AN INVESTIGATION INTO THE ADOPTION AND IMPLEMENTATION OF AN ONLINE BUSINESS NETWORK PLATFORM FOR THE PRINTING INDUSTRY AND THE ASSOCIATED BENEFITS

ALDRIN BHUNU (R138902Y)

A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE MASTER DEGREE IN BUSINESS ADMINISTRATION

2016

GRADUATE SCHOOL OF MANAGEMENT

UNIVERSITY OF ZIMBABWE

SUPERVISOR: DR D. MADZIKANDA
DECLARATION

I, Aldrin Bhunu, do hereby declare that this dissertation is a result of my own investigation and research, except to the extent indicated in the acknowledgements, references and comments included in the body of the report, and that it has not been submitted in part or in full for any other degree to any other university.

………………………………

Student Signature Date

………………………………

Supervisor Signature Date
ACKNOWLEDGEMENT

Certainly I would not have managed to complete this dissertation without the unwavering support and guidance of my supervisor family, friends and wife. I would like to express my sincere appreciation to my wife Caroline for the moral support for the entire period of my study. Special thanks goes my supervisor, Dr D. Madzikanda, for his patience and excellent guidance throughout the research. I would also like to thank all the institutions that participated in the study, my research would not have been completed without their support. I would also want to thank my MBA CLASS OF 2016 who imparted the discipline of learning, without which I would not have managed to get this far. In all this, to the supreme of all power and honour God Almighty, TO him be all the glory.
DEDICATION

To my lovely wife Carol and our children Tinotenda, Tanatswa and Tadiswa “Tataa”

To all the people hoping for a glorious future one day.

Glory to God the Almighty.
ABSTRACT

The study sought to assess the feasibility of adopting and implementing of online business platform for the printing industry in Zimbabwe. Most of the Zimbabwean printing companies have successfully employed a host of marketing and operational strategies to target various types of customers and improve business performance.

Literature review and the study highlighted that there numerous benefits of adopting online platforms for companies in the printing industry. Companies adopting online business network platform are likely to be more competitive and their operational costs are reduced. The research adopted a phenomenological research philosophy. An interview guide was used to carry out fifteen in-depth interviews with the management of printing companies. These established that printing companies benefit from online printing platform through brand visibility, ability to attract the attention of potential customers, instant response to industrial developments, technical forums, cheaper ways of doing business-in terms of advertising and running promotions, boost of online sales, improved customer service and effective feedback, customer loyalty is enhanced, experience sharing on the platform, new business development, data management improvement, work related research, staff training and development, online payments via credit and debit cards, e-transactions from adopting online business network.

The challenges of adopting online business network were found to be among others cybercrime, closed operating system for printers (guerilla marketing and gamesmanship to gain competitive advantage). Poor government support and poor IT infrastructure, lack of financial resources for setting up the network, security issues on the internet, and ability of businesses to get a return on investment were some of the concerns. Expertise is also required in the implementation and adoption of online business network. The government must support the printing industry by ensuring that IT equipment are subsidised to make them affordable. An area of further study is recommended, is to investigate the effect of government intervention in the development of the printing industry in Zimbabwe and the regulation of unethical conduct by mushrooming fly by night printers.
TABLE OF CONTENTS

DECLARATION.............................................................................................................................................. ii

ACKNOWLEDGEMENT.................................................................................................................................. iii

DEDICATION................................................................................................................................................ iv

ABSTRACT.................................................................................................................................................... v

TABLE OF CONTENTS .................................................................................................................................. vi

LIST OF FIGURES ........................................................................................................................................ x

LIST OF TABLES ........................................................................................................................................... xi

CHAPTER ONE .............................................................................................................................................. 1

1.0 INTRODUCTION AND BACKGROUND .............................................................................................. 1

1.1 INTRODUCTION ................................................................................................................................... 1

1.2 STUDY BACKGROUND ......................................................................................................................... 2

1.3 PROBLEM STATEMENT ........................................................................................................................ 6

1.4 RESEARCH AIM AND OBJECTIVES .................................................................................................... 7

1.5 MAJOR RESEARCH QUESTIONS ......................................................................................................... 8

1.6 RESEARCH PROPOSITION .................................................................................................................. 8

1.7 SCOPE OF THE STUDY ....................................................................................................................... 8

1.8 JUSTIFICATION OF THE STUDY ....................................................................................................... 8
1.9 CHAPTER SUMMARY ........................................................................................................ 10

CHAPTER TWO ................................................................................................................... 11

2.0 LITERATURE REVIEW: ONLINE BUSINESS PLATFORMS ........................................ 11

2.1 INTRODUCTION ........................................................................................................... 11

2.2 DEFINING ONLINE BUSINESS NETWORK ................................................................ 13

2.3 UNDERPINNING THEORIES ..................................................................................... 14

2.4 MODELS OF BUSINESS NETWORKING ..................................................................... 15

2.5 AREAS OF CONDUCTING RESEARCH ..................................................................... 18

2.6 DISCUSSION OF KEY VARIABLES ......................................................................... 18

2.7 LITERATURE SYNTHESIS CONCEPTUAL FRAMEWORK ....................................... 26

2.8 CHAPTER SUMMARY .................................................................................................. 28

CHAPTER THREE ............................................................................................................ 29

3.0 RESEARCH METHODOLOGY ...................................................................................... 29

3.1 INTRODUCTION ........................................................................................................... 29

3.2 RESEARCH RECAP .................................................................................................... 30

3.3 RESEARCH DESIGN ................................................................................................... 30

3.4 DATA COLLECTION .................................................................................................. 34

3.4 RESEARCH INSTRUMENTS ....................................................................................... 35

3.6 POPULATION AND SAMPLING TECHNIQUES ....................................................... 37
3.7 CONDUCTING INTERVIEWS .......................................................... 42
3.8 DATA PROCESSING AND ANALYSIS ........................................... 43
3.9 RESEARCH LIMITATION ............................................................... 44
3.10 VALIDITY AND RELIABILITY ....................................................... 44
3.11 ETHICAL CONSIDERATIONS ...................................................... 44
3.12 CHAPTER SUMMARY ............................................................... 45

CHAPTER FOUR .................................................................................. 46

4.0 FRAMING AND ANALYSIS OF DATA .............................................. 46
4.1 INTRODUCTION ............................................................................. 46
4.2 AN OVERVIEW OF THE RESPONDENTS ....................................... 47
4.3 DATA FRAMING AND ANALYSIS .................................................... 50
4.4 INTER-CASE COMPARISON AND ANALYSIS .................................. 77
4.5 DISCUSSION OF KEY OR SUBSTANTIVE FINDINGS ....................... 78
4.6 CHAPTER CONCLUSION ............................................................... 82

CHAPTER FIVE ................................................................................... 83

5.0 CONCLUSIONS AND RECOMMENDATIONS .................................. 83
5.1 INTRODUCTION ............................................................................. 83
5.2 ACHIEVEMENT OF RESEARCH AIM AND OBJECTIVES ................ 83
5.3 CONCLUSIONS ............................................................................. 84
5.4 ANSWER TO RESEARCH QUESTIONS ................................................................. 87
5.5 CONTRIBUTION ............................................................................................... 88
5.6 MANAGERIAL RECOMMENDATIONS .............................................................. 91
5.7 POLICY RECOMMENDATIONS ....................................................................... 91
5.8 GENERALIZATION OF FINDINGS ...................................................................... 92
5.9 LIMITATIONS .................................................................................................. 92
5.10 AREA OF FURTHER STUDY .......................................................................... 93

APPENDIX .............................................................................................................. Error! Bookmark not defined.

REFERENCES ........................................................................................................ 101
LIST OF FIGURES

Figures                              Pages
Figure 1.1: Typical online network system.              1
Figure 1.2 Digital Printing Machine at the Bottom and Litho Printing at the top 5
Figure 2.1 Image of Sources of Research                    11
Figure 2.2 Network diagram                                 13
Figure 2.3 Theoretical competency Model                     14
Figure 2.4 ERP in extension                                16
Figure 2.5 E-SCM                                         17
Figure 2.6 Real time access                                23
Figure 2.7 Conceptual Framework                            27
Figure 3.1 Image of Directions for Chapters               29
Figure 3.2 Exploring Images                               32
Figure 3.3 Image of Data collection File                   34
Figures 3.4 Conducting Interviews Pictures                 42
Figure 3.5 Ethical Considerations Image                    44
Figure 4.1 Internet Network Image                          46
Figure 4.2 Data Framing                                   50
Figure 4.3 The Network Revolution Diagram                 70
Figure 5.1 Latest Digital Networked Printing Machine     85
Figure 5.2 Conceptual Framework                           89
LIST OF TABLES

Tables

Table 3.1: Advantages and Disadvantages of the different approaches 36

Table 3.2: Target population 38

Table 3.3: Sampled population 39

Table 4.1 Shows the response rate of the face-to-face interviews 47

Table 4.2: Appreciation of online business networks 51

Table 4.3: Opinions on an integrated networked business system 54

Table 4.4: Level of uptake of online business in the printing industry 56

Table 4.5: Whether the adoption of online business platforms will add value to the printing industry 58

Table 4.6: What needs to be done to improve efficiency and productivity in terms of technology other than being online? 60

Table 4.7: Benefits of adopting online business network Platform for the printing industry 63

Table 4.8: Benefits that will result in the greatest impact in the printing industry from the adoption of online business platform 66

Table 4.9: Reasons for organisations failing to experience the expected benefits in the printing industry 68

Table 4.10: Internal challenges of implementing online business platform 71

Table 4.11: External challenges of implementing online business 73

Table 4.12: Reasons why printing companies would not readily be part of the connected platform 75
CHAPTER ONE

1.0 INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

Online networks in the business world are becoming increasingly important in the context of business today. In this era of social participation, the consumer is no longer a passive recipient of goods and services, but is actively involved in creating value. Online platforms, that allow external participants to co-create value, are rewriting the rules of competition. Businesses will either have to embrace platform models or stand the risk of being disrupted by new entrants. Business owners and managers need to rethink their business models and restructure operations to appropriately leverage the competitive advantage that online platforms provide. The following Figure 1.1 shows a typical online network system that enables the user to reach the rest of the world by a click of a button by businesses using any one of the simple everyday life inexpensive gadgets such as mobile phones, desktop computers and tablets.

Figure 1.1: Typical online network system.

Source: www.shutterstock.com
This research study is aimed at assessing the adoption of online business network platform in Zimbabwe in the printing industry. This industry is a major player in the technology sector and networking of businesses, Delfmann, Werner and Gehring, (2002). The advent of the internet has opened new frontiers to marketing in the way business communicates with their customers, technical support, vendors, suppliers and key partners. The printing industry in the country is just like most industries, they are still in their infancy in as regards the use of online business network platforms, thus the need to assess the feasibility in usage of online business networks in the printing industry. This research is motivated by the fact that, the impact of online business network platform on the business environment is in the majority of cases highly regarded yet little or nothing is done to go ahead and exploit the vast opportunities that come with the utilization of internet services.

1.2 STUDY BACKGROUND

Most of the Zimbabwean printing companies have successfully employed a host of marketing and operational strategies to target various types of customers. The current business and customer trends are continuously creating new challenges as well as opportunities for increasing profitability. If the printing companies want to improve their return-on investment and reduce glaring inefficiencies associated in doing business offline. They need to adopt online business network platform systems technologies along with their conventional marketing strategies and promotion media channels to publicize and advertise their products via the press, posters, TV, radio, direct mail, cinema, outdoor and transportation displays all in an effort to outwit each other on the market.

The Zimbabwean printing industry comparatively is not very competitive by default, as it is operating in an uncompetitive economic environment. There are national structural challenges that need to be addressed for the industry to be competitive. This research is positing that adoption of technology is one of the key enablers of that ability to be competitive as it is within the ambit of the organizations’ management. It is interesting to note that with the sophristry of today’s consumers, be it business and individuals they are quite aware of products on the international market through the use of the internet websites and other online platforms, therefore organisations need to adopt the use of the internet too, to be virtually visible globally and locally.
The printing companies in Zimbabwe are still behind in employing online business network platform strategies as a way of formulating their operating framework. According to Zhou (2011), Zimbabwe is still lagging behind in terms of ICT compared to other countries in the region. International printing companies are changing their marketing strategies to meet the new competitive business environment that is being driven by e-commerce. The ICT new policy (2012) reported that the Zimbabwean government has removed duty on ICT equipment. Such polices have a positive impact on the adoption of on-line business. Also the educational policy recently announced by Professor Jonathan Moyo the Minister of Higher and Tertiary Education to improve science subject uptake through free education through the STEM initiative to children who are good at sciences, is a hope for Zimbabwe in terms of acquiring the right skills desired in the economy.

The specialized categories of the printing industry and the major players that constitute the printing sector of Zimbabwe are presented below just to give a broad general overview of the printing industry.

(I). Relief printing

In the printing industry the general definition of relief printing, is transfer of an image from a raised surface (image carrier) for example, Support Printers and Packaging, Cork Label and Ort Printers and Stationers in Msasa does a lot of letter press jobs that require embossing, serialization and die cutting of labels on their letter press machines. Flexography printing as a relief method is used extensively in the printing and packaging industry for printing on corrugated board, paper cartons and plastic film for packaging of dry food stuffs and detergents. Hunyani Corrugated, Saltrama, Highfield Bag and Artmail - Flexible Packaging (Pvt) are some of the big players for this kind of printing process.

(II). Intaglio / Gravure Printing

This is the reverse of the relief concept described above; an intaglio image is transferred from a sunken or etched cylinder surface and this is a general definition. Copper plate etching and engraving are two intaglio processes. Fidelity Printers and Refiners is one of the specialists in
security printing using this technology for printing national and government documents, academic certificates and currency printing. HyliteLitho and Process Engravers also offer these specialized printing services

(III). Screen Printing

The general meaning of screen printing in the printing industry, is a process that transfers an image by allowing ink to pass through openings in a stencil that would have been applied to a screen mesh. Some of the industrial uses for screen printing include printing on round plastic containers, large display signs, tins for processed foods and canned beverages containers, billboards and printing on textiles (including t-shirts). There are a number of screen printers in Zimbabwe that includes; Screen Litho, Kingsport Investments, the now defunct David Whitehead and Carnald Metalbox.

(IV). Lithographic Printing

This is the most widely used and well known form of commercial printing. Here, the image is transferred from a flat chemically treated aluminum surface (commonly referred to as the “plate”) that has image areas that accept ink and non-image that repel ink. Sheet fed, web fed and continuous paper printing machines helps to achieve the printing process. Lithographic printing is ideal for printing high volumes of paper products such as newspapers, books, magazines, brochures and other business forms. Examples of organisations in the business include among others, Printflow, Natprint, Pacprint, City of Harare Printing, Paragon Business Forms, Enterprise Press, Printworks Zimbabwe, Jongwe Printers, ZPH, Sable Press, Ort Printers, Cable Mial and Interpack.

(V). Digital Printing

This is one of the latest printing technology in the industry. It is done by computer printers, photocopiers, riso machines and large format printing machines for printing banners, billboards, business cards, posters, booklets and small runs / jobs. Companies like Compusign, Advertising Industry, Lighthouse, Document Support, Bralyn Litho Printers and Xerox agencies. Digital printing technology is renowned for its fast turnaround lead times and high quality resolution products.
The various printing processes reveal that not all printing companies do not use the same printing process, but they specialize to meet the specific needs of the customer i.e. printing is a broad industry. Therefore, this research will help to highlight the importance of the adoption of an online-based internet site that helps prospective customers, suppliers and other stakeholders to navigate
the website easily to find the appropriate company for their particular printing needs without delay or extra cost of going through middlemen. The STEM initiative recently launched by the ministry of Higher and tertiary education reinforces the need for Zimbabwean economy to harness the use of science, technology, engineering and mathematics subjects to improve our industry. It is the technology facet that the printing industry needs very much.

