



COLLEGE OF BUSINESS AND ECONOMICS

**THE EFFECT OF DIGITAL MARKETING ON
PERFORMANCE OF COMMERCIAL BANKS IN
RWANDA**

**A CASE OF SELECTED COMMERCIAL BANKS IN
RWANDA**

Dissertation submitted to the University of Rwanda, College of Business and Economics in Partial Fulfilment of Requirements for the master's Degree in Business Administration, Specialization of Marketing.

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October 2018

DECLARATION

I, hereby declare that this thesis entitled “The effect of digital marketing on performance of commercial banks, a case of selected commercial banks in Rwanda” is my work and it has not been submitted for any degree. All the sources I have used or quoted have been indicated and acknowledged by complete references.

Signature..... Date...../...../.....

MUTONI Dianah

APPROVAL

This is to certify that this thesis entitled “The effect of digital marketing on performance of commercial banks, a case of selected commercial banks in Rwanda” was conducted by MUTONI Dianah under my supervision and guidance.

Signature..... Date.....

Supervisor:

DEDICATION

I dedicate this work to God our Father in Heaven.

To my husband Francis.

To my mother Mrs Musafiri INGABIRE Mary.

To my lecturers from all levels.

To my dissertation's supervisor Dr Phillipe NDIBWIMANA.

To my brother Ntambara for being there for me.

To my little angels Premier, Patra and Palma.

To my friends and my colleagues.

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LIST OF ABBREVIATIONS/ ACRONYMS

ATMs	: Automatic Teller Machines
BPR	: Banque Populaire du Rwanda
SPSS	: Statistical Packages for Social Sciences
UR	: University of Rwanda

ABSTRACT

The study assesses the effect of digital marketing on performance of commercial banks in Rwanda. The specific objectives were to identify the common digital marketing platforms used by the commercial banks in Rwanda; to determine the extent to which the application of digital marketing has improved customers convenience as channel of performance of commercial banks in Rwanda; and to assess how the application of digital marketing help in reducing marketing cost against traditional marketing in commercial banks in Rwanda. This study employed a descriptive cross-sectional survey design where it was used to gather information on a population of 95,500 customers and 243 employees at a single point in time. The sample size was included by 37 customers from BPR and 63 customers selected at Equity Bank, and 46 employees from BPR and the 25 employees from Equity Bank. The study findings show that Google Ad was used by 16.0% in Equity Bank while in BPR was confirmed by 21.7% of respondents to be digital marketing platform. Facebook was used by 40.0% in Equity Bank while in BPR; it was used by 28.3% of respondents. Instagram was used by 40.0% in Equity Bank while in BPR, it was on rate of 28.3%. Blogger was 4.0% in Equity Bank while in BPR; it was confirmed by 8.7% of respondents. Tweeter was confirmed on zero rate at Equity Bank while in BPR, was confirmed on 4.3% of respondents. E-mail was on zero also in Equity Bank while in BPR; E-mail was confirmed on 8.7% of respondents. The findings show that the application of digital marketing has improved customers convenience. Mobile banking was 15.2% in BPR; Account opening was on 13.0% in BPR; account management was on rate of 28.0% in Equity Bank and 32.6% in BPR; Card Payments was on 28.0% in Equity Bank and 15.2% in BPR, Money transfers was on 40.0% of respondents in Equity Bank in Rwanda while 21.7% was from BPR. The application of digital marketing helps in reducing marketing cost against traditional marketing in commercial banks in Rwanda where 28.0% in Equity Bank said that digital marketing reduces the cost at a very high level; while 50.0% respondents in BPR said that digital marketing reduce the cost of marketing for Bank at a very high level. To conclude, according to the findings there is significant effect of digital marketing on performance of commercial banks in Rwanda. As recommendation, the commercial banks in Rwanda should invest in digital platforms so as to be in a position to take full advantage of the digital marketing potential.

KEY WORDS: Digital Marketing, Performance, and Commercial Banks

CHAPTER ONE: INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Background of the study

The world at the time experiencing a new global economic order which is characterized by information and communication technologies. A whole remarkable change is taking place in which the spread of knowledge is giving a rise to an era of knowledge and information. These dramatic turns are taking an extreme lead in challenging for small developing economies like Rwanda. Fortunately, knowledge, and technology offer such countries like Rwanda, with no big mines and a landlocked a platform on which to build a future and become part of the global digital economy (Mosawi et al., 2016)

Rwanda has paradoxically turned out to be one of the top ten fastest growing economies in the world in the past 24 years after the tragedy of Genocide against Tutsi that befell the land which left the economy seriously suffering. It is also regarded standing in position in being among the top best performing economies in Africa and as such striving to hold top place in making it easy to invest in Africa, as emphasized by Doing business in Rwanda, RDB. In spite of the recent financial crisis, the economy of Rwanda recovered from the sharp downturn with an expansion of 7.4% in 2010 (African Economic Outlook, 2011), (World Bank) and the outlook for 2013 remains robust.

