: that many authors were not interested in knowing about the digital publishing process and were just happy that their

ebooks appeared online. This is an advantage for mainstream publishers because authors still consider them to be their main route to publishing ebooks, and therefore do not explore independent or online self-publishing options such as Kindle Direct Publishing (KDP).

5.11 Authors' perceptions about ebooks

As mentioned earlier, because the number of authors who had published ebooks was small and only a few knew about the digital publishing process, this section on author's perceptions about ebooks is short. Authors like K. Cudjoe and A. Kwapong stated that ebooks had the following *relative advantage*. According to K. Cudjoe, ebooks 'will make learning easier than print books' and added that 'it is just that many students don't have personal access to laptops in Ghana, especially in rural Ghana' (K. Cudjoe, April 1, 2016). A. Kwapong also held the opinion that ebooks 'will help in the promotion of literacy since the enhanced features of ebooks will help children who have challenges with reading printed books catch up with their contemporaries' (A. Kwapong, March 3, 2016). These perceptions influence the adoption of ebook publishing.

5.12 Authors' adoption categories

In examining the authors' adoption categories, it was discovered that out of the twelve authors interviewed, three – M. Amedofu, H. N. Abbey and E. Appiah – can be classified as *early adopters* because they approve of the innovation by adopting it, although they did not have a good knowledge of ebook publishing at the time they permitted the digitisation of their work.

The other five may be best described as *perceptual late adopters* because although their responses indicated they were sceptical and slow to adopt or publish ebooks, there was no certainty as to whether they would adopt or not in the future. These authors are V. Akoto, A. A. Adjei, A. Kwapong, R. Goka, and K. Cudjoe. While V. Akoto cites financial challenges as a reason for being slow to adopt, A. A. Adjei was concerned about the security of her books in a digital environment. The rest stated they would adopt when infrastructural challenges such as improved access to the Internet and computers in schools had been addressed, and policy changes such as that permitting

schools to use ebooks have been implemented: this will increase the level of interest and create a ready market for their ebooks.

The other group of authors who have published ebooks but do not fall into any of Rogers' adoption categories can be classified, by my description, as *incidental adopters. Incidental adopters* are those who adopt the innovation by chance or who were not actively involved in the decision-making process to adopt or otherwise, e.g. when a publisher digitises content without the author's knowledge, or when an author just goes along with the publisher's decision to digitise. Authors in this category are N. A. Osae, J. Borborye, G. Ankrah, and one author who wished to remain anonymous.

It was interesting to discover that N. A. Osae, J. Borborye, and G. Ankrah did not have any concern about their publishers digitising their first ebooks without their knowledge; rather, they saw it as an opportunity to improve the visibility of their books and also earn extra income. The anonymous author, however, was not pleased that her work was digitised without her knowledge and permission, as is discussed later in the next subsection on authors' motivation for publishing ebooks.

Figure 20 shows the authors' adoption categories.

Figure 20. Authors' adoption categories
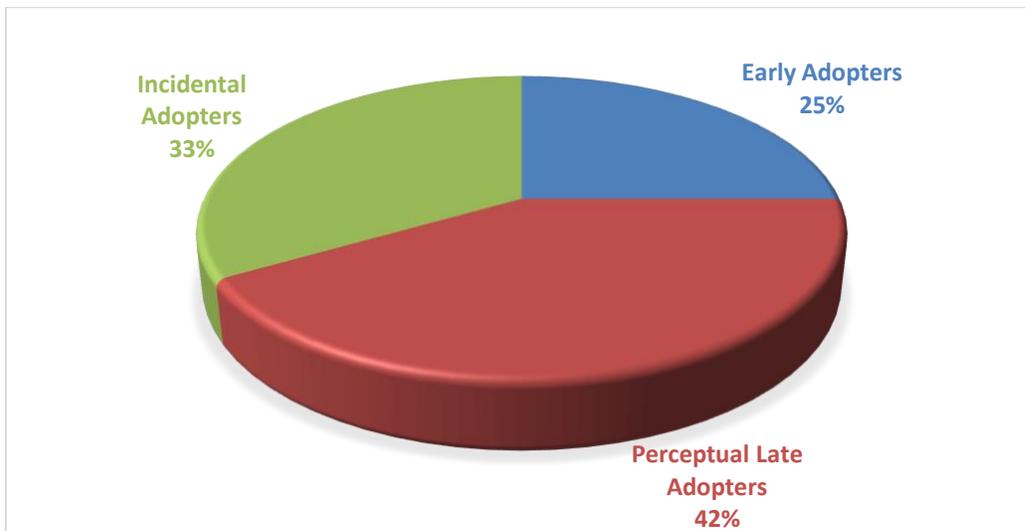
Source: Author's fieldwork

5.13 Authors' motivations for publishing ebooks

The authors interviewed gave various reasons for publishing ebooks. These include the costs involved, visibility of the books, and going along with their publishers' decisions to publish ebooks.

5.13.1. Cost

Mawuli Amedofu and Edward Appiah Boakye decided to publish ebooks because they considered going digital easy and cost effective. According to Mawuli Amedofu:

> It was cheaper and easier for me because I had already done the illustrations and I didn't have to go through the trouble of incurring the cost of printing. So, I said why not 'throw it in'. No inconvenience of going around from school to school to sell and all that (M. Amedofu, February 5, 2016).

In the case of Edward Appiah Boakye, 'the agent suggested it because it was cost effective. That is, it would be cheaper to handle' (E. Appiah Boakye, February 2, 2016). Whereas authors find publishing ebooks a cheaper option, digital publishers and online distributors like Azaliabooks find it expensive to manage their website and storefront, as already discussed.

5.13.2 Visibility

Publishing and distributing online potentially gives authors more visibility compared to conventional channels. The authors who participated in this research published ebooks because it will make their content more visible to the world. According to Joel Borboye, 'It [his ebooks] will go international… the international platform appealed to me' (J. Borboye, February 15, 2016). Also, Edward Appiah Boakye thought 'the nature of the story will appeal to the international readership. I thought ebooks were common in the United States and the UK so my focus was not on the Ghanaian readership (E. Appiah Boakye, February 2, 2016).

For H. N. Abbey, the prospect of selling more copies online appealed to him, stating that, 'if you are lucky and your book is interesting, you are likely to get several copies sold because you will have a wider audience. For example, if you are in Ghana

and you sell [print books] in the thousands, you are likely to sell [ebooks] in the millions online' (H. N. Abbey, March 1, 2016).

This is a misconception: publishing online without an active promotion strategy does not guarantee visibility to ebooks, despite their accessibility. As E. Appiah Boakye and M. Amedofu disclosed, they had not made sales since their ebooks went online in 2014 and 2015 respectively. A possible explanation is that they expected the online platforms to promote the ebooks without any effort from themselves.

5.13.3 Going along with publishers' decisions

Some authors had their content digitised by default when their publishers collaborated with the Worldreader digitisation project. As N. A. Osae revealed, 'my publisher went digital and therefore my book became digitised' (N. A. Osae, February 22, 2016). Although it would have been expected for the publisher to seek the author's permission or to acquire the digital rights before digitising the work, four of the authors interviewed stated that their publishers did not seek their permission before digitising their work.

The anonymous author mentioned earlier was extremely disappointed in her publisher. Although initially not prepared to talk about her work and experience, she stated that:

> The publisher has not treated us well at all. In fact, I stopped following up on the book. The illustrations were also not impressive. We had no idea our book was online, let alone talk about royalties. I simply have no interest in this book any more (Anonymous, March 8, 2016).

When asked if she had stopped writing children's books because of this experience, she replied:

> I will do others upon retirement and choose another publisher. There are many manuscripts but my first experience with this publisher made me not want to continue with him (Anonymous, March 8, 2016).

This study did not ascertain whether the publisher in question was unaware of the need to seek his author's permission to digitise, or if he just took advantage of them. Such a situation poses a barrier to the adoption of ebook publishing as it has the potential to validate the perception that ebook publishing is not safe.

5.14 Barriers to adopting ebooks from authors' perspectives

Among authors, the main barrier to going digital was the inadequate level of knowledge about digital publishing and ebooks. Several authors agreed they needed more knowledge with one requesting that 'you have to teach me about this ebook thing' (K. Cudjoe, April 1, 2016). Even among the authors whose books had been digitised, there was scant evidence of knowledge about the digital publishing processes their books undergo. To improve the level of uptake of ebooks, therefore, there is need for training and knowledge-sharing among stakeholders.

Inconsistent electricity supply and Internet access were cited as further barriers to the adoption of ebooks. One author and member of the GBPA Council supports the position that eliminating these barriers will promote an increase in adoption. In her opinion:

> If someone waves a magic wand and electricity and Internet access and connectivity all work nicely, reading devices become available to children in Ghana, that's when publishers will be confident to go in that direction. Competition is what drives everybody. A smart-thinking person will have to go that way. It will come; it's a matter of time. Companies must plan for it even if they are not yet investing in it so they can at least get their foot in the door (P. Woode, March 2, 2016).

Commenting on the inadequate access to reading devices as a barrier to the uptake of ebooks, A. Kwafo revealed that 'the numbers of computers that government provides are inadequate for each student to have access to a computer. Since students are not encouraged to bring cell phones to school, they can only access ebooks at home, that is for those who can afford it' (A. Kwapong, March 3, 2016).

In terms of success with ebooks, the seven authors who had published ebooks were either evasive about their earnings or stated they were yet to receive any royalties from the sale of their ebooks. An author revealed his disappointment when he stated:

> My expectations for going digital were not met at all. I was expecting to get royalties or revenue within the first three months. I waited for six months, then eight months; it's been more than a year now, and still nothing' (E. Appiah Boakye, January 28, 2016).

When asked about their role in promotion, the authors admitted they did not promote their books themselves but expected the vendor or online platform to take responsibility for this. This accounts for the general lack of sales.

5.15 Projections for the future for authors and publishers

Although the current uptake or adoption level is relatively low, stakeholders project an increased level in adoption as the barriers fall, knowledge about digital publishing and ebooks increases, and publishers become willing to explore the use of smartphones as a medium of disseminating digital content. Publishers like Buck Press, Boison Publications, and Top Facts, among others, will consider going digital with their publications if there are structures and systems to make their content secure in an online environment, and if ebooks are introduced into mainstream schools.

The CEO of Studio Brian Communications, on the other hand, recommends adopting ebooks because 'things are changing so we have to change along because if we don't, we will be left behind' (March 1, 2016). Also, J. Adjokpe predicted a favourable future for ebooks when he stated that:

> People are going digital. People are almost sleeping online now. Now, people are more attached to their devices so, within the next five years, we should have digital publishing taking so much of our total business of publishing companies. We need to build capacity because the industry is moving towards that direction so that is where we also need to move (J. Adjokpe, CEO, Hetura Books, March 8, 2016).

There is also the need for more ebook publishing options and platforms, as well as up-to-date skills in digitising content, all to promote a more vibrant ebooks sector. Presently, publishers who have already digitised their content have to wait in a long queue at Worldreader to have their ebooks produced as revealed by J. Ampah, CEO of Yen-Timtim, and Sam Nyarko Mensah of Step Publishers. This situation indicates a high demand but limited supply of expertise and options to digitise content. Relying solely on Worldreader means that these ebooks can only be accessed on a preloaded Kindle or in the MOBI format, thereby restricting access. The use of Azaliabooks and Pick Reader, on the other hand, allows access to ebooks in other formats like EPUB, which is compatible with many reading devices.

5.16 Conclusion

This chapter shows that, although the level of awareness of ebook publishing among publishers and authors is high, the actual level of adoption is relatively low. This research has identified two new adoption categories. First, are the *incidental adopters* who adopt innovation by chance without going through the decision-making process in adopting an innovation (as outlined by Rogers' diffusion of innovation theory). The second are *perceptual late adopters* who may appear interested but are sceptical and slow in the uptake of the innovation. But since they have not yet adopted, and there is no certainty that they will, they cannot be classified *late majority* or even *laggards* as per Rogers' categories because they are not resistant to the innovation. They may be following on the path of adoption but are not there yet or they may never make the decision to adopt.

This being the first time Rogers' diffusion of innovation theory has been used in publishing research, it is important to note some limitations regarding the adopter categories of innovator, early adopter, early majority, late majority and laggards. Fitting publishers strictly into these categories can pose a challenge because publishers operate in both print and digital publishing. This means publishing in different formats can place a publisher in more than one adopter category. Publishers can also be at different stages in the process of deciding whether to innovate or not, based on the different reasons to adopt or not.

Publishers' motivations for publishing ebooks have been summarised at the end of section 5.9, along with their perceived barriers to adoption. Further, some publishers revealed that any delay in adoption was because they wanted their competitors or those they considered as market leaders to 'test the market' first. 'We will go digital when our competitors start going digital' (E. Boison, March 24, 2016) revealed.

Authors' motivations for publishing ebooks include the ease and comparatively low cost with which ebooks are published; the visibility for authors and their books; and accepting the publisher's decision to digitise content. The barriers to adoption were cost, security issues and fear of piracy, inadequate information about ebooks, lack of access to

reading devices and the Internet, unreliable power supplies, and the non-use of ebooks in the mainstream educational system.

Several publishers and authors are yet to fully explore independent foreign self-publishing digital platforms. Although exploring independent self-publishing digital platforms would be a good way to showcase digital content from Ghana to the world, the business and political implications are worth considering. For instance, how will local digital publishing infrastructure develop if authors and publishers only use well-established foreign infrastructure like Kobo, Barnes & Noble (Nook), Amazon, and so on, instead of Azaliabooks and Pick Reader, both of whom cite low patronage as a major challenge?

If the recommendation of the president of the Ghana Book Publishers' Association is that 'Ghanaians must focus on telling their own stories instead of looking to the foreign media to tell the Ghanaian stories' (GBPA President, February 24, 2016), then it is only fair that these stories are published using local expertise and infrastructure. This will encourage investment in and development of local expertise and infrastructure to conform to acceptable standards.

In promoting digital publishing and ebooks, it would be expedient for the government to consider supplying ebooks as well as print copies of textbooks to schools, and also to equip schools and school libraries with sufficient computers and other electronic devices to support e-learning. Further, government should provide teachers with appropriate devices and training in order that they themselves may learn to operate and maintain these devices and, ultimately, integrate them into their teaching practices.

Although the government has an important role to play in promoting digital publishing and the uptake of ebooks, publishers need to consider a full shift to digital operations, thereby setting the foundation for eventually adopting digital publishing and ebooks. Ghanaian publishers could also explore collaborative opportunities with organisations like Leti Arts so as to benefit from the latter's expertise in creating interactive stories and games.

Promotion is an important tool in creating awareness about books, whether print or digital. If ebook uptake is to spread in Ghana, communication within the market about the technology (digital publishing) and the product (ebook) must be improved and developed by publishers and authors. Publishers have a means of promoting books but it is often inadequate with promotion being neglected. Authors must thus reconsider their roles in the publishing value chain and extend them beyond merely being creators of content, to evolve as marketers of their own work, adopting strategies to engage their readers through other media (Squires, 2007, p. 37).

As a 'new technology', the availability of knowledge and data and how these are communicated will influence the speed with which digital publishing spreads in the Ghanaian publishing industry. Until publishers can ascertain the profitability of their ebooks by being more transparent about their sales data, investments into ebook technology will continue to be low.

The current knowledge and skills levels among publishers and authors also need to be enhanced if the rate of digital publishing is to increase. On several occasions during the fieldwork, I had to teach or explain the process of digital publishing to authors and publishers, even to those who had already produced ebooks. This is a clear indication of the inadequate level of knowledge about ebook publishing, thereby making a case for training to upgrade knowledge and skills levels. This is explored further in Chapter Seven, which examines the digital infrastructure and human resource capacity of the publishing industry in Ghana.

In conclusion, it is worth noting that the success and rapid spread of digital publishing and ebooks requires an increase in adoption among authors and publishers as well as improved levels of awareness of, access to, and use of ebooks among readers. The next chapter discusses the current situation of ebook use among basic school children.

CHAPTER SIX

AWARENESS OF, ACCESS TO, AND USE OF EBOOKS AMONG BASIC SCHOOL CHILDREN

6.1 Introduction

The introduction of Information Communication Technology (ICT) into the curriculum of basic education in Ghana in 2002 sought to establish the foundation for children to appreciate digital content and acquire skills in using it. Responding to the questionnaire, the Director of Curriculum Research Development Division (CRDD) of Ghana Education Service (GES), revealed that:

> Ghana has an ICT for Accelerated Development policy out of which the ICT for Education (ICT4Edu) policy has been developed. The ICT4Edu policy seeks to promote the use of technology in schools/learning. Currently, there are some pilots on-going with the use of ebooks although they are spearheaded by NGOs, they have the support of the GES. We are implementing a USAID-funded project, which is promoting early grade reading. This project will introduce e-readers in about 50 schools (Director of Curriculum Research Development Division, 2016).

The scenario above coupled with the emergence of digital publishing technologies should have continued the improvement of digital literacy in schools. But as Malcolm and Godwyll (2008) revealed in their study *Implementation of ICT in education in Ghana,* challenges were identified with the implementation of ICT in schools, namely: high student/computer ratios, equipment breakdowns, slow or inconsistent Internet connectivity, and lack of professional development programmes for teachers to upgrade their skills on emerging technologies (p. 44). Although some of these challenges may still persist, the number of school children using ebooks is significant, with 20,016 Ghanaians reading on phones and 9,056 on e-readers in various languages, including Akuapem Twi, English, Ewe and Hausa, according to Worldreader (www.worldreader.org/where-we-are-/ghana).

Turning the focus now on how school children engage with and use ebooks, this chapter draws mainly on the responses from the focus group discussions (FGD) held in five Ghanaian basic schools between February and April 2016 in Accra and Kumasi. The

respondents were drawn from a range of classes, from primary 4 to junior high school, and were aged between 9 and 13 years old. In all, forty-four pupils, 52% girls, and 48% boys participated in the FGDs. This chapter also draws on some responses from publishers and other stakeholders, as well as secondary literature to support its arguments.

This chapter discusses children's level of awareness of ebooks and their definitions of these products; it investigates the level of access children have to ebooks and the type of devices they use to engage with them; it examines children's preferences in terms of format, i.e. print and electronic, and notes their comments on ebooks as a learning tool. It also discusses the challenges children have in using ebooks, and concludes with young readers' classifications based on Rogers' adoption categories.

6.2 Awareness and definition of ebooks

Awareness in this research is defined by the ability to know and be acquainted with ebooks. Many of the children who participated in the research knew or had seen ebooks before. To ascertain their level of knowledge and acquaintance with ebooks, the children were asked to describe or define them. Some of the definitions given are categorised based on elements they emphasise: *content, format, mode of delivery* and *hardware*. The definitions are presented in Table 9 on the next page.

Table 9. Definitions/descriptions of ebooks from focus group participants

Focus	Definitions/descriptions
Content	The ebook is a book on the Internet. (Focus Group 2)
	A reading website on the Internet. (Focus Group 1)
Format	Resource that comes as an ebook used for study, reading and entertainment. (Focus Group 1)
	A digital book is a book on a smart device, it's not a hard copy, it's software. (Focus Group 4)
	An ebook is a book obtained from the Internet and can be read via the Internet using a personal computer. (Focus Group 5)
Mode of delivery	It is an electronic book that can be accessed using ICT or electronic device. (Focus Group 1)
	Any book to be accessed through the Internet. (Focus Group 2)
	A book you can download and read anytime. (Focus Group 3)
Hardware	It is a Kindle. (Focus Group 3)
	It is a book on an electronic device. (Focus Group 2)
	Ebook is a device that helps you to read books easier and to carry around and things like that. (Focus Group 3)

Source: Author's fieldwork

Access to ebooks through the Internet appears to be a common thread running through these definitions thereby making access to the Internet an important factor in promoting the uptake of ebooks. Other definitions by some participants, especially those in Focus Group 4, do not readily fall into any of the categories in Table 9. Examples of these are:

'They are books placed alphabetically and labelled as ebooks on a computer.' (Focus Group 4)

'They talk about history and traditional things that go on in an area.' (Focus Group 4)

'The icon is a shelf with books on it.' (Focus Group 4)

These descriptions of ebooks suggest that these participants may have had an idea of what ebooks were but were not able to articulate their thoughts. The description 'the icon

is a shelf with books on it' (Focus Group 4) suggests that skeuomorphism[15] as a design concept is still relevant in introducing users to new technology.

These definitions from nine to thirteen-year-olds are very close to the definition given by university students in Asunka's (2013) study where ebooks were defined as 'electronic versions of physical books that can be accessed and read online through a computer, PDA, ebook reader and so forth' (p. 44).