1.3 PROBLEM STATEMENT

There is a limited use of online platform services by the printing industry in Zimbabwe this is despite a host of electronic and internet-based services having found their way on to the local market and industries. Among the online platforms such as online job sites www.cvpeople.com, www.bizcommunity.com, property site such as www.lamudi.com, electronic banking, electronic money transfers, electronic bill payments and electronic product purchaseswww.ownai.com, www.ebay.com and www.amazon.com. The mobile banking, air, RTGS and plastic money “craze” has also taken the country by storm as businesses go online to improve on the manner they deliver financial services. But despite the vast scope of electronic information and communications technology (ICT) services and their availability on the Zimbabwean market, there appears to be an embedded skepticism on the part of users to take advantage of their existence, especially in the area of printing.

Most of the studies on, online business network were done in the developed world Shailey (2010). According to Baretto (2010) developed nations are well advanced in technology and business platform networking is the recent culture of business. Baretto (2010) suggested that developing nations are still lagging behind in terms of technology. Internet penetration rate locally is low hence online business is still a challenge. There is limited literature on the benefits of online business networking let alone in the printing industry. Studies carried out in developed nations by Power (2009), Alam, Ali, & Jani, (2011) Jarvinen et al., (2012); Omar et al., (2011); Pentina, Koh, and Le, (2012) may not be holistically relevant to developing countries due to the differences in technology advancement and the implementation approach more so, these studies were not specific to printing companies.
This study will try to close this gap of low uptake of online transactions by focusing on business online networking in printing industry in Zimbabwe through gathering information from the previously done studies and link the literature to the printing industry.

ICT companies and our local graduates have been shouldered with the brunt of the blame for failing to raise awareness on the opportunities and capabilities that exist for individuals and businesses that use the internet, either for marketing or carrying out their services. As a result, in the quest to break into hitherto inaccessible markets and customers, local businesses have failed to make use of the internet as a useful strategic tool. This could explain why e-services are not being used despite their availability. This research study is aimed at assessing usage of online business network platform in Zimbabwe by printing companies. This industry is a major player in the technology sector and networking of businesses.

1.4 RESEARCH AIM AND OBJECTIVES

The aim of the research is to assess the feasibility of the adoption and implementation of an online business network platform for printing companies and the associated benefits thereof. The specific objectives to be investigated are;

1. To find out if stakeholders in the printing industry (corporates, government and individuals) will embrace the adoption of an automated online business network hub targeted at their own industry.

2. To investigate how online business network platform for the printing industry can be adopted or developed.

3. To determine the benefits of online business network platform to printing companies.

4. To find out the challenges on implementation of online business network platform to printing companies.

5. To recommend a business network platform model for printing industry in Zimbabwe.
1.5 MAJOR RESEARCH QUESTIONS

The research questions to be answered in this study are:-

1. How can an online business network platform for printing industry be implemented or developed successfully?

2. What are the benefits to printing industry for adopting an online business network?

3. What are challenges of implementing an online business network platform to printing companies?

4. What is the best business network platform model for printing companies in Zimbabwe?

5. Are stakeholders in the printing industry (corporates, government and individuals) of printed products ready to utilize a highly automated network platform?

1.6 RESEARCH PROPOSITION

This study proposes that the adoption and implementation of an online business network platform for the printing industry has benefits to the organisations and the sector as a whole?

1.7 SCOPE OF THE STUDY

The study was targeted at organisations in the printing industry operating in Harare, being the capital that houses head offices for most organisations in the country. The interviews were conducted to top management and business owners since these were considered to be key informants on the subject under investigation.

1.8 JUSTIFICATION OF THE STUDY

The research was carried out to investigate the feasibility of the adoption and implementation of an online business network platform for the printing industry and the associated benefits. The stakeholders in the printing industry that are likely to benefit from this research include and is not limited to the following; Business owners, employees, students, training colleges for the printing industry, printing organisations, print consumers and other researchers. This research is
expected to give a better understanding of how online business and social networking has revolutionized businesses and how the printing and packaging business can use the internet to make synchronize, transact and gain a sustainable competitive business advantage. It will provide advice on the risks involved and good online networking platform. It also discussed how printing companies can create an online networking strategy and choose the right platforms for a printing business in Zimbabwe. Most people in the country are avid users of social network media like Facebook, WhatsApp and Twitter but this has not been transformed for use for the purposes of business.

For a serious high-tech printing and packaging industry it is imperative that the players be able to be competitive. This research is also expected to assist other stakeholders like the government, customers and employees have a clearer picture of the quality of the service which they are getting from printing organisations as well as how improvements can be achieved. The research project is also important to the researcher to cover the theoretical aspects of online business network platforms; the project will help the researcher get a better understanding of the practical aspects of the subject.

Although there is much literature on ICT in general and some renowned platforms such as banking and telecommunications, the exploitation of outside value is an essential characteristic of open innovation around this area. The real challenge is to determine ways to derive benefit from these business networks Germany & Muralidharan, (2001). This study therefore looked at how stakeholders can benefit from the proposed network in terms of improved marketing, value added services and easiness of doing business among other things. It also seems that there is limited literature around this area of study especially in the African and Zimbabwean context.

From literature it seems the main underlying concept for this study is around e-commerce and so much literature but no clear theory in the field of E-Marketing. Theories are still in their infancy stage for the ICT industry and yet not well established, hence there is a need for having more well-established studies that can be considered as a step toward a theory building in the field of online ebusiness. The current study aims at establishing such challenges and how applicable and associated benefits to be derived from them in the Zimbabwean context.
1.9 CHAPTER SUMMARY

Chapter one introduced the topic of research and what motivated the researcher to undertake the study, giving the background to the study. Since the study was focusing on the feasibility of adopting and developing online network platforms for the printing industry, a broad general overview of the various printing industry areas of specialization were described. Statement of the problem, research objectives and questions were highlighted. The scope of the research and justification of the study was also explained briefly in this chapter, as the researcher prepared work on literature review in the next chapter.
CHAPTER TWO

2.0 LITERATURE REVIEW: ONLINE BUSINESS PLATFORMS

Figure 2.1: Image of sources of research

Source: www.shutterstock.com

2.1 INTRODUCTION

A literature review is an examination of scholarly information and research-based information on a specific topic Dawidowicz, (2010). Its goal is to create a complete, accurate representation of the knowledge and research-based theory available on a topic. This chapter presents literature review on developing online business network platform for the printing industry. There is more literature reviewed on business networking specifically in the developed world. According to Baretto (2010) developed nations are well advanced in technology and business networking is the culture of business. Baretto (2010) suggested that developing nations are still lagging behind in-terms of technology. Internet penetration rate is low hence online business is still a challenge most developing countries with the exception of countries like Morocco and Kenya where some
European nations have outsourced their call centers to take advantage of different time horizons and the handling of their non-core business activities. The recent Post and Telecommunications Regulatory Authority of Zimbabwe (Potraz) report, reveals an increase in Zimbabwe’s mobile and internet penetration, by December 2015 it stood at 48.1%.

There is limited literature on the benefits of business networking let alone in the printing industry. Studies carried out in developed nations by Power (2009), Alam, Ali, and Jani (2010); Jarvinen et al. (2012); Omar et al (2011); Pentina, Koh, and Le, (2012) may not be holistically relevant to developing countries due to the differences in technological advancement and the implementation approach, more so these studies were not specific to printing companies. Printing companies use of e-commerce in Zimbabwe has been generally low as the industry has been traditionally dominated by few oligopolistic firms who had a given market and did not need to embark on aggressive marketing and extensive customer focused activities. However of late with government thrust on indigenization and massive job layoffs there has been an increase in the number of small to medium enterprises printing companies mushrooming due to economic decline push factors with a few being as a result of pull factors. This has resulted in serious hyper competition (red ocean strategy scenario) as some of these indigenous entrepreneurs are changing the old business models and being techno savvy are exploiting the benefits of ICT to enhance business performance.

This literature helped close the gap through reviewing of literature on business networking platform in the printing industry through gathering information from the previously done studies and link the literature to the printing industry. A thematic approach was used to present the literature review focusing on the objectives of the study.
2.2 DEFINING ONLINE BUSINESS NETWORK

![Network Diagram](image)

**Figure 2.2: Network diagram**

**Source:** WERESC (2012)

The success of customer communities (customers loyal to a particular product who come together and become a society e.g. Apple users have their online community) has shown that business relationships can be created and developed on the web, and online dating has proved that deep personal relationships can be created, as well. Armed with an email address, websites and internet connectivity business online has been made easier for both customers and businesses. The internet has become an enabler of intra and inter-network interaction Chaston (2014). The greatest strength of the internet, is its ability to create a business to business relation and the ability to interact online.

### 2.2.1 Significance of the Study

The study is critical specifically for the printing industry and in general for the general economy as the results of the research can be used to improve the ease of doing business, if the proposed online model is adopted and implemented. Then to the academic fraternity it will add to the body of knowledge in terms of research methodology and effectiveness of the approach applied. Management and captains of industry will benefit immensely from the findings as they will be
able to get information that is based on empirical research given recent thrust and emphasis on evidence based management.

2.3 UNDERPINNING THEORIES

This research is informed by the theoretical competence model.

2.3.1 A Theoretical Competency Model

This model explains the extent to which internet can be adopted to facilitate the relationships between different stakeholders. It points out the level at which have the awareness of e-commerce which is supported by internet.

The second point was outlined by McGowan and Durkin (2001) where he pointed out that the utilization and acquiring of internet into business involves the apportionment of like money, effort and time. This model is in figure 2.1 below. The model shows that the stakeholders are customers, suppliers, intermediaries and distributors. The model also shows that the competitors in the vertical axis of the diagram.

![Theoretical Competency Model](image)

**Figure 2.3: Theoretical competency Model**

*Source: Adapted from Durkin and McGown (2001)*
Quadrant 1 shows that both parties have an awareness of e-commerce. In this quadrant it is argued that the business owner must possess the necessary competencies in terms of the vision and how the internet can meaningfully contribute to e-commerce.

Quadrant 2 shows that the level at which the value that internet can provide to business is appearing more tangibly.

Quadrant 3 shows that the competitors are the ones who have actually appreciated the value of internet into their business.

Quadrant 4 shows that both the business and competitors have come to realize that internet is central to the development of the business.

Durkin and McGowan (2001) in the model highlights the importance of technical ability and control as key for the business to be able to run their operations using the internet on an ongoing business.

2.4 MODELS OF BUSINESS NETWORKING

2.4.1 eCRM model

Electronic Customer Relationship Management (e-CRM) is referred to the marketing activities, tools and techniques via the Internet network which are able to build and enhance the relationship between organization and customers Lee-Kelley et al., (2003). Bradway and Purchia (2000) mentioned that e-CRM is the intersection between Internet market and customer-centric strategies. It is sometime referred, to web-enabled or web-based CRM Aileen, (2006). Since the use of IT plays the important role to deliver products and services to customer (customer does not use CRM), business decides to use eCRM to support the multiple electronic channels to contact and communicate with its customers Bernett & Kuhn, (2002). Same as CRM, eCRM objective is to gather information from customers and adjust service level to match with specific needs which will be able to enhance customer relationship Jerry & Nicholas, (2006). eCRM helps organizations to enable specific products and services to reach customer needs through Internet access Schneider, (2004); Hugh et al, (2002). This is one of the opportunities that organizations received because it can retain profitable and valuable customers by fulfilling
their requirements Ing-long & Ching-Yi, (2009). Customer satisfaction, customer retention and customer loyalty are three significant components of customer relationship that organization want to achieve which is the significant goals of CRM AvJill, (2001); Mohammad & Ning, (2005)

2.4.2 Enterprise Resource Planning (ERP)

Enterprise Resource Planning (ERP), according to Abass, (2011) is manufacturing software system links all the functional activities of an organisation into a single system from marketing and sales, PR, procurement HR, Finance up to production. The activities of the organisation are all interconnected such that information is available to the departments. The major goal of ERP is to increase operating efficiency by improving process and decreasing costs Behesshti (2006)

![ERP in extension](image)

**Figure 2.4: ERP in extension**

**Source: Abbass (2011)**

According to Harrison, (2004) having an ERP system in place by individual organisations helps in the inter connection of printing companies on a common platform. The existing individual organisations’ ERP system can be linked to that of the other companies. This will result in a networked system riding on the already set up ERP systems.
2.4.3 Supply Chain Model (SCM)

The supply chain management system is a model that comes close to an online business platform as it has all the characteristics of an integrated business network between the end customers and all the suppliers in the value chain. Its only weakness compared to the proposed online business network platform is that information sharing, collaboration, synergies, and data exchange happen between one company and its suppliers and customers. Whereas the researcher is proposing linking all the companies in the printing industry on a single platform whilst maintaining their autonomy. Lambert et al. (1997) views SCM as an integration of business activities of an organisation with its upstream and downstream stakeholders.
2.5 AREAS OF CONDUCTING RESEARCH

E-commerce is still evolving. It has moved from computers to mobile phones apps; this form of e-commerce is referred as mobile commerce (m-commerce). Another form of e-commerce, f-commerce, is also developing via Facebook, a social networking application. A business continues to find solutions to resolve the issues brought by e-commerce. In the printing industry particularly in Zimbabwe, online business network is an emerging topic which still requires more research. All other models of online business such as the CRM, SCM and the ERP (which is also relatively new in Zimbabwe) are being implemented by various organisation in both formal and informal sector.

However the printing industry has not yet fully adopted the online business network in order to enjoy its benefits, that are being enjoyed by other industries and sectors, benefits like ease of doing business, efficiency and the ability to reap value added services that the banking, telecoms, radio and TV broadcasting and many other sectors are enjoying. This study therefore sought to investigate the benefits that are associated by the adoption of online business network platform. Researches were done in the developed countries where resources were available and there is excellent internet connectivity. It is necessary to do a research on the adaptability of online business in low resourced nations like Zimbabwe.

2.6 DISCUSSION OF KEY VARIABLES

2.6.1 INDEPENDENT VARIABLE ADOPTION OF PRINTING ONLINE BUSINESS NETWORK

Business networking techniques help any organisations to build stronger connections, associations and relationships Alam, Ali and Jani, (2011). Understanding what is business networking, and how it differs from online social networking, is important in business. Professional networking is a learned skill; there are differences between face-to-face networking (often a challenge to get your message across in short introductions), business networking, and social networking (which is primarily online). From peer networks to strategic alliances, effective networks will help an organisation build its business scope.
The use of internet based business networking offers benefits, yet not all businesses take advantage of it. The research that explored what drives some businesses to adopt online business network was fragmented and limited in scope. Some studies on this topic were exploratory and focused on the type of usage and the barriers hindering adoption of internet marketing; as well as e-commerce, e-business, and social networks Alam, Ali, and Jani, (2011).

According to Sastre (2013) the buying and selling activities of printing and packaging companies were argued to be greatly supported by online business to business communications. Abou-Shouk (2011) indicates that whilst e-commerce is becoming like the way of doing business in the printing and packaging supply chain in developing countries.

In a study carried out in Croatia, Petria (2012) realised that converged online and offline products are a growth area and is developing and evolving alongside online technology. Petria (2012) pointed out that the printing companies in Croatia were developing new products that put interactive elements into printed products.

Smart phones are changing how people access the internet and go online and there is an opportunity of taking print products and putting QR codes to link to online content to be able to reach customers easily. QR codes are a great way of putting interactivity into print products and the Croatian market has now embraced the changes. This is a positive move for digital printing industry.