According to Aladwani (2001) the banking family have unadventurously done the best they can to adopt technology in striving to improve the products and services they lender and hence employing information communication technology to better service their financial needs and satisfy the needs of their customers and rise the application of internet-based operations in their day to day business (Gopalakrishnan, at al., 2003). The importance of internet in business operations has been a discussion for a number of scholars (Ahmad, et al., 2014:12).

There are a growing number of organizations that are using the internet and other electronic tools to communicate with their trading partners. They all agree that this actually covers all sectors of economies ranging from government institutes, private institutions and also with end-users of their products and services who are the customers. In this same spirit, the Rwandan banking sector is embracing electronic or digital marketing technology with its due advantages. Digital marketing in particular offers the traditional players in the financial services sector the

opportunity to add a low-cost advertising channel to their numerous platforms. The banking sector plays a significant role in the growth of economies all over the world especially Rwanda (Ahmad, et al., 2014:17).

In addition, the banking industry is one of the most profitable and growing in Rwanda, however, due to liberalization, globalization, technological advancement and more enlightened customers, it has been faced with several challenges emanating from the operating environment. It is as a result of these challenges that the commercial banks have had to change tact in order to be competitive. Commercial banks assaulted by pressure of globalization and competition from non-banking new ways to add value to the service. The question of what drives performance is at the top in understanding superior performance and hence striving for it. Substantial research efforts have gone into addressing this question, starting from the strategic level and going down to operational details. A key study benchmarking the strategies of leading retail banks was carried out by the bank strategies of leading banks (Vander, 1992).

This study is based on the opinions of heads of marketing at all commercial banks established the linkage between marketing, operation, organizing excellence. This finding led to the formulation of the service management strategy encapsulated in the trial operational capabilities service quality-performance, (Jackson, 1995). The capabilities services quality-trial is, in turn a focused view of the services profit chain described by (Heskett et, al., 1994) based on their analysis of successful services organization.

Marketing is the process of meeting consumer needs profitably; electronic marketing is the application of the internet and the arising technologies to attain the firm's goals as discourses (Sedlacek, 2006). Right from the first developments in marketing theories, the contribution of this discipline to the impact it has on the companies has been studied in terms of company cost effectiveness, efficiency, and effectiveness (Clark, 1999).

Likewise, what is important to know that the company goal is very subjective to each distinctive company, and that argument with the market often does not take into consideration long-term company objectives meaning this would confrontation can be in the short term of the company's life (Ambler, & Kokkinaki, 1997).

Measuring the performance of marketing activities on the Internet is even more difficult, due to this interdisciplinary instrument, the intangibility of some benefits brought about by the multimedia systems, and the lack of experience of the management in the measuring systems of the new generation. Consequently, understanding the way in which one can measure Internet and how it affects a company's performance positively or negatively is really a different task (Ghosh, 1998) the scholar goes ahead to asserts that for the manager it is more and more difficult to carefully evaluate in commercial terms the returns on Internet investments this being a service product in nature, evolution is somewhat troublesome.

However, for the case of Rwanda in spite of banks trying to enforce the banking services, Rwanda is still faced with some challenges which need to be addressed in order to promote effective and efficient banking performance and these are: The development of an efficient monetary transfer system in Rwanda has been hampered by so many factors.

Rwanda is face with infrastructural deficiency such as erratic power supply and communication link in some areas, inadequate skilled managers and requisite tool on end users and client systems, high charge or cost for the e-employment terminals (ATMs) so the banking legislation should set out standard charges for e-employment services. Hence these factors are believed to hampered e-banking services performance in the country hence affecting banks performance. It should also be noted no substantial academic research has been done in Rwanda especially on performance in the country hence affecting bank performance.

It should also be noted no substantial academic research has been done in Rwanda especially on performance of commercial banks hence this study aims at examining the impact of e-marketing on performance of commercial banks in Rwanda despite the above factors in order to come up with recommendations to improve on the e-marketing services in the country.

1.2. Problem statement

The banking industry in Rwanda is experiencing the waves of technological as a player in the world of banking and a player as well in a country that deliberated to switch from analogue to digital in all aspects of its economy as due to the benefits as discussed by (Ahmad, Rahim, Bakar, & Mohamed, 2014; El-Gohary, 2010, 2012; Mosawi et al., 2016), in the introduction. The development of the e-banking, e-commerce, e-business and e-marketing which a fundamental redesign of their core product is renders their position in the distribution chain as risky since banks can reach consumers directly without the need for physical distribution chains, because this calls for questions of resistance to adopt and embrace these developments.