The definitions in Table 9 seem consistent with Tian and Martin's (2010) definition of ebooks as 'electronic books as well as digital versions of printed books that are generally downloaded from the Internet and read on a screen; like on a computer, tablet, smartphone or specific ebook reader' (p. 6). Similarly, the definitions also resonate with Garrish's (2011) definition of ebook as 'electronic presentation of a book' (p. 1).

During the focus group discussion, we were able to distinguish between awareness (to know about) and use (to read) since awareness did not necessarily mean to use or read. From this clarification, it was established that out of the forty-four participants, thirty-eighty of them were aware of ebooks while six were not aware of them. The six became interested and enthusiastic about knowing more during the practical ebook reading sessions which took place during the focus group discussions. During the practical sessions, ebooks were introduced to the participants via an iPad and a preloaded e-reader. This gave the participants the opportunity to read both vanilla and enhanced ebooks. The practical sessions in all five focus groups served two purposes: first, to ascertain the level of knowledge and use among participants who claimed they use ebooks and second, to introduce those who were not aware of, but were interested in, ebooks.

Out of the thirty-eight who were aware, only thirty-one children had actually read ebooks. Table 10 on the next page shows the categories across all the focus groups.

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[15] The International Design Foundation defines skeuomorphism as a concept 'where an object in software mimics its real-world counterpart.' https://www.interaction-design.org

Table 10. Awareness and use of ebooks across all focus groups

Responses	Group 1 (Accra) 7 participants	Group 2 (Kumasi) 8 participants	Group 3 (Kumasi) 9 participants	Group 4 (Kumasi) 8 participants	Group 5 (Accra) 12 participants	Total 44
Aware	6	8	9	5	10	38/44
Not aware	1	0	0	3	2	6/44
Read/use	6	3	9	5	8	31/44
Aware but don't read	0	5	0	0	2	7/44

Source: Author's fieldwork

It is clear from Table 10 that not all children who knew about ebooks had read them. In focus groups 2 and 5, only three out of eight participants and eight out of twelve participants respectively read ebooks. It is also worth noting that focus group 4 had the highest number of participants (three) who were not aware of ebooks, the highest number among all five groups. The reasons the non-readers of ebooks gave included the following:

> I don't really like reading storybooks (Focus Group 2).
>
> I don't use electronic devices because of my eyes. Because the electronic device will hurt my eyes (Focus Group 2).
>
> I don't know about them (Focus Group 4).
>
> I don't know how to get them (Focus Group 5).

The responses above indicate a dislike for reading story books, the strain an electronic device might have on the eyes, and lack of knowledge about ebooks and how to access them. Promoting literacy requires that these issues be addressed. Potential solutions could be promoting a reading culture, providing an alternative to readers who have difficulty in using electronic devices, and actively promoting ebooks (the publishing activity that, as has already been established, publishers and authors pay least attention to).

To the question, 'When and how did you see and read your first ebook?' the children gave the following responses:

I saw an ebook about 4 or 5 years ago. I didn't know it was an ebook. I wanted to download a game to play when I mistakenly downloaded it. When I opened it, I realised it contained words so I closed it. Then opened it again to read it (Focus Group 1).

I was searching for a print book online and found the ebook instead. This was 3 years ago (Focus Group 1).

I think about 3 or 4 years ago. I was watching a TV show and out of curiosity, I typed the name of one of the characters. I got the ebook by clicking on a link that came up (Focus Group 1).

The first time I read an ebook was when I saw it already loaded on a phone sometime in 2014. My friends were talking about it (Focus Group 2).

I found it by chance on a tablet. King Lear. It was my sister's tablet. This was last year (Focus Group 2).

We were told to find 100 new words and their meanings. So, I went on the net to search. I saw ebooks by chance and I downloaded them for free (Focus Group 4).

It was a year ago. My uncle was telling my mother about it and I heard it (Focus Group 5).

These responses show that the children's first experiences with ebooks were by coincidence, personal enquiry or through introduction by family members or friends; they did not come about by introduction in school or other formal educational means. Finding ebooks by chance is a particularly interesting response since advocates for printed books have argued that ebooks cannot pass the 'stumble-upon test' as do printed books (Baron, 2015).

In her book *Words Onscreen: The Fate of Reading in a Digital World*, Naomi Baron cites Will Schwalbe as stating that:

Electronic books live out of sight and out of mind. But printed books have body, presence. Sure, sometimes they'll elude you in improbable places: in a box full of old picture frames, say, or in the laundry basket, wrapped in a sweatshirt. But at other times they'll confront you, and you'll literally stumble over some tomes you haven't thought about in weeks or years (Schwalbe, 2012 in Baron, 2015, p. 134).

Although it may appear improbable to find ebooks by chance according to Baron and Schwalbe, the focus group participants stated that they had done so, thus confirming that ebooks can pass the 'stumble-upon' test.

Participants in the focus groups also indicated that the genres they mostly read were: adventure, comedy, comics, educational, fan fiction, horror, mystery and religious matters, although many of the children could not recollect titles and author names. Also, the ebooks they had read were mainly foreign ebooks, with only three pupils being aware of and having read locally published ebooks (those written by Peggy Oppong). Table 11 below shows a list of the titles of ebooks the children remembered having read.

Table 11. Foreign and Ghanaian ebooks read by focus group participants

Foreign ebooks	Foreign ebooks (cont.)	Ghanaian ebooks
A To Z	The Fault In Our Stars	Twi Bible
Allegiance	The Last Destination	Constitution Of Ghana
Angels And Demons	The Legend Of Arthur	End Of The Tunnel
Beauty And The Beast	The New Girl	The Lost Hill
Book Of Jokes	The Race To The Stars	The Sultan's Daughter
Fifty Shades Darker	The Secret Of The Snow	The Last Wish
Harry Potter (series)	The Shy Girl Has A Gun	The Adventures Of Cleopas
Hunger Games	Thumbelina	Beneath The Cover
King Lear	Lily Alone	
The Anon	The Little Scout	
Diary Of A Wimpy Kid		
The Divergent Youth		
The Kingdom of Fantasy		

Source: Author's fieldwork

This table clearly shows that more foreign ebooks than local ebooks were accessed and used by readers. One reason for the dominant preference and use of foreign ebooks may be because these ebooks were available to download freely online. Another reason for low uptake of local ebooks may be because many local publishers are still cautious about putting content online for fear of piracy, as discussed in Chapter Five. The

few publishers who have published ebooks have done so on the Worldreader's preloaded reading device; as these are intended for readers in deprived communities, access is therefore limited. As has already been discussed, publishers on Azaliabooks.com also do not actively promote their ebooks, relinquishing the promotion responsibility to their online vendors.

The ebooks accessed and read by the children have basic layout features, mainly consisting of plain text with simple line illustrations, resembling **vanilla ebooks**. Just a few of them had read described as **enhanced ebooks**, i.e. books that have interactive features combining text, audio, video, special effects and gaming.

This study also revealed a low level of awareness of ebooks written and published in Ghana among the young readers. This was not surprising because the Ghanaian publishers and authors who produce ebooks are mainly targeting foreign markets in their quest to reach a wider audience (as discussed in Chapter Five) and as a result have not focused or targeted promotions at local readers (if they carry out any promotion at all). Although textbook publishing is regarded as the strongest sector of publishing in Ghana because of its ready market, schools that teach the GES curriculum did not use digitised or born-digital textbooks. Also, e-textbooks were not stocked in school and public libraries.

6.3 Access to ebooks

'Access' and 'use' have various definitions. Al, Soyal and Tonta (2010) defined access as printing, viewing or downloading, further stating that access statistics provided by ebook vendors differ in this respect (p. 4). This presupposes that while a vendor may capture access to content based on its printing, others can be based on its viewing or downloading. According to Zell (2013), 'access to books from indigenous African publishers, whether it is fiction, non-fiction or children's books, can be said to have greatly improved over the last decade' (p. 19). Improved Internet availability and access, use of mobile technology, and the growth of digital literacy among Ghanaian children through the introduction of ICT in the curriculum, have all contributed to improved access to ebooks.

As McLean and Kulo (2013) have pointed out, an increasing number of children access literature via digital devices (slide 27). My study has also revealed that children use their mobile devices to access books whether as 'sanctioned learning (from the educator's perspective) or as "wasted" by playing diversionary games' (Mobile for Reading: A Landscape Research Review, 2014, p. 6). All forms of reading must be encouraged: 'skimming (getting the gist of things), scanning (searching for specific information) reading extensively (say reading novels for fun), and extensive reading (really concentrating on the text') (Barron, 2015, p. 22).

Libraries play a vital role in disseminating literature, both by buying from publishers and by inculcating and sustaining reading habits (Crabbe, 1996, p. 80). However, school and public libraries in Ghana do not have sophisticated enough systems to either stock ebooks or facilitate their lending and borrowing. Only academic libraries in some universities and research institutions are digitised and stock electronic resources.

6.3.1 Content

The content of the preferred genres noted in section 6.2 was accessed free of charge and downloaded from the Internet. These include some titles inappropriate for children, such as *Fifty Shades Darker* and *Angels And Demons*. Other content came preloaded on smartphones and other reading devices owned by the users. Only a few children had had their ebooks purchased for them online by their parents, but since parents did not form part of my research scope, their experiences with online transactions were not considered in this research. Some children expressed their frustration with accessing ebooks that were not free and had to be purchased online. This leads on to a discussion of the perception that online content must be free (Keen 2007, p. 27).

6.3.2 Sources

The Internet is the main source of ebooks accessed by young readers. Although some local publishers claimed they have ebooks on their websites, upon investigation it was discovered that only the titles and not the content was available, as the websites lacked the capacity for online transactions such as downloading and purchase. Other free access

sources for young readers included self-publishing websites like Wattpad, and some preloaded content on smartphones and e-readers.

Participants also said they shared ebooks by sharing reading devices, as was revealed in focus group 3 when a girl said: 'We swap devices, the reading devices' (Focus Group 3).

It is important to note that cost plays a key role in access to reading materials, not only in digital format but in print too. The book-buying culture of Ghanaians has been said to have been negatively influenced by past government policies on education. As Segbawu (2001) observed, the free education policy of post-independent Ghana meant, 'all textbooks were free' and as a result, 'people did not develop the habit of buying books because all educational materials were provided free of charge' (p. 43). Crabbe (1996) however, revealed that 'contrary to conventional thinking that people in rural areas would not be able to afford books, information gathered by Ghana Book Publishers Association showed that many people especially children have willingly bought books, ranging from textbooks to general readers. Children have even used their lunch money to buy books for themselves' (p. 33).

From my discussions with the children in this study, however, only two participants reported buying ebooks online from Amazon using their parents' credit cards. In Focus Group 1, one reader stated that: 'I saw one and I wanted to read, but I couldn't because I had to pay for it' (Focus Group 1).

In terms of why and where they read, most of the children reported reading ebooks for pleasure outside school hours because electronic devices are not allowed in a typical Ghanaian school. The only permitted use of electronic devices occurs under supervision in computer labs as part of ICT lessons.

As *Mobiles for Reading: A Landscape Research Review* (2014) revealed, the use of ebooks outside school has benefits. The report stated that:

> The traditional use of the time of learning in schools changed very little with the advent of computer labs. Much more time is potentially gained when mobile

devices can be used outside of the classroom, after school hours in leisure time and in the home (p. 6).

Although all schools have libraries, none of them has an e-lending facility. Therefore, to improve the uptake of ebooks, interest in reading must be cultivated and ebooks should be formally introduced in schools.

6.3.3 Devices most frequently used

The focus group discussion revealed that participants use a mix of devices with the most frequently used being smartphones followed by tablets, laptops, dedicated e-readers (Kindle) and desktop computers (in that order). Table 12 below illustrates this-:

Table 12. Devices used in accessing and reading ebooks

Device	Number of participants
Smartphone	15
Tablets (iPad and Samsung Galaxy)	5
Laptops	5
Kindle	4
Desktop computer	3

Source: Author's fieldwork

A few of these children owned these devices while others used those belonging to their parents, siblings and other family members. The cost of these reading devices is another issue. Laptops, desktops and dedicated e-reading devices are more expensive than smartphones. According to Grimus and Ebner (2014), low-cost, affordable mobile phones are developing a new conduit for learning in Africa (p. 4). A cursory survey of device prices (those mentioned by participants) is shown in Table 13 on the next page.

Table 13. Prices of reading devices

Devices	Price in Ghana cedis	Price is GBP equivalent*
Smartphone		
Samsung Galaxy S5	Ghc 575.00	£105.00
Huawei	Ghc 250.00–Ghc 400.00	£46.00–£73.00
iPhone 4 to iPhone 6 plus	Ghc 400.00–Ghc 2,350.00	£73.00–£428.00
Tablet		
iPad 2 to iPad Air 2	Ghc 720.00–Ghc 2,000.00	£137.00–£365.00
Samsung Galaxy Note 3	Ghc 635.00	£116.00
Laptop	Ghc 1,200. 00–Ghc 3,000.00	£219.00–£556.00
Desktop	Ghc 700.00–Ghc 2,000.00	£128.00–£365.00
Dedicated e-reader		
Kindle	Ghc 400.00	£73.00

Source: Author's construct

*Conversion rates were based on the OANDA currency convertor App, as of April 20, 2017

That smartphones are used most frequently to read ebooks is not peculiar to Ghana. Reporting on a Nielsen survey, Maloney (2015) stated that, '54% of ebook buyers in the US said they used smartphones to read their books at least some of the time. That's up from 24% in 2012, according to a separate study commissioned by Nielsen' (para. 9). She further stated that 'the rise of phone reading is pushing publishers to rethink the ways books are designed, marketed and sold with smaller screens in mind' (para. 10).

Similarly, commenting on the high usage of smartphones to read in in South Africa, Vosloo (2010) recommended content creators take advantage of the '*book poor but cell phone rich* context of South Africa, indeed most of Africa'. He added, 'If cell phones are what's in the hands of young people, then that is what we have to work with' (para. 6). This position is worth exploring by industry players in Ghana to encourage young people to read more and thus improve literacy rates.

6.3.4 Alternative use of reading devices

The children who participated in my study also use their devices to do other things apart from reading ebooks. The thirty-one children who stated that they read ebooks also used their reading devices for the following activities as illustrated in Table 14 below.

Table 14. Alternative uses of reading devices

Activity	Number of children	Device used
Watch movies/videos	9	Smartphones
Play games	6	Smartphones
Browse the Internet	5	Smartphones
Do homework/school assignment	4	Desktops and laptops
Listen to music	3	Smartphones
Engage in social media activities	3	Smartphones
Send and receive text messages	3	Smartphones
Take pictures and video	2	Smartphones and tablets
Explore features on the device	1	Smartphones and tablets

Source: Author's fieldwork

These alternative uses of reading devices give a clear indication of convergence. As Philips (2014) posits, books remain a key part in the 'cross-media franchise' … making users less likely to differentiate between the categories of media, as they make connections between them (p. xiv). Convergence with other media means Ghanaian publishers need to look beyond traditional methods of disseminating content and must explore other media to make their content visible. According to F. Hall (2013):

> Because the digital world encompasses increasing levels of convergence, issues previously outside core publishing activities are impinging on publishers more explicitly: books are another form of entertainment and this now needs to be more clearly acknowledged as publishers compete with other sectors (p. 137).

If Ghanaian books publishers are to fully enjoy the benefits of digital book publishing they must not only pay attention to activities in other media sectors but must begin to find pragmatic solutions to the challenge of promoting and distributing their books to reach both local and foreign audiences.

6.4 Challenges with the use of ebooks

Although a majority of the users of ebooks in my study accessed and read ebooks without any problems, a few had challenges with their use. One child had some difficulties using the reading device (a tablet) and another found the content difficult to understand. An interesting perspective one reader brought up was the constant monitoring of parents when they see him with an electronic device. He described the situation as 'too much parenting'. When they see you using or holding a device, they assume you are on social media and want to stop you' (Focus Group 2).

This comment about over-parenting resonated with other members of the group who seemed to have had similar experiences and nodded in agreement thereby bringing up what Tully Barnet described as 'other changes to the social dimension of books and reading' (Barnet, 2014, p. 1) that ebooks bring. Another challenge participants identified was having restricted access to some ebooks online. One young reader expressed his frustration:

> It is difficult sometimes. When you see a book online and you click on it to get it, it will show that it is coming but you wait for a long time then you will get information that you can't connect to the ebook. Why is it so? (Focus Group 4).

To which I responded: 'It could be either you have to pay for the ebook or your Internet connection is down.' This challenge is not peculiar to the children alone since some adults also expressed frustration with access to online content. This situation came up during my interview with authors when I asked if they used ebooks. The arguments for and against access to free content (open access) will continue in academic circles (Eve, 2014) (https://www.cambridge.org/core/books/open-access-and-the-humanities/02BD7DB4A5172A864C432DBFD86E5FB4) but children's ebook publishers in Ghana need to consider the most suitable and viable options: how to reach a

young target audience which is accustomed to free access; and how to make a profit or at worse, break even.

Access to the Internet was another challenge some children raised in the focus group discussion. As already mentioned in Chapter One, Internet access in Ghana is mainly by broadband and mobile data subscription. Some respondents thought it was too expensive to purchase mobile data for their tablets and smartphones to access ebooks even if these ebooks are free. This position is reflected in a participant's comment when he stated that:

> Buying credit to download the ebooks is expensive. The ebooks require a high amount of mobile data to download. So, you can see that a book might be interesting reading but because you need lots of mobile data to download it, you just have to let it go (Focus Group 2).

Another concern was the current national energy crises that interfere with the consistent supply of electricity to charge reading devices. Most devices have long battery lives when charged, so one way to solve this problem would be to invest in e-readers because they have longer battery lives than smartphones and tables. However, the young readers in this study use smartphones and tablets more than e-readers because of the other functions available.

Currently, several pilot projects to expand and utilise ICT in education are in progress. The Director of Curriculum Research Development Division (CRDD) of GES indicated that:

> Kindles are being piloted. They are robust and do not need continuous Internet connectivity. The government is also expanding IT infrastructure to districts and towns so it is easier for schools to get connected to the Internet. We have an NGO piloting the use of Raspberry Pi (Director of Curriculum Research Development Division, 2016).

The impact of these pilot projects will only be ascertained when the results are gathered. In the meantime, and regardless of the challenges mentioned above, the majority of the young readers in my study prefer ebooks to printed books.

6.5 Preferences for ebooks compared to printed books

Out of the forty-four children who participated in the focus group discussion, thirty-five children representing 80% preferred ebooks, two representing 5% preferred printed books, while five representing 11% preferred both ebooks and printed books and two representing 5% were not sure what they preferred. These preferences are illustrated in Table 15 below.

Table 15. Responses to preference for ebooks compared to printed books

Book format	Number of participants
Ebooks	35
Printed Books	2
Both ebooks and printed books	5
Not sure	2

Source: Author's fieldwork

The reason for their preferences is categorised along the lines of *ease of access and use*, *convenience* and *novelty*. Table 16 on the next page illustrates the responses across all five focus groups.

Table 16. Preference categorisation and reasons

Preference categorisation	Reasons
Novelty	They are interesting because you can watch videos, look up new words and do other things (Focus Group 2). They are entertaining because of the stories, illustrations (Focus Group 1). You can just listen to someone read to you (Focus Group 5). It is fun (Focus Group 3).
Convenience	They are more portable than the actual books because you can have like a thousand books on one device (Focus Group 3). They are reliable and easy to carry around. If you need to read three books in a week and your backpack is getting heavy, you can have the books on your iPad instead. It makes it lighter and easier to carry around (Focus Group 3). We are tired of carrying heavy school bags full of heavy printed books (Focus Group 2). You will not have to carry heavy bags to school (Focus Group 4). I like ebooks because printed books can be difficult to find when they are not available (Focus Group 5). I can change font size, style and background when reading an ebook (Focus Group 1).
Ease of access and use	It makes you faster in reading than reading printed books (Focus Group 4). I find them interesting because it's almost like a book but you can get through the pages faster and you can find things easier in an ebook (Focus Group 1). I find them educative since it is easy to find things (Focus Group 3).
Durability	Unlike reading printed books where the pages can tear, ebooks pages cannot tear (Focus Group 4). It's not easy to destroy them. Like printed books, you can rip the pages and tear the covers. This one is like a software so you can't really destroy them (Focus Group 3).

Source: Author's fieldwork

Some other reflections on ebook preference are given below:

> I really like the ebook because I don't read during the day. I usually read at night when I am done with my stuff and my mum is like I should turn off the light but with the ebook my phone has its own brightness so I can read the ebook while the light is off and others are asleep (Focus Group 5).