Fageth (2012) stated that marketing newsletters and brochures will have to incorporate both online and print element. Online printing help organisation to reach the right people. The industry will have to concentrate on innovation and develop compelling and affordable solutions to convergence.

2.6.2 DIMENSIONS: BENEFITS OF ONLINE BUSINESS NETWORKING

According to Page (2015) Active networking is vital to career growth. Networking is actually about building long-term relationships and a good reputation over time. It involves meeting and getting to know people who you can assist, and who can potentially help in return. Business networking serves many purposes: sales, general marketing, recruiting, job-hunting, knowledge exchange, and business development (strategic alliances, joint ventures, channel sales, etc.). Of
these, business development is the one that it supports best, as business development and business networking are closely related. Zhou (2012) argued that developing strategic relationships via networking events has been the traditional means of making new business contacts. This section of the literature review focuses on the various benefits of online business networking like ease of doing business, cost savings on travelling, online documentation of information, faster transaction completion, cheaper advertising and information exchange.

2.6.2.1 Increased work efficiency

Kanyaru and Kyalo (2015) found that increasing work efficiency is the key to smooth and productive business operations. Improved work efficiency is even more important for the printing industry that needs to maximize their gains from available resources. To reach this goal, the printing industry must implement a seamless workflow with integrated digital technologies that enhance productivity. Spence (2010) pointed out that travelling to and from an event can take up time that could be used for working. In terms of speed, it is possible to respond fairly quickly to a question online, because there will be at resources at hand.

Smith (2014) argued that printing is an indispensable aspect of business operations and it is one area that can be vastly improved with effective digital technology solutions. By incorporating automated printing solutions with synergistic processes, printing companies can manage, print and share documents with greater efficiency and agility. These printing solutions must be easy to deploy and easy to manage while also being cost-efficient.

2.6.2.2 Information sharing

Information sharing helps individuals and teams to share and expand knowledge, experiences, and different people see the same things from a different perspective without the need to go into a formal learning set up and thus how industry “best practices” are developed. Page (2015) argues that networking is a great opportunity to exchange best practice knowledge, learn about the business techniques of your peers and stay abreast of the latest industry developments. A wide network of informed, interconnected contacts means broader access to new and valuable information. Baker (2015) pointed out that Networking in business is a way to find out what others think before investing time and money on promotions that are not profitable. A study of
275 firms participating in SDN between 2004 and 2008 showed firms using the online network business had significantly higher productivity. Valuable knowledge gained from investments in SAP by user firms was transferred to others through the online forum, helping the diffusion of best practices related to the platform. Preliminary estimates suggest a 1% increase in such inward knowledge spillovers will increase production output by many thousands of dollars. While knowledge spillovers benefit software users, they present challenges for producers.

Levenson (2006) argued that print advertising directs customers to go online to access more detailed information. However, the reverse is also true that online advertisements direct people to hardcopy print. In many cases, the two media, online and print, are moving to be complimentary as opposed to being competitive. For example, it is more cost effective and convenient for businesses to update information on web sites rather than waiting for printed materials to be reprinted. Web sites then drive viewers to request information that is often delivered in print because it is becoming increasingly apparent that the response rate to print, when done properly, is greater than the response rate to online advertising.

2.6.2.3 Low cost Marketing.

According to Zhou (2012) business networking is effective in reducing costs. In a case study of Zinio carried out Levenson (2007), many of the world’s largest publishers have turned to Zinio’s technology to publish their digitally formatted magazines and textbooks. The result is lower distribution and production costs, as well as expansion of customer bases. Zinio has enlisted some 70 plus publishers with thousands of publications to choose from. All four case studies provided on Zinio’s Web site – Business Week, VNU, Pocket PC, and International Investor – address the issue of advertisers and cost efficiency. VNU notes that they have reached a niche market with little to no effort on their part, except by putting their trust in Zinio’s expertise. They also note that advertisers are delighted over reaching new markets through more cost efficient methods. Large advertisers like IBM Corp, Sun Microsystems and Cisco Systems were enticed to “bolt” new products onto the electronic copies through a variety of rich media techniques. The growth in circulation, the ability to reach audiences in new ways, including video ads and upcoming plans to sell digital-only split runs – all this has helped VNU grow overall ad revenue. Rate increases reflecting this new, broader reach are also on the horizon Skinner(2006).
2.6.2.4 Promotion

Having a large network may assist business career forward, promoting a new product launch, or driving new members to the organization. “Word of mouth” is still one of the best forms of advertising. Spreading good information about the organisation may provide leads for career advancement or organization growth. Skinner (2006) concluded that there are a few reasons that contribute to online printing business network. These is a desire to reach new markets through advertising which is an important decision to take into account when taking printing online. If a magazine has a high number of advertising pages, the push for online advertising is much greater and more valuable to the publisher. Advertisers pay large sums of money for space in the printed magazine. With the ability to repurpose an advertising campaign to reach a larger market, advertisers are more willing to support publishers with a desire to venture into online publishing.

According to Skinner (2006), in a Comscore Survey, an increasing number of marketers are leveraging print’s high credibility by using custom publications to get their messages out and absorbed. More than 32 billion custom publications circulate annually in the United States, according to the 2006 Annual Report of Custom Publishing Review. Total expenditures on the medium amounted to $29.9 billion for the year. The researchers also found that 66 percent of people surveyed read custom publications and that 80 percent agree that custom publications contain useful information. Online printing is a useful tool for promotion. Moreover, Robinson and Ernst (2006) established that print products such as catalogs, brochures, and direct mail still continue to boost return on investment. However, personalization is key for results in a marketing campaign, and digital print allows for this. Though email and the Internet are increasingly perceived as an inexpensive way to market, they have proven to be the least effective for marketing because of their low response rate. On its own, the Internet lacks in the characteristics that make print media more effective. However, the Internet provides a marketing advantage when used to support or supplement print advertising. Integrating print and non-print forms of media in any marketing approach is the most cost effective and memorable way to gain and influence the purchasing decisions of customers. Thus online printing becomes an effective tool for marketing.

2.6.2.5 Credibility
According to Suryani, and Subagyo (2011), improving business reputation and finding support are also benefits of networking. Successful networking, leads to reputation hence a good reputation leads to support. The business may have valuable information, ideas, and resources that those in the network may need. Establishing a desire to assist colleagues increases the businesses credibility. Page (2015) noted that being visible and getting noticed is a benefit of networking that’s essential in career building. Today not being on the net is frowned down upon and organisations without websites and some form of online presence are regarded laggards, as being backward, unprofessional and are even treated with suspicion.

It is important to note that even despite the creation of fake websites and imitation social Facebook or tweeter accounts that has not really had serious implications to these business. For example locally Star FM radio station has been able to leverage on ICT to create mutually beneficial relationships for their business partners by taking the radio to the people using subtle advertising programs that are driven by technology. Recently their star attraction KVG and Phatisani were able to broadcast the 3 to 6 session live from England, all due to the beauty of technology. During live streaming of programs listeners are able to interact with the presenters using various online platforms like WhatsApp, Facebook, Instagram and Tweeter in real time.

2.6.2.6 Real time access to local, regional and global customers.

![Cloud computing diagram]

Figure 2.6: Real time access  
Source: [www.shutterstock.com](http://www.shutterstock.com) (Accessed 24/04/2016)
According to OECD (2013), e-commerce has brought a number of advantages globally of which one of the advantages is real time access to local, regional and global customers is perhaps the biggest advantage of doing business online. The website is not only available 24 hours per day, but also available to everyone 365 days a year. When doing business online, there are no time restraints. A website never closes, and online communication and interaction is ever available. Selling online allows business to reach a wider audience. Any person with an internet connection can access to available website from anywhere anytime.

2.6.3 INTERMEDIATE DIMENSIONS: CHALLENGES ON IMPLEMENTATION OF ONLINE BUSINESS NETWORK PLATFORM TO PRINTING

As regards the adoption of online business network, Stockdale and Standing (2004) identified four variables that are regarded as the main barriers of doing online such as:-

- cost and resources
- top management support
- knowledge and expertise
- Government support.

2.6.3.1 Costs and resources

Costs of implementing on-line business in the printing industry can be high. Further evidence of these barriers is provided by Kanyaru and Kylo (2015) in a study of ecommerce business in Kenya that the barriers include high technology implementation costs because, businesses will normally need to pay out a lot of money to have their websites professionally designed and developed. The cost include connection costs, software and hardware set up and maintenance, implementation costs may also include conducting search costs, cost of writing contracts and paying staff to update and maintain electronic database. In addition contractual, transmission and coordination costs are also incurred. Technology and infrastructure costs are also required to implement compatible systems to receive messages from other trading partners. McGuire, and Dowling, (2013). Organisations need to first develop the necessary IT infrastructure applications, acquire the technical implementation expertise and invest in training. They must also acquire e-
commerce translation and mapping software and contract with a communication medium or company. Thus high costs may create initial barriers to e-commerce participation.

2.6.3.2 Knowledge skills and expertise.

MacGregor (2011) posit that knowledge, skills levels of employees required to run the online business and to manage the website, keeping it running and maintaining it. One of the barriers to online adoption is related to limited lack of technical knowledge, expertise and resources hinder IT – use and e-commerce participation. There is a need for IT training on every adoption of a new information systems. The IT staff needs to establish themselves as vital department within organizations. Henceforth, the need for IS personnel to have knowledge in organizational and managerial issues. The ICT staff needs to know how to integrate on-line system in all departments of the organisation.

2.6.3.3 Lack of management Support

Chitura et al (2008) in their banking sector study found that with poor and lack of management support and commitment, implementing e-commerce even with critical activities becomes a challenge. If management is unwilling to provide adequate financial resources, poor business practices might follow. For example without full support, an organisation might neglect the need for a paper audit trail that would ensure the reliability of electronic certification and business continuity. Successful e-commerce adoption requires top-level commitment, as many potential adopter are ignorant about the potential and use of e-commerce technologies and their potential benefits and risks.

2.6.3.4 Lack of standards and policies

According to Akindele (2011) the environment that lack standards and best known practices which in-turn lead to potential compromises in network controls, maintenance, data ownership, internal and external security, and permissions is not conducive for online business. In a survey of ITAA- information Technology American Association (2010) found that barriers to online business adoption include the budget constraints, and public policy regulations. Most organisations do not even have a complete security policy in place. Lack of consistent government policies, laws and practices may impact participation in online network. Chaudhry
(2007) postulates that legal issues are a barrier to online business networking usage, since this industry is highly regulated due to its technological aspects. Other barriers have to do with issues of security, slow transaction speed and the fear to try an unproven technology, which are overcome with the passage of time.

2.7 LITERATURE SYNTHESIS CONCEPTUAL FRAMEWORK

The conceptual framework assists in the development and implementation of an online business network platform for the printing industry and the associated benefits. The researcher having identified that there is a gap in terms of research being carried out in the use of online platforms specifically to the printing industry in Zimbabwe came up with a conceptual framework in figure 2.8.

The conceptual framework seeks to consider the feasibility of the development and implementation of an online business network platform for printing companies and the associated benefits. The framework explores the relationship between the adoption and implementation of an online business network platform and the associated benefits and challenges thereof. In the literature, the potential of online business networking, its costs, benefits and the development of a worthy network are reviewed. The conceptual framework therefore indicates that adoption of online printing network offers a number of benefits to the printing industry. However there are some intermediate variables that may hinder the adoption of online business network. This study was alive to potential barriers to adoption of online business network which are costs, knowledge and skills, top management support and government policies. The research therefore proposes that the development and implementation of an online business network platform for printing companies has benefits to the organisations and the sector as a whole.
Figure 2.7: Conceptual Framework

Source: Own Construction
2.8 CHAPTER SUMMARY

The review of literature has indicated that adoption of online business network presents a number of benefits to the printing industry. Although there are many other benefits this study could not exhaust them, but has looked at lower costs of marketing, Increased work efficiency, credibility, real time access to local, regional and international customers via internet, Promotion of information sharing. It has been shown that online business networks are not without their challenges as they can be hindered by cost of resources, lack of management support, lack of standards and policies and lack of knowledge and skills. The literature has shown that in most cases online business network uptake by the printing industry in the developing world is low due to resource unavailability.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

Figure 3.1: Image of Directions for the Chapter

Source: http://upload.wikimedia.jpeg

3.1 INTRODUCTION

This chapter describes and outlines how data for the research was collected practically in the field and how the study was conducted to investigate the adoption and implementation of an online business network platform for the printing industry and the associated benefits. This chapter gives an insight into the problem. The major areas covered include research design,
population, sampling, data sources and methods of data collection, analysis and presentation. The researcher sought to figure out ways of gaining information to respond to the research objectives.

3.2 RESEARCH RECAP

The main objective of the research was to investigate the benefits of adopting and implementation of an online business network platform for the printing industry in Zimbabwe. This was accomplished through qualitative research approach. The sub-objectives that were investigated are; how online business network platform for the printing industry can be adopted or developed; to explain the benefits of online business network platform to the printing industry, to find out the challenges of implementation of online business network platform for the printing industry; to recommend a business network platform model for the printing industry in Zimbabwe and to find out if stakeholders in the sector (corporates and individuals) will embrace the adoption of an automated online business network hub. The objectives are in line with the main research question which is about detailing the benefits of online business network platform for the printing companies in Zimbabwe. Since the research was qualitative the proposition of the study was that the development and implementation of an online business network platform for the printing industry has benefits to the organisations and the sector as a whole.

3.3 RESEARCH DESIGN

A research design encompasses research philosophy, research approach and research strategy and all determine the choice of the data collection method to be used by the researcher. Furthermore a research design can be defined as the purpose, in which there is an association of the research questions and how to answer the research questions through the methodology adopted and the justification of that methodology to have the data reliable or not reliable in answering the research questions to be validated.

This research was designed to collect information from organisations and stakeholders in the printing and packaging industry. The business dictionary (2014) defines a research design as a detailed outline of how an investigation will take place. A research design will typically include how data is to be collected, what instruments will be employed, how the instruments will be used and the intended means for analyzing data collected.
Research design therefore constitutes the blueprint for the collection, measurement and analysis of data, Cooper and Schindler, (2001). In this research organisations and stakeholders in the printing and packaging industry in Harare were the population of the study and only those based in Harare. Participants of this research were mainly top management, owners of the printing industry and other key stakeholders.

The researcher adopted a qualitative research design format data collection tool as an interview guide for in-depth interviews as a data collection tool. The researcher used a non-probabilistic sampling technique, that is, judgmental sampling to select respondents. Fifteen printing related companies were selected to participate in the study with a selection of one respondent per firm or organization to make fifteen respondents. The researcher conducted a detailed content analysis in terms of the views and the experiences of the respondents. The analysis was done through analyzing the responses from the in-depth interviews.

Research design is divided into three distinct categories which are exploratory, descriptive and causal. Of the designs each one of them has a differing ideology and purpose. The research plan of this study was to find out the feasibility of adopting and implementation of an online business network platform for the printing industry and the associated benefits from it. Below the design is explained in more detail.
Exploratory Research

Exploratory research is an important part of any marketing or business strategy. Its focus is on the discovery of ideas and insights as opposed to collecting statistically accurate data, Cooper and Schindler (2001). This is the reason why exploratory research was adopted to this study to investigate the adoption/development and implementation of an online business network platform for the printing industry and the associated benefits. This type of research design was best suited for planning in this study at the beginning in determining the sample size and judgemental sampling. Also the researcher used this type of research design, because it is commonly used for further defining company issues, areas for potential growth, alternative courses of action, and prioritizing areas that require statistical research. Interviews were undertaken through this research design as they use open ended interview questions to have an in-depth understanding of the phenomenon under study. The research also used this method,
because it leads to the answering of the research questions which are: how can an online business network platform for the printing industry be implemented or developed successfully; what are the benefits to the printing industry for adopting an online business network; what are the challenges of implementing an online business network platform to the printing industry; what is the best business network platform for the printing companies in Zimbabwe and are stakeholders (corporates, government and individuals) of printed products ready to utilize a highly automated network platform?