The rise of digital marketing has had profound effects on the advertising industry and is shaping the advertising experience. Going forward, the effectiveness and low cost of digital marketing compelled many businesses to rethink the size and makeup of their advertising budgets. The purpose of this research was to examine the effect of digital marketing on the performance of commercial banks in Rwanda because the report given by National Bank of Rwanda (NBR Report, 2014) shows that there is a gap between the information received by customers regarding payment of cheques between banks; time wasted in banks as people line up the queue waiting to be served, errors as a result of manual work and fraud related issues. Bank client complain of the above hence the researcher was interested to examine the contribution of electronic marketing to bank performance in Rwanda.

1.3. Objectives of the study

This research presents two categories of research objectives such as general objective and specific objectives

1.3.1. General objective

The general objective of the study was to investigate the effect of digital marketing on the performance of commercial banks in Rwanda

1.3.2. The specific objectives

- i. To identify the common digital marketing platforms used by the commercial banks in Rwanda.
- ii. To determine the extent to which the application of digital marketing has improved customers convenience as channel of performance of commercial banks in Rwanda.

- iii. To assess how the application of digital marketing help in reducing marketing cost against traditional marketing in commercial banks in Rwanda.

1.4 Research questions

- i. What are the common digital marketing platforms used by the commercial banks in Rwanda?
- ii. To what extent does the applications of digital marketing has improved customers convenience as channel of performance of commercial banks in Rwanda?
- iii. How does the application of digital marketing help in reducing marketing cost against traditional marketing in commercial banks in Rwanda?

1.5. Scope of the study

This research intended to understand the application of digital marketing and how it impacts the performance of commercial banks in Rwanda. The research was conducted with in selected commercial banks located within Kigali city. These banks included by BPR and Equity Bank respectively.

The research as well focused on identifying the application of these marketing channels as compared to the traditional marketing channels to satisfy their customers' needs at the banks. Rwanda first embraced internet through Rwanda internet exchange point that started in the mid 2004 by the government's Rwanda Information Technology (RITA) as written by (Gagliardone I, Golooba-Mutebi 2016 Aug), for the interest of this research five years data was be used, that is 2013 to 2017.

1.6. Significance of the study

This study is very important for not only to the researcher but also to the University of Rwanda, College of Business and Economics (UR_CBE), selected banks [BPR and Equity bank] as the case study where this research was conducted.

1.6.1. Personal interest

This study helped the researcher to have knowledge and skills on the use of internet marketing vis-a-vis banking performance in Rwanda.

1.6.2. Social interest

The study was assist the managers of BPR and Equity Bank who want to come up with the real picture on impact of internet marketing to the banking performance in Rwanda by use of analysed and interpreted information from the field.

1.6.3. Academic interest

The study was of greater significant the MBA student who is expecting to get a master's degree in Marketing after accomplishing this research.

1.6.4. Scientific interest

The study is of greater important to UR-CBE community by holding the final report on the library which was be used by interested researchers on the effect internet marketing to the banking performance in Rwanda.

1.7. Organization of the study

This study consists of four chapters:

Chapter One is a general introduction that includes background of the study, problem statement, research questions, objectives of the study (general objective and specific objectives), scope of the study and significance of the study.

Chapter Two is literature review which consists of introduction, definition of key terms, digital marketing, performance, financial institutions and others that was considered important and necessary on the effect of digital marketing to the performance of selected banks here in Rwanda.

Chapter Three of this study is about research methodology. Research methodology consists of introduction, research design, data collection, data analysis and interpretation and then limitations of the study.

Chapter Four is analysis and interpretation of results. This chapter includes introduction and analysis of data related to effect of digital marketing to the performance of selected banks here in Rwanda. The chapter five was summary of main findings, conclusion, and recommendations

CHAPTER TWO: LITERATURE REVIEW

This chapter presents the ideas from previous authors and researchers who wrote on digital marketing and performance of commercial banks. It gives conceptual review, the theoretical review and empirical review. Then, the researcher seeks the gaps left by previous authors, thereafter, shows how to fill those gaps.

2.1 Theoretical Review

2.1.1 The Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is an information systems theory that models how users come to accept and use a technology. The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it, notably Perceived usefulness (PU). This was defined by Fred Davis as the degree to which a person believes that using a particular system would enhance his or her job performance; Perceived ease-of-use (PEOU) - Davis defined this as the degree to which a person believes a particular system would be free from effort (Davis, 2011).