Reading is a good habit to have, but the above response suggests staying awake late to do so makes it counterproductive if children are tired and unable to concentrate in school. There is also the issue of the kind of content children are reading and whether they are doing so covertly. A matter worth exploring in future research would be the question of who controls what the child reads at night, where content is free to access online.

The element of cost or free access also has an influence on the choices readers make. As one respondent stated 'a lot of ebooks are free but then if they were in the hard copy form they wouldn't be, so I would choose ebooks over the printed books' (Focus Group 5). Another said:

> I find it more convenient to use because when you enter a library you have to go around looking for the particular book you want to read, but with the ebook, you search for the book, type the name and it gives you a directory (Focus Group 5).

The statement above also reflects the previously stated fact that school libraries have no digital search or retrieval systems, so patrons have simply to go and look for books on the shelves. As Madej (2003) asserted 'when children use a computer, they have before them, combined, all the storytelling media of the past rolled into one. It is part oral tradition, part print tradition, part television tradition all integrated to create a fascinating whole' (p. 2). This experience therefore influences their choices and preferences.

In all five focus groups, the issue of carrying heavy school bags loaded with books was mentioned a lot. It is common for pupils in Ghana to carry textbooks, jotters and exercise books for between six and eight subjects a day. Also, in cases where children do not have copies of their timetable and therefore do not know what subjects they have on a particular day, they may carry all their textbooks to school each day so they can be ready for any subject.

That young readers show a high preference for ebooks is consistent with observations made by Hinostroza, Isaacs and Bougroum (2012) and Tolani-Brown et al, (2009) cited in *Mobiles for Reading: A Landscape Research Review* (2014) wherein, if given a choice, young learners in wealthier countries often prefer social interaction on the Internet or mobile devices to listening passively to an instructor or reading a textbook (p.6). Also, according to Landoni (2010), as 'children in the western world are

increasingly interacting with technology from a very young age, it is often the case they are exposed to, and enjoy playing, browsing and searching, the web even before their reading and writing skills are fully developed' (p. 25).

Some comparisons can be drawn between the western 'wealthier countries' and the situation in Ghana. Though Ghana is not considered a wealthy country, my study has revealed that young people may have common preferences and characteristics irrespective of the geographical location and economic status. Curiosity and drive to try new technology (ebooks) may be a universal phenomenon. The responses captured in this study reflected the children's actions and experiences with ebooks without any parental, adult or school intervention. As Scott (2008) observed, 'the best people to provide information on children's perspectives, actions and attitudes are children themselves. Children provide reliable responses if questioned about events that are meaningful to their lives' (p. 88).

It is interesting to note that one child in Focus Group 1 found ebooks 'boring' because they contain 'useless expressions'. Some participants still preferred printed books for various reasons. Some of these are stated below:

> I will still prefer the printed books because some of the ebooks you need the Internet connection to download them so if you want to read the book and you don't have Internet connection then that means you cannot read, so I prefer the hard copy (Focus Group 1).

> I think printed books are cheaper, because you don't need any device, Internet, power and all that (Focus Group 1).

> In some cases, I would like a physical book. For instance, my music book or some favourites, just in case I lose the reading device, there will be a something tangible I can rely on like a hard copy (Focus Group 2).

> I prefer printed books. You can bring them to school, but with ebooks, you can't bring your gadget [smartphone, tablet or dedicated e-reader] to school (Focus Group 5).

> For academic purposes, I will prefer printed books. When you carry physical books, it gives you a different feeling. You look academic. When you carry your ebooks on your phone, anybody can carry a phone around (Focus Group 5).

> Not everyone like those in rural areas may have access (Focus Group 5).

These comments show that printed books still hold promise for young readers in Ghana as they do in other parts of the world that have reported an increase in the sale of printed books. As Mollet (2015), commenting on the publishing industry in the United Kingdom, stated:

> As long as publishers can give readers the option of paper or screen, the market will – and is – taking care of itself. The ebook is no more a challenge to the lifespan of paper than television is to the theatre. Although in some areas – notably academic journals – the demand is for an almost exclusively digital product, we can see in other areas – such as children's – that the tangible object remains king (p. xii).

6.6 Adoption of ebooks in basic schools in Ghana

The perspective of readers on adopting ebooks as a tool for teaching and learning in schools was sought during the focus group discussion. The discussion with the basic school children revealed a high interest in adopting ebooks in their schools. The children's perception and responses to introducing ebooks in schools are stated below:

> I will shout a big Hallelujah to God because physical books can be too heavy (Focus Group 2).

Others also said:

> It will cost our parents less to have all our reading books preloaded on a reading device (Focus Group 2).

> It would be wonderful. It will give us all the advantage of using our computers (Focus Group 2).

> It will make school more interesting (Focus Groups 2 and 3).

> You don't have to bother about soiling ebooks; people won't have to suffer much (Focus Group 3).

> I wish our school would have our textbooks as ebooks so we can use our tablets in school. It is very annoying packing books every day, adding them to exercise books and notebooks and carrying them up the stairs every day only to realise that you've left one of the books you needed for the day at home and get punished for it; not bringing a textbook to school for lessons (Focus Group 3).

Although the majority of the participants would be happy to have ebooks in schools as reflected in some of the comments stated above, one youngster was emphatic in calling

for a monitoring mechanism that allows teachers to sanction students who may be using their devices for other things apart from reading in class. He said:

> I will want all schoolbooks to be ebooks. But they should create a device that is connected to every device in the class so once you start playing a game in class, the teacher is aware (Focus Group 2).

The positive responses and interest exhibited by the children in having school books in digital format at the basic school level contrasts with what Asunka (2013) reported in his study. He explored Ghanaian undergraduates' awareness of, experiences with, and perceptions of ebooks, and their acceptance of e-textbooks as an eventual replacement for physical textbooks. He reported that although the students acknowledged the potential benefits, they were strongly averse to the use of ebooks and other Internet-based electronic resources in place of printed books for academic purposes (p. 47)

The strong sentiments expressed by the children in my study were usually followed by the question 'When are we going to have ebooks in our school?', to which I responded, 'not in the near future'. However, when the barriers to the adoption of ebooks, as discussed previously, are removed and the pilot projects yield positive results, policy makers will hopefully be encouraged to advocate the use of ebooks in schools.

This will be the first step before authors and publishers wholeheartedly embrace ebooks because most Ghanaian publishers rely on government tender to supply textbooks and supplementary readers. Justifying why they depend solely on government purchases, one publisher had this to say:

> That's the only way you can get some purchases. That is the fastest way to make money. Government does not allow individual publishers to supply directly to government public schools, and they are a big market (K. Agyepong, Publishing Manager, Winmat Publishers, February 19, 2016).

An author also stated that:

> You know, we are textbook people. We do textbooks because that's a sure way to reap your investments. You need to have a strong financial base, revenue from textbook sales to venture into other areas of publishing, which is not bad in itself (P. Woode, March 2, 2016).

The next step will be to establish that young readers are interested in, and are reading, ebooks because of what I describe as *awareness disconnect*, i.e. the situation where local publishers are not aware that Ghanaian children are reading ebooks, and many of the children are not aware that local publishers are producing ebooks. Other steps will include improving infrastructure; ensuring a consistent electricity supply; increasing Internet access in schools; upgrading ICT laboratories in schools; and introducing digital publishing training programmes. The following section discusses the place of these young readers within Rogers' adoption category of diffusion of innovation.

6.7 Readers' adoption categories

The young readers represented in this study can be considered to be members of the publishing ecosystem in Ghana because they are readers and potential readers of ebooks. As members of this 'social system' and because they are users of publishing products, their 'innovativeness', i.e. the degree to which they have adopted ebooks has been examined using Rogers' (2003) adoption of innovation categories in Figure 21 below.

Figure 21. Adoption categories of focus groups
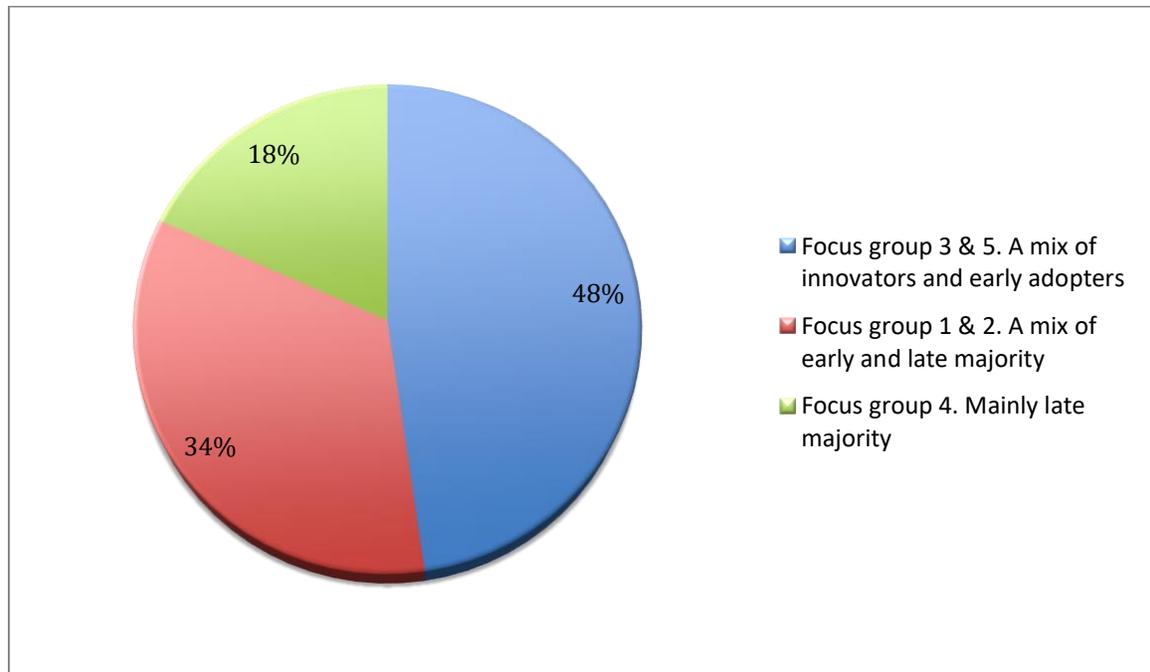
Source: Author's fieldwork

Figure 21 indicates that members of Focus Groups 3 (in Kumasi) and 5 (in Accra) have characteristics of *innovators* and *early adopters*. In these two groups, the majority of the participants were actively engaged in the use of ebooks, with many of them demonstrating good knowledge of ebooks, their access and use. The post-focus group conversations (which were off the record) were interesting and engaging as the children tried to persuade me to impress on their school authorities to introduce ebooks into their schools.

Focus Group 1 (in Accra) and 2 (in Kumasi) can best be described as predominantly *early* and *late majority* with a few individuals exhibiting characteristics of *innovators*. Although some of the participants were aware of ebooks and used them, the level of individual involvement with ebooks was not as high as those in groups 3 and 5. Comparing all of the focus group discussions, participants in Focus Group 4 (in Kumasi) were the least aware of ebooks and used them least, as the discussions evolved around only three participants; this group can be best classified as *late majority*.

From these classifications, it is evident that the focus group participants cannot be situated in a particular adopter category based on their adopter characteristics. Rogers recognises that socio-economic status, personality values and communication behaviour influence the adoption of innovation (Rogers, 2003, p. 287). In this context, the socio-economic variables that may influence the adoption of ebooks among young readers include age, formal education, literacy and social status. The young readers in this study were aged between 9 and 13; and they were drawn from private and public schools that use the GES curriculum. The students came from a mixed social background but were all literate and in formal education.

It may be argued that their responses do not reflect the situation across the whole of Ghana because ebook adoption is technology driven and appropriate technology for the adoption and use of ebooks is not consistently available throughout the whole country. However, a realistic place to begin an assessment of level of adoption has to be from the place that has the technology to make the adoption happen.

The focus group discussions did not seek to ascertain personal attributes and communication behaviour therefore these are not discussed within this context.

6.8 Conclusion

This chapter clearly shows that young Ghanaian readers are aware of ebooks. Further, their definitions and descriptions of ebooks reflect the characteristics of *content, format, mode of delivery* and *hardware* as supported in literature. They access and read mainly free foreign ebooks downloaded online and those preloaded on their reading devices, as well as reading from self-publishing platforms like Wattpad. This has negative implications for publishing for profit since the target audience is already acquainted with free access to online content. On the other hand, the high level of awareness and use of ebooks revealed in this study presents an opportunity for publishers, since young readers are already familiar with this new technology and accessing content online.

Apart from tablets and dedicated reading devices like Kindles, smartphones are the most frequently used devices to access ebooks. Reading or other device-based activities occur out of school because children are not allowed to use electronic devices while at school. Many young readers prefer ebooks over printed books and look forward to their introduction into the mainstream educational system because of the benefits they offer: ease of access when the infrastructure is available, the convenience of carrying several ebooks on one device, the ability to access other media from the same device, and the novelty of interactive features (of enhanced ebooks).

As Boss (2011) posits, 'the infrastructure for supporting e-readers already exists in much of the developing world, thanks to networks for connecting and charging phones even in remote regions. E-readers use the same network to download books' (para. 4). The opportunity for the uptake of ebooks exists but in reality, there are some barriers. The main ones identified were restricted access to some ebooks online, the cost of mobile data, and frequent power outages or interruptions.

Based on data collected from publishers, authors and other members of the Ghanaian publishing ecosystem, it can be said that young readers have embraced ebook technology faster than those other members. The *awareness disconnect* between

authors/publishers on one side and their intended users on the other implies that although locally produced children's ebooks are available, they are not accessible to readers since promotion is inadequate and not targeted at the young Ghanaian reader. If uptake of locally produced digital content is to increase, publishers must be willing to invest in market research leading to the commissioning of titles that young readers want to read.

Octavio (2011) argues thus: 'For domestic players to benefit from the electronic era, it will be essential for them not to adopt systems implanted from outside on an 'as is' basis, but rather to invest in new models better suited for the people's expectations and requirements' (p. 311). Therefore, for all members of the publishing ecosystem to benefit from digital book publishing, there is the need to adopt a model that reflects the Ghanaian situation: where most people own and use smartphones to read ebooks, where publishers produce mostly textbooks and rely on government purchases, and where users expect and access predominantly free online content.

CHAPTER SEVEN
INFRASTRUCTURE AND HUMAN RESOURCES FOR DIGITAL PUBLISHING

7.1 Introduction

This chapter examines the infrastructure and human resources that are required to support the emerging ebook sector. The adoption of ICT in Ghana has increased rapidly since 2002 and its introduction into the school curriculum. The spread of Internet use is an example of how ICT has spread across companies and organisations (Cirera, Lage & Sabetti, 2016, p. 3).

Within the term 'infrastructure', this chapter describes and discusses the macro infrastructure and micro infrastructure. Combining these elements is useful because digital publishing draws on several services as they converge through a common infrastructure: computer, telecommunications, media and information (Brennen and Kreiss, 2012, para. 25; Flew, 2005, p. 10). Macro infrastructure describes the wider national framework enabling the creation and dissemination of digital content such as Internet access and provision; power supplies; availability of reading devices; e-commerce and online payment systems; libraries; and appropriate industry regulation. These elements all contribute to the success and growth of the ebook sector. Micro infrastructure identifies the internal systems which ebook publishers and vendors have in place to facilitate ebook publishing and distribution, including human resources capacity (knowledge and skills). KNUST's role in building skills and knowledge in digital book publishing will also be mentioned.

This chapter argues that a well-developed digital infrastructure that is reliable, secure, affordable, fast and has a high capacity impacts positively on the adoption of digital publishing. Similarly, knowledge and skills in digital publishing contribute to the creation, dissemination and uptake of ebooks.

7.2 Macro infrastructure

According to the Global Internet Report (2016), 'the Internet has the ability to accelerate human progress, bridge the digital divide and build societies that promote innovation,

entrepreneurship and progress' (p. 8). Effective digitalising of operations and digitising of publications can only thrive if publishing companies have adequate Internet access. As Sanchez et al, (2006) argue, access to the Internet reduces the cost of many transactions, increases management efficiency by enabling firms to manage their supply chains effectively, and facilitates communication between the organisation and its customers (p. 825).

7.2.1 Internet access

Internet access has improved in Ghana since the turn of the century. In December 2000, the number of Internet users was recorded as approximately 30,000, which had increased to more than 7 million in January 2017 (http://www.internetworldstats.com/stats1.htm). The World Bank Project Performance Assessment Report (2016) records Ghana's increase in broadband subscriptions from 1.6 million (6.89 subscriptions per 100 inhabitants) in 2010 to 18 million subscriptions (67 subscriptions per 100 inhabitants) in 2015 (p. 14). Despite the positive development in the telecommunications infrastructure as discussed in Chapter One, the same World Bank Report in 2016 stated that only 23.5% of the population used the Internet at home in Ghana in 2010, growing to 29.6% in 2015 (p. 14). This growth is modest when compared with countries like Nigeria, which has 47.4% and Kenya, 45.6% of their respective populations using the Internet at home (World Bank, 2016). However, given that Nigeria's population is 167 million (www.bbc.co.uk) and Kenya's is 42.7 million (www.bbc.co.uk), Ghana's 29.6% of a population of 25.5 million (www.bbc.co.uk) is significant.

The digital infrastructure benchmarks against which countries like the United Kingdom are measured are Internet penetration, bandwidth speed and cost (Council for Science and Technology 2010, p. 3). According to the United Kingdom's Council for Science and Technology (2010), a world-class broadband requires high capacity and resilient networks to deliver not just the universal service commitment, but also superfast broadband and ubiquitous, seamless connectivity to households and businesses (p. 3).

The success of ebook publishing and use of ebooks in Ghana is contingent on access to, and quality of, the digital infrastructure. While the publishers and authors interviewed were unable to comment on the capacity of the digital infrastructure, they

shared their frustrations about the challenges they face in accessing the Internet in some parts of Ghana. For example, when it rains, telephone lines are often down and network signals are weak, making it impossible to have an Internet connection.

During this research, five information technology (IT) experts from IT centres and departments of public institutions were asked to assess Ghana's IT infrastructure, drawing on their knowledge of the industry and their experience with using the infrastructure. The experts were asked to assess Ghana's digital infrastructure according to these attributes: high capacity, reliability, resilience, security, affordability and speed, using the ratings: poor, fair, good, very good and excellent.

The responses from the IT experts are revealed in Figure 22 below:

Figure 22. IT experts' ratings of Ghana's digital infrastructure
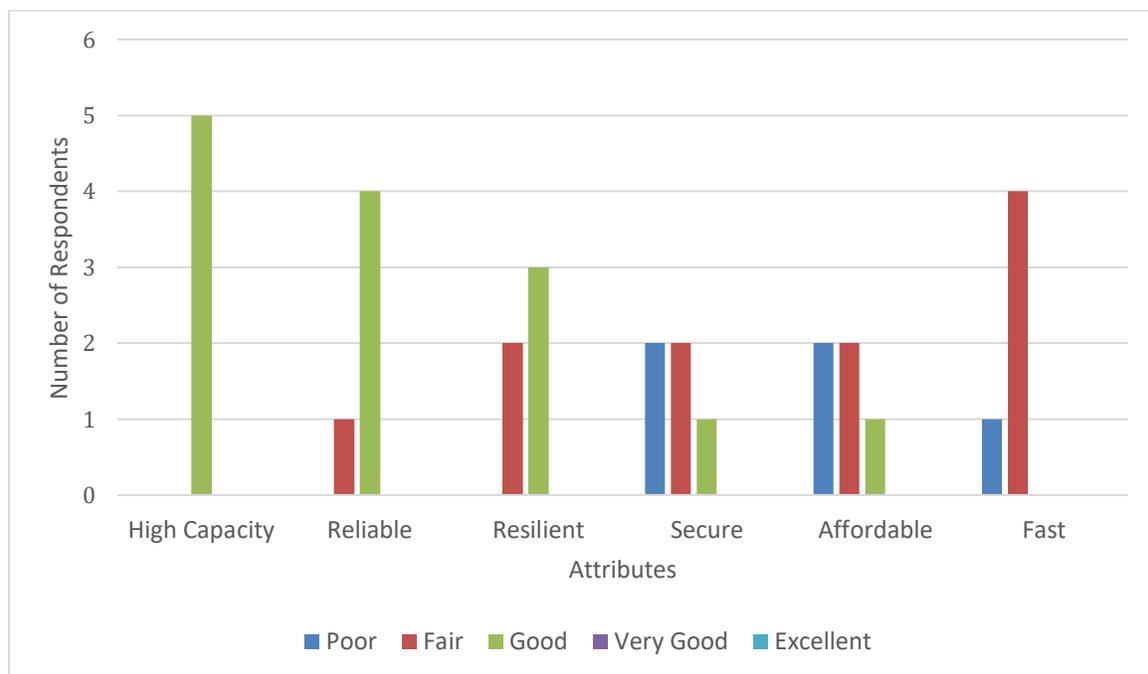
Source: Author's fieldwork

It is evident from the diagram above that all respondents rated the capacity of the general communication infrastructure as good. Three out of five respondents rated attributes such as the resilience of the networks as good while two out of five rated security and

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affordability as poor; speed was rated as fair. None of the respondents rated any of the attributes as 'very good' or 'excellent'.