**Research Philosophy**

The debate based on ontology is that ontological realism assumes that the world is external to the researcher and exists independently of the individual’s appreciation of it, Saunders et al (2010). This was the guiding principle of the philosophy that the researcher adopted. The researcher’s philosophy determines or guides the researcher on the research process to choose from, there are four main ontological approaches which are realism; empiricism, positivism and nominalism. Furthermore according to Saunders et al (2010), there are two types of research philosophies

**Phenomenology**

The phenomenological approach used in this research because it makes use of personal experience on the adoption/development and implementation of an online business network platform for the printing industry and the associated benefit, Holstein and Gubrium (1995). Hence the researcher undertook fifteen in depth interviews with stakeholders representing management and small commercial printers business owners.

This was applicable to the study because the researcher intended to hear views of respondents on the printing industry and why local graduates have been shouldered with the brunt of the blame for failing to raise awareness on the opportunities and capabilities that exist for individuals and businesses that use the internet, either for marketing, carrying out their services or e-commerce. The phenomenology approach has an advantage as it is more subjective and frequently uses interviews, focus groups, or single case designs Holstein and Gubrium (1995).
3.4 DATA COLLECTION

Figure 3.3: Image of data collection file

Source: www.vanysocialstudies.weekly.com

Data collection is very key under qualitative analysis since detailed information is supposed to be solicited from the respondents. Data for this study was collected using interview guides. These guides were used on key informants who were mainly chief executive officers, managing directors and other senior managers for the participating organisations.

3.4.1 Secondary Data Collection

According to Oakshott, (2006) secondary data is that data that has already been collected. This data is already in existence having been collected earlier on for another purpose, but can be utilized for other purpose other than the one it has been collected for. This data is easier to collect but it’s one major disadvantage is that the quality of its source is unknown Oakshott (2006) asserts.

3.4.2 Primary Data Collection

Kotler, (2002) identifies primary data as information collected for the specific purpose at hand. Saunders et al (1997) identified three methods of collecting primary data namely, observation, questionnaire, and in depth interviews. The researcher chose the in-depth method using an interview guide format as the primary data collection method with the view that this would be
more accurate and relevant to the research being conducted. The guide has some of the following advantages, to minimize interview bias; to minimize subjective analysis and interpretation; and it allows easier analysis of findings. Questionnaires were not adopted for use in this study but rather interviews were the main source of primary data collection. This research was dependent on primary data as it is the data collected specifically for this purpose to answer the study questions.

3.4 RESEARCH INSTRUMENTS

Kotler, (2002) states that the researcher can choose from two main research instrument: the questionnaire and mechanical devices. The former being commonly used because of its flexibility and this researcher chose interviews to get qualitative data from the research subjects as the research instrument. In this study an interview guide was structured for the interviewer to follow when interviewing the interviewees. Interviews were undertaken with the guide and the research questions were answered through the data collected from the interviews conducted by the researcher. Interviews gave the researcher the chance to clarify points to the interviewee and vice versa. Two way communications was available and constant feedback was made possible. More information was collected and respondents were cooperative as they choose the place they are free and the time that the interviews were undertaken. Confidentiality was a priority in the process of conducting the interviews.

Saunders, Lewis, and Thornhill, (2010) argued that in some cases, qualitative research may be conducted through interviews, such as listening to someone recount something that happened in the past, such as a wartime experience or other event. Schiffman and Kanuk, (2000) argue that when qualitative research takes the form of an interview, the interviewer asks open-ended questions and simply records what the participant says. Personal bias can be an issue, but other issues arise as well. For instance, the researcher may react to the subject’s responses, encouraging or discouraging the dialogue in a certain direction. Moreover, the researcher has to be careful that they do not ask leading questions. In depth interviews were carried out by the researcher using an interview guide attached as Appendix 1. The interview guide had semi structured questions. This was self-administered to the selected fifteen company owners and top management that had been purposively chosen using judgemental selection method. The
researcher avoided questions that are ambiguous, confusing, leading in nature but used those ones that gave room for further probing. Most of the interviews were held at the respondent’s offices with the exception of three respondents who requested that the interviews be conducted at the researcher’s office to avoid disruptions.

3.5.1 Interviews

It has been proven that personal interviews maximize the chance of getting the respondent’s full cooperation Brewer (2002). The challenge is for the interview to cultivate a neutral attitude towards the subject and his/her own feelings, opinions and judgments to oneself. The advantages which the researcher got from using interviews as a way of collecting data was the ability to capture the non-verbal communication of the respondents Fraenkel and Wallen (1996). This was therefore the appropriate instrument for this type of research. The Table below shows the advantages and disadvantages of the different approaches in interviews.

Table 3.1: Advantages and Disadvantages of the different approaches

<table>
<thead>
<tr>
<th></th>
<th>Personal interviews</th>
<th>Telephone interviews</th>
<th>Self-administered surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td>Interviewer can answer questions about, probe for answers and use follow-up questions</td>
<td>Expanded geographical coverage without remarkable increase in costs</td>
<td>Relatively cheaper</td>
</tr>
<tr>
<td></td>
<td>Non-verbal response can be observed</td>
<td>Reduced interview bias</td>
<td>Perceived as more anonymous</td>
</tr>
<tr>
<td></td>
<td>Response rate is high and immediate.</td>
<td>Fastest completion time</td>
<td>No interviewer bias</td>
</tr>
<tr>
<td></td>
<td>Illiterate and functionally illiterate respondents can be reached</td>
<td>Gives room for probing</td>
<td>Allows respondents to think about questions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Response rate is immediate</td>
<td>Allows contact with otherwise inaccessible respondents</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Expanded geographical coverage</td>
</tr>
</tbody>
</table>
### Disadvantages

- High costs of travelling
- Time consuming
- Follow-up is labor intensive
- Some respondents are unwilling to talk to strangers
- Bias from interviewer to interviewee.

- Response rate is lower than personal interview
- Can be prematurely ended
- Non-verbal responses cannot be observed
- No control as who responds
- Unavailability of phone numbers.
- Some target groups are not available by phone
- Responses may be less complete

- Response rate can be low and responses not immediate
- No control on who actually responds
- Cannot be long or complex
- Skewed responses may result.

---

**Source:** Cooper and Schindler (1998:304)

### 3.5.2 Pilot testing

Saunders, Lewis and Thornhill (2010), state that the purpose of a pilot test is to refine the questionnaire, so that respondents will have no difficulties in answering the questions. The interview guide was piloted with three printing company leaders. The pilot testing helped to iron out some gray areas before the actual interviews were conducted.

### 3.6 POPULATION AND SAMPLING TECHNIQUES

#### 3.6.1 Population

According to Fraenkel and Wallen (1996) the population are those elements that the researcher is interested in and then go on to make statistical interferences on. The target population for this study was the top management, business owners and stakeholders of the printing industry.

The researcher split the target population as shown in table 3.1 below.
Table 3.2: Target population

<table>
<thead>
<tr>
<th>RESPONDENTS</th>
<th>SIZE OF TARGET POPULATION</th>
<th>PARTICIPANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Owners</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Top Management</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>ICT Experts</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>20</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

This is the actual population which the researcher wishes to generalize the research findings.

3.6.2 Sample size

Qualitative research design can be thought of as a rough sketch to be filled in by the researcher as the study proceeds Frankel and Devers (2000). After a preliminary interview guide has been formulated and resources identified and secured, the design can be likened to an abstract drawing. It has taken shape without particular individuals, groups, organizations, or sites that is the social and physical settings where respondents are located in mind, in this study it was only Harare the scope of the study as it is the capital city of Zimbabwe. The selection criteria looked at subjects that were capable of answering the research questions since the printing industry is a technical field that requires acquired knowledge and experience not trivial gut feelings.
Candidates for the in-depth interviews identified as highlighted in the table below.

Table 3.3: Sampled population

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>POSITION IN ORGANISATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>ICT Infrastructure Manager</td>
</tr>
<tr>
<td>B</td>
<td>Print Production Coordinator</td>
</tr>
<tr>
<td>C</td>
<td>Business Development Manager</td>
</tr>
<tr>
<td>D</td>
<td>Apprenticeship Trainer and Examiner (Printing)</td>
</tr>
<tr>
<td>E</td>
<td>Technical College –Head of Department  Printing</td>
</tr>
<tr>
<td>F</td>
<td>Artesian – Technical Head</td>
</tr>
<tr>
<td>G</td>
<td>Managing Director</td>
</tr>
<tr>
<td>H</td>
<td>Business Owner</td>
</tr>
<tr>
<td>I</td>
<td>Ministry of Manpower Representative</td>
</tr>
<tr>
<td>J</td>
<td>Marketing Executive</td>
</tr>
<tr>
<td>K</td>
<td>Manager Managing director</td>
</tr>
</tbody>
</table>
The table above gives a summary of the respondents with pseudo names in the form of letters of the alphabet A to T in order to conceal their identities and the organisations were representing. These were the respondents that were targeted to take part in the interviews. An interview with a key informant of the government was to be undertaken with a representative from Ministry of ICT, but unfortunately it failed to materialize.

The respondents were chosen by considering their ability to provide required information for the research. According to Henry (2006) and Ghoshi (2002), in judgmental sampling sample elements are chosen to enable the researcher to answer his or her research questions and satisfy
his or her objectives. Respondents’ judgment is used to get good sources for accurate information Schiffman and Kanuk (2000).

3.6.3 Sampling methods

Given the goals and logic of qualitative research, judgmental sampling is often employed. Judgmental sampling strategies are designed to enhance understandings of selected individuals experience’s or for developing theories and concepts. The researcher sought to accomplish this goal by selecting information rich respondents who are printing firm owners and top management of printing companies that provided the greatest insight into the research question. Miles and Huberman (2004). Judgmental sampling was adopted for this research as it is considered to result in the greatest spinoffs.

Sampling techniques are methods by which the researcher can derive a sample from a population (Wegner 1995). On the other hand Henry (2000) defines sampling as a process of selecting representative subset from a population to determine the characteristics of the random variable under investigation. Sampling is classified into two basic methods: non probabilistic or probabilistic Barnett (2010). Moreover prior studies by Ferber (1974) define a sample as a small part of anything designed to show the style, quality, and nature of the whole. A sample approximates the measurement of the whole population well enough, within acceptable limits.

The researcher adopted a non-probabilistic sampling technique. In selecting respondents of this study, the researcher adopted a multiple sampling technique. The target population was first grouped according to all the stakeholders and then according to staff category, management and regulatory authorities. Finally the researcher used judgmental sampling ways to determine who to interview with interviewees such as managers, business owners and key stakeholders.

In choosing the business owners and managers for the fifteen participating printing companies the researcher then undertook interviews with each company targeting the top management and business owners. From each company the researcher selected one respondent. This implies that the researcher adopted a stratified sampling technique in putting the population into groups or strata who are managers, senior staff and business owners. From the strata the researcher then
went on to select the interview a single participant in each company by using judgmental means. Factors like knowledge of the printing industry, department and experience were considered in applying this technique. The researcher chose the respondents judgmentally as shown in the table above.

The reasons why the researcher sampled the study population were because a sample is easier to administer than the whole population and the cost of administering the whole population may be too high. Also the researcher sampled the population because adequate conclusions can still be derived from a sample rather than the whole population.

3.7 CONDUCTING INTERVIEWS

Figure 3.4: Conducting interviews Picture

Source: www.vansocialstudies.weekly.com

Structured interviews were adopted because the researcher took advantage of the wide range of responses that can be obtained. The interview was structured and also considered due to its versatility, simplicity, open endedness and the ability to probe for more information. The researcher explained to the respondents the reasons for the interviews. The researcher made use of an interview guide to guide the interview process. Recordings of interviews were also done and the data transcribed for analysis. Discretion and confidentiality were upheld by the
researcher and information gathered for the research questions which ought to be answered through the data collection method.

3.8 DATA PROCESSING AND ANALYSIS

Qualitative data analysis searches to describe general statements about relationships and themes present on the data. Wolcott (2004) states the term analysis is a generic term that embraces the three basis categories when analyzing data, description, analysis and interpretation. He suggests these categories are not exclusive; neither visibly separated by a line, yet identifying and distinguishing each one may be useful to organize and present the data. In qualitative data, especially content analysis, the data collection and gathering is simultaneously receiving some kind of interpretation. The reading of the data to follow the criteria to inclusion on the database, leads to initial interpretation and understanding of the concepts, and it depends on the researcher, the analysis can begin while collecting data Marshall and Rossman (2006). Reflecting over the conceptual framework, and questioning the data, the ideas emerge on categories through the engagement with the texts. Categories of inclusive patterns and meaning, yet exclusives, are generated according to the existing framework. In a related strategy, themes are discovered within the data, and the researcher creates deductive constructed-analysis Marshall and Rossman (2006).

This study analyzed the data from interviews and secondary sources by first coding process through initial coding of the interview responses. This type of coding was chosen by the researcher to examine, compare and search for similarities and differences throughout the data, and as Charmaz (2006) contextualizes that it remains open to all possible theoretical directions indicated by your readings of the data.

The second level coding chosen, was pattern coding of the interviewee responses. Pattern coding gave to this study the basis to explain major themes underneath the segments of the data which was the adoption/development and implementation of an online business network platform for printing companies. The researcher explored the patterns in online marketing and printing relationships, the search for causes and explanations to the possible phenomenon and finally, the platform to construct frameworks and processes for benefits to online operations for the printing industry.
3.9 RESEARCH LIMITATION

The challenges encountered during this research included time constraints in setting up interview dates, rescheduling, and participating. The research was hampered by the costs of travelling, which ultimately limited the size of the sample size for the research. The lack of enough time forced the researcher to limit interviews as method of data collection as it is cheaper though it takes time to get the response.

3.10 VALIDITY AND RELIABILITY

Easterby-Smith et al (1997) advice that every researcher should be prepared to interrogate questions of reliability, validity, generalizability and that these can be approached from either a positivist viewpoint or a phenomenological viewpoint. Cooper and Schindler (2001), whose approach tends to be totally devoted to quantitative research, also mentioned the necessity of evaluation criteria. Reliability according to Easterby-Smith et al (2001) is about determining whether the measure yields the same results on different occasions and when conducted by different researchers. External validity is concerned about whether the research findings may be equally applicable to other research settings.

In order to ensure that the data that the researcher collected is valid and reliable data, the sampling technique ensured representation of companies and organizations in the target industry. From the targeted companies the researcher also ensured that most informative respondents were chosen such that the data collected was reliable enough for this study and was a true reflection of the industry in general.

3.11 ETHICAL CONSIDERATIONS
Adler and Clark (2003) refer to ethical principles in research as ‘the set of values, standards, and principles used to determine appropriate and acceptable conduct at all stages of the research process. When conducting research on human participants it is important to be concerned with issues of respect, justice and fairness and beneficence Loue cited in Fontes(2004).