Understanding why people accept or reject computers had proven to be one of the most challenging issues in information systems (Swanson, 1988). Szajna, (2002) found that the instrument had predictive validity for intent to use, self-reported usage and attitude toward use. The sum of this research has confirmed the validity of the Davis instrument, and to support its use with different populations of users and different software choices.

User acceptance of technology has been an important field of study for over two decades now. Although many models have been proposed to explain and predict the use of a system, the Technology Acceptance Model has been the only one, which has captured the most attention of the Information Systems community.

Thus, it is essential for anyone willing to study user acceptance of technology to have an understanding of the Technology Acceptance Model. This literature review provides a historical overview of the Technology Acceptance Model (TAM) by summarizing the evolution of TAM, its key applications, extensions, limitations, and criticisms from a selective list of published articles on the model. Current observations indicate that although TAM is a highly cited model,

researchers share mixed opinions regarding its theoretical assumptions, and practical effectiveness. It is concluded that research in TAM lacks sufficient rigor and relevance that would make it a well-established theory for the IS community.

2.1.2 Diffusion of Innovation Theory

The diffusion is the process by which an innovation is communicated through certain channels over a period of time among the members of a social system. An innovation is an idea, practice, or object that is perceived to be new by an individual or other unit of adoption. Communication is as process in which participants create and share information with one another to reach a mutual understanding (Rogers, 2009).

The Innovation-Decision Process Model suggests that the adoption of an innovation is not a single act, but a process that occurs over time. Potential adopters go through five stages when interacting with an innovation. The first stage is knowledge in which potential adopters find out about an innovation and gain a basic understanding of what it is and how it works. The second stage is persuasion in which potential adopters form a positive or negative impression of the innovation. It is only in the third stage decision, that the innovation is actually adopted or rejected.

The fourth stage, implementation, occurs when the innovation is actually used. In the fifth stage, confirmation, the adopter seeks information about the innovation and either continues or discontinues use of the innovation.

2.1.3 Digital marketing channels

Digital marketing became popular because of the e-commerce, in other words, online shops. The main reason why digital marketing is being used in businesses is the lower cost and reachability compared to traditional marketing. For example, to reach 2,000 customers by newspaper or direct mailing the budget is around 200-900 dollars but with digital marketing the cost of advertisement is around 50-75 dollars (Bhargava, 2015).

Digital marketing platforms are intended to support an extensible set of requirements within a single neighbourhood or two. A digital marketing platform unveils key elements as standardized services via a programmatic application programming interface for building custom applications, extensions and integrations with other custom and commercial applications and data sources. Some offerings claim to be digital marketing platforms that address virtually all digital marketing neighbourhoods, but the methods and objectives of each neighbourhood vary widely.

Any platform sufficiently general to span them all would take the form of a general-purpose tool such as a spreadsheet or a browser with applications outside of digital marketing. So, any platform in digital marketing needs to address requirements specific to a limited number of neighbourhoods or domains (Miles, Stephen Bel., 2003).

However, the platforms are not the overall solution because it can create lock-in risks as you become dependent on a single-provider specialized platform longer implementation cycle's slow time to value May not be cost-effective to buy a platform for small subset of functionality among these we can talk about Mobile marketing platforms. The Factors of Digital marketing are as follows:

2.1.3.1. Networks

Digital marketing is all the time affected by the right Networks to realize the goals of technology usage, it is key to find a strong communication network that integrates all areas with each other's and empower all people to access the network easily and quickly (World Bank, D.C, 2001).

2.1.3.2. Security

Security has been found out to be among the vital elements while looking at any digital business to protect people from any transactions loss, from hackers, viruses, and wastage by using specific techniques like encryption, Authentication, Integrity, repudiation where by a transaction cannot be rejected during transmission process, as well as confidentially meaning transactions cannot be accessed by unauthorized people) (Chellappa, and Pavlou, 2002).

2.1.3.3. Information privacy

Privacy of Customers' information is also another concern while looking at digital marketing and other activities from unauthorized people. Banks should seek customers' permission to access their data. In this way, customers develop trust ICT and E-banking Services (Federal Reserve Bank of New York, 1999).

2.1.3.4. National ICT policy

According to the government regulates of Rwanda every business on the land in question and the success of a digital world for any country would not be without the government being behind it, Rwanda, under the leadership of President Paul Kagame , has made a number of progresses to develop Rwanda into the ICT leader of Africa.