On the whole, the reliability, resilience and security of the networks as rated by the respondents are adequate but require further development and investment. It is, however, interesting to note that in spite of this average rating of the digital communication infrastructure, the National Communications Authority records an increase in mobile data subscriptions to more than 19 million subscribers, 69% of the total population as at November 2016 as mentioned in Chapter One. This suggests there is a demand for digital communication products and services which is a positive indicator that ebooks should be widely promoted and distributed.

7.2.2 Cost of Internet usage

An important element that influences the level of Internet usage is cost, i.e. consumers' ability to pay to access this infrastructure and, by extension, digital publishing technology and ebooks. Although Figure 22 indicates a mixed reaction to the affordability of Internet access/services, the cost of Internet access is generally high in Ghana, with Internet Service Providers (ISPs) either quoting prices in US dollars or displaying 'price on request' for many of their service packages. This selling strategy accommodates price volatility and allows customers to pay the Ghana Cedi equivalent based on the prevailing forex rates, taking into consideration inflation created by the depreciation of the Ghana Cedi at any given time.

Since many local publishers are medium- and small-scale businesses (as mentioned in Chapter Four), the idea of adopting a digital book publishing model that relies on expensive Internet access requires careful consideration. An official at the National Communications Authority (NCA) observed that the cost of the Internet is high, with consumers paying an average of Ghc 3.00 (the equivalent of GBP 0.60) for 200 megabytes a day, in a country where the daily minimum wage is Ghc 8.80 [the equivalent of GBP 1.54 as at August 29, 2017, (www.xe.com)]. The World Bank (2016) rated the average cost of an international Internet connection as $10,000 for a full circuit to the United States or United Kingdom (p. 1), making access very expensive for Ghanaian

businesses and individual subscribers. This could serve as a potential barrier to the adoption of digital publishing and the uptake of ebooks.

The cost of Internet access is also a factor because the faster the service, the higher the cost. A few ISPs, such as TS2 Space, provide satellite Internet with a download speed of 0.5–10 megabits per second (mbit/s) and an upload speed of 0.25–1.0 mbit/s, costing \$335 to \$25,206. However, the average broadband speed provided by most of Ghana's other ISPs is 512 kilobytes per second (kbit/s) for download and 128 kbit/s for upload (www.allisps.com/en/offersGHANA). The National Communications Authority states the average Internet speed in Ghana as 2.58mbps (as at May 2016), which is slow and inadequate for online activity; it is also inadequate to support the emerging ebook sector.

7.3 Electronic commerce

Confidence in the reliability and security of online transactions plays a critical role in the growth and spread of digital publishing. Online transactions are considered advantageous because businesses that use e-commerce increase sales, reduce costs and can offer greater flexibility to customers and suppliers (Stockdale & Standing, 2004, p. 305). Electronic commerce in the book industry is underdeveloped compared to, for example, the banking industry.

When publishers were asked how customers paid for ebooks, they responded that credit and debit cards were most frequently used. This was followed by mobile money payment, PayPal, then cash payment. Figure 23 on the next page gives a visual presentation of their responses.

Figure 23. Mode of payment
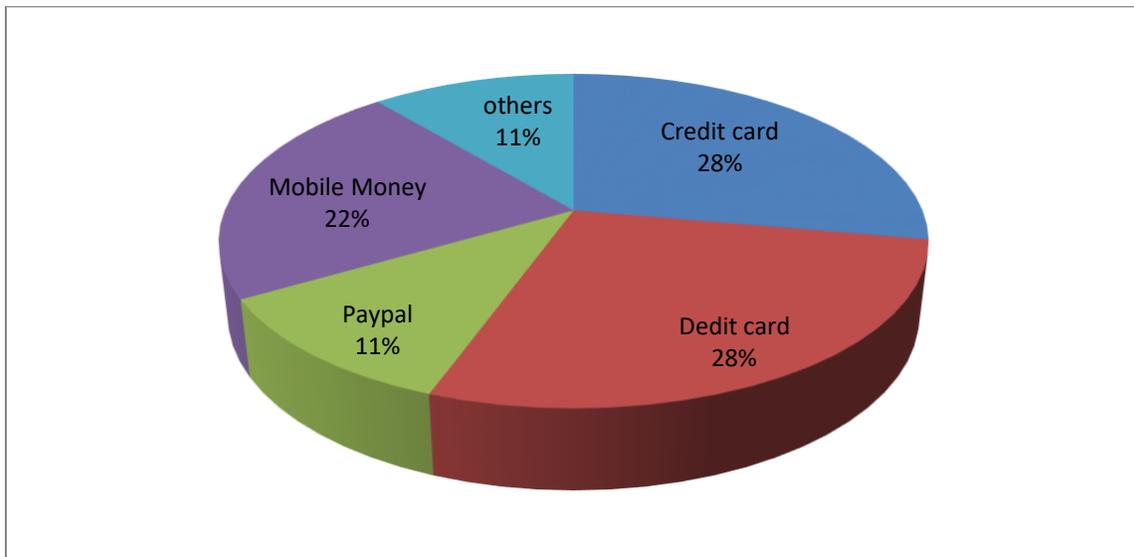
Source: Author's fieldwork

Credit and debit cards are the most common form of payment as the pie chart above indicates showing 28% each, followed by mobile money transfer with 22%, PayPal, 11%, and others, 11%. Apart from the use of credit and debit cards, other means of payment used in Ghana are the mobile money [16] system and vouchers. All the major telecommunications companies listed in Chapter One offer the mobile money service to their clients. The challenge with the mobile money system, however, is that the service is not linked to customers' bank accounts. Customers have to be physically present at the mobile money vendor's shop to upload money into their 'wallet' before carrying out any online transaction.

The premium Short Messaging Service (SMS) is another means of payment, by which customers send short text messages to pay for services. However, businesses found these services to be unprofitable because the telecommunications companies take 70–80% of the transaction fee (E. Tawia, February 11, 2016). Other means to purchase

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[16] The mobile money system is a fast, simple, convenient and secure way of making payments and transferring money using a mobile phone www.mtn.com.gh.

ebooks are Apple coupons; these are bought for cash (US dollars) in selected supermarkets and then used to make ebook purchases from the iBook Store.

The use of Azalia vouchers is another means to make purchases, especially for customers who are unable to use other means of payment. Figure 24 below shows an Azaliabooks voucher.

Figure 24. Azaliabooks voucher

Screenshot from Azaliabooks.com

The use of coupons and vouchers like these facilitate access to ebooks in cases where people do not have debit or credit cards or are uncomfortable using them online. However, like the mobile money system, customers who want to use the vouchers and coupons have to be physically present at the points of sale to purchase them before the online transaction can take place.

Cash transactions are still common: even when customers place orders online for printed books, publishers do not have the means to receive online payment and will take cash payment on delivery of the books. Publishers disclosed during interview that Azaliabooks and Worldreader paid them by bank cheques and they, in turn, paid their authors in the same way.

Trust in online trading is another factor that influences the uptake of e-commerce on which the growth and success of digital publishing depends. Meltzer (2014) asserted that the following act as barriers to e-commerce: limited Internet access, barriers to cross-

border data flows, market access restrictions, lack of balanced IP (Internet Protocol) frameworks, different consumer protection laws across jurisdictions, inadequate dispute settlement options, access to international payment systems, trade logistics; and lack of trust in online vendors (p. viii). These barriers are common in Ghana (indeed, throughout Africa) and need to be removed by business leaders and politicians, as suggested by Ekekwe (2015, para. 14), to improve the e-commerce landscape for entrepreneurs to successfully carry out online business.

Although these barriers exist, the International Trade Centre (ITC) has predicted a bright future, estimating the growth of the African e-commerce market from US$ 8 billion in 2013 to US$ 50 billion by 2018, adding that e-commerce will account for 10% of retail sales in Africa's largest economies by 2025 (ITC, 2015, pp. 4, 5). Such a prediction, although encouraging, does not in itself yield positive results.

7.4 Power supplies

Ghana's energy crisis has persisted since 1983 with intermittent respite (discussed earlier in Chapter One) and is a major challenge that threatens the success of digital book publishing. A consistent and reliable electricity supply is an important component of the infrastructure that can support a growing ebook sector. The World Bank is investing heavily in the power sector, as revealed in Edjekumhene et al (2002, p. 6), supporting the Sankofa Gas Project with a $700 million facility. This project will develop offshore natural gas to contribute 1,000 megawatts to domestic power generation – about 40% of Ghana's current installed generation capacity. When completed, the World Bank project will increase power generation capacity and also leverage $47.9 billion in private sector investments, with potentially huge returns and benefits for Ghana (World Bank, 2015, para. 1, 6).

There is also need for government investment into the electricity and gas sectors to ensure that all stakeholders in the supply chain (institutions that generate, transmit and distribute electricity to homes and businesses) work together to provide more reliable power supplies. The over-dependence on foreign support for national development has shifted the responsibility of nation-building to foreign entities therefore allowing for interference in national politics in many cases.

Given that the energy crisis has persisted over the years, publishers and institutions interested in adopting digital publishing and ebooks must consider alternative sources of power such as renewable and solar energy since, 'as it is, non-residential customers pay more for electricity than they would for solar energy' (I. Edjekumhene, March 1, 2017). Another infrastructural requirement for a vibrant ebook sector is well-resourced and digitised libraries, discussed in the next section.

7.5 Libraries

Libraries are important parts of the infrastructure supporting publishing and access to books because they 'perform the important archival functions of retaining for the record as well as for future researchers, copies of established literature' (Grycz, 1998, p. 155). In spite of this important role, Rojeski (2011) has stated that libraries have struggled with integrating ebooks into their collections, although ebooks do not take up physical space and are accessible from various locations by multiple users at the same time (p. 228). Ghanaian school and public libraries remain non-digitised and do not stock ebooks.

A general belief among stakeholders that printed books should take priority over investment into a digital infrastructure became evident during this study. As the president of the Ghana Library Association revealed, 'we are not there yet. We first have to get the children reading printed books first… then there is the need for a Kindle or any reading device' (P. S. Dadzie, February 22, 2016). While the position that children must be encouraged to read print before electronic books may be laudable, having both print and ebooks available simultaneously is also an option worth exploring as children would be able to choose the formats they prefer. Investment in infrastructure for digitising libraries is required to achieve this.

Although school and public libraries are not digitised, some private digital library initiatives do exist, such as the Tigo digital library project, and an ebook library hosted by Smartline that allows patrons access to several books 'within seconds, simultaneously'. The Smartline electronic library services are grouped into three categories: EBL1, EBL2 and EBL3. EBL1 allows users to purchase, rent or browse and only pay for ebooks when they are needed; EBL2 allows patrons to 'download for offline access on any ebook-enabled device', meaning that Internet access becomes a barrier to potential users; EBL3

allows for the integration of ebooks with existing systems because they 'can be migrated to other digital collection management platforms' (www.smartlinepublishers.com).

Figure 25 below is a screenshot of Ebook Library hosted by Smartline.

Figure 25. A screenshot of Ebook Library
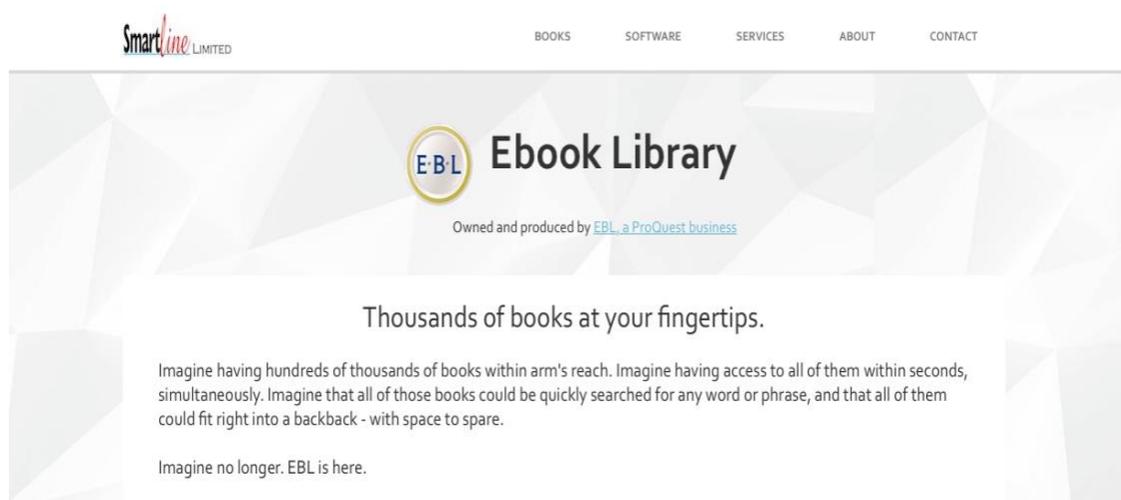
Screenshot from http://www.smartlinepublishers.com (accessed February 22, 2017),

This online library service is accessible to users of various operating systems, including Microsoft Windows, Apple Macintosh, Linux and Android, and makes provision for other operating systems not listed, as indicated in the screenshot below (Figure 26).

Figure 26. Technical requirements to access Ebook Library

Screenshot from http://www.smartlinepublishers.com

This private ebook library allows for both purchases and rentals with the prices varying per book. No minimum purchase is required but selected institutions are eligible for discounts. Potential customers are required to contact Smartline to ascertain their eligibility for discount. Software support and upgrade are available on request for $1,000 and $100 per year respectively. Figure 27 below shows a screenshot of the webpage advertising this service.

Figure 27. Ebook Library pricing policy
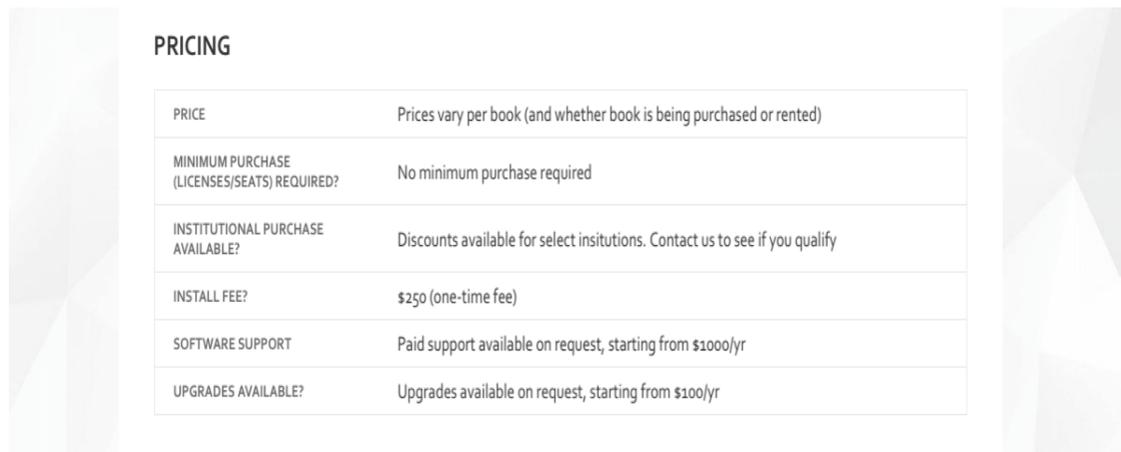
PRICING	
PRICE	Prices vary per book (and whether book is being purchased or rented)
MINIMUM PURCHASE (LICENSES/SEATS) REQUIRED?	No minimum purchase required
INSTITUTIONAL PURCHASE AVAILABLE?	Discounts available for select insitutions. Contact us to see if you qualify
INSTALL FEE?	$250 (one-time fee)
SOFTWARE SUPPORT	Paid support available on request, starting from $1000/yr
UPGRADES AVAILABLE?	Upgrades available on request, starting from $100/yr

Screenshot from http://www.smartlinepublishers.com

This experimentation with a digital library by Smartline Publishers is worth exploring to ascertain its success in terms of patronage, impact and the influence it might have in advocating the move to digital. While the Smartline online library is a paid-for service, the Worldreader Open Library offers free children's ebooks. The only requirement for access is downloading their mobile reading app which can be used on 'any Internet-enabled mobile phone, including on the simplest feature phones' (http://www.worldreader.com).

7.6 Regulations

The digital marketplace in Ghana has no geographic or demographic exclusion and there are no regulations for ebook publishing and distribution. Digital publishing requires a legislative framework that sets out guidelines on how content can be created, protected, distributed and purchased; and to inform stakeholders about acceptable practice, protect

their interests, and outline modes of redress in case of any violations. Such an initiative would attract more investment into the digital infrastructure because of the sanity and transparency it would bring to the ebook sector. Consumers must have confidence in carrying out online transactions if adoption levels are to increase. A strong regulatory framework will be a step towards instilling such confidence and promoting secure e-commerce.

There is, unfortunately, no guarantee that such legislation would be enforceable. The administration of copyright law in Ghana, for example, has been fraught with challenges such as the lack of personnel for monitoring and enforcement, and difficulties in pursuing cases in court (Mahama, 2012, p. 50). Some regulations and legislation implemented by the National Communications Authority include the following:

- The Electronic Communications Act of Ghana, Act 775 of 2008: this act regulates electronic communications, broadcasting, the use of wavelengths and related matters.
- The Electronic Communications Amendment Act, Act 786 amended the above Act to provide the minimum rate for international incoming electronic communication traffic and related matters.
- The Electronic Communications Regulations, 2011 govern the electronic communications industry. An amended draft, The Electronic Communication (Interconnect Clearinghouse Services) Regulations 2016, is currently open for public comments.

These legislations and regulations focus only on digital telecommunications and broadcasting without any provisions for digital publishing or uploading and downloading of digital content. The lack of any regulation to govern ebook publishing and distribution is not surprising since it is an emerging sector. However, given the provision that is made for 'related matters', advocating for future amendments of these regulations to incorporate provisions for digital publishing should be possible.

7.7 Micro infrastructure: ebook publishing technologies

As already mentioned in Chapter Four, Worldreader, Azaliabooks, Pick Reader, Leti Arts, Step Publishers and Smartline are the main players in the ebooks sector. They all publish or distribute digital content for children except for Pick Reader, which is yet to stock children's ebooks due to the low uptake of its services by publishers and authors.

In Ghana, digitisation of content begins at the input level. Files originally produced in Word, PDF, QuarkXPress or InDesign are converted into digital files in-house or sub-contracted to Azaliabooks, Worldreader or in some cases companies in India, as revealed by S. Brobbey, Country Manager of Literamed Publications. The digitisation process that describes the digital work flow of ebooks, software and technology used is illustrated in Figure 28 below.

Figure 28. The digitisation process

Input	→	Transformation /creation	→	Output	→	Point of access
		(Using Calibre or Sigil)				

MS Word document
QuarkXPress
InDesign
PDF
Photoshop

EPUB files
MOBI format

Ebooks
Comics

Worldreader
Amazon
Azaliabooks
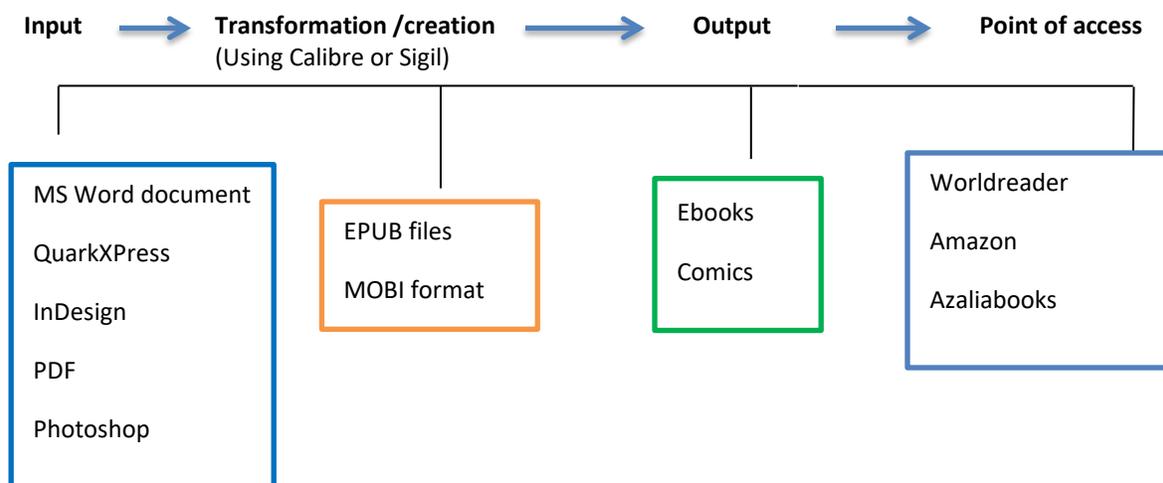
Source: Author's construct based on responses from interviewees

At the input level, files are converted from their original formats into EPUB and MOBI, or EPUB or Photoshop, while others are converted to FI (file interface) files, which are easier to convert into EPUB files in house. Worldreader accepts files in any format and converts them to EPUB or MOBI. Worldreader has the expertise to perform file conversion in its Ghana offices, but the process is also carried out in its offices in India

and the United States. Pick Reader accepts files in EPUB, PDF or Word formats and digitises them locally, in Ghana.