In this research the researcher adhered to the following ethical considerations as outlined by Maldonado (2009). Participants were advised of the voluntary nature of their participation and that they can withdraw from the study at any time without penalty. They were advised that at any time during the process they could decline to answer any question they were not comfortable to answer. The research objectives were also clearly delineated and articulated to the participants during interviews of key informants. The participants were informed of all data collection methods and activities. Written transcriptions and interpretations of the data were made available to the participants interested in them. The participant’s rights, interests and wishes were considered first when choices are made regarding reporting the data. The final decision regarding participants’ privacy rested with the participant.

3.12 CHAPTER SUMMARY

Chapter three explored the methodology of the research, articulated the research design, population of the research and sampling techniques. Details of advantages and disadvantages of methods employed in research were dealt with in this chapter. The researcher adopted the qualitative technique in collecting and analyzing the data as it had more advantages of verifiability over the quantitative method. A sample was used instead of population given the constraints attributable to the use of the population. Presentation and discussion of the findings is undertaken in the next chapter. This methodology sought to define the research proposition which was that; the development and implementation of an online business network platform for printing companies has benefits to the organisations and the sector as a whole.
CHAPTER FOUR

4.0 FRAMING AND ANALYSIS OF DATA

Figure 4.1: Internet Network Image
Source: www.softcodeinfotech.com

4.1 INTRODUCTION

This chapter analyses the research findings based on the interviews that were undertaken as the data collection instrument. Fifteen interviewees took part in the research. The chapter broke down and arranged the data into meaningful groups and searched for patterns of relationships among these data groups. Through interviews, responses were qualitatively analyzed in terms of
their applicability to the study for emerging codes, categories and themes to the responses that were given during the interviews. Responses are presented in a tabular form and then summaries of findings are presented. The findings of the research study are then discussed and are linked to the literature review done earlier on in chapter two. The main thrust of the study was to determine the feasibility of adopting and implementing of online business platform for the printing industry in Zimbabwe. As outlined in the methodology interviews with key informants were undertaken, the sample had been purposefully selected. The research proposition is discussed in this chapter. Findings are analyzed through the research objectives and the research questions.

4.2 AN OVERVIEW OF THE RESPONDENTS

The study sampled twenty (A-T) printing related organisations, and from those companies twenty key informants were purposefully chosen by considering their ability to provide required information for the research through being interviewee’s for the study. The table below shows the profiles of the respondents and job titles at their respective organisations. The table also shows the rate of success of the interviews that were conducted.

Table 4.1 shows the response rate of the face-to-face interviews

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>POSITION IN ORGANISATION</th>
<th>PARTICIPATED - YES /NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>ICT Infrastructure Manager</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>Print Production Coordinator</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>Business Development Manager</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>Apprenticeship Examiner</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>Head of Department - Printing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>Artesian – Technical Head</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>Managing Director</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>Business Owner</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>Ministry Representative</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>Marketing Executive</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>Manager Managing director</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>Executive Marketing</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>Operations manager</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>Managing Director</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>Business Owner</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>Head Marketing &amp; Sales</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>Shareholder</td>
</tr>
<tr>
<td>18</td>
<td>V</td>
<td>Sales Manager</td>
</tr>
<tr>
<td>19</td>
<td>R</td>
<td>General Manager</td>
</tr>
<tr>
<td>20</td>
<td>S</td>
<td>Business Owner</td>
</tr>
</tbody>
</table>
Table 4.1 above gives a presentation of the successful interviews that were done with the key informants. The researcher set up appointments with the respondents and structured interviews were conducted using an interview guide. The researcher was the interviewer together with a research assistant to help in data capturing. Confidentiality was maintained and interviewees were given an explanation on the purpose of the study, which was for academic reasons. Fifteen out of the twenty interviews were successfully undertaken giving an interview response rate of 75%. This response rate is considered high enough to guarantee validity of the responses given by the key informants to warrant qualitative analysis of the data collected and satisfy the research objectives.

Responses given by respondents culminated in the deduction of codes, categories and themes that emanated from answers that were being proffered by the respondents. The researcher through the open coding system from themes that came from the thinking patterns of respondents. From this the researcher suggested a possible emerging theory that would help in the creation of online business platform based on factors and variables that emerged from the codes, data categories and themes. This is illustrated in the diagram below.
4.3 DATA FRAMING AND ANALYSIS

4.3.1 Open coding process

<table>
<thead>
<tr>
<th>CODES</th>
<th>CATEGORIES</th>
<th>THEMES</th>
<th>THEORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoid Leaking of information</td>
<td></td>
<td>Online Confidentiality</td>
<td></td>
</tr>
<tr>
<td>Cyber Security</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Concerns - Passwords, Verification and Access codes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection of sites against hackers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peculiar Machines and Equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Niche Market</td>
<td></td>
<td>Company’s Competitive Advantage</td>
<td></td>
</tr>
<tr>
<td>Specialised Printing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unique Company Strengths</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Printers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-house printers and print shops</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size and scale of operation (Internal and Formal Printers)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Print Brokers (Briefcase Companies)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactive and Interface Systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Automation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business App, Website, Platform</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPP, CRM, SCM, Intranets</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.2: Data Framing, Source: Own Construction
4.3.1 Adoption or development of an online business network platform for printing companies

4.3.1.1 Appreciation of online business networks

The research sought to establish qualitatively how the major players in the printing industry of Zimbabwe appreciate online business networks. The results from the interviews that were undertaken by the researcher are presented in the table below. Each key informant response given verbatim being matched to the organization they were representing. Details of all the responses are tabulated below.

Table 4.2: Appreciation of online business networks

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>RESPONSE SUMMARY</th>
<th>CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>• Business enquiries</td>
<td>• Online Communication</td>
</tr>
<tr>
<td></td>
<td>• Quotations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Advertising</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Information sharing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• (All the above are possible online)</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>• Printing is diverse and a specialized industry</td>
<td>• Business Structure</td>
</tr>
<tr>
<td>C</td>
<td>• Confidentiality/secretcy can cause problems in establishing the business network platform</td>
<td>• Confidentiality (Online)</td>
</tr>
<tr>
<td></td>
<td>• Database management to be undertaken on the platform</td>
<td>• Online Communication</td>
</tr>
<tr>
<td>D</td>
<td>• Business engagement is spread much more wider with a variety of players</td>
<td>• Business Structure</td>
</tr>
<tr>
<td>E</td>
<td>• Already in process also is 3D, standardization process with a platform WAN, ISO2647 standard of printing</td>
<td>• Online Communication</td>
</tr>
<tr>
<td>F</td>
<td>Environmental regulation on the emissions to the environment and software that calculates carbon emission, customers given certificate online to match levels of emission.</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Stated as a first of its kind if implemented in the country but dedicated platform would be a noble idea</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Communication platform for trainees and experienced staff to interact</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Save costs and time in the production process</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Embracing technology results in innovation</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Online Communication</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Company’s Competitive Advantage</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>Add value to current operations through integrated networks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skills development on ICT related framework</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advertising platform reduces annual marketing budgets</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>Online Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Company’s Competitive Advantage</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>It adds value to customer needs and satisfaction through interaction with a variety of businesses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Costs obvious are incurred by the customer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Good for business growth</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Online Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Company’s Competitive Advantage</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>Internet access make doing business easy</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>Online Communication</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>Resource effectiveness and efficiency in manufacturing</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>Company’s Competitive Advantage</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>There is need to define products/services that can be done online, if execution of the product is to fit in this platform</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>Online Communication</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>Local players are lacking on internet use compared to foreign companies</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>Online Communication</td>
<td></td>
</tr>
</tbody>
</table>
### Activities to be done online

<table>
<thead>
<tr>
<th>O</th>
<th>Activities to be done online include (1) Print Designs (2) Moving these designs to advertising and origination agencies (3) proof reading (4) Quotations, Invoices and Delivery Notes.</th>
<th>Online Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>I would say our organization is partially using online communication</td>
<td>Online Communication</td>
</tr>
</tbody>
</table>
| T | • Movement of designs and adverts to origination houses.  
   • Proof reading and Editing online instead of hard copies  
   • Communication with instant feedback | • Online Communication  
   • |

### Summary of the findings

The findings on the appreciation of online business revealed that, most of the respondents had an appreciation of business online networks. However some respondents argued that the platform is technically already in existence through internet communication via emails and browsing of website pages. As highlighted in the table above a key Respondent E indicated that online business networks are almost similar to supply chain management systems. In addition the respondent said that he had witnessed a typical online platforms when he visited Germany where they use 3D additive online manufacturing technology and standardization process via ISO2647 standard of printing. The technology is able to monitor and control emissions from printing machines online. Another interviewee J said their appreciation of online business networks is that they are already using the internet as a tool to enhance business efficiency.

O and K interviewees argued that they were aware of online business networks but not necessarily for the printing industry alone. A representative of the Ministry of Manpower Training and Development respondent commended the online business network for ‘printers’ as a first of its kind and a noble idea that embraces technology in the printing industry as a mode of communication aimed to save costs and time.
4.3.1.2 As a business leader what is your opinion on an integrated networked business system (platform thinking)

The opinions of the research interviewee’s on an integrated networked business system are tabulated below.

**Table 4.3: Opinions on an integrated networked business system**

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>RESPONSE SUMMARY</th>
<th>CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Integration of existing business management systems to the platform for instance ERP, CRM, SCM and DMS systems.</td>
<td>Company’s Competitive Advantage</td>
</tr>
<tr>
<td>C</td>
<td>People don’t take printing as an industry including government therefore organized lobbying is necessary for a proper industry structure irrespective of company size or scale of operation.</td>
<td>Business Structure</td>
</tr>
</tbody>
</table>
| E          | Easy advertising  
Sharing of study material relevant to the industry.  
Competitive framework construction | Online Communication |
| F          | Suppliers, engineers and students on the platform helps in solving problems in a faster way.  
Smartness of the system better than always knocking on customers doors | Online Communication |
| G          | Convergence of business leaders to lobby for policies that support operations of players  
Explore the opportunity costs of the proposed platform.  
Control/standardization of final product possible. | Business Structure |

54
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Embracing globalization in commerce</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Increases the speed of operation in the industry</td>
<td>Company’s Competitive Advantage</td>
</tr>
<tr>
<td>J</td>
<td>It makes it easy to advertise and promote the business with 24/7 online presence.</td>
<td>Online Communication</td>
</tr>
<tr>
<td></td>
<td>Ability to connect with business related contacts, payment is obviously made easy even payment of employee salaries and wages. It makes it possible to develop relationships with people we work with or we intend to work with for example currently via “LinkedIn”</td>
<td>Online Communication</td>
</tr>
<tr>
<td>K</td>
<td>Promotes business efficiency</td>
<td>Company’s Competitive Advantage</td>
</tr>
<tr>
<td>O</td>
<td>Any platform that enables the propagation of information in a faster and efficient way is always welcome and would do a lot to enhance the way in which we do business</td>
<td>Company’s Competitive Advantage</td>
</tr>
<tr>
<td>L</td>
<td>Technology improves the way and quality of products are delivered</td>
<td>Company’s Competitive Advantage</td>
</tr>
<tr>
<td>N</td>
<td>Possible to have such a platform by integrating with the existing body of Federation of Master Printers (FMP) and NEC for the printing industry.</td>
<td>Online Communication</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>An integrated platform would be a good idea for linkages.</td>
<td>Online Communication</td>
</tr>
</tbody>
</table>

**Summary of findings**

The responses of the business leaders were quite diverse on an integrated networked business. They centered on ability to do business better through embracing technology, communication and cheaper advertising medium. Respondent G viewed an integrated networked business system as the convergence of business leaders to push for policies that help in the regularization of
operations of printers in the industry. The policies help to explore other printing technologies such as digital printing. C Printers key interviewee respondent saw a networked business system as an opportunity for serious business people to come together. Key informant T opinioned that customers are demanding technologically driven faster and shorter runs thus forcing printers to find ways to increase speed and responsiveness while maintaining profit margins. Key informant E said the platform will result in benefits such as easy advertising, sharing of data and the competitive framework construction. The research also found out qualitatively that respondent F and ministry representative respondent believe that integrated a networked business system gives suppliers, students and engineers an opportunity to link electronically and discuss matters as stakeholders in the industry.

4.3.1.3 Level of uptake of online business in the printing industry

The level of uptake of online business in the printing industry is considered low although most of the respondents argued that it is a good concept. Detailed responses are presented overleaf.

Table 4.4: Level of uptake of online business in the printing industry

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>RESPONSE SUMMARY</th>
<th>CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Low uptake due to lack of knowledge of benefits to be accrued and some organization are too small for such systems.</td>
<td>Business Structure</td>
</tr>
<tr>
<td>C</td>
<td>More awareness is needed on this new thing</td>
<td>-</td>
</tr>
<tr>
<td>D</td>
<td>It’s the future of transactions for printers, in terms of communication with clients</td>
<td>Online Communication</td>
</tr>
<tr>
<td>E</td>
<td>Sector populated with many small monopolistic players who lack professionalism and focus, who do not follow standard operating procedures. On the other extreme there are few oligopolistic professional firms that look for long term benefits</td>
<td>Business Structure</td>
</tr>
<tr>
<td></td>
<td>No long term focus and poor adoption of standard procedures</td>
<td>Business Structure</td>
</tr>
<tr>
<td></td>
<td>Low uptake as some SMEs do not appreciate the value of</td>
<td>Business Structure</td>
</tr>
<tr>
<td></td>
<td>organized commercial printers platforms</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>F</td>
<td>Low uptake at the present moment due to subdued economy</td>
<td>Business Structure</td>
</tr>
<tr>
<td>G</td>
<td>Marketing Research needs to be done on this topic</td>
<td>-</td>
</tr>
<tr>
<td>H</td>
<td>Social media has dominated online business such that there are more players on social media compared to those on an official business platform as there is nothing at the moment</td>
<td>Online Communication</td>
</tr>
<tr>
<td>J</td>
<td>• It is a faster route to new business development</td>
<td>Company’s Competitive Advantage</td>
</tr>
<tr>
<td>K</td>
<td>• Good, though there is room for more players</td>
<td>Business Structure</td>
</tr>
<tr>
<td>L</td>
<td>• The internet has been there for over twenty years and many players are doing it especially foreign firms • Quotations, enquiries done online but that is not tallying with the final physical product/service delivered thus done offline • Physical nature of the final product limiting uptake of e-business Organisations need to set up IT department first</td>
<td>Online Communication</td>
</tr>
<tr>
<td>O</td>
<td>• Fear of incurring costs by some printers, as their focus are on higher margins in the short term.</td>
<td>Company’s Competitive Advantage</td>
</tr>
<tr>
<td>T</td>
<td>• Research is necessary to aid in making an informed decision on innovative ideas that enhances productivity.</td>
<td>Business Structure</td>
</tr>
</tbody>
</table>

**Summary of findings**

The majority of the participants were of the view that the level of uptake of online business in the printing industry is low. However respondent K indicated it is comparatively good and N argued it will be well received by the business community. L key informant pointed that the level of uptake of online business in the printing industry is low due to physical aspect of the final product, with H respondent stating that social media has dominated online business such that there are more players on social media than an official platform.

4.3.1.4 Whether the adoption of online business platforms will add value to the printing industry
An investigation was carried out qualitatively to determine whether the adoption of online business platforms will add value to the printing industry in Zimbabwe. Majority respondents agreed that the adoption of online business platforms will add value to the printing industry. The detailed findings are tabulated overleaf.