The country's Vision 2020 plan is centered on "a prosperous knowledge-based economy." six "pillars" and four "cross-cutting domains," one of which is "science and technologies, including ICTs." The government in objecting to achieve the above has put in place the legal, institutional and structural framework, favourable to the unfolding and the integration of ICT in the economy and within society; she has encouraged the private initiatives in the communication sector

2.1.3.5. Digital skills

The government has purposed to improve Rwandan skills in using and managing ICT, overseen they adapt technological co-operation to the transfer of ICT to Rwanda, to improve communication facilities. In 1997, Rwanda's first technology institute of higher learning, the Kigali Institute of Science, Technology, and Management (KIST), was established. KIST was founded to increase the capacity of the country to produce qualified scientists, engineers, and administrators. It offers degree programs in Computer Engineering, Electrical Engineering, Business Administration and many more to date

In the year 2004 through the year 2005 Rwanda Terracom was founded as a private company charged with developing a state-of-the-art fiber optic network in Rwanda. Terracom's first goal is to connect schools, hospitals and government buildings in the country's capital, Kigali.

2.1.3.6 Digital-marketing and customer convenience

Kotler and Keller (2008) have defined marketing as identifying, anticipating and satisfying customer needs profitably. Taking an example of web site as a major part of digital-marketing, what is considered is how a web site can fulfil the definition of marketing by Identifying needs from customer comments, enquiries, requests and complaints and by observing new customer groupings identified by data mining through customer data, sales and interests. Anticipate customer needs is done by asking customers questions and engaging them in a dynamic dialogue built on

So, with the growing technology when you visit a web site and an unusually relevant banner ad drops down, this is no coincidence – cookies have anticipated your desires and needs, and firms are desiring to satisfy needs with prompt responses, punctual deliveries, order status updates, helpful reminders, after-sales services and added value services combined with the dynamic dialogue. The dialogue maintains permission to continue communicating and then adds value by delivering useful content in the right context of time and amount, by doing all that the marketer's memory as the relationship effectively blossoms during the customer's life increases lifetime value.

And if the web site is integrated with customer relationship management (CRM) systems and mass customization, then the relationship even deepens, and needs are completely satisfied in a very efficient automated two-way process. This also, of course, provides convenience for the customers and some protection from the inevitable attack of competition to the marketer. Social media marketing has integrated with all the other communications approaches to bring value to customer. Social media helps amplify a message through comments and sharing of social networks, viral marketing or word-of-mouth marketing.

Social media marketing is an exciting new frontier in the marketing sphere and as such, multiple books and studies have been published on social media as a marketing tool. Internationally, Wire (2010) found that 18% of social media users look to social media as core information discovery tool because they trust what their friends say, and social media provides the perfect platform (Barnes, 2008)

Frost & Sullivan (2011) have written a white paper on social media customer engagement on how contact centre organizations can integrate social media in their operations but have not analysed the strategic competitive advantage in customer care using social media. The adoption of social media marketing by commercial banks has been on the rise due to the social media inventions by customers and how convent social media has proved to be to them. These inventions were originated at different times but developed almost concurrently to bring about the current connectivity witnessed in the world today.

From the invention of the phone, the world is on the move with mobile phones, it is projected that by 2019, over 5 billion people will own a mobile phone. The increase in connectivity became the boon for social media platforms from classmates.com in 1995 to the current popular networking sites established in 2002 and onwards like Facebook, linked in, Instagram, twitter, YouTube and many other emerging apps which are getting established and still evolving into aspects of virtual and augmented reality. These social media websites mostly are characterized by simple user interfaces with features accessed by the user to upload content as well as receive information which improves convenience. (Shankar et al. 2011).

2.1.4 Determinants of Performance of commercial banks

Commercial banks play a vital role in the economic resource allocation of countries. They channel funds from depositors to investors continuously. They can do so, if they generate necessary income to cover their operational cost they incur in the due course. In other words, for sustainable intermediation function, banks need to be profitable. Beyond the intermediation function, the financial performance of banks has critical implications for economic growth of countries. Good financial performance rewards the shareholders for their investment. This, in turn, encourages additional investment and brings about economic growth. On the other hand, poor banking performance can lead to banking failure and crisis which have negative implications on the economic growth.

The determinants of bank performances can be classified into bank specific (internal) and macroeconomic (external) factors (Al-Tamimi, 2010; Aburime, 2005). These are stochastic variables that determine the output. Internal factors are individual bank characteristics which affect the banks performance. These factors are basically influenced by internal decisions of management and the board. The external factors are sector-wide or country-wide factors which are beyond the control of the company and affect the profitability of banks. The overall financial performance of banks as per International Journal of Economics and Financial Issues, (2013) Oloo, (2010) Studies have shown that bank specific and macroeconomic factors affect the performance of commercial banks (Flamini et al. 2009). In this regard, the study of Olweny and Shiphoh (2011)

2.1.4.1 Bank Specific Factors/Internal Factors

As explained above, the internal factors are bank specific variables which influence the profitability of specific bank. These factors are within the scope of the bank to manipulate them and that they differ from bank to bank. These include capital size, size of deposit liabilities, size and composition of credit portfolio, interest rate policy, labour productivity, and state of information technology, risk level, management quality, bank size, ownership and the like. CAMEL framework often used by scholars to proxy the bank specific factors (Dang, 2011). CAMEL stands for Capital Adequacy, Asset Quality, Management Efficiency, Earnings Ability and Liquidity. Each of these indicators is further discussed below.