The content creators and managers interviewed mentioned Sigil and Calibre as the most common software used in digitising or creating ebooks, with Sigil being preferred because of its additional features. As one content creator disclosed, Calibre enables the conversion of PDF documents to EPUB format but the process often results in embedded errors. Sigil also enables conversion but allows for the editing of EPUB files. Another content creator uses Sigil to convert from Word to EPUB and from Calibre to MOBI because Worldreader preloads MOBI files onto its Kindles. In an attempt to minimise costs, publishers use free versions of the software but these have limited features. The content creators are therefore unable to access some enhanced features of the full software. However, publishers who digitised through Worldreader do not have this challenge.

Local publishers' sensitivity to price or cost means investment in new technology is limited. However, there are options of which many publishers are not aware: for example, widely used software such as InDesign has features which enable conversion to MOBI, which can then be exported to EPUB format.

7.7.1 Security

Security of online content is one of the major barriers to adoption of digital book publishing by Ghanaian publishers and authors as revealed in Chapter Five. To protect content or ebooks from piracy and other unauthorised copying, there is the need for Digital Rights Management (DRM), a secure lock placed on digital files to protect them and prevent their unauthorised downloading by encryption and other security features. DRM has been described as 'a wrapper around the eBook file or as part of the package of the eBook itself' (http://www.ebookarchitects.com para. 2) which ties the ebook to the account of the one who purchases it.

Most DRM systems have features that block printing and copying even by legitimate owners. There are three DRM systems: Adobe Digital Editions Protection Technology (ADEPT) uses Adobe Content Server 4 (ACS4) to manage the DRM of

ebooks from a server; Apple's FairPlay protects files sourced from the iBook Store; and Amazon has its own dedicated system. While ADEPT is versatile and is used by B&N, Sony, Kobo, Overdrive, and can be used by other eBook stores, Amazon and Apple's DRM systems are locked to their own platforms (http://www.ebookarchitects.com).

Azaliabooks.com uses Adobe Content Server 4 while Pick Reader uses a 128-bit AES Encryption Algorithm, Device MAC ID Verification, and User Authentication to protect its online content. In terms of managing their storefronts, Azaliabooks relies on local expertise from IT Consortium, a Ghanaian IT firm (J. Alemna, March 10, 2016), while Pick Reader relies on an Indian company. Owing to its relationship with Amazon, Worldreader relies on the Amazon's own DRM for its preloaded ebooks.

7.8 Human resources

Ebook publishing requires much in the way of human resources and technical expertise, whether it be in content creation for publishers, or web development, network and storefront creation for vendors. Skills are also needed for online editing, book design, digitising and conversion of content, managing online content, and digital marketing and promotion. There appears to be adequate training provision in Ghana for the development of digital skills, with institutions like the Ghana-India Kofi Annan Centre of Excellence and others offering training in ICT, as discussed in Chapter Four. However, skills levels in digital publishing are lacking and the capacity to digitise content is low given that only two mainstream publishing houses, Step Publishers and Smartline, have the in-house capacity to digitise content, with others relying on Worldreader and Azaliabooks for digitisation services. This creates a longer turn around period for publishers and authors, while publishers lose business to third parties.

Currently, no institution offers any training in digital book publishing. The publications officer at Step Publishers, Sam Nyarko Mensah, who doubles as a content creator, is an example of the current skills level in Ghanaian publishing: he had no formal training but taught himself to digitise content after an initial introduction to the digitisation process by Worldreader. According to him:

I learnt pretty much on my own. I acquired books and articles and spent the time to study. I have a big file labelled, "the world of electronic publishing" in which I have all my books and articles on the ebook publishing (S. Nyarko Mensah, February 15, 2016).

Jojo Ampah, CEO of Yen-Timtim also learnt about digital publishing through self-tutoring with some help from the content manager at Azaliabooks.com. Jemimah Alemna, on the other hand, acquired skills during her postgraduate study in the United Kingdom. Any form of continuous development is likely to be through self-tutoring since no institution in Ghana currently offers any formal training in digital publishing.

However, other avenues like Leti Arts' internship programme, in which students are introduced to creating games and interactive stories, can serve as an opportunity to acquire transferable skills for digital publishing, for example, creating illustrations for interactive ebooks. As at February 2016, when the interview with the co-founder was conducted, Leti Arts had had eighty students through its internship programme from secondary schools and polytechnics. Leti Arts takes on National Service personnel to train and hopefully employ but they have to pay a full annual salary for each intern to the National Service Secretariat before they begin – yet another challenge to the emerging ebook sector. However, the company's internship programme offers opportunities to draw on relevant expertise outside the book industry to offer training in digital publishing, as well as to create an avenue for collaboration between publishing and its allied industries as a way for closing the gap in the skills deficit.

7.8.1 Areas of skills deficit identified by authors and publishers

The adoption of an innovation requires appropriate knowledge about that innovation. Any lack or gap in knowledge or expertise needs to be filled. However, to build capacity to adopt an innovation, trainers need to identify areas where skills deficits exist. Authors and publishers who participated in this research identified these areas, as shown in Table 17 on the next page.

Table 17. Skills deficit areas identified

Respondents	Areas of skills deficit
Authors	Digital platforms and how to access them
	Publishing contracts
	Digital/online promotion and marketing
	Digital publishing process
Publishers	Digitising; converting documents into digital files for ebooks
	Digital/online promotion
	Market research (determining titles/genres/subjects that will sell)
	Digital self/independent publishing options
	Editorial decisions regarding ebooks

Source: Author's fieldwork

From Table 17, it can be seen that the common areas publishers and authors stated as being skills-deficient were digital publishing process, digital promotion, and marketing. While authors also indicated a lack of expertise in how to access digital platforms and knowledge about publishing contracts, publishers stated they required expertise in market research to find bestsellers, how to make editorial decisions about ebooks, and exploring digital self-publishing platforms.

Digitisation of content is a priority to publishers but expertise in this area was limited or inadequate. The long queue to have books digitised, already mentioned in Chapter Five, and the subsequent delays in getting ebooks published, is evidence of the deficit in content handling expertise. Worldreader has been the first option for publishers for digitising content but relying solely on Worldreader has its limitations. This is because their ebooks are either preloaded onto Kindles (for deprived communities to promote their literacy programmes) or made available on Amazon. As a result, access is

limited either to beneficiaries of the literacy programmes, Amazon customers or Kindle users.

Publishers and authors were interested in acquiring new knowledge as well as updating their skills in the areas stated in Table 17. This therefore makes a strong case for training and skills development. This interest in knowledge acquisition is also evident in the self-tutoring initiatives some publishers and content creators have pursued. Given that no institution currently offers a course or modules in digital book publishing, the Department of Publishing Studies at KNUST can explore this opportunity by introducing digital publishing into its undergraduate Publishing Studies programme.

7.9 Kwame Nkrumah University of Science and Technology's (KNUST) role in building capacity in ebook publishing

With its initial mandate of providing comprehensive professional training for all sectors of the book industry (Hasan, 1981, p. 17) still relevant, the Publishing Studies programme at KNUST has developed the benchmark in sub-Saharan Africa as a frontline training institution in publishing studies since October 1984. Extending this mandate to include courses in digital book publishing in its undergraduate programme will make its courses more relevant to meet the emerging needs of the publishing industry. Publishers and authors who participated in this research confirmed this by providing a favourable response to the question of possible introduction of digital booking publishing into the programme at KNUST.

The course in digital publishing which has been designed and is now subject to the approval of the KNUST Academic Board is to be incorporated into the existing Bachelor of Arts Publishing Studies programme (See Appendix 2 for the proposed course outline). The course aims to equip students with the relevant knowledge, skills and abilities for working in the publishing industry and contribute their expertise to the emerging ebook sector. As already stated, the purpose of this course is to try to reduce the skills deficit identified during this research, and to provide publishers and authors with a means to acquire new knowledge and update their skills.

The purpose of this course will be: to give students an understanding of the digital publishing process; to carry out live ebook projects, from idea generation to publishing online; to instruct in ebook promotion and marketing; and to manage the creation and curation processes involved in ebook publishing. All students will have the opportunity to take this course because digital publishing topics will be incorporated into core modules, such as Introduction to Publishing BI 151 and BI 152 in year one. From the second year, digital publishing will become an option or pathway open to students specialising in publishing management/administration or book design/illustration.

In the fourth year, students will also have the option to either carry out an ebook project or conduct research into digital publishing. Based on the new knowledge and experience I have acquired in carrying out this PhD research, I feel equipped to offer my expertise in teaching and supervising research in digital publishing. Expertise can also be drawn from other lecturers in the departments of Computer Science, Communication Design and Art Education at KNUST. As Elorm Tawia, Co-Founder of Leti Arts suggested, 'Training must start from the university. KNUST Publishing Studies Department or Communication Design Department will be a good place to start (E. Tawia, February 11, 2016). The success of this programme at the undergraduate level will be a good foundation to extend it to the Masters level.

7.10 Conclusion

In examining the infrastructure and human resources needed to support ebook publishing in Ghana in this chapter, it is evident that while some components in the macro infrastructure, such as information communications technology, are adequate others, such as electricity, e-commerce/online payment systems and digital libraries, need investment and improvement. Although the digital communication infrastructure is adequate it has potential for improvement and growth in terms of access to, and cost of using, the Internet. Ghana's digital infrastructure needs continuous expansion and improvement to make the Internet more accessible and affordable to the population as the number of subscribers increases. The success of ebook publishing and the use of ebooks in Ghana is contingent on access to, and quality of, the digital infrastructure.

As the policy paper 'The digital communications infrastructure strategy' published by the United Kingdom Department for Digital, Culture, Media and Sports (2015) indicated, 'As data traffic over mobile networks rises and higher speed services become available, mobile operators will increasingly require access to pervasive fibre infrastructure to make the best use of the valuable and finite spectrum available to them' (p. 22). The government of Ghana therefore needs to expand the fibre optics infrastructure to accommodate the growth of subscribers to telecommunication services, as indicated in Chapter One.

The current widespread use of mobile phones and mobile data, as revealed in the 2017 National Communication Authority Report stated in Chapter One, is a positive indicator that, as with the use of smartphones, ebook uptake will increase when access to infrastructure and the right expertise become widely available. If the ITC prediction (discussed in section 7.3) regarding the future of e-commerce in Africa is to come true, then the future for children's ebook publishing may be bright. However, it will depend on a consistent and reliable electricity supply to enable access to content online.

Another area that also requires urgent government attention is finding a permanent solution to Ghana's recurrent energy crises. Depending solely on foreign investments and donor partners to finance the power sector puts Ghana in a precarious state because the withdrawal of foreign investment for any reason will affect not only the economy but the daily lives of its citizens. While the government works on solving the national energy crisis, publishers interested in digital book publishing must be willing to invest in alternative sources of energy such as solar power to run their businesses. The abundant sunshine in Ghana and the subsidies available for solar energy users (as per the Renewable Energy Act of 2011) are incentives publishers can embrace.

The settlement agreement between Google and the Authors' Guild and Association of American Publishers that was finally dismissed in April 2016 is a clear indication that there is a need for regulation to protect the various interests of all participants in any digital publishing ecosystem. A regulatory framework for the emerging ebook sector in Ghana is key to promoting and building confidence among stakeholders (potential investors, publishers and users) and ultimately will enhance the

spread of ebooks. During this research, it was evident that authors and publishers were concerned about the safety of their works in a digital environment. Therefore, there must be guidelines to regulate what can be published in the digital format. The regulation must stipulate how manuscripts can be acquired; the kind of publishing contracts permissible (since there has been evidence of publishers digitising authors' work without permission); and how the work may be digitised, distributed and accessed, all the while protecting the copyright of the content creator(s), and all within the context of a digital environment.

Expertise from all agencies under the Ministry of Communication, namely the National Information Technology Agency[17] (NITA), the National Communications Authority (NCA), Ghana Investment Fund for Electronic Communications (GIFEC), and the Data Protection Commission (DPC), must be pooled to create the required regulatory framework for this emerging sector. This is important because the World Bank Report (2016) indicated that some of the barriers to the development of Ghana's IT industry were inadequate legal and regulatory frameworks, and the lack of the requisite human and physical infrastructure to promote information technology-enabled services (ITES) sector growth. These areas must be bolstered and strengthened to instil investor confidence, which in turn could generate growth and employment (p. 1).

On the micro infrastructure level, the internal operational structures of digital publishers and vendors, i.e. the workflows, software and human resources, are also important to support the success of the ebook sector. It is imperative that publishers who wish to be profitable must also be willing to invest a little more into their publishing businesses, going beyond, for example, using free software to digitise their content. Despite the infrastructural challenges, the interest in adopting digital publishing expressed by publishers and authors is a positive sign that can be harnessed by offering training opportunities at KNUST and other institutions.

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[17] The National Information Technology Agency (NITA) is a public service established by Act 771 under the Ministry of Communication in 2008 to implement the national ICT policy. Its mandate includes identifying, promoting and developing innovative technologies, standards, guidelines and practices to facilitate the goal of Ghana becoming a technologically driven and knowledge-based economy (http//:www.moc.gov.gh) accessed February 23, 2017.

CHAPTER EIGHT
CONCLUSION AND RECOMMENDATIONS

8.1 Introduction

This thesis has examined digital book publishing in Ghana with a specific focus on the level of adoption of ebook publishing within the context of Rogers' diffusion of innovation theory. In doing so, a mixed methods research strategy was adopted, consisting of surveys, interviews and focus group discussions to solicit information from publishers, authors, young readers, library officials, IT experts and head teachers. It has discussed publishers' and authors' perceptions of, motivations for, and challenges in going digital, to ascertain if digital publishing has disrupted traditional print publishing based on their levels of adoption. The research also investigated the level of awareness of, access to, and use of ebooks among young Ghanaian readers. It further examined the infrastructure and human resource capacity to support the ebook sector, identifying deficits in knowledge and skills to form the basis for a new course which will be incorporated into the curriculum of the Publishing Studies programme at KNUST.

The previous chapters in this thesis introduced the research and its context, discussed the research methodology and reviewed relevant literature on digital publishing and children's ebooks. Book publishing in Ghana was described and discussed, followed by publishers' and authors' levels of adoption of ebook publishing. Also, young readers' levels of awareness of, access to, and use of ebooks were examined, as were the infrastructure and human resource capacities available to support the emerging ebook sector. This concluding chapter summarises and synthesises the main findings, restates the main arguments, draws conclusions and makes final recommendations.

This thesis has argued that the level of adoption of ebook publishing influences the state of digital publishing in Ghana. As stated in the introductory chapter, digital publishing in Africa is under-researched except for Gaigher, Le Roux and Bothma's (2013) study on South Africa. There was a serious lack of literature on digital publishing in Ghana before this study was conducted, except for some anecdotal evidence that could be drawn from discourse on social media networking sites and personal blogs. This

research has, therefore, moved the discourse on the state of digital publishing in Ghana from an informal context to a formal one, presenting literature that has been subjected to academic scrutiny.

This research could also form a basis for any future research in digital publishing in any part of the world, but especially Africa. Although the fifty-four countries in Africa are at different levels of economic and social development, their somewhat similar experiences in terms of the influence of missionary activities, colonialisation and their effect on the development of indigenous publishing, are contexts from which publishing in general and digital publishing in particular can be studied. Although the findings of this research may not represent the whole of Africa, they can form a basis for future research on digital publishing in other African countries and begin the formal discourse in digital publishing in Africa. Also, this thesis and the journal articles that will emerge from it will contribute to literature on publishing studies in general, and publishing in Africa and Ghana in particular.

Given the lack of industry data and literature on digital book publishing in Ghana, the exploratory nature of this research justifies a pragmatic approach, using a mixed method that focuses on answering the main research questions: *What is the state of digital book publishing in Ghana?* In response to this question, the next sections summarise and synthesise the main findings. These have been outlined under the following sub-headings: publisher, authors, young readers, infrastructure, and human resources.

8.2 Publishers

Digital literacy and an active online presence form a basis upon which digital technologies like ebook publishing can thrive. Although Ghanaian publishers have websites and are active on social media websites, many have not taken full advantage of the opportunities to directly engage with their readers since they only advertise their books and services using a one-way communication model.

Ten out of the forty publishers who participated in the survey indicated that they had published children's ebooks. These are accessible mainly on the Worldreader and Azaliabooks platforms. Ebooks on Worldreader can also be accessed on Amazon owing

to the existence of a publishing agreement between the two. At the time of this research, there were no sole digital publishers; neither were any born-digital ebooks produced locally, except for some digitised backlist titles.

Ghanaian publishers perceive digital publishing and ebooks as complementary to printed book: a means to reach the international book market since ebooks have the potential to reach a wider market than physical books. This is evident from the sales received from the United Kingdom, United States, Belgium, Tanzania, Nigeria and other countries. The publishers also considered ebook publishing to be a good thing since the sales and revenue from their ebooks have not affected those of their printed books.

Unfortunately, the success of their ebook publishing enterprises could not be accurately determined since publishers were evasive about sales volumes and revenues. The publishers who were willing to speak about their success with ebooks made comments like 'it's not bad', 'it's okay, seeing you don't do much in terms of marketing and once in a while when you least expect it, you get a cheque from your vendor.' Online vendors like Azaliabooks and Worldreader were also unwilling to give information about sales. Only Step Publishers gave a rough idea of its sales figures when it disclosed that, 'sometimes we get $1,000 per quarter from one platform' (S. Nyarko Mensah, Step Publishers). US$1,000 in ebook revenue per quarter is high in the Ghanaian book industry, especially when publishers only digitise backlist titles from which they have made profits and do not commit resources to promotion, relying on the online vendors to do this.

The publishers who participated in this research were also unwilling to discuss the terms and conditions of the memorandum of understanding signed between them and Worldreader. However, they did reveal that publishers who sell directly via Amazon 'don't sell much' (Adaex Educational Publishers, February 29, 2016). Some publishers revealed that attempts to sell through Amazon independently of agents like Worldreader do not yield good results because they end up paying only for their books to be 'hosted' on Amazon without receiving any revenues. Others found the process of opening a bank account in the United States and waiting for 90 days to have their books made available online cumbersome.

This research has revealed that publishers' motivations for adopting ebook publishing include the following: to transform the industry and try the 'new' way of publishing ('keeping abreast with time'); to reach a wider audience; and to exploit the opportunities offered by platforms such as Worldreader. However, the relatively low level of adoption of ebook publishing, in which only ten out of forty respondents in the survey described their themselves as 'actively' publishing ebooks, indicates that digital publishing has not 'disrupted' or threatened traditional print publishing at all. Publishers are still very much involved in print publishing because their expertise in this area is greater than in ebook publishing.

It is, however, important for publishers to look beyond their print publishing activities and begin to explore the digital publishing model. While it appears as though print publishing is still popular among Ghanaian readers, ebooks have the potential to make a significant impact if the interest in ebooks can be translated into demand, as indicated in Chapter Six. Also, as Michael Bhaskar has cautioned, publishers must not be oblivious of the changes digital publishing brings into the publishing ecosystem because, as 'papyrus workers, scribes, rubricators, hot metal typesetters and even map publishers probably all once thought themselves relatively secure, yet they have all (been) rendered irrelevant by new technology' (Bhaskar, 2013, p. 61). Given that publishing operates in an open system, publishers should pay attention to happenings in the external business environment, and begin to invest in and build their internal infrastructure, so as to be ready to go digital as and when the dynamics of the industry change.