**Table 4.5: Whether the adoption of online business platforms will add value to the printing industry**

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>RESPONSE SUMMARY</th>
<th>CATEGORY</th>
</tr>
</thead>
</table>
| A          | • Data sharing, enhances data management systems (DMS)  
            • Online database management cheaper  
            • Search engine based on the platform better than physical searching.  
            • Monitor and track platform visitors and try to determine their needs on the platform and then ahead to satisfying them. | • Online Communication  
            • Online Communication |
| C          | • Information availability for suppliers and consumers readily available.  
            • Training and development of staff in the sector via online | • Online Communication  
            • Online Communication  
            • |
| E          | • Yes, especially given other value added services from the platform like problem solving circles and technical forums can be created. | • Online Communication |
| F          | • There can be challenges at the moment, but with time the value is priceless, give it a year or two it will be up and running. | • - |
| G          | • Information sharing  
            • Competitive framework brings transparency  
            • Communication with instant feedback | • Online Communication  
            • Online Communication  
            • |
<table>
<thead>
<tr>
<th>H</th>
<th>Yes certainly it will via networking of players/stakeholders in the industry of printing through information sharing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>I recently managed to get a new customers using Facebook as a source of getting new sales leads “New Business”. LinkedIn has offered J the opportunity for its sales team to develop business relationships with a lot of guys. It is also easy to share notes with other business who share the same interests with J. Recently our HR placed an advert for freelance sales reps on face book, the response rate was very good and the costs attached to it very low. Requests for quotes and orders can be done online easily with very minimum costs.</td>
</tr>
<tr>
<td>K</td>
<td>Yes, website development. Staff training online. Niche marketing add value to the firm.</td>
</tr>
<tr>
<td>L</td>
<td>Cost reduced for example time and cost spent travelling for proof reading and this reduces cost of doing business.</td>
</tr>
<tr>
<td>N</td>
<td>Reduce costs-travelling for suppliers, service providers converge and share ideas in Delphi style. Reduce geographical space by click of a button. Information sharing that is product knowledge, economic trends, global research of data.</td>
</tr>
<tr>
<td>O</td>
<td>Certainly there would be value added as it would allow greater and easier interaction between customer and suppliers online instead under brick and motor buildings.</td>
</tr>
<tr>
<td>T</td>
<td>Communication on the internet with clients has proved to be very effective via requests for services and feedback of products.</td>
</tr>
</tbody>
</table>
Summary of findings

All the interview respondents that took part in the research agreed that the adoption of online business platforms will add value to the printing industry in Zimbabwe. Respondent J stated that value added was through generating new business, LinkedIn platform has offered J the opportunity for its sales team to develop business relationships, requests for quotes and orders can be done online easily with very minimum costs to company J. Respondent O highlighted that value addition through greater and easier interaction between customer and supplier. K respondent was of the opinion that value addition is accrued through website development and staff training. Furthermore N and G interviewees stated that value is added through reduction of costs in travelling by suppliers, service providers converge on their own dedicated platform and information sharing, product knowledge, economic trends, global research of data.

4.3.1.5 Other than electronic networking of players in the printing industry what do you think needs to be done to improve efficiency and productivity in terms of technology

The study sought to find out that, other than electronic networking of players in the printing industry what needs to be done to improve efficiency and productivity in terms of technology. The views of the research participants are summarized below.

Table 4.6: What needs to be done to improve efficiency and productivity in terms of technology other than being online?

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>RESPONSE SUMMARY</th>
<th>CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>• Online print production-generation of requisitions, quotations, orders and payment for products and services</td>
<td>• Online Communication</td>
</tr>
<tr>
<td></td>
<td>• Infrastructure development is paramount and curbing of cyber-crime through strong pass words</td>
<td>• Confidentiality (Online)</td>
</tr>
<tr>
<td>B</td>
<td>• Pricing model in the industry needs to be computer based</td>
<td>• Business Structure</td>
</tr>
<tr>
<td>C</td>
<td>• Establish barriers to entry (legislation) to avoid unscrupulous practices like leaking of critical information</td>
<td>• Company’s Competitive Advantage</td>
</tr>
<tr>
<td></td>
<td>• Lack in appropriate technology resource base but knowledge</td>
<td></td>
</tr>
</tbody>
</table>
and skills is vast, players are well informed of what needs to be done
- Lack of capital in terms of acquiring the technology

| E | • Regulation of operations of small players especially print brokers who do not invest in long term technologies  
|   | • Standardization of operations in the industry necessary | • Business Structure |

| G | • Government to improve the technological infrastructure that is basic for telecommunication | • Online Communication |

| H | • Security is an important factor and technology should enhance it | • Confidentiality (Online) |

| J | • There is now need to start adopting computer to machine printing (CTP).  
|   | • New printing technologies (like digital printing) other than the traditional litho, letterpress and flexography printing | -  
|   | • Business Structure |

| K | Standardisation of operations through resource sharing | • Business Structure |

| L | • In Africa printing focuses on the final product mainly ignoring the technology | • Business Structure |

| N | • Resource availability a major factor to purchase new equipment | • - |

| O | • Retooling of the industry is critical. Also the introduction of the new technology is essential to improve efficiency | • Business Structure |

| T | • Resources lobbying for the industry especially for small players | • Business Structure |
Summary of Findings

Legislation, capital, resources, infrastructure and management support were indicated as some of the major factors, other than technology as issues that need to be looked at to improve efficiency. Institute E interviewee contended that other than electronic networking of players in the printing industry a code of conduct is important for professionalism and standardization of operations. Respondent J stated that there is need for transitioning to digital technology; adoption of computer to machine printing technology (CTP); new printing technologies and online print production to improve efficiency and productivity. L informant respondent stated that in order to improve efficiency and productivity in terms of technology the online printing designs should be the same as the final product that is the physical product supplied on softy copy and the hard copy delivered.

ICT expert A argued that to improve technology in the sector there is need for infrastructure development. Respondent G stated that Government has to improve the technological infrastructure and respondent C was of the view that there is need to establish barriers to entry in the printing industry through legislation to regulate activities of all players in order to improve quality of finished products. Respondent B said that the pricing model in the industry needs to be computer base for it to be electronically driven and avoid having certain activities being done offline for no apparent reason.

4.3.1.6 Benefits to printing companies that are as a result of adopting online business network

One of the main objectives of the research was to find out the benefits of online business network platform for the printing industry. The interviews revealed that the major benefits to the printing industry of adopting online business network are

- brand awareness and visibility
- easy to find an organization or the right supplier
- New business development
- Improves competitiveness
- communication improvement
- Bringing together like minded people/business.

The findings were summarized and presented in the table below.

**Table 4.7: Benefits of adopting online business network platform for the printing industry.**

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>RESPONSE SUMMARY</th>
<th>CATEGORY</th>
</tr>
</thead>
</table>
| A          | • Data management improvement  
            • Filing on the cloud possible  
            • Eliminates physical storage space  
            • Advertising and sales on website banners | • Online communication |
| C          | • Information sharing  
            • Communication improvement with clients and internally | • Online communication |
| E          | • Up to date information sharing on the platform  
            • Communication online instead of driving to customers or suppliers  
            • Access to production sequence at any time i.e. job monitoring  
            • Connection with suppliers and customers | • Online communication |
| F          | • Immediate result benefit of the platform will be in three parts:  
            • Experience sharing on the platform  
            • Problem solving by putting problems experienced on the machines on the platform  
            • Interactions with players in the same industry | • Online communication |
| G          | • Online payments that is local credit debt cards, e-transactions | • Online communication |
| H | - Improved easiness of doing business  
- Efficiency can be improved through competitive pressures  
- It adds to the prestige of the company and customer perceptions.  
- Improved communication system with stakeholders |
| J | - Brand visibility all the time  
- Ability to attract the attention of potential customers.  
- Instant response to industrial developments  
- Cheaper way of doing business-in terms of advertising and running promotions  
- Boost of online sales  
- Improved customer service and effective feedback-J is ISO Certified and business performance is mainly rate according to how customers are treated  
- Customer can easily find J and this creates potential business  
  There is loyalty and advocacy from customers that J has so far connected with |
| K | - Increase of online sales  
- Improved customer service and effective feedback |
| L | - Reduced lead time and Enquiries online  
- Collaboration with the Federation of Master Printers (FMP). |
| N | - Work related research possible  
- Online advertising gives you an edge over your competitors  
  After/before sales services support |
| O | - Elimination of inefficiencies like the time spend on travelling and waiting, its real time business |
| T | - Brand visibility  
- Ability to attract the attention of potential customers.  
- Cheaper way of doing business-in terms of advertising and running promotions |
Summary of Findings

As a result of the interviews that were undertaken the researcher asked the respondents the benefits of online business network platform to printing companies. The respondent J said it will increase online sales while O respondent argued that one of the benefits is elimination of inefficiencies in the channel. Institute E key informant indicated during the interviews that the benefits of adopting the online business platform for printing companies in Zimbabwe are: - up-to-date information sharing on the platform, communication online, job costing, quotations availability, access to production sequence at any position in the production line and connection with suppliers. On the other hand ICT expert A stated that the benefits for adopting the system are data management improvement, filing, storage, communication, advertising and sales. N highlighted that the benefits of the online printing platform to companies are online advertising and after/before sales services.

The respondent L highlighted that the pronounced benefits of online business network platform to printing companies are proof reading, improved pricing and reduced lead time and enquiries. The respondent added that online business networks are good as they assist members to collaborate with existing employer bodies like the Federation of Master Printers (FMP), similar to Mark X exhibition in South Africa. Mark X exhibition is a body in South Africa that coordinates printing players in the industry through exhibitions. Indigenous and foreign players, suppliers of equipment, print engineers, new consumables and new product development are showcased there.

4.3.1.7 Respondents were asked to identify benefits that will result in the greatest impact in the printing industry from the adoption of online business platform

As a follow up question to the above, the researcher probed on the benefits that the respondents had identified, those they deemed to result in the greatest impact in the printing industry.
Table 4.8: Benefits that will result in the greatest impact in the printing industry from the adoption of online business platform

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>RESPONSE SUMMARY</th>
<th>CATEGORY</th>
</tr>
</thead>
</table>
| A          | • Data management information system  
             Information sharing, greater customer reach and perception | Online Communication |
| C          | • Service providers accessible online 24/7  
             • Manpower online database for recruitment | Online Communication |
| E          | • Use of technology will definitely make the industry more competitive industry. | Company’s Competitive Advantage |
| F          | • It will result in building a strong organizational brand on the platform. | Company’s Competitive Advantage |
| G          | • Standardization of activities will result in cost effectiveness and a match between value accrued and process | Business Structure |
| H          | • Feedback with customers becomes easier  
             • Website developments improve company status | Online Communication |
| L          | • Pre-printing activities are already being done, so it’s a matter of just taking them to the platform. | Online Communication |
| J          | • Brand visibility and presence on the internet all the time | Online Communication |
| K          | • Work related research is made easy as hopefully there will be bloggers on the platform who have a passion about the industry. | Online Communication |
| N          | • Website development and improvement | Online Communication |
| O          | • Platforms help to stay in touch and connected to your customers with little or no effort | Online Communication |
Summary of Findings

There was general consensus among respondents that the greatest benefit for printing companies through online printing networks would be brand visibility. On the other hand, one respondent stated the greatest benefit would be, for example, as an organization already uses intranet to facilitate the ordering of cheque books for banks, therefore, this platform will enhance customer involvement and tailor-made products for them. Hand, another key informant shared the same view from their interview responses that the greatest impact to the printing industry would be feedback with customers becomes easier, website development improve company status and advertising improved via networking opportunities. Moreover, the ICT expert interviewee stated benefits to do with sales increase, data management and information sharing. A respondent added that the adoption and implementing of online business platform for printing companies in Zimbabwe will result in standardization of activities, cost effectiveness and a match between value accrued and process. Another respondent argued that supporting operations (manpower), service providers, professionalism and manpower recruitment from the suggested benefits of online business platform will result in the greatest impact in the industry. The respondents were of the view that the greatest impact in the printing industry would emerge from work related research, information sharing, database management and advertising, increasing brand visibility.

4.3.1.8 Reasons for printing organisations failing to experience the expected benefits on the online platform

The following table gives the results on the reasons why printing companies may fail to experience the expected benefits associated with adopting and implementing of online business platform in Zimbabwe.
Table 4.9: Reasons for organisations failing to experience the expected benefits in the printing industry

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>RESPONSE SUMMARY</th>
<th>CATEGORY</th>
</tr>
</thead>
</table>
| A          | • Funding constraints  
            • Lack of infrastructure  
            • Lack of technical expertise | • Constraints  
            • Constraints |
| C          | • Resources availability  
            • Brokers activities (informal printers)  
            • Cybercrime a possibility | • Constraints  
            • Business Structure  
            • Confidentiality |
| E          | • Companies not in geographical location to access internet services  
            • Resources affordability | • Online communication |
| F          | • Staff not well trained on the operations and benefits of being part of the platform, no R&D | • Business Structure |
| G          | • Lack of skilled staff in ICT  
            • Poor resources  
            • Credit crunch  
            • High set up costs  
            • Confidential information control  
            • Poor security online for money transactions | • Constraints  
            • Constraints  
            • Confidentiality (Online) |
<p>| J          | • Lack of professionalism as there are too many sprouted informal players in the industry that have mushroomed | • Business Structure |
| K          | • Resources needed and the firm cannot afford | • Company’s Competitive Advantage |</p>
<table>
<thead>
<tr>
<th>L</th>
<th>Duty on equipment a hindrance</th>
<th>Leaking of confidential information</th>
<th>Confidentiality (Online)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>Website designing, upgrading and designing costly to set up</td>
<td>Connectivity challenges through service providers</td>
<td>Constraints</td>
</tr>
<tr>
<td>O</td>
<td>Inability to utilize the resource at their disposal.</td>
<td>The unavailability reliable broad band backbone.</td>
<td>Constraints</td>
</tr>
</tbody>
</table>

**Summary of Findings**

The major reasons for organisations in failing to experience the expected benefits that were given through the interview were: lack of professionalism as there are too many informal sprouting players in the industry. The researcher discovered that the challenges include high costs of setup, resources unavailability, infrastructure is capital intensive, staff not well trained on the technological usage and privacy. Respondent actually stated that, the reason for the organisations failing to get the benefits of online printing platform is the unavailability reliable broadband backbone. Employees not be well trained on the operations and benefits of being part of the online business platform.
The respondent was of the view through the interviews that lack of resources needed for on line operation, high duty of printing equipment are some of the reasons for organisations in failing to experience the expected benefits. Interviews from ICTexpert, Gkey informant and C key informant were of the same view that lack of staff skills, poor resources, credit crunch currently being experienced in Zimbabwe, high set up costs high, confidential information control and poor security online for money transactions could be the some of the reasons for printing organisations for failing to experience the expected benefits of online printing business networks.