1. Capital Adequacy

Capital is one of the bank specific factors that influence the level of bank profitability. Capital is the amount of own fund available to support the bank's business and act as a buffer in case of adverse situation (Athanasoglou et al. 2005). Banks capital creates liquidity for the bank due to the fact that deposits are most fragile and prone to bank runs. Moreover, greater bank capital reduces the chance of distress (Diamond, 2000).

However, it is not without drawbacks that it induces weak demand for liability, the cheapest sources of fund Capital adequacy is the level of capital required by the banks to enable them with stand the risks such as credit, market and operational risks they are exposed to in order to absorb the potential loses and protect the bank's debtors. According to Dang (2011), the adequacy of capital is judged on the basis of capital adequacy ratio (CAR). Capital adequacy ratio shows the internal strength of the bank to withstand losses during crisis. Capital adequacy ratio is directly proportional to the resilience of the bank to crisis situations. It has also a direct effect on the profitability of banks by determining its expansion to risky but profitable ventures or areas (Sangmi and Nazir, 2010).

2. Asset Quality

The bank's asset is another bank specific variable that affects the profitability of a bank. The bank asset includes among others current asset, credit portfolio, fixed asset, and other investments. Often a growing asset (size) related to the age of the bank (Athanasoglou et al., 2005). More often than not the loan of a bank is the major asset that generates the major share of the banks income. Loan is the major asset of commercial banks from which they generate income.

The quality of loan portfolio determines the profitability of banks. The loan portfolio quality has a direct bearing on bank profitability. The highest risk facing a bank is the losses derived from delinquent loans (Dang, 2011).

Thus, nonperforming loan ratios are the best proxies for asset quality. Different types of financial ratios used to study the performances of banks by different scholars. It is the major concern of all commercial banks to keep the amount of nonperforming loans to low level. This is so because high nonperforming loan affects the profitability of the bank. Thus, low nonperforming loans to total loans shows that the good health of the portfolio a bank. The lower the ratio the better the bank performing (Sangmi, and Nazir, 2010).

3. Management Efficiency

Management Efficiency is one of the key internal factors that determine the bank profitability. It is represented by different financial ratios like total asset growth, loan growth rate and earnings growth rate. Yet, it is one of the complexes subject to capture with financial ratios. Moreover, operational efficiency in managing the operating expenses is another dimension for management quality. The performance of management is often expressed qualitatively through subjective evaluation of management systems, organizational discipline, control systems, quality of staff, and others. Yet, some financial ratios of the financial statements act as a proxy for management efficiency. The capability of the management to deploy its resources efficiently, income maximization, reducing operating costs can be measured by financial ratios.

Operating profit to income ratio (Rahman et al. in Ilhomovich, 2009; Sangmi and Nazir, 2010). The higher the operating profits to total income (revenue) the more the efficient management is in terms of operational efficiency and income generation. The other important ratio is that proxy management quality is expense to asset ratio. The ratio of operating expenses to total asset is expected to be negatively associated with profitability. Management quality in this regard, determines the level of operating expenses and in turn affects profitability (Athanasoglou et al. 2006).

4. Liquidity Management

Liquidity is another factor that determines the level of bank performance. Liquidity refers to the ability of the bank to fulfil its obligations, mainly of depositors. According to Dang (2011) adequate level of liquidity is positively related with bank profitability. The most common financial ratios that reflect the liquidity position of a bank according to the above author are customer deposit to total asset and total loan to customer deposits. Other scholars use different financial ratio to measure liquidity. For instance, Ilhomovich (2009) used cash to deposit ratio to measure the liquidity level of banks in Malaysia. However, the study conducted in China and Malaysia found that liquidity level of banks has no relationship with the performances of banks (Said and Tumin, 2011).

2.1.4.2 External Factors/ Macroeconomic Factors

The macroeconomic policy stability, Gross Domestic Product, Inflation, Interest Rate and Political instability are also other macroeconomic variables that affect the performances of banks. For instance, the trend of GDP affects the demand for banks asset. During the declining GDP growth, the demand for credit falls which in turn negatively affects the profitability of banks. On the contrary, in a growing economy as expressed by positive GDP growth, the demand for credit is high due to the nature of business cycle. During boom the demand for credit is high compared to recession (Athanasoglou et al., 2006). The same authors state in relation to the Greek situation that the relationship between inflation level and banks profitability is remained to be debatable. The direction of the relationship is not clear (Vong and Chan, 2009).