8.3 Authors

Digital publishing has been discussed within the context of disintermediation, convergence and as a disruptive innovation because it has the potential to empower authors, readers and other stakeholders in the publishing ecosystem to bypass the role of the traditional publisher (Squires & Ray Murray 2013, p.3). However, Ghanaian authors still depend on publishers and third parties to get their work digitised and have yet to fully explore and access online self-publishing platforms such as Kindle Direct Publishing (KDP).

The twelve authors who participated in this research are classified as *early adopters, perceptual late adopters* and *incidental adopters*. Three out of the twelve authors interviewed are *early adopters* because they approve of the innovation by adopting it (as per Rogers' adoption categories) although they did not have a good knowledge of ebook publishing at the time they 'approved' the digitisation of their work. Five were *perceptual late adopters* because although their responses indicated they were sceptical and slow to adopt or publish ebooks, there was no certainty as to whether they would adopt or not in the future. While financial challenges were stated as a reason for being slow to adopt, the security of digital content, as well as other infrastructural challenges already discussed in Chapter Five, were also stated as barriers to adoption, or delayed adoption.

The other four authors were classified as *incidental adopters* because they became adopters by chance or default: they were not actively involved in the decision-making process to adopt and their works were digitised without their knowledge or permission.

Authors were motivated to publish ebooks because they consider it cheaper and easier to sell the products this way (with less personal involvement). Other reasons given were the visibility that publishing and distributing in an online environment gives authors. There is, however, a misconception among authors and some publishers that as long as ebooks are 'out there', sales will increase. In interview, one author stated '… you are likely to get several copies sold because you will have a wider audience. For example, if you are in Ghana and you sell [printed books] in the thousands, you are likely to sell [ebooks] in the millions online' (H. N. Abbey, March 1, 2016). A well-planned multifaceted promotion strategy, however, is what makes a book visible, regardless of format; merely situating a product online is not enough to guarantee sales. The experiences of E. Appiah Boakye and M. Amedofu, as discussed in Chapter Five, attest to this.

The barriers to ebook adoption, according to authors, were inadequate knowledge about digital publishing and ebooks, inconsistent electricity supply and Internet access, and lack of access to reading devices. Knowledge about the digital publishing process even among authors who had published ebooks was low compared to their knowledge

about the print publishing process. This, therefore, makes a case for improving knowledge and skills levels through training and knowledge-sharing to in turn improve the uptake of ebooks. Further, eliminating other barriers such as lack of access to reading devices and computers in schools, and resolving the problem of inconsistent power supplies and Internet access, will contribute to the increased adoption of ebooks.

In terms of success with ebooks, the seven authors who had published ebooks were either evasive about their earnings or stated they were yet to receive any revenue or royalties from the sale of their ebooks. This makes it impossible to determine how successful authors have been with ebook publishing.

8.4 Young readers/Children

This research has revealed that young Ghanaian readers are aware of ebooks, proffering definitions and descriptions consistent with the characteristics of ebooks such as format, mode of delivery and hardware reflected in literature. They access and read mainly free foreign ebooks downloaded online, including some titles inappropriate for children, such as *Fifty Shades Darker* and *Angels And Demons*. Some titles are preloaded onto reading devices and others are read from self-publishing platforms like Wattpad. Access to the 'right' books is important in developing the minds and lives of children (Marten, 2016, p. 9) but a liberal digital environment that permits access to content deemed inappropriate raises the issue of control, something that will be interesting to investigate in future research.

Although the young readers' penchant for free content may be considered as having negative implications for publishing for profit, publishers can consider the readers' digital literacy as an advantage to the adoption of ebooks since there would be no need to introduce them to the technology. This research has also revealed that apart from tablets and dedicated reading devices like Kindles, smartphones are the devices most frequently used to access ebooks among young readers. However, because Ghanaian students are not permitted to use electronic devices like smartphones during school hours, and since ebooks are not currently used for teaching and learning in schools, students read ebooks out of school.

In terms of preference for printed books compared to ebooks, many young readers who participated in this research preferred ebooks over printed books and indeed look forward to their introduction into the mainstream educational system. The reasons for their preference were stated as: ease of access to information when the infrastructure is available; the convenience of carrying several ebooks on one device; the ability to access other media from the same device; and the novelty of the interactive features of enhanced ebooks.

In terms of adoption categories, the young readers were a mix of *innovators, early adopters* and *early majority*, as indicated in Chapter Six. Comparatively, the children's level of adoption was higher than the publishers and authors who participated in this research, which is understandable because younger people are perceived to be more technologically aware and more adventurous in trying new things than older people.

The main barriers identified by the young readers were: restricted access to some ebooks online; the cost of mobile data to download ebooks onto their devices; and frequent power outages that interrupt electricity supply to the reading devices (despite their substantial power storage capacities).

Although locally published children's ebooks are available, they were not readily accessible to young readers because publishers perceive ebooks as being for the international market. The locally produced ebooks on Azaliabooks, for example, are not free to download so the young readers are attracted to the free foreign ebooks which they can download online, read on websites, or may already have preloaded on their devices. It is worth noting that the ebooks preloaded on the Worldreader Kindle are only accessible to beneficiaries of the Worldreader literacy project (except for its new online library which only permits reading online).

The lack of access to local children's ebooks by young readers also stems from the *awareness disconnect* between publishers and readers. As already explained in this thesis, this awareness disconnect comes about because publishers are not aware that young Ghanaian readers know about and read ebooks, while the young readers do not know that ebooks are published by Ghanaian publishers. This awareness disconnect also

exists because publishers and authors do not adequately promote their ebooks, expecting the online vendor to promote them while they focus on their core business of print publishing. If the uptake of local ebooks is to increase, publishers must be willing to invest in market research to determine titles young readers will be interested in and publish accordingly. Also, for access to locally produced ebooks to improve, there must be investment to improve the existing ICT infrastructure.

8.5 Infrastructure and human resources

In examining the infrastructure and human resource capacity to support the emerging ebook sector, this study revealed that while Internet penetration or coverage can be regarded as adequate, the cost of access is likely to deter potential ebook users, being high for the average Ghanaian. On the other hand, the increase in mobile data subscribers mentioned in Chapter One is a positive indicator that the uptake of indigenous ebooks could increase if functions such as promotion and marketing were improved. Publishers must also take advantage of the infrastructure that already exists to try ebook publishing since the technology can be adopted on a trial basis. Thus, although the infrastructure to support ebook publishing exists and is adequate, there is the need for further development if ebook publishing and the uptake of the ebook is to increase.

A fully digitised school and public library system is also required to support ebook publishing. This research has revealed that public and school libraries are not yet ready to go digital and stock digital content, owing mainly to inadequate funding. The underfunding of public libraries means they cannot afford to take on any form of digitisation at present. This situation is further complicated by the perception held by some that children must be encouraged to read printed books first before introducing them to ebooks.

However, with the interest young readers have shown in exploring digital content through independently accessing free ebooks online, library authorities must be proactive in seeking funding to digitise their systems and build stocks of digital content. The state, and for that matter, government must prioritise library development as part of developing the education infrastructure across the country.

Improving access to computers and the Internet, and creating an ebook policy, will form the basis on which ebooks can be introduced into basic schools. Further, finding a permanent solution to Ghana's recurrent energy crises is also crucial to the success of any digital publisher (and indeed any business enterprise).

The professional skills available to support ebook publishing are woefully inadequate. Only two mainstream publishers have in-house expertise to digitise content, while others sub-contract to Worldreader, which often sends files from Ghana to the United States to be digitised (although they claim to have expertise in the Ghana office). A few others go to Azaliabooks; Pick Reader, at the time of this research, is yet to receive contracts for digitising children's ebooks. Although Worldreader appears to be the preferred choice, publishers have long waits to have their work digitised, which eliminates the advantage of speedier production that ebooks are supposed to have over printed books. Some publishers opt to have their work digitised in India.

The lack of local expertise signifies a large skills deficit that can only be filled through training and knowledge-sharing across the industry and through appropriate collaborations. For example, although many publishers use Adobe InDesign for print publications, many publishers were not aware that InDesign could be used to create documents in EPUB for ebooks. It was interesting to note that even some publishers who described themselves as actively publishing ebooks were not familiar with the digital publishing process, being happy to subcontract to third parties like Worldreader and Azaliabooks.

Publishers and authors identified the following areas in which they required new knowledge and enhanced skills:

- The digital publishing process
- Digital platforms and how to access them
- Publishing contracts
- Digital/online promotion and marketing
- Digitising, i.e. converting documents into digital files for ebooks
- Market research (determining titles/genres/subjects that will sell)

- Digital self-publishing/independent publishing options
- Commissioning/editorial decisions and workflows

The knowledge and skills deficits identified during this research has informed the design of a digital publishing course that will be incorporated into the BA Publishing Studies programme at KNUST.

Digital publishing has not had a significant impact on the Ghanaian book industry. Although most Ghanaian publishers have digitised their back office, communication and editorial operations to an extent, few have adopted digital book publishing and published ebooks. This implies that while digital technologies of the twenty-first century have significantly disrupted the communication circuit (Squires & Ray Murray, 2013, p. 3) in the developed west, they are yet to make any significant impact on the publishing value chain in Ghana. At best, it can be described as beginning to create a 'ripple' but it has not 'disrupted' the publishing value chain, illustrated by the fact that authors either still rely either on mainstream publishers to digitise their work, or agents to act on their behalf on self-publishing sites.

8.6 Adapting Rogers' diffusion of innovation theory

Roger's diffusion of innovation theory is useful in studying how innovations spread or are adopted in a society. While previously used to study the adoption of innovations in the fields of agriculture, nursing informatics and other disciplines, this is the first time the theory has been used in publishing studies research to describe and access adoption of innovations among publishers, authors and readers. This research identified additional adopter categories: *incidental adopters* and *perceptual late adopters*.

Incidental adopters are the individuals who adopt an innovation by chance or default without going through the decision-making process of adopting the innovation: the stages of knowledge, persuasion, decision, implementation and confirmation, as discussed in Chapter One. As this research has revealed, these adopters simply go along with the adoption or become adopters because the decision to adopt was taken on their behalf. For example, when publishers digitise authors' content without their knowledge

or permission, these authors become incidental adopters because, as the originators of the digitised content, they have moral rights to assert themselves as authors of the work.

Perceptual late adopters are individuals, i.e. publishers and authors, who appear interested in adopting the innovation but are sceptical and slow to adopt. However, since at the time of evaluation they were only interested in the adoption but had not yet adopted; and since there is no guarantee that they will do so in the future; and because they are not actually resistant to the innovation, they cannot be classified as late majority or laggards/late adopters as per Rogers' adopter categories. These individuals may be following on the path of adoption, but they are not there yet, or they may never make the decision to adopt, hence they become *perceptual late adopters*.

This thesis has also demonstrated that apart from the attributes of relative advantage, compatibility, complexity, trialability and observability identified by Rogers as influencing the adoption or diffusion of an innovation, the element of actual and perceived cost of adoption and how information about the technology is communicated within the industry also play an important role. While publishers identified the cost as a barrier to adopting ebook publishing, authors considered it cheaper and easier to publish ebooks. Readers mentioned the cost of access (the cost of Internet access and reading devices especially for readers in deprived communities) as a potential barrier to the spread and uptake of ebooks.

Although the children who participated in the research mainly accessed free ebooks, the mobile data they use to download these free ebooks has to be paid for. The Ghanaian innovators who have ventured into ebook publishing do not offer free content, so the children cannot download for free.

Being the first time Rogers' diffusion of innovation theory has been used in publishing studies research, it is important to note some of its limitations with regard to the adopter categories: innovators, early adopters, early majority, late majority and laggards. Fitting publishers strictly into the various categories poses a challenge because of the fluid nature of the publishing business which permits publishers to operate in both print and digital markets, publishing different genres in different formats. This can place

a publisher in multiple adopter categories based on the demands of the market within which the publisher is operating, and the genres or titles it is publishing, at a given time. Publishers can therefore be at different stages in the innovation decision-making process. The diffusion of innovation theory can be adapted or expanded to make provision for incidental adopters, perceptual late adopters and any other categories identified in future research.

8.7 Recommendations

The purpose of this research and its findings are significant for both industry and academia. It is with this in mind that I present two sets of recommendations, one for industry and professional practice, and one for academia and the academic discipline of publishing studies. The growth of publishing in general and in digital publishing in particular requires a multi-faceted approach. Access to children's ebooks must be given attention by all stakeholders because as Clark & Phillips (2008) assert 'The vitality of children's publishing creates the book buyers of the future' (p. 53). Further, the digital phenomenon is not only here to stay but will evolve in spite of its slow/low uptake in the Ghanaian book industry. Publishers must not ignore this fact but must invest in acquiring knowledge, infrastructure and market intelligence to fully engage in digital publishing.

> As Pires Franco (2014) succinctly observes:
>
> If there is one thing the history of the book has shown us, it is that books, writing, publishing and reading are not static; rather, these things evolve – in tandem – with cultural, social, economic and technological changes. Expecting the book to persist 'as we know it' seems equivalent to asking for time to stop and for books to remain forever crystalized in their current form (p. 35).

Publishers should therefore be prepared and equipped to adapt to evolving publishing technology by exploring opportunities for collaborations between telecommunication companies, software developers and training institutions like KNUST to carry out projects, build capacities, and ultimately create platforms designed for local operating conditions and which are appropriate for local publishers, authors and consumers.

The government's role in promoting publishing is key to making digital publishing attractive because of the social, economic and cultural roles which book

publishing plays irrespective of format. Glover (2007), writing about publishing in Australia, reveals that the Australian government used 'a mix of instruments to subsidise and regulate the publishing sector: operational grants, project grants, printing subsidies, rights payments' (p. 87) among others.

Digital publishing must be incentivised so that reading materials in digital format can be made available to communities where physical book distribution is difficult. Any incentive package produced for publishers, authors and other stakeholders must be easily accessible, free of unnecessary bureaucratic procedures, transparent, and free from the potential for corruption. Some initiatives and programmes to support indigenous publishing in the past, such as the textbook policy mentioned earlier in this work, have been dogged with a lack of transparency in the award of contracts, accusations of corruption, and the threat of lawsuits.

Creating a coherent policy or legislative framework will also encourage and support the adoption of ebooks and digital publishing. Amending the textbook policy to include the supply of ebooks to schools is one way to persuade Ghanaian publishers to go fully digital because of the dependence of publishers on government purchase of textbooks.

Further, the government's role in creating an enabling publishing environment must include improving the current ICT infrastructure. The more efficient the broadband and ICT infrastructure, the more able the economy becomes to foster social and economic development. In addition, the National Communications Authority (NCA) must be adequately resourced to expand its mandate to establish a regulatory framework to guide digital publishers and ebook buyers.

Libraries play an important role in literacy development and making information freely available to society. Public and school libraries need to be upgraded and expanded and the staff retrained to deliver on their mandate of providing reading material, and data processing and dissemination facilities for the public. Neglecting libraries and focusing on simply constructing school buildings is politically expedient and only a cosmetic improvement of the educational infrastructure. A well-resourced and efficient network of

school and public libraries will form a good foundation that will support digital publishing and access to ebooks.

Publishers, authors and indeed all stakeholders in the ebook ecosystem must begin to think beyond the traditional ways of distributing ebooks, smartphones and tablets. Investment in building capacity in terms of training, infrastructure development, and collaborations between publishers and telecommunications, software and games companies such Leti Arts, are key to promoting digital publishing. With a high preference for ebooks indicated by the young readers who participated in this research, publishers and authors can begin to explore ways by which these preferences can be harnessed to promote literacy.

Communication and knowledge-sharing should be encouraged and supported across the industry as part of the process of persuading publishers to adopt digital book publishing. The Ghana Book Publishers Association, The Ghana Book Development Council and allied stakeholder associations must support training, communication and knowledge-sharing initiatives within the industry. A free flow of information will give stakeholders the opportunity to evaluate the merits and demerits of digital publishing and ebooks and adopt digital practices at their own pace.

Further research into publishing will help to develop and promote publishing studies as an academic discipline. This important field of human endeavour, publishing, is one of the least understood disciplines mainly because publishing studies is relatively new and, as Luey (1997) observes, publishing had been perceived more as a medium for research dissemination than as a discipline in itself (p. 142). An increase in the research output of publishing scholars around the world as they adopt different approaches to their research will contribute to the growth of publishing scholarship, enabling publishing studies to grow from a discipline that is perceived to 'lack theoretical and methodological rigour' (Murray, 2013, p. 3) to one whose 'theories and concepts organise the accumulated specialist knowledge effectively (Krishnan, 2009, p. 9). As a contribution to the field, my research has not only explored the use of Rogers' diffusion of innovation theory in publishing studies, but has identified new adopter categories: *incidental adopters* and *perceptual late adopters*, as already discussed.

Researching into specific areas of publishing in Ghana is equally important. The huge gap in current literature on publishing in Ghana, coupled with a lack of industry statistics, is unacceptable in a country that prides itself as the first in sub-Saharan Africa to gain independence. Information is key to thriving in the global knowledge economy; for any significant developments to occur, there must be relevant and accurate data to inform policy direction, investment and appropriate training. For example, regular annual publishing industry statistics such as: publishers' and booksellers' sales volumes and revenues; a list of bestsellers, long sellers and new titles; the most-used formats (paperbacks, hardbacks, ebooks, audiobooks etc.) would be a good place to start.

Funding limitations and time constraints were some major limitations encountered in carrying out this research. Given that this study was carried out in three years amidst fulfilling other academic obligations, a longitudinal study design that allows data to be collected at different points in time could not have been used although it may have yielded interesting data and trends. In providing guidelines for future research based on the delimitation of this study, I suggest a random sampling approach to selecting publishers and authors although this could be challenging given that they are spread across a large country.

A survey method of collecting data from young participants may also provide more credible data since, in a focus group discussion. some respondents may make statements to support a position because that is the popular stance taken by the majority of the group. Some suggested areas for future research include the role of parents in accessing and using children's ebooks, the interaction between authors and readers in the digital age, reasons for the continuing non-implementation of the National Book Policy, and Ghanaian publishers' roles in collating industry statistics. Further, there will also be the need for a follow-up research on digital book publishing after five years to investigate changes in adoption levels, infrastructure and human resource capacities, as well as access to, and use of, ebooks, perhaps using a longitudinal study approach. With up-to-date information and statistics, stakeholders can develop strategies and establish the right systems to enable the publishing industry to play its role in national development.

The reliance on third parties can be considered one of the 'flavours of disintermediation' (Bhaskar, 2013, p. 69) since most Ghanaian publishers and authors who have published ebooks have not explored the independent online self-publishing platforms like Kindle Direct Publishing[18], Kobo[19] or Draft2Digital[20], as established by this research. The situation in the Ghanaian book industry lends credence to Bhaskar's (2013) observation which suggests that disintermediation may not suddenly occur but may set in as a gradual process (p. 69). Barriers and challenges to ebook production, such as the costs associated with adopting the technology, issues of security of content online, deficits in knowledge and skills levels, non-use of ebooks in schools, and infrastructural challenges are some inhibitors that may delay the adoption of digital publishing and, for that matter, the disintermediation of traditional publishing.

Given that digital publishing is growing, albeit at a slow rate, training to build the industry's capacity through the introduction of courses at KNUST will contribute to the increase in adoption within the industry in Ghana, taking into consideration the country's infrastructural challenges.

Foreign influence has played a strong role in book publishing in Ghana. First was the introduction and development of print publishing through the activities of the Christian missionaries and colonists; more recently, ebooks were introduced through the Worldreader digitisation project. However, for print and digital publishing to grow, stakeholders must be ready and willing to focus on expanding the indigenous infrastructure, systems and expertise to propel the book industry and the publishing studies discipline forward. Digital publishing has not disrupted or disintermediated traditional publishing in Ghana. The 'ripple' it is currently creating can only increase to the point of disruption and disintermediation when digital knowledge, skills and infrastructure improve, all barriers are removed, and when demand for ebooks grows.

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[18] Kindle Direct Publishing (KDP) is an online self-publishing platform owned by Amazon that allow authors from anywhere in the world to publish books electronically for free on the Kindle.
[19] Kobo is an ebook retailer that uploads ebooks exclusively on their Kobo reading device and can be accessed by authors all over the world.
[20] Draft2Digital is a distributor of ebooks to multiple retailers' sites like iBooks (iTunes) or Nook (Barnes & Noble) and other less popular sites http://www.livewritethrive.com Retrieved on November 21, 2016.