4.3.1.9 Internal challenges of implementing online business platform

The table below tabulates respondents’ views on the internal challenges of implementing online business platform.
Table 4.10: Internal challenges of implementing online business platform

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>RESPONSE SUMMARY</th>
<th>CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>• Resource for infrastructure that is, servers, routers and switches expensive</td>
<td>Constraints</td>
</tr>
<tr>
<td></td>
<td>• Technical expertise in terms of skills</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>• Too many print brokers with no long term focus</td>
<td>Business Structure</td>
</tr>
<tr>
<td></td>
<td>• No separation of ownership and control of the platform</td>
<td>Business Structure</td>
</tr>
<tr>
<td></td>
<td>Lack of passion in the development of the industry</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>• No network at all in some areas</td>
<td>Online Communication</td>
</tr>
<tr>
<td></td>
<td>• Security on the platform</td>
<td>Confidentiality (Online)</td>
</tr>
<tr>
<td>F</td>
<td>• Resistance from the players who are technophobia</td>
<td>Constraint</td>
</tr>
<tr>
<td></td>
<td>Resources challenge</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>• Management not supportive of the platform</td>
<td>Business Structure</td>
</tr>
<tr>
<td></td>
<td>• Staff being reluctant to embrace change</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Resources not enough</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>• Training of staff to get value out of business platform</td>
<td>Business Structure</td>
</tr>
<tr>
<td></td>
<td>• Poor value addition, idea not aligned to organizational goals</td>
<td>Business Structure</td>
</tr>
<tr>
<td>J</td>
<td>• Issues on how to handle risks associated with online business systems</td>
<td>Confidentiality (Online)</td>
</tr>
<tr>
<td></td>
<td>• How to incorporate social media into traditional business systems or processes</td>
<td>Online Communication</td>
</tr>
<tr>
<td>K</td>
<td>• Management not wanting to spread risks</td>
<td>Constraint</td>
</tr>
<tr>
<td>L</td>
<td>• Financing</td>
<td>Constraint</td>
</tr>
<tr>
<td></td>
<td>• Equipment not versatile (different organizational</td>
<td></td>
</tr>
</tbody>
</table>
Summary of Findings

The challenges of implementation of an online network platform that came out from the interviews had to do with security of the network, whether it will not be abused or hacked. Resources and capital financing where the bone of contention. On the other hand, institutional D key informant during the interviews argued that the internal challenges of implementing online business platform are issues to do with how to handle risks associated with online business systems, how to incorporate social media into traditional business systems or processes and change management which is very critical. Also respondent from H Printing stated that challenges of implementing online business platform for printers is training of staff to be able to get value out of the platform and poor value addition by printing companies. Other internal challenges that were stated by N key informant in implementing online business platform are loss of confidential information and company secrets to third parties.

4.3.1.10 External challenges of implementing online business
The research further went on to interview respondents to get their views on the external challenges of implementing online business. The findings are presented in the table below basing on the views of the key informants who participated.

**Table 4.11: External challenges of implementing online business**

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>RESPONSE SUMMARY</th>
<th>CATEGORY</th>
</tr>
</thead>
</table>
| A          | • Financial resources for advertising, data management  
             • Demand for products/services and ability of consumers to enjoy the benefits | Constraint |
| C          | • The sector is not taken as an industry  
             • Security concerns | Constraint  
             Confidentiality (Online) |
| E          | • Industrial espionage  
             • Intellectual property protection | Confidentiality  
             Company’s Competitive Advantage |
| F          | • Standardization of operations for printers  
             • ICT knowledge | Business Structure |
| G          | • Security risks, cybercrimes and having limited protocols to safely transact online  
             • Trading partners not adopting online business’s  
             • Interest rates are too high, cost of borrowing is too much  
             • Poor government support  
             • Customers not accepting having transactions done online | Confidentiality  
             Constraint  
             Constraint |
| H          | • Setup costs and control of being online depend on service providers  
             • Legislation and copyright laws  
             • Online payment systems are prone to hacking | Constraint  
             Confidentiality (Online) |
| J | Cybercrime is a problem | Confidentiality online |
| K | Closed system for printers | Business Structure |
| | Poor government support | Constraint |
| L | Getting players on the platform biggest challenge | Business Structure |
| | Protection of business interests | Constraint |
| | Mobilization stakeholders to create platform | |
| | Closed system of printing organisations | |
| | Expensive printing equipment | |
| | Government not very supportive | |
| O | The unavailability of a reliable broadband infrastructure and buffering. | Constraint |
| T | Legislation | Constraint |
| | Resources | |
| | Service providers not interested | |
| | Payments systems need security | Confidentiality |

### Summary of Findings

According to the table above the key informant from M printers during the interviews highlighted that the external challenges of implementing online business are getting participants on the platform is the biggest challenge, protection of business interests, closed nature system of printing organisations, expensive equipment of printing and lack of government support. These reasons are the external challenges that affect the implementation of online business networks for printers in Zimbabwe. Respondent H argued that the external challenges are high setup costs.
and control of being online depend on service providers while online payment systems are prone to hacking as external challenges.

The views from the key informants of F, T, N and G printing companies all shared the same sentiments about external challenges in the implementing of online business. From the interviews the challenges were given as high security risks, cybercrime and having limited protocols to safely transact online, trading partners not adopting online business software and hardware, interest rates are too and high cost of borrowing is too much to fund capital projects and consumers not accepting having transactions done online. O key informant added that external challenges of implementing online business networks for printing companies in Zimbabwe has to do with unavailability of reliable broadband infrastructure for smooth operations online.

4.3.1.11 Reasons why printing companies would not readily be part of the connected platform

The reasons why printing companies would not be readily be part of the connected platform from the interviews that were undertaken are presented in the table below.

**Table 4.12: Reasons why printing companies would not readily be part of the connected platform**

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>RESPONSE SUMMARY</th>
<th>CATEGORY</th>
</tr>
</thead>
</table>
| A          | • Funding and resources to run the program  
             • Training of staff inadequate, bad economy | • Constraints |
| C          | • Disorganization of the sector  
             • No barriers to entry in the industry  
             • Security concerns | • Business Structure  
             • Confidentiality |
| E          | • Protection of organization internal strengths | • Company’s Competitive Advantage |
| F          | • Poor resource base for the industry  
             • Basic user interface need to be developed for ease | • Constraints |
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>G</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Security risks, cybercrime and having limited protocols to safely transact online</td>
<td>Confidentiality</td>
</tr>
<tr>
<td></td>
<td>Trading partners not adopting online business’s</td>
<td>Confidentiality</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>H</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Information control through competitive pressures</td>
<td>Company’s Competitive Advantage</td>
</tr>
<tr>
<td></td>
<td>Setup and maintenance costs</td>
<td>Business Structure</td>
</tr>
<tr>
<td></td>
<td>Consumers perception of online transactions is very low</td>
<td>Confidentiality</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>J</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Printing business is more of target marketing</td>
<td>Company’s Competitive Advantage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>K</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lack of resources</td>
<td>Constraints</td>
</tr>
<tr>
<td></td>
<td>Protection of trade secrets</td>
<td>Confidentiality</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>L</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Competitive pressures and keeping niche market</td>
<td>Company’s Competitive Advantage</td>
</tr>
<tr>
<td></td>
<td>Specialised industry</td>
<td>Business Structure</td>
</tr>
<tr>
<td></td>
<td>Protection of customer information</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resource shortages for investments and operations</td>
<td>Constraints</td>
</tr>
<tr>
<td></td>
<td>Security online not adequate</td>
<td>Confidentiality</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>O</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technology uptake in our industry is slow</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>T</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Competitive pressures and keep niche market</td>
<td>Company’s Competitive Advantage</td>
</tr>
<tr>
<td></td>
<td>Do not see any value in it</td>
<td></td>
</tr>
</tbody>
</table>

**Summary of Findings**
F, T, H and A ICT expert key informants during the interviews indicated factors that would hinder their organization from readily being part of the connected platform as follows: - Resource shortages for investments and operations, security online not adequate, training of staff costs, competitive pressures and keeping niche market, setup and maintenance costs and consumers perception and appreciation of the value in online transactions is very low.

Similarly G Printing key informant stated that reasons why printing companies would not be readily be part of the connected platform are Security risks, cybercrime and having limited protocols to safely transact online. On the other hand C Printers key informant said they would not be part of the network because of disorganization of the printing sector, lack of barriers to entry in the industry and security concerns.

4.4 INTER-RESPONDENT COMPARISON AND ANALYSIS

Development or adoption of online business network

The findings showed the respondents from all the twenty companies’ respondents shared almost similar views. All the company cases had an appreciation of online business network platform. E, L and C Printers exclusively highlighted that they have adopted some form of online business network. However other respondents stated that they would also want to tap into the various benefits associated with the platform. N Printers felt that the online business network is not appreciated because local players lack internet network connectivity. Most companies felt that integrated business network makes it easy for advertising and promotes efficiency in doing business. C Printers had different view that printing is not taken as an industry even government itself does not consider it as and a standalone industry, but rather a sector that plays a supporting role to other industries. Land K Printing confidently argued that there is a good uptake of online business printing however this was not the same with all other companies who felt that there is still low uptake. They alluded to the aspect that the printing industry is dominated by small players who have no capacity of setting up of online business due to lack of knowledge and the fear of huge costs. All the companies agreed that online business platform will certainly add value to the printing industry citing the various advantages with J Printers alleged to have managed to get new customer through social online business network like LinkedIn.
Benefits of online business network

All companies who participated in the study proved to be very aware of the various advantages that online business can offer such as information sharing, efficiency, cost reduction, advertising, and improving customer relationships. C printers and, G shared the view on manpower recruitment and training online, which implies that online business network also allows companies to engage their manpower base as well as developing them through training the platform.

Challenges on implementation of online business network platform to printing companies

The companies cited internal challenges that were similar on implementing business network platforms. The common ones are security and lack of resources (Human resources, financial resources, material resources, internet etc). Some respondents such as such as D and B highlighted the issue of lack of support from the management which is one of the challenges that affect the adoption of online business network. Without support from the management it is impossible to implement the platform. There has been similar sentiments across the board. External challenges that affect the adoption of online business network included legislation. F printers, K, H,G and T highlighted that the government is not supportive and C Printers, still alleged that the sector is not taken as an industry. Resources, security, ICT knowledge were also stated by the majority of the respondents as an impediment to the adoption of the platform.

4.5 DISCUSSION OF KEY OR SUBSTANTIVE FINDINGS

Online Confidentiality

The results highlighted that the printing companies greatly appreciate online business network, its operation and the benefits that are associated with the platform. However most of the respondents had serious concerns with confidentiality. They highlighted factors such as cybercrime, security fears of being hacked and creation of fake platforms accounts as what is happening with most social media accounts. According to Akindele (2011) the environment that lack standards and best known practices which in-turn lead to potential compromises in
network controls, maintenance, data ownership, internal and external security, and permissions is not conducive for online business. Literature supports that the use of internet based business networking offers benefits, yet not all businesses take advantage of it. The research that explored what drives some businesses to adopt online business network was fragmented and limited in scope. Some studies on this topic were exploratory and focused on the type of usage and the barriers hindering adoption of internet marketing; as well as e-commerce, e-business, and social networks Alam, Ali, and Jani, (2011); Jarvinen et al., (2012); Omar et al., (2011); Pentina, Koh, and Le, (2012).

**Competitive Advantage**

There was consensus among the respondents that most printing companies have unique strengths that are peculiar to them. This factor meant that they did not perceive fellow printing organisations as competitors, but complementors as they were offering totally different products on the market. Therefore it was easy for them to be on the same platform for synergistic purposes. Most respondents agreed that being on the platform would result in company’s creating a competitive advantage. This sentiment was also shared by Chaston (2014) Integrated business network is a platform that enhance business relationships and this is developed through the Web, and online dating has shown that deep personal relationships can be achieved, as well. Online business networking can create, connect and create business opportunities on the web as suggested by Chaston (2014) in the literature.

The research findings highlighted a number of benefits associated with online business network. These benefits are information sharing, elimination of in-efficiencies identified during the research like travelling and waiting that come with doing business offline. Other benefits identified include cost reduction, advertising, improving customer relationships, and training. The findings agrees with the conceptual model that adopting online business network is associated with a number of benefits that include ease of doing business, Lower Costs of Marketing, Ability to use multimedia communication system, Real time access to local, regional and international customers via internet and the ability to interface and interact with customers on the platform and brand awareness. The conceptual model did not exhaust all the benefits as has come out of research findings.
Business Structure

One of the categories that came out from the interviews was that of business structure having a bearing on the development of online platform. The way a business is organised has a bearing on its ability to be part of the platform. For example it was evident that it was easier for medium to large commercial printers to be part of the online platform as they have the resources and are ready to come together for the development of the industry. On the other end of the continuum were small informal printers that seemed reluctant to join the platform due to resources concern. These felt they are too small to profitably invest in such capital intensive projects as they were not quite sure of their growth and survival. However among the small players were some who had a vision to grow their businesses and saw the platform as an opportunity for growth.

Literature has deliberated that, according to Page (2015) Active networking is vital to career growth. Networking is actually about building long-term relationships and a good reputation over time. It involves meeting and getting to know people who you can assist, and who can potentially help in return. Business networking serves many purposes: sales, general marketing, recruiting, job-hunting, knowledge exchange, and business development (strategic alliances, joint ventures, channel sales, etc.). Of these, business development is the one that it supports best, as business development and business networking are closely relate. Zhou (2012) argued that developing strategic relationships via networking events has been the traditional means of making new business contacts.

Enabler of Online Communication

The respondents view was that all technological advancements system developed in the past and in the future are all aimed at improving business efficiency. Business systems like ERP, CRM, SCM websites and business are all a testimony that business are always searching for something that enables better and faster communication. According to findings by Chaston (2014), the internet must be seen as a key enabler in intra and inter-network interaction that has the ability to foster beneficial enduring business relationships.

This is especially so if the solution is capable of enabling two way communication with little or no extra costs. Respondents were alive to the fact that in business one they that you can manage
are the costs of doing business. Reducing costs has direct benefits to both the customer and business as business will need less money to produce products and at the same time customers have affordable products. Therefore use of technology does not just improve standards of living but reduces the cost of living. Again today’s sophisticated customers are demanding to be involved and be part of the creation of a product, hence any systems that enables interaction and interface with the customer is welcome.

**Constraints on implementation of online business**

The findings of the research did not result in only the positive aspects alone, there were constraints that the respondent highlighted during the research. These constraints were not part of the categories that came up during the coding process, this is the reason why the researcher thought it will be prudent to highlight them here despite the fact that there was no category on the constraints on adoption of online business platform. Even the literature constantly pointed out to these constraints encountered in an effort to develop online platform.

In a survey of ITAA- information Technology American Association (2010) found that barriers to online business adoption include the budget constraints, and public policy regulations. Most organisations do not even have a complete security policy in place. Lack of consistent government policies, laws and practices may impact participation in online network. Chaudhry (2007) postulates that legal issues are a barrier to online business networking usage, since this industry is highly regulated due to its technological aspects. Other barriers have to do with issues of security, slow transaction speed and the fear to try an unproven technology, which are overcame with the passage of time.

Due to these challenges companies are not motivated to adopt online business as the conceptual model has indicated. These challenges also affect companies from realizing benefits of online business network. The major challenges that came out of the study were lack of resources, high costs, security, lack of government support, poor infrastructure, lack of management support, lack of skills and expertise amongst others. These are common challenges that are encountered in ICT.
Generally the challenges are familiar to any business operating in Zimbabwe but, adopting online business is actually an opportunity to gain competitive advantage and improved company performance. Deliberate internal business online strategy and external online business strategy is required for the success of adopting and implementation of a Business Online Platform: Online Printing Platform. Business is however not free from challenges, the brave one will plan scan the environment to grab the opportunities that come their way and counter threats to their strategy. From the researcher’s general observation, the major challenge with the printing industry in Zimbabwe is that the majority of the companies in the industry are small.

4.6 CHAPTER CONCLUSION

This chapter outlined the qualitative findings of the study on the feasibility of adopting and implementing of online business platform for printing companies in Zimbabwe. The major aspects discussed in the chapter were on how an online business network platform for printing companies can be adopted or developed. The benefits of online business network platform to printing companies. Challenges on implementation of online business network platform to printing companies and recommend a business network platform for printing companies in Zimbabwe. The next chapter presents the conclusions and recommendations of the study garnered from the interview responses in this chapter.
CHAPTER FIVE

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter provides the interpretation of findings, evaluation of proposition and recommendations. The conclusions are drawn from the discussion of results in chapter four and the recommendations were given by the respondents during the interviews. These are linked to the objectives of the study. Also, the areas of further study will be provided in this chapter.