Ownership Identity and Financial Performance

The study of the relationship between ownership and performance is one of the key issues in corporate governance which has been the subject of ongoing debate in the corporate finance literature. The relationship between firm performance and ownership identity, if any, emanate from Agency Theory. This theory deals with owners and manager's relationship, which one way or the other refers to ownership and performance.

In relation to performance according to Javid and Iqbal (2008), the identity of ownership matters more than the concentration of ownership. This is so because ownership identity shows the behavior and interests of the owners. Ongore (2011) argues that the risk-taking behavior and investment orientation of shareholders have great influence on the decisions of managers in the day-to-day affairs of firms.

According to Ongore (2011), the concept of ownership can be defined along two lines of thought: ownership concentration and ownership mix. The concentration refers to proportion of shares held (largest shareholding) in the firm by few shareholders and the later defines the identity of the shareholders.

Morck et al., (2010) explained that ownership concentration has two possible consequences. The dominant shareholders have the power and incentive to closely monitor the performances of the management. This in turn has two further consequences in relation to firm performance. On the one hand close monitoring of the management can reduce agency cost and enhance firm performance. On the other hand, concentrated ownership can create a problem in relation to overlooking the right of the minority and also affect the innovativeness of the management (Ongore, 2011; Wen, 2010).

2.1.4.3 Financial Bank Performance Indicators

Profit is the ultimate goal of commercial banks. All the strategies designed, and activities performed thereof are meant to realize this grand objective. However, this does not mean that commercial banks have no other goals. Commercial banks could also have additional social and economic goals. However, the intention of this study is related to the first objective, profitability. To measure the profitability of commercial banks there are variety of ratios used of which Return on Asset, Return on Equity and Net Interest Margin are the major ones (Murthy and Sree, 2003; Alexandru et al., 2008).

1. Return on Equity (ROE)

ROE is a financial ratio that refers to how much profit a company earned compared to the total amount of shareholder equity invested or found on the balance sheet. ROE is what the shareholders look in return for their investment. A business that has a high return on equity is more likely to be one that is capable of generating cash internally. Thus, the higher the ROE the better the company is in terms of profit generation.

It is further explained by Khrawish (2011) that ROE is the ratio of Net Income after Taxes divided by Total Equity Capital. It represents the rate of return earned on the funds invested in the bank by its stockholders. ROE reflects how effectively a bank management is using shareholders' funds. Thus, it can be deduced from the above statement that the better the ROE the more effective the management in utilizing the shareholders capital.