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APPENDIX ONE

TABLE OF THEMES
GHANA INTERNATIONAL BOOK FAIRS (GIBF) 2012–2017

11th GIBF	September 24–29, 2012 Ghana International Trade Fair Centre, Accra	Books & Reading in the World of the Internet
2013	**NO BOOK FAIR**	**NO BOOK FAIR**
12th GIBF	November 4–8, 2014 Ghana International Trade Fair, Centre, Accra	E-books: A New Tool for Promoting Literacy & Global Development
13th GIBF	November 3–6, 2015 National Theatre, Accra	Professional Book Publishing and E-Services: A Resource for National Development
14th GIBF	August 18–21, 2016 National Theatre, Accra	Growing the Knowledge Based Economy through Reading
15th GIBF	August 24–27 2017 Accra International Conference Centre	Books and Culture in the Digital Age

Source: Author's compilation

PROPOSED COURSE IN DIGITAL PUBLISHING TO BE RUN BYTHE DEPARTMENT OF PUBLISHING STUDIES
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY
KUMASI, GHANA

Preamble

The purpose of this proposed course in digital publishing is to help students acquire the relevant knowledge, skills and abilities needed by the emerging digital publishing sector in Ghana. The need for this course stems both from the gaps in skills and expertise identified during my PhD research, and from publishers' and authors' requests for a course in digital book publishing.

Course objectives

After completing these courses, students should be able to:

1. Understand the digital publishing process;
2. Carry out digital publishing projects from idea-generation through to online publication;
3. Promote, market and manage the creation and curation of digital publications.

YEAR ONE: Semester One

Code: BI 151 **Course title**: Introduction to Publishing I   **Credits:** 3

Update the already existing course content to include the following topics:

- Publishing in a digital era
- Concept of born-digital & digitisation
- Key players in the digital economy

YEAR ONE: Semester Two

Code: BI 152 **Course title**: Introduction to Publishing II   **Credits:** 3

Update the already existing course content to include the following topics:

- Understanding of e-business models and the digital economy
- Digital self-publishing platforms

- Social media and its management

YEAR TWO: Semester One (Elective)

Code[*] (   ) **Course title**: Digital Publishing I   **Credits 2**

- Content management
- Metadata and Big Data; their use, issues surrounding their use
- Technical infrastructure (basic software and hardware)
- Data capture, conversion and storage
- Markup: XML & related technologies

YEAR TWO: Semester Two (Elective)

Code[*] (   ) **Course title**: Digital Publishing II   **Credits 2**

- Organising, editing and linking content
- Accessibility
- Obstacles to digital publishing
  - Digital Rights Management
  - Digital marking and promotion
  - Practical lessons/live projects

ASSESSMENT CRITERIA

Attendance	10%
Continuous assessments/mid-semester examinations	30%
End of semester examinations/submission of project	60%

YEAR THREE Semester Two

Code BI 396   **Course title**: Industrial Attachment   **Credits 4**

Optional ebook project

Develop an ebook through idea generation, editorial and design, and upload on a website to be created for the purpose of showcasing students' ebook projects. Assessment shall be

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[*] To be determined by Departmental Board

[*] To be determined by Departmental Board

based on an oral presentation of work, detailing the purpose, target audience, choice of design and format etc. Student must be able to demonstrate originality.

YEAR FOUR Semester One

Course Code 400   **Course Title:** Thesis/Project I   **Credits 3**

Students write a proposal and defend their project/thesis either to develop and produce an ebook as in second semester of Year Three or write a dissertation on a topic related to digital publishing. Students must be able to complete a 'review of related work' in the case of project or literature review in dissertation by the end of the semester.

YEAR FOUR Semester Two

Course Code 400   **Course Title:** Thesis/Project II   **Credits 3**

Students continue project/thesis. Submit and defend work.

LECTURERS/FACILITATORS

Lucy Ry-Kottoh, Smith Esseh, Jemimah Alemna.

READING LIST

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APPENDIX THREE

LIST OF CHILDREN'S EBOOKS PUBLISHED BY SOME GHANAIAN PUBLISHERS

ABBOK PUBLICATIONS (ebooks) as at May 2017

Textbooks

1. English for Primary Schools Books 1–6
2. Information Communications Technology (ICT) Books 1–6

Storybooks

1. The Bush Rangers Vols. 1 and 2
2. The Adventures of the Homo-Twins
3. Somebody Has Done It, Why Can't You?
4. Bobo the Kind Lion
5. It Pays to be Honest
6. The Island of No Return
7. Life
8. Ogozo Gozo and the Trapped Birds

Twi Titles

1. Fa Me Sua Akenkan
2. Nokwaredi So Wo Akatua
3. Ntafo Bi a Wone Won Ho Sese Ho Asem
4. Ogozo Gozo ne Nnomaa a Ode Afiri Yii Won No
5. Se Obi Atumi Aye a Den Nti Na Wuntumi Nye
6. Bobo Ohene Gyata Yamyefo No
7. Supow a Obi Nko so Nsan Mma

ADWINSA PUBLICATIONS

Supplementary Readers in English

1. My Body
2. Afua and the Magic Calabash
3. Oko and Salamatu: The Importance of Good Drinking Water

Twi (Akuapem and Asante) translations

1. Afua ne Koraa Nwanwasono Bi (Afua and the Magic Calabash) (Asante)
2. Me Nipadua (My Body) (Asante)
3. Kweku Ananse Ato Nsubura Mu (Kwaku Ananse in the Well) (Akuapem)
4. Kraman Ketewa Tuntum No (The Little Black Dog) (Asante and Akuapem)
5. Agyei ne Amina (Oko and Salamatu: The Importance of Good Drinking Water) (Asante)
6. Ofee ne Adobea (Oko and Salamatu: The Importance of Good Drinking Water) (Akuapem)
7. M'ebusua Ho Asem (About My Family) (Akuapem, Asante)
8. Mo Nuabanyin Ebo (My Brother Yao) (Akuapem, Asante)
9. Kwaku Ananse Ato Abura Mu (Kwaku Ananse in the Well) (Asante)
10. Me Nipadua (My Body) (Asante)

Mfantse translations

1. Me Nyimpadua (My Body)
2. Bodom kakraba Tuntum no (The Little Black Dog)
3. Kwesi Na Ekuwa (Oko and Salamatu: The Importance of Good Drinking Water)
4. M'ebusua Ho Asem (About My Family)

Ga Translations

1. Gbee Di` bibioo le (The Little Black Dog)
2. Oko Ke Salamatu (Oko and Salamatu: The Importance of Good Drinking Water)
3. Miweku le he Sane (About My Family)
4. Minyemi Nuu Yao (My Brother Yao)
5. Tsie Anaanu Gbee Nubu le mli (Kwaku Ananse in the Well)
6. Migbomotso (My Body)

Dangme translations

1. Gibe Bi Yumu o (The Little Black Dog)
2. Bueno ke Adiki (Oko and Salamatu: The Importance of Good Drinking Water)
3. Ye weku he sane (About My Family)
4. Ye Nyemiynumu (My Brother Yao)
5. Tseko Annani No vu Ni (Kwaku Ananse in the Well)
6. Ye Nomlotso O he nihi (My Body)

Dagbani translations

1. Baa'Bil Sabinli (The Little Black Dog)
2. Mabiligu Lahabali (About My Family)
3. N Tuzo Yabdoo (My Brother Yao)
4. Kpatinariga Lu kobilga Ni (Kwaku Ananse in the Well)
5. Nningbuna (My Body)

Ewe translations

1. Novinye ntsu (My Brother Yao)

2. Dogbe Kple Sitsofe (Oko and Salamatu: The Importance of Good Drinking Water)

3. Avuvi Yibo La (The Little Black Dog)

4. Nye Fome Ntinya (About My Family)

5. Nye ntila (My Body)

6. Yiyi Ge Dze vudo Me (Kwaku Ananse in the Well)

Nzema translations

1. Me Abusua Nwo Edweke (Talk about My Family)

2. Twea Bile Nretee ne (The Little Black Dog)

3. Me Diema Nrenyia Yao (My Brother Yao)

4. Kedeba edo Bula Nu (Kwaku Ananse in the Well)

5. Afiba Nee Awa Anwo EiꞮzulole Ne (Afua and the Magic Calabash)

6. Me Sonlabaka Ne (My Body)

Bilingual titles for Kindergarten

1. Play with Words (English and Nzema)

2. Play with Words (English and Mfantse)

3. Play with Words (English and Ga)

4. Play with Words (English and Asante Twi)

5. Play with Words (English and Akuapem Twi)

6. Play with Words (English and Ewe)

7. Play with Words (English and Dagbani)

8. Play with Words (English and Dangme)

Local language translations from English

1. Atsu kple Aku (Ewe). Let's Read for Kindergarten 1 and 2

2. Kwame mini Fati (Dagbani). Let's Read for Kindergarten 1 and 2

3. Kwame na Adwowa (Mfantse). Let's Read for Kindergarten 1 and 2

4. Kwami ke Fati (Ga). Let's Read for Kindergarten 1 and 2

5. Pano ke Dede (Dangme). Let's Read for Kindergarten 1 and 2

6. Kwame ne Owusua (Asante Twi). Let's Read for Kindergarten 1 and 2

7. Kwame ne Aso (Akuapem Twi). Let's Read for Kindergarten 1 and 2

8. Koame nee Dawua (Nzema). Let's Read for Kindergarten 1 and 2

Textbooks in English

1. Talk about My Family

2. Natural Science for Primary Schools Books 1- 3

3. Natural Science for Primary Schools. Teacher's Guide Books 1–3

4. Integrated Science for Primary Schools Books 4–6

5. Integrated Science for Primary Schools. Teacher's Guide Books 4–6

Storybooks in English

1. Yaa Mansa: A Victim of Beauty

2. Thrice Eating Kelewele

3. The Village Teacher

4. The Drunkard's Daughter

5. Mission to Kunda

6. Kwaku Ananse in the Well

7. Kwaku Ananse and Abebe the Grasshopper

8. Kidnappers in Action

9. Ancient Greek Stories About Africa (for the African Child)

10. Adisa, A Lost Hope

11. A Wish Comes True

SAM-WOODE PUBLISHING

Akuapem twi titles translated from English

1. Agodi Da (Sports Day)

2. Anansesemto Bere (Story Time)

3. Awoda! (Happy Birthday)

4. Kofi Yare Atiridii (Kofi Has Malaria)

5. Mommedi Agoru (Come and Play)

6. Mpoano! (At the Beach)

7. Oni oo! (Hello!)

8. Or botan Ke se (The Big Rock)

9. Sor re! (Wake Up)

10. Ye wor Kookoo Afum (At the Cocoa Farm)

Fante titles translated from English

1. Agokansi Da (Sports Day)

2. Anansesem Ber (Story Time)

3. Awoda! (Happy Birthday)

4. Bra bedzi Agor (Come and Play)

5. He loo! (Hello!)

6. Kofi Enya Etsiridii (Kofi Has Malaria)

7. Kokoo Haban No Mu (At the Cocoa Farm)

8. Mpoano (At the Beach)

9. Orbour Kese No (The Big Rock)

10. Sor re! (Wake Up)

Ewe titles translated from English

1. Dzigbeza fe Dzorgbenyui Na Wo (Happy Birthday)
2. Foh Le Aba Dzi! (Wake Up!)
3. Gilto É¤i do (Story Time) (Ewe)
4. Kofi Le Asrade (Kofi Has Malaria)
5. Kpe gah La (The Big Rock)
6. Lamese fefewe La (Sports Day)
7. Le Futa (At the Beach)
8. Le Kokogble La Me (At the Cocoa Farm)
9. Medo Gbe Na Mi! (Hello!)
10. Va Me Fe (Come and Play)

Textbooks in English

1. Learn Your ABC
2. Learning to Read English 1
3. SWL Integrated Science for Primary Schools: Books 1–6

Supplementary readers in English

1. All About Me
2. Ananse's Magic Drum
3. At the Beach
4. At the Cocoa Farm
5. Awuratu
6. Come and Play
7. Differently Able
8. Exam Time
9. Fate
10. Happiness at Last

11. Kofi has Malaria

12. SWL Readers for Teens: Fish Boy

13. SWL Readers for Teens: Some Popular Ananse Stories

14. SWL Readers for Teens: Talents

15. SWL Readers for Teens: The Visitor

16. SWL Readers for Teens: Twisted Tales

17. SWL Readers for Teens: Why was Hawa Sick?

18. SWL Yellow Book 5: Vowels and Consonants

19. The Adventures of Osopo: Volumes I–2

STEP PUBLISHERS

Supplementary readers in English

1. A Tale of Two Boys

2. Abiba's Journey

3. Abu Goes to School

4. Ayisha

5. Birago and Grandmother

6. Danger in Town

7. Nice Things to Remember

8. Norty: The Naughty Boy

9. Old Vulture and the Rainbow

10. Queen of Sorrow

11. Sick Village

12. Stories Auntie Serwaa Told

13. Studying at Home

14. The Betrayal of Abban

15. The Temptation

16. There Goes Tiggo

17. Two Little Ants

18. Well Done, Abena

Career choices/guidance

1. The Carpenter
2. The Caterer
3. The Dressmaker
4. The Farmer
5. The Journalist
6. The Mason
7. The Nurse
8. The Pastor
9. The Police
10. The Publisher
11. The Roaster

APPENDIX FOUR

DATA COLLECTION INSTRUMENTS AND CONSENT FORMS

THE FOCUS GROUP DISCUSSION SCRIPT

Introduction

Hello Everyone,

My name is Lucy. I am carrying out research on digital/eBook publishing in Ghana. Today, I am here for us to discuss ebooks: (What they are, how you get and use them, and whether you find them useful for studies and leisure).

I will not use your names in my report/thesis so please feel free to tell me what your opinions are. I shall record our discussions so I can check later to see if I got everything you said right. I hope everyone has returned the consent forms signed by their parents.

Everyone will have the opportunity to talk and we shall also try our hands on a few ebooks in the course of our discussion. There will be refreshment after our discussion, so please don't be in a hurry to leave.

Thank you.

General questions

1. Tell me what you know about ebooks.

   Prompts: definition/description

2. How do you find them?

   Prompts: attractive/engaging/stimulating/boring

Use

3. How many of you read/use ebooks?
4. How did you hear/know about ebooks?
5. When did you read your first ebook? Title? Author? Publishers?
6. Do you read many of them?

   If No: Why not?

   If Yes: Why do you read them?

   Prompts: interest, curiosity, school, friends

7. Tell me about these ebooks.

   Prompts: subjects (textbook/school books)/titles/ themes/authors

8. What features do they have?

   Prompts: text/ illustrations/sound/video/interactive features

9. Where are these ebooks are produced from?

   Prompts: foreign/local/both

10. What kind of devices do you read on?

    Prompts: Laptops/dedicated e-readers/(brands)/smart phones/desktops

11. Do you own these devices?

12. Apart from reading on your device, what else do you use it for?

    Prompts: playing games, watching movies, reading news, social networking

13. Where do you read?

    Prompts: school, home, library

    Short break for hands on reading on devices as I observe (15 minutes)

Availability/Access

14. Where and how do you to get these ebooks?

     Prompts: download free, school/public library, borrow from friends, parent buy for me/ came on readers/

15. How easy is it to get them?

16. Are you able to borrow ebooks from the library?

Impression

17. Have you encountered any problems in the use of ebooks?

18. What do you think about having all your textbooks and supplementary readers as ebooks?

19. Comparing ebooks to printed books, which do you prefer and why?

Conclusion

All right, we have come to the end our discussion. Is there any question you will like to ask me? Many thanks.

Refreshments!

INTERVIEW GUIDE FOR CONTENT CREATORS

Introduction

Exchange first names

 I am carrying out research on digital book publishing in Ghana with a focus on children's ebooks and will appreciate your views/opinion about your work (creating ebooks) and digital book publishing in as whole.

 Your responses will be anonymous unless you prefer otherwise. Our conservation shall be recorded for the purposes of cross checking later to ensure that I have captured all the important issues you have mentioned. I will be happy if you sign this consent form before I proceed with the interview.

 Thank you.

General information

1. Can you please tell me about your work?

Prompt: job title/years' experience/training or qualification

2. Who are your clients?

Prompt: publishers, /authors/online stores: local or foreign

Kinds/ Genres/ Technologies

3. Can you describe the kind of ebooks do you create?

Prompt: digitised/ born digital/genres: children? features

4. How many have you created so far?

Prompt: In a month/year/till date

5. Can you tell me about your workflow?

Prompt: processes/technologies skills / equipment/platform(s) and reading devices.

Motivation/Expectations/Challenges

6. What is your motivation for choosing this line of business/career?

Prompt: Have your expectations been met? Any Challenges?

7. How are you able to keep abreast with the latest technology and remain competitive?

8. How fierce is competition?

Opinion/Perception

9. What do you think is the current state of digital publishing in Ghana?

10. What do you consider 'barriers' and 'enablers' to digital book publishing in Ghana?

11. What is your impression about the following:

- current human resource (expertise/skill levels/ availability)
- digital infrastructure to support digital publishing (broadband speed, penetration, reliability etc.)

12. How will you rate the diffusion of digital publishing technology so far?

13. Does digital book publishing in Ghana have a future?

14. Is there anything you consider important that will help improve digital children's publishing in Ghana?

Many thanks.

INTERVIEW GUIDE FOR AUTHORS

Exchange first names

I am carrying out research on digital book publishing in Ghana with a focus on children's ebooks. I am here to seek your views/opinion about your work (writing children's books) and the industry as whole. Your responses will be anonymous (unless you prefer otherwise).

I shall record this interview for the purposes of cross checking later to ensure that I have captured all the important issues you have mentioned. I will be happy if you sign this consent form before I proceed with the interview. Thank you.

General information

1. Please tell me about your writing.

Prompt: Full time/part-time

                         How long have you been writing?

                         Subjects/themes/ why the choice of these?

                         Age range

                         Literary agents?

Publishing options

2. Tell me how you publish your books.

Prompt: traditional print publisher/digital publisher/self-publishing

3. What motivated the choice? Have your expectations been met?

4. Any challenges? How have you overcome them?

5. How are your books promoted? Do you play any role in this?

6. Where are how are your books sold? How do you monitor sales? How about royalties?

For digital authors

How did you hear /know about ebooks/digital publishing technology?

What formats/platforms are your books published for?

For non-digital authors

Why haven't you gone digital? Will you consider going digital in the future?

Opinions/perceptions

7. What is your opinion about the following: (Ghana's digital infrastructure, skills of ebook creators, regulation?)

8. Do you think digital publishing has a future in Ghana?

9. What measures must be put in place to make it vibrant?

10. Any comments/opinions you would like to share?

QUESTIONNAIRE FOR PUBLISHERS

Dear Publisher,

The purpose of this survey is to collect data that will feed into research that examines digital book publishing in Ghana. Completing this questionnaire is purely voluntary and your responses will be anonymous unless you prefer otherwise and will only be used for academic purposes.

I shall be happy if you sign the consent form attached. Please write out and tick as appropriate. Thank you.

SECTION A: GENERAL INFORMATION

1. How would you describe your business operation?

Micro employing 1–9 people	[	]
Small employing 10–29 people	[	]
Medium employing 30–99 people	[	]
Large employing 100 and above people	[	]

2. How long have you been in business?

Below 5 years	[	]
5–10 years	[	]
11–20 years	[	]
21–30 years	[	]
31–50 years	[	]
Above 51 years	[	]

3. What genre/s of books do you publish? Select all that apply.

Adult Fiction	[	]
Young Adult	[	]
Children's textbooks	[	]
Supplementary Readers	[	]
Non-fiction	[	]
Textbooks for Secondary schools	[	]
Academic/ scholarly books	[	]
Poetry	[	]
Nonfiction	[	]
Others. Please specify _____		

5. How will you describe yourself?

        Print publisher   [   ]
        Digital publisher   [   ]
        Both print and digital publisher   [   ]

6. Have you digitised your publishing operations?

        Not interested   [   ]
        Currently have   [   ]
        Planning to   [   ]
        Like the idea   [   ]
        Used to but not anymore   [   ]

7. Which areas of your business have you digitised? Please tick as many as apply.

        Accounting   [   ]
        Product planning and estimation [   ]
        Internal communication   [   ]
        Manuscript submission   [   ]
        Editorial   [   ]
        Production   [   ]
        Marketing and service provision [   ]
        Content delivery (eBook)   [   ]
        Other: please specify _____

8. What sales offers or arrangements do you offer buyers?

        Credit   [   ]
        Subscription   [   ]
        Vouchers   [   ]
        Multi-buy   [   ]
        Discount   [   ]
        Full price   [   ]
        Other: please specify _____

9. Are you on any social media?

        Yes   [   ]
        No   [   ]

If your response to question 9 is **yes,** please continue with question **10.** If **no,** go to question **12.**

10. What do you use social media for?

Promote your books   [   ]
Promote your business   [   ]
Promote yourself   [   ]
Other please specify _____

11. If **yes**, please state them.

Facebook   [   ]

Twitter   [   ]

Goodreads   [   ]

Pinterest   [   ]

Linked-in   [   ]

Google+   [   ]

Instagram   [   ]

Others: please specify _____

If your response to Question 9 is **no**,

12. Can you please state why?

_____
_____
_____
_____
_____
_____

SECTION B: ADOPTION OF DIGITAL TECHNOLOGIES

13. How will you describe yourself in terms of adopting digital publishing (ebook) technology? Please tick as many as apply.