5.2 ACHIEVEMENT OF RESEARCH AIM AND OBJECTIVES

The research has achieved its intended objectives. The literature review and the conceptual model adopted the objectives of the study through the dimensions variables, intermediate dimensions and outcome variable. A qualitative research method was used as a suitable method to answer the objective. The findings and conclusions were made on the objectives and these were:

- To investigate how online business network platform for printing companies can be adopted or developed.
- To determine the benefits of online business network platform to printing companies.
- To find out the challenges on implementation of online business network platform to printing companies.
- To recommend a business network platform model for printing industry in Zimbabwe
The main aim of the research was to find out if it was feasible to adopt and implement an online printing platform for the printing industry. Yes, players in the industry welcomed the concept and identified some of the immediate benefits of the platform such as interactive ability, technical forum for college, university students and experienced technicians and engineers already in the field and other value added services

5.3 CONCLUSIONS

Zimbabwe has not yet fully embraced use of online business network in the printing industry and at the present moment there is no literature available that is relevant to this industry. This study is about the feasibility of setting up online network printing platform and hopes to close the gap on lack of information about online platforms. The conceptual framework demonstrated that the adoption of online business network as the dependent variable, its benefits and the challenges associated with implementation as the independent variables will assist in the uptake of the online platform.

As a result of the analysis undertaken in the previous chapter, the research provided the following conclusions themed on the study objectives.

5.3.1 The ways that an online business network platform for printing companies can be adopted

The research concludes that the major players in the printing industry of Zimbabwe appreciate online business networks and that the online business platform is feasible considering the huge demand for printed and packaging material in the economy delivered in an efficient manner and hassle free process to the customers. The study revealed that business leaders appreciate the importance of online business network through the conventional internet websites and internal information management systems like ERP, CRM and SCM. The research concludes that it is also important to integrate the already existing systems that are functioning like silos into a bigger network for the benefit of all players for the purposes of information sharing, omnibus adverts with a global reach and technical threads for problem solving.
The convergence of business leaders to lobby for policies that support standardization of operations of printers in Zimbabwe was a cause of concern to business leaders that were interviewed. There is need to explore digitalization in printing as it results in multimedia advertising, online sharing of data, use of new technologies and computers to print systems. Also it is concluded that an online business network platform for printing companies can be adopted by collaborating with the Federation of Master Printers (FMP) - an employer’s body for the printing industry and NEC for printing industry – an employee body representing the interest of employees in the printing industry.

The study concludes that the level of uptake of online business in the printing industry is low. This was blamed as being as a result of the physical nature of the output product limiting uptake of e-business. Also it revealed that social media has been informally adopted as an online business tool such that there are more printing players on social media like LinkedIn, Facebook,
twitter and even WhatsApp which means there is a real an opportunity for a formal online business platform.

It was found out and concluded qualitatively that the adoption of online business platforms will add value to the printing industry in Zimbabwe. The adoption of online business platforms will generate new business linkages and value added services such as online payment portals, experts blogging on the platform, commentaries by pundits in the printing industry and online exhibitions.

Elimination of all forms of inefficiencies associated with working offline like travelling time and waiting for information to arrive through manual system. This valuable time wasted on such activities can be used for doing productive work in the office or factory floor.

5.3.2 The benefits of online business network platform to printing companies

The study concludes that printing companies will benefit through brand visibility locally, regionally and internationally, the ability to attract the attention of potential customers, instant response to industrial developments, cheaper way of doing business in terms of advertising and running promotions, boosting of online sales, improved customer service and effective feedback, ISO certification of system to match international standards, customer loyalty, experience sharing on the platform, new product development, data management improvement, work related research, staff training and development, online payments that use local credit and debit cards.

The reasons why printing companies might fail to experience the expected benefits associated with adopting and implementing of online business platform for printing companies in Zimbabwe were given as the following:- Lack of professionalism as there are too many unprofessional informal players in the industry; unavailability reliable broadband backbone; lack of resources needed for online operation by printing companies, high duty of printing equipment; high printing online set up costs, the need to control confidential information and poor security online for money transactions are the reasons concluded as why printing companies might fail to experience the expected benefits.

5.3.3 Challenges on implementation of online business network platform to printing companies in Zimbabwe
Internal challenges of implementing online business platforms high risks associated with online business systems and how to incorporate social media into traditional business systems and processes. Other challenges on implementation of online business network platform to printing companies are concluded as, too many print brokers with questionable business ethics and no long term focus of the industry, lack of passion for business to invest into the technology.

External challenges of implementing online business include as cybercrime fears, closed system structure of printers, poor government support, the sector not taken as an industry and issues to do with online security of transactions.

The reasons why printing companies would not be readily be part of the connected platform are concluded in this study as that printing business is more of target marketing, disorganization of the sector, competitive pressures and keeping niche market. Furthermore the study concludes that printing firms are not ready to be part of the connected business platform because government as a major player influences the functioning of the industry as it is an interested party. It is public knowledge that the government is a shareholder in printing companies like P, FJ and CPrinters.

5.4 ANSWER TO RESEARCH QUESTIONS

The research managed to answer the research questions that were being explored. The interviews were designed in such way that they address the research questions of the study. The findings provided answers to the research questions, the research questions were;

How can an online business network platform for printing companies be implemented or developed successfully?

What are the associated benefits to printing companies for adopting an online business network?

What are the challenges of implementing an online business network platform to printing companies?

What is the best business network platform model for printing companies in Zimbabwe?
5.5 CONTRIBUTION

Theoretical contribution

The conceptual framework marks the researcher’s own contribution the body of study, having initially created a conceptual framework from materials reviewed in chapter 2, the researcher managed to come up with anew conceptual framework after the interviews. This new framework assists in the development and implementation of an online business network platform for the printing industry and the associated benefits.

The framework explores the relationship between the adoption and implementation of an online business network platform and the associated benefits and challenges thereof. The conceptual framework therefore indicates that adoption of online printing network offers a number of benefits to the printing industry. Initially the framework did not have benefits such as the ability have technical forums, linking students at universities and colleges with those experienced technical experts already in the industry. The concept of having bloggers and pundits on platform was one area that most respondents welcomed as well. It was seen as a way of creating a virtual printing community that is always in touch with each other irrespective of distance and different time zones. It is also important to note that constraints in the development of the model were initially overlooked, but as the research progressed codes on the challenges began to emerge. This dimension would really help to consider pitfalls when an organization is considering coming up with an online business network platform. The researcher proposes that this model is used in conjunction with Theoretical competency Model in Figure 2.1 by Durkin and McGown (2001)
Contribution to the Body of Knowledge

Again is expected that scholars, researchers, organisations and policy makers will make referral to the conceptual model of this study. The model may be used to support other theories on the subject by scholars. Before this research there has been a gap on research on the adoption of online business platform for the printing industry in Zimbabwe. Why the obsession printing
industry in Zimbabwe for the researcher? It is clear that most industries are getting automated in order to improve efficiency. Areas like agriculture, transport logistics, wild life and hospitality industry have been made efficient and sophisticated through adaptation of internet technologies. Recently there was news on the death of Cecil the Lion whose movements in the Hwange National Park were being monitored via GPS from Britain. It is interesting that the online system was the first to realise that something had happened to Cecil, this proves the beauty and sophistry of technology.

5.5.2 Methodological contribution

A qualitative research methodology was applied in this research to determine the feasibility of adopting online business platform in the printing companies. This methodology produced valuable information on the subject matter, hence detailed findings which are comprehensive for printing companies and policy makers to have a clear understanding of online business platform and realise the need to adopt it. The method proved ideal for researches of this nature that requires detailed information.

5.5.3 Empirical contribution

This study provided first-hand information on adoption of online business platform in the printing companies. The research contributes on providing reading material to the academic community, researcher and whoever has an intention to enhance online printing knowledge. The findings will be used as empirical evidence in some future researches. Findings from the research are a true reflection of what is happening in the industry and not imaginary assumptions.

The study recommends that other than electronic networking of players in the printing industry there is need for transitioning to digital printing technology, adopting of computer to machine printing system like the one currently being used by L Printers, increased printing speed, online print production, standardization of operations, infrastructure development and resource availability to improve efficiency and productivity.
5.6 MANAGERIAL RECOMMENDATIONS

This research has some implications to the managers and policy makers that were exhumed from the findings. These are as follows

- The managers of printing industry must consider adopting online business platform as a way of growing their business and become more competitive in the market. Online printing platform will go a long way through the associated benefits especially companies that are involved in digital printing. In a gradual manner companies may are able to adopt the proposed platform and systematically improve business information systems.

- In today's world of evidence based management it is important that managers have access to these kind of researches in their decision making process.

- The printing companies must invest and set up IT functional departments at their firms in order to be able to harness technological benefits the macro-environment offers.

- The research helped to solidify the argument that tastes of customers in the market are changing with the trends and hence organisations must be proactive and match the needs of the clients who are now techno savvy and can google whatever they want.

- The printing companies need technical expertise. The manager must consider staff development, through training or outsource for IT consultancy.

- Businesses should own up to their works for feedback and quality control

5.7 POLICY RECOMMENDATIONS

The research also made policy recommendations which as follows;

- The network regulators must ensure that there is efficient internet connectivity to make online printing business effective
• The government must support the printing industry by providing assistance on the required IT infrastructure at a national level to enable diffusion of online business network and also ensuring that these equipment are subsidised to make the set up costs affordable.

• The government must ensure that there is regulation of operations for small players who currently been to wreak havoc to printing standards in the country as they have a profit maximization thinking rather than long term survival and wealth maximization.

• Legislation through POTRAZ should come up with policies that encourage usage of ICT services for business both to increase standards of living and business performance.

• Rules and regulations must be in place through code of conducts, statutory instruments and corporate governance to ensure just like in other industries like mining, transport, and health amongst others.

5.8 GENERALIZATION OF FINDINGS

The generalizations of qualitative work is problematic partly because of the small number of participants in the study as highlighted by Dr. Madzikanda in MBA dissertation clinics at the University of Zimbabwe GSM.

5.9 LIMITATIONS

This study was carried out in a short time frame due to time constraints. The second limitation was the difficulty in obtaining information from the respondents that had been identified for the research, the managers felt that the interviews were taking up their time. However once the conversations started they realise the importance of the exercise. A cross sectional research seemed to have suffocated the research and therefore in future a longitudinal research would be more appropriate. Another limitation was that of respondents that were out of their depth given that the area of ICT is relatively new and for some who have been in the industry for a long time and are technophobic as latest technological advancement have overtaken them.

The fact that this study refers only to a single city extinguishes the opportunity of making comparison and generalizing to the other parts of the Zimbabwe. The results may be inconclusive.
since more solid inferences may be made by looking at a number of similar organizations in other cities.

**5.10 AREA OF FURTHER STUDY**

An area of further study is recommended is to study and investigate how the small informal printers and print brokers can be organized and regulated and be absorbed in the mainstream printing industry in order to improve and involve them in the development of an inclusive online printing platform. In terms of research instruments the researcher thinks that focus groups would help in data collection by bringing players in the industry and then they brainstorm until they come up with a position. The research discovered that what one respondent praised the other would shoot it down, therefore bringing them together using the Delphi technic would result in a lively debate.
APPENDICES

INTERVIEW GUIDE SEMI-STRUCTURED INTERVIEW GUIDE

Introductory letter

Dear Sir/Madam

My name is Aldrin Bhunu and I am a final year student at the Graduate School of Management at the University of Zimbabwe studying for the Master of Business Administration Degree. In partial fulfilment of the requirements of the program, I am conducting a research entitled ‘The feasibility of adopting and implementation of online business platform for printing companies in Zimbabwe’. This is entirely to understand more about ease of doing business through the use of ICTs in the target industry.

You are one of the few people that have been carefully selected to assist with responding to the questions through the personal interview method.

This is a purely academic research and all information received will be strictly confidential. The interview process, analysis and discussion of the data will not mention your name hence it is also strictly anonymous. Participation is voluntary though the researcher will appreciate that you assist in this regard. If you have questions, please do not hesitate to contact the researcher on mobile -

0772 886 038 or landline 752356

Your favourable response will be greatly appreciated.

Yours faithfully

Aldrin Bhunu

Research / Student Number ID No. R138902Y
SECTION A: DEMOGRAPHICS

1. What category is your position in the organization?
   [ ] Manager  [ ] Executive  [ ] Senior Executive  [ ] Board Member

2. Age Category
   [ ] below 20 years  [ ] 21-30 years  [ ] 31-40  [ ] 41-50  [ ] above 51

3. For how long have you been associated with the printing industry?
   [ ] Less than 5 years  [ ] 6-10 years  [ ] 1-20 years  [ ] 21 – 30 years  [ ] above 21

4. How long have you been in your current position?
   [ ] Less than a year  [ ] 1-5 years  [ ] 5-10 years  [ ] above 10

5. What is your highest professional qualification?
   [ ] Diploma  [ ] Journeyman  [ ] Degree  [ ] Masters  [ ] Doctorate
SECTION B: HOW THE ONLINE BUSINESS NETWORK PLATFORM FOR PRINTING COMPANIES CAN BE ADOPTED OR DEVELOPED

1. What is your appreciation of online business networks?

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

2. As a business leader what is your opinion on an integrated networked business system (platform thinking)?

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

3. Do you think the adoption of online business platforms will add value to the printing industry?

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

4. Other than the electronic networking of players in the printing industry what do you think needs to be done to improve efficiency and productivity in terms of technology?

____________________________________________________________

SECTION C: THE BENEFITS OF ONLINE BUSINESS NETWORK PLATFORM TO PRINTING COMPANIES

1. What will the printing companies benefit from adopting online business network?

____________________________________________________________

2. Of the benefits you suggested above, which one do you think will result in the greatest impact to the industry?

____________________________________________________________
3. What could be the reasons for organisations failing to experience the expected benefits?

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

SECTION D: CHALLENGES ON IMPLEMENTATION OF ONLINE BUSINESS NETWORK PLATFORM TO PRINTING COMPANIES

1. What are the internal challenges of implementing online business platform?

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

2. What are the external challenges of implementing online business?

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

3. What do you think are the reasons why printing companies would not readily be part of the connected platform?

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________
SECTION E: TO RECOMMEND A BUSINESS NETWORK PLATFORM FOR PRINTING COMPANIES IN ZIMBABWE

1. In your opinion, does your organisation and other printing companies have the resources to adopt the proposed platform?

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

SECTION F: EMBRACING THE ADOPTION OF AN AUTOMATED ONLINE BUSINESS NETWORK HUB

1. What are the requirements for adopting online business in the printing industry?

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________
2. What kind of support would be require from the stakeholders and the policy makers of the industry in order reduce the impact of these challenges?

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

3. What are your recommendation on the adoption of online business platform in the printing industry?

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

5. The introduction of networked business platforms has been trending topic in Zimbabwe in the wake of current cash shortages e.g. Ecocash mobile money platform, mobile banking apps platforms CV Africa job market platform, the uber taxi calling app, Lamudi property platform, and Onwai buying and selling platform. Can this innovation be applied to printing organisations?

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

The end- Thank you
REFERENCES

Abbas, M. (2011). ERP Systems in HEI Context from a Multiple Perspective View: A Case Study,


Arts California Polytechnic State University June 200


Bareto (2001) Experiencing discrimination: How members of disadvantaged groups can be helped to cope with discrimination.


Durkin and McGown (2001) Theoretical Competency Model


Kotler P. (2002), Marketing Information and Marketing Research, Mateu-Cromo Artes Graficas, Madrid, Spain


Newsday 1 February 2016 *Government Launches STEM initiative.*


The business dictionary (2014)

The ICT new policy (2012)