	Yes		No
I am aware of digital publishing (ebook) technology.			
I am interested in digital publishing and actively seeking details and related information.			
I have considered the merits and demerits of eBook technology and have adopted it.			
I have considered the merits and demerits of eBook technology and am not interested in adopting it.			
I have considered the merits and demerits of eBook technology and am undecided about it.			
I have adopted digital publishing to some degree and am still seeking more information.			
I am actively publishing ebooks.			

If you publish digitally, please continue with question 14. If not, go to question 24. Please tick as many as apply.

14. What genres do you publish digitally?

Adult fiction   [   ]

Young adult fiction   [   ]

Children's textbooks   [   ]

Supplementary Readers   [   ]

Nonfiction   [   ]

Textbooks for Secondary schools   [   ]

Academic/scholarly books   [   ]

Poetry   [   ]

Others: please specify _____

15. What textbooks do you publish digitally?

English language   [   ]

Mathematics   [   ]

Science   [   ]

Social Studies   [   ]

French   [   ]

Ghanaian language   [   ]

RME   [   ]

Citizenship Education   [   ]

Other: please specify _____

16. Do your ebooks have these features?

Hypertext   [   ]

Sound   [   ]

Animation   [   ]

Voice over   [   ]

Interactivity [   ]

Other: please specify _____

17. Are your ebooks created in-house?

Yes   [   ]

No   [   ]

18. If your response to question 17 is **NO**, please state where you buy your electronic services from, if **YES**, please go to question 19.

_____
_____
_____
_____

19. Does the electronic service meet your expectations in terms of quality and delivery?

      Yes   [   ]

      No   [   ]

      Not really   [   ]

20. What platform(s) are your ebooks created for?

      Apple   [   ]

      Kobo   [   ]

      Kindle   [   ]

      Nook   [   ]

      PDF   [   ]

      Other: please specify _____

21. What reading devices can your ebooks are read on?

      Dedicated e-reader   [   ]

      Smartphone   [   ]

      Tablets   [   ]

      Laptop   [   ]

      Desktop   [   ]

      Other: please specify _____

22. Where can your ebooks be accessed?

        Company website   [   ]

        Amazon.com   [   ]

        Azaliabooks.com   [   ]

        Public/school libraries [   ]

        Worldreader   [   ]

        Other: please specify _____

23. How do customers pay for your ebooks?

        By credit card   [   ]

        By debit card   [   ]

        PayPal   [   ]

        Mobile Money   [   ]

        Other, please specify _____

24. How many books do you publish in a year? Please fill in and tick as appropriate.

Genre	Number of titles	Digital	Print	Percentage of sales revenue
Adult Fiction				
Young Adult				
Children's textbooks				
Supplementary Readers				
Non-fiction				
Textbooks for Secondary schools				
Academic/ scholarly books				

Poetry				
Non-fiction				
Other (Please specify)				

Many thanks for your time.

Contact details:

l.a.ry-kottoh@stir.ac.uk

afeafarykottoh@gmail.com

QUESTIONNAIRE ON GHANA'S DIGITAL COMMUNICATION INFRASTRUCTURE TO SUPPORT DIGITAL BOOK PUBLISHING/EBOOK PUBLISHING

The purpose of this survey is to collect data on Ghana's digital communication infrastructure. This will feed into a PhD research that examines digital book publishing in Ghana. Your responses will be anonymous unless you prefer otherwise and will only be used for academic purposes. Please write out and tick as appropriate. Thank you.

1. What is the reach/coverage of Ghana's fibre optics infrastructure? Please give details:

    _____
    _____
    _____
    _____
    _____
    _____
    _____
    _____

2. Does Ghana have a satellite technology?   Yes [   ]   No [   ]
    If yes, please give details:

    _____
    _____
    _____
    _____
    _____
    _____

    If No, are there any plans to acquire it? Please give details:

    _____
    _____
    _____
    _____
    _____
    _____

3. Please complete the table below

Broadband Suppliers

Fixed Broadband	Penetration	Advertised Speed	Speed actually Delivered	Reasons for the gaps
Mobile Broadband	Penetration	Advertised Speed	Speed actually Delivered	Reasons for the gaps
Cable Broadband	Penetration	Advertised Speed	Speed actually delivered	Reasons for the gaps

Internet Service Providers	Penetration	Advertised Speed	Speed actually delivered	Reasons for the gaps

Telecommunication company	No. of data subscribers	Advertised speed	Speed actually delivered	Reasons for the gaps

4. Is there any regulation or institution that ensures that communication networks are secure and resilient?

Yes [   ]   No   [   ]

If Yes, please give details

_____
_____
_____
_____

If No, why do you think there is none?

_____
_____
_____
_____

5. What is the average broadband speed in Ghana_____

6. Are there any geographic and/or demographic exclusion in Ghana's digital market place? Yes [   ]   No [   ]

If Yes, please give details

_____
_____
_____
_____
_____

7. Using a scale from 1 to 5, where one is "Poor" and five is "Excellent how will you rate Ghana's digital communications infrastructure along the following attributes

High capacity

1 ☐ Poor	2 ☐ Fair	3 ☐ Good	4 ☐ Very Good	5 ☐ Excellent

Reliability

1 ☐ Poor	2 ☐ Fair	3 ☐ Good	4 ☐ Very Good	5 ☐ Excellent

Resilience

1 ☐ Poor	2 ☐ Fair	3 ☐ Good	4 ☐ Very Good	5 ☐ Excellent

Security

1 ☐ Poor	2 ☐ Fair	3 ☐ Good	4 ☐ Very Good	5 ☐ Excellent

Affordability

1 ☐ Poor	2 ☐ Fair	3 ☐ Good	4 ☐ Very Good	5 ☐ Excellent

Fast/Speed

1 ☐ Poor	2 ☐ Fair	3 ☐ Good	4 ☐ Very Good	*5* ☐ Excellent

8. Do think Ghana's current digital communications infrastructure can support a vibrant digital book publishing/ebook publishing industry? Please give reasons.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

9. What improvements in terms of digital communications infrastructure must occur to make digital book publishing/ebook publishing very successful?

_____
_____
_____
_____
_____
_____

Many thanks for your sharing your knowledge and your time.

Contact details:

l.a.ry-kottoh@stir.ac.uk

afeafarykottoh@gmail.com

INTERVIEW SCHEDULE FOR PUBLISHERS

Exchange of first names

The purpose of this interview to seek your views on digital book publishing in Ghana. Participating is purely voluntary and your responses will audio recorded but will remain anonymous unless you prefer otherwise and will only be used for academic purposes. I will be happy if you sign this consent form before I proceed with the interview. Thank you.

Digital publishers

Tell me about your publishing business.

1. How long have been publishing? pbooks/ ebooks?
2. What were your motivation/expectations then? Are they still valid?
3. What challenges have you encountered going digital?
4. How will you describe the patronage of your ebooks?
5. What do you think about the digital infrastructure in Ghana?
6. How about the human resource capacity?
7. How will you rate the diffusion of digital publishing technology so far?
8. Do you think digital publishing has a future in Ghana?
9. What measures must be put in place to make it vibrant?
10. Any comments/opinions you would like to share on digital publishing?

For print publishers

1. Why have you not gone digital?

2. Would you consider going digital in the near future?

3. What changes do you expect to see before you go digital?

4. How will you rate the diffusion of digital publishing technology so far?

5. Do you think digital publishing has a future in Ghana?

INTERVIEW SCHEDULE FOR ONLINE BOOK RETAILERS/VENDORS

Exchange first names

I am carrying out a research on digital book publishing in Ghana focusing on children's ebooks. I am here today to seek your views/opinion about your work (retailing ebooks) and the industry as whole. Your responses will be anonymised (if you desire).

I shall record our conservation for the purposes of cross checking later to ensure that I have captured all the important issues you have mentioned. I will be happy if you sign this consent form before I proceed with the interview. Thank you.

1. Please tell me about your business.

Prompt: Focus, and age of business

2. What are the features of the platform?

Prompts: collection, features,

3. Who are your markets/audiences?

Prompt: Foreign/local/ any geographical restrictions/ pattern of patronage

4. What kind of agreement exists between publishers/authors who use your platform?

5. How do you make your storefront secure and prevent piracy?

Prompts: DRM

6. What methods of payment do you use? How easy is it to transact business online in Ghana? What kind of online transaction do you support?

7. Is there any institution that regulates online book selling?

8. What do you consider 'barriers' and 'enablers' to digital book publishing in Ghana?

9. What is your impression about the following?

- Current human resource (expertise/skill levels/ availability) area of expertise that requires training?
- Digital infrastructure to support digital publishing (broadband speed, penetration, reliability, cost etc.)

10. How will you rate the diffusion of digital publishing technology so far?

11. Does digital book publishing in Ghana have a future?

INTERVIEW SCHEDULE FOR LIBRARIANS

Exchange first names

I am carrying out a research on digital book publishing in Ghana focusing on children's ebooks and will need your views on incorporating ebooks into your collection, e-lending and use of children's books. Your responses will be anonymised (if you desire).

I shall record our conservation for the purposes of cross checking later to ensure that I have captured all the important issues you have mentioned. I will be happy if you sign this consent form before I proceed with the interview. Thank you.

1. Are school/public libraries digitised?

2. Please tell me about your experience with ebooks.

3. What are your impressions about incorporating digital publications into your current library collection?

4. Is there adequate infrastructure to support this? How will this be rolled out?

5. What about skilled personnel to manage digital libraries?

6. With the incorporation of ICT into the basic school curriculum, will adopting ebooks and other digital learning materials be a feasible?

7. What are your general impressions about digital book publishing?

INTERVIEW SCHEDULE FOR HEADTEACHERS

Introduction

I am carrying out a research on digital book publishing in Ghana focusing on children's ebooks and will appreciate your view on access and availability and potential use of ebooks in your school. Your responses will be anonymised (if you wish).

I shall record our conservation for the purposes of cross checking later to ensure that I have captured all the important issues you have mentioned. I will be happy if you sign this consent form before I proceed with the interview. Thank you.

1. Do you have any digital/electronic books in your school?

2. If yes, can you tell me about the collection
   Prompts: subjects/ themes/ features/ reading devices used/patronage

3. If no, would you consider adding them to your print books and learning materials?

4. What is your general impression about adopting ebooks as an additional learning/teaching tool?

5. What are the children's use/attitudes towards ebooks?

6. With the incorporation of ICT into the basic school curriculum, how feasible will it be in adopting ebooks and other digital learning materials?

7. What are your general impressions about digital book publishing?

INTERVIEW SCHEDULE FOR WORLDREADER/AZALIABOOKS

Introduction

I am carrying out a research on digital book publishing in Ghana focusing on children's ebooks and will appreciate your view on access and availability and potential use of ebooks in your school. Your responses will be anonymised (if you wish). I shall record our conservation for the purposes of cross checking later to ensure that I have captured all the important issues you have mentioned. I will be happy if you sign this consent form before I proceed with the interview.

Thank you.

1. Please tell me about your business /ebook projects

3. What genres do you produce?

4. Are they all digitised/ or born digital?

5. What was the motivation? Any challenges?

6. What do you consider 'barriers' and 'enablers' to digital book publishing in Ghana? Any regulation/national policy in this regard?

7. What is your impression about the following?

- Current human resource (expertise/skill levels/ availability)
- Digital infrastructure to support digital publishing (broadband speed, internet penetration, reliability, reading/access devices, online transaction etc.)

8. How will you rate the diffusion of digital publishing technology so far?

9. Does digital book publishing in Ghana have a future?

CONSENT FORMS FOR PARENTS

Dear Parent/Guardian,

A PhD researcher is conducting research into **DIGITAL BOOK PUBLISHING IN GHANA: A FOCUS ON CHILDREN'S PUBLICATIONS** and will require the participation of children in a focus group discussion on **access and use of ebooks among basic school children in Ghana.**

Information gathered from the participants will be used purely for academic purposes and a teacher will be present during the discussion to observe and put the pupils at ease. The children shall not be exposed to any form of harm and no sensitive or personal information shall be collected.

Please complete the form below and return it to the school through your child/ward. Thank you.

Please underline the appropriate response

I give my consent/do not give my consent for my child/ward to take part in the focus group discussion on: **Access and use of ebooks among school children in Ghana.**

I permit/do not permit my ward(s) responses to be audio-recorded so the researcher can accurately analyse her findings for her PhD thesis and other academic presentations.

I understand that participation is not obligatory and my child/ward can withdraw at any stage of the process.

Name of Parent/Guardian _____

Signature: _____Date: _____

Sample permission letter to basic schools

<div align="right">
Department of Publishing Studies
KNUST
Kumasi
January 26, 2016
</div>

The Director
D & D Academy
Kumasi

Dear Sir,

PERMISSION FOR CONSENT TO CARRY OUT A FOCUS GROUP DISCUSSION IN YOUR SCHOOL

I write to seek your permission to carry out a focus group discussion with some pupils in your school. This focus group discussion; **access and use of ebooks among school children in Ghana** is part of a PhD research I am carrying out in the University of Stirling, Scotland and is titled **DIGITAL BOOK PUBLISHING IN GHANA: A FOCUS ON CHILDREN'S PUBLICATIONS.**

I shall require about seven pupils (users and potential users of ebooks) from primary six to junior high school to participate in discussing the following:

1. The awareness of ebooks

2. The access and use of ebooks

3. Their general impressions about the use of ebooks vis-a-vis printed books

To set the pupils at ease, I shall appreciate the presence of a teacher from the school to observe and help organise the children. There will be no question that will require sensitive and personal information from students or put them in any form of danger.

I shall therefore be grateful for your consent to allow your pupils to participate in the discussion.

Thank you.

Yours sincerely,

Mrs. Lucy Ry-Kottoh

PhD Researcher
University of Stirling

<u>**CONSENT FORM FOR RESPONDENTS**</u>

RESEARCH TITLE: **DIGITAL BOOK PUBLISHING IN GHANA: A FOCUS ON CHILDREN'S EBOOKS**

This PhD research is being carried out to:

- Examine the state of digital publishing in Ghana with reference to children's publications.
- Investigate the current practices among digital publishers against the backdrop of what pertains in United Kingdom.
- Assess the human and infrastructure capacity for digital publishing.
- Identify prospects and challenges and develop strategies to overcome them.

Your participation in this research will include responding to a survey questionnaire and/or interview that will be audio recorded, transcribed, analysed and used for scholarly purposes only; a doctoral thesis, professional conference presentations, and portions published in academic journals.

All documentation and records will remain anonymous (unless participant prefers otherwise) and stored securely for 10 years. No risks or discomforts will be encountered during the data collection exercise. Participation is voluntary and should you have a change of mind along the way, you are free to withdraw from participating at any point.

If you have any questions or concerns about this research, please feel free to contact Lucy Ry-Kottoh, PhD Researcher at University of Stirling, on any of the following:

Email: l.a.ry-kottoh@stir.ac.uk/afeafarykottoh@gmail.com

Telephone: 0244 671726 / +44 (0) 7502 977468, +44(0)1786 609321

If you would like to be informed about the findings of this research, please contact me using the above details.

Please complete the portion below to indicate that you understand and accept to participate in this research.

Thank you

Name of Participant: _____Signature: _____

Email: _____Date: _____

APPENDIX FIVE

ETHIC FORMS

FACULTY OF ARTS AND HUMANITIES

DIVISION OF LANGUAGES AND LITERATURE

RESEARCH ETHICS DECLARATION FORM

FOR STUDENTS

<u>This form should be completed in consultation with your supervisor</u>

Name of Student: **LUCY AFEAFA RY-KOTTOH**

Student registration number: **2210727**

Programme: **PhD in Publishing Studies**

Supervisor for dissertation/project: **PROFESSOR CLAIRE SQUIRES** and **DR SIMON ROWBERRY**

Title of dissertation/project: **DIGITAL BOOK PUBLISHING IN GHANA: A FOCUS ON CHILDREN'S EBOOKS**

Proposed start date: **OCTOBER 1, 2014**

Proposed end date: **SEPTEMBER 30, 2017**

Outline the main ethical issues pertinent to your research project here, and the actions planned to deal with these issues:

Ethical Issues:

My research will involve live participants and my data collecting instruments will include interviews of publishers, authors and content developers.

I will also conduct a focus group discussion with selected basic school children (primary 6 to junior secondary school pupils within the age ranges of 9 and 15) to discuss their access and use of ebooks. A teacher, appointed by the head teacher will be present during the discussion to make the children comfortable to interact with me.

Questions will not include the provision of any sensitive or personal information from adult and young participants. All participants shall not be exposed to any form of danger.

Action:

I will seek clearance and consent from the following to allow selected school children to participate in the focus group discussion:

District director of education

Head teachers of selected schools

Parents

I shall also seek the consent from the publishers, authors, content developers, teachers, and librarians before conducting the survey and interviews.

* Please see consent letter/forms attached

Supervisor's recommendation to School of Arts and Humanities Research Ethics Committee

Approve	Not Approved

Supervisor's signature:…………………………………………………………..…..………………….

Note of issues/concerns: ………………………………………………….……………………..……...

…………………………………………………………………………………………..……………

COMMITTEE DECISION

Approve	Approve subject to amendment (noted below)	Not Approved

Committee chair's signature: …………………………………………..………………..………………..…………

Date: ……………………………………………………………..…………………………………………..…

NOTE:

Completed and signed checklist forms should be retained on file in the divisional office. ALL research ethics declaration forms should be returned to the divisional office. The divisional administrator is then responsible for sending to the school administrator a copy of all the completed applications. All the forms (approved and not approved) will then be reviewed by the School of Arts and Humanities Research Ethics Committee.

FACULTY OF ARTS AND HUMANITIES, DIVISION OF LANGUAGES AND LITERATURE
RESEARCH ETHICS CHECKLIST

This form should be completed for every student research project <u>as soon as the topic has been finalised.</u> It is not necessary for staff to complete this form for their own research, but we hope some might find it useful. It is used to identify whether a full application for ethical approval needs to be submitted to the School of Arts and Humanities Research Ethics Committee.

The principal investigator or supervisor (where the principal investigator is a student) is responsible for exercising appropriate professional judgement in this review. This checklist must be completed before potential participants are approached to take part in any research.

Research Checklist to be completed:

Please answer each question by ticking the appropriate box:	YES	NO
1. Does the research involve living participants?	X	
2. Does the research involve reproducing copyrighted work in published form (other than brief citation)?		X
3. Does the research involve data not in the public domain e.g. private/unpublished?	X	
4. Are you applying for external funding?	X	
5. Does the study involve participants who are particularly vulnerable or unable to give informed consent e.g. people under 18, people with learning disabilities, your own students? (If the research involves people under 18, you may have to apply for a Disclosure Scotland Certificate.)	X	
6. Will the study require the co-operation of a gatekeeper for access to participants? (e.g. teacher, local authority)	X	
7. Will it be necessary for participants to take part in the study without their knowledge and consent at the time? (e.g. covert observation of people)		X
8. Will the study involve discussion of sensitive topics (e.g. sexual activity, drug use)?		X
9. Are there issues of safety for the investigators or subjects?		X
10. Could the study induce psychological stress or anxiety or cause harm or negative consequences beyond the risks encountered in normal life for the investigators or subjects?		X
11. Will inducements (other than reasonable expenses and compensation for time) be offered to participants?		X

Are there any ethical issues raised by your proposed research? YES

If you have answered 'no' to all of the questions you need take no further action before starting your research.

If you have answered 'yes' to <u>any</u> of the questions, you must complete the attached research ethics declaration form and submit the declaration form, along with this form, to your divisional administrator. These forms will be then submitted to the School of Arts and Humanities Research Ethics Committee for consideration before you begin the research.

STUDENT'S NAME: [in capitals]   LUCY AFEAFA RY-KOTTOH

STUDENT'S SIGNATURE:
……………………………………………………………….………………………………………

SUPERVISOR'S SIGNATURE:
…………………………………………………………………….………………………………..………..……

Screenshot of email communicating approval of Ethics Committee