2. Return on Asset (ROA)

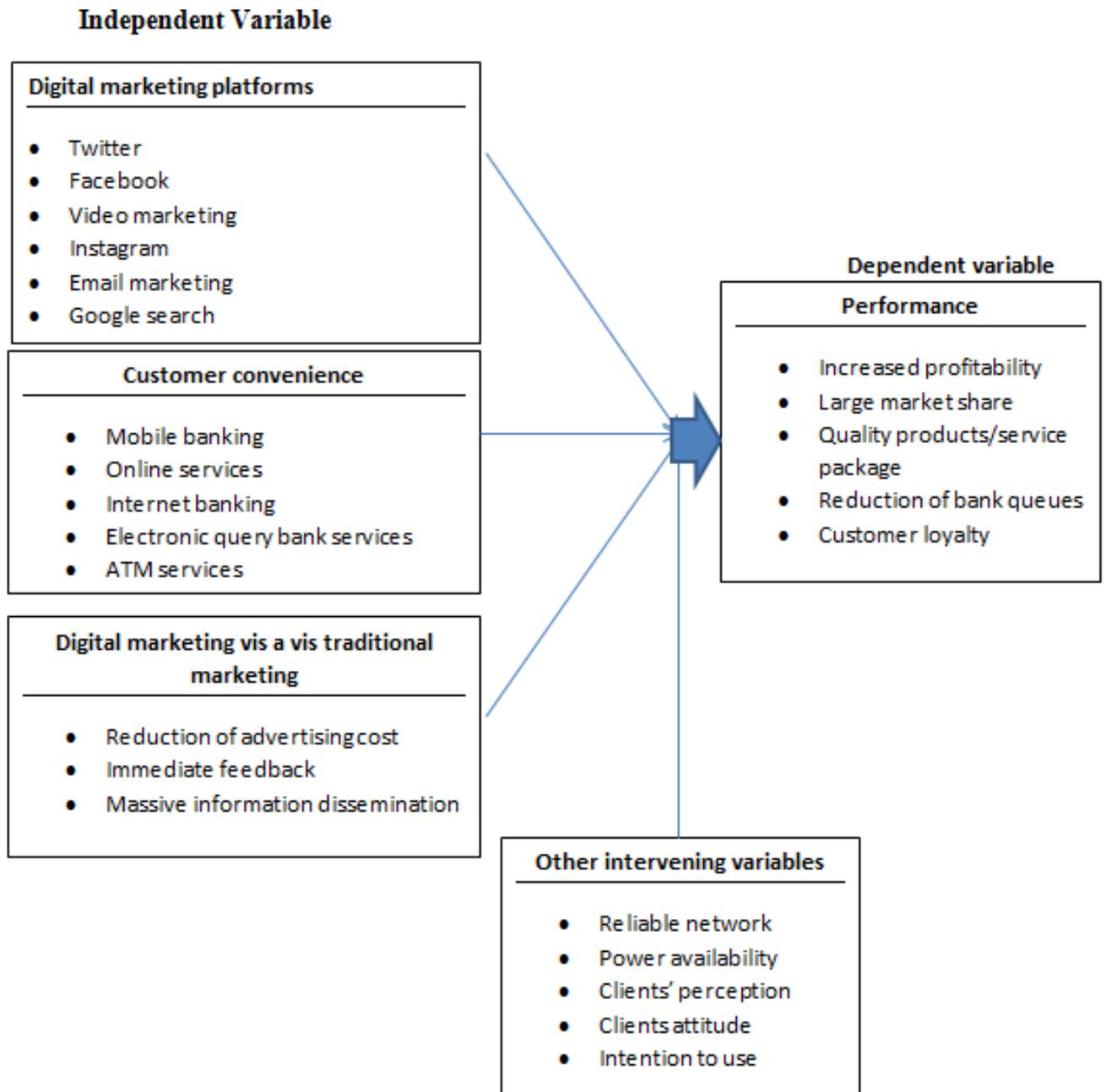
ROA is also another major ratio that indicates the profitability of a bank. It is a ratio of Income to its total asset (Khrawish, 2011). It measures the ability of the bank management to generate income by utilizing company assets at their disposal. In other words, it shows how efficiently the resources of the company are used to generate the income. It further indicates the efficiency of the management of a company in generating net income from all the resources of the institution (Khrawish, 2011). Wen (2010), state that a higher ROA shows that the company is more efficient in using its resources.

3. Net Interest Margin (NIM)

NIM is a measure of the difference between the interest income generated by banks and the amount of interest paid out to their lenders (for example, deposits), relative to the amount of their (interest- earning) assets. It is usually expressed as a percentage of what the financial institution earns on loans in a specific time period and other assets minus the interest paid on borrowed funds divided by the average amount of the assets on which it earned income in that time period (the average earning assets). The NIM variable is defined as the net interest income divided by total earnings assets (Gul, et al., 2011).

Net interest margin measures the gap between the interest income the bank receives on loans and securities and interest cost of its borrowed funds. It reflects the cost of bank intermediation services and the efficiency of the bank. The higher the net interest margin, the higher the bank's profit and the more stable the bank is. Thus, it is one of the key measures of bank profitability. However, a higher net interest margin could reflect riskier lending practices associated with substantial loan loss provisions (Khrawish, 2011).

2.2. Conceptual Review



Source: *Researcher conceptualization 2018*

Figure 1: Conceptual review

2.2.1. Digital marketing platforms

To appreciate the incredible growth of the internet we should look back at how ancient communications technology advanced into the global network of interconnection of computers that we have today called the internet.

According to Tom Standage (1998) the story of electronic communication begins with the wired telegraph a network that grew explosively to cover the globe, connected people across vast distances in a way that seemed almost magical, and changed the world for ever.

In his book *The Victorian Internet*, Tom Standage emphasizes on the wired telegraph and draws some astonishing parallels between the growth of the world's first electronic communications network and the growth of the modern-day internet. Standage goes ahead to describe the origins of the telegraph, and the quest to deliver information from point to point more rapidly in the days when speedy communication relied on a fast horse and a skilled rider:

D-marketing is something beyond the Internet. Electronic marketing includes technologies that customer relationship management, business resource planning, supply chain management, etc. as well as make possible (Shah, 2009).

American Marketing Association's firm centric defines the term "digital marketing" as activities, institutions, and processes facilitated by digital technologies for creating, communicating and delivering value for customers and other stake-holders, it has grown over time from a specific term describing the marketing of products and services using digital channels to an umbrella term describing the process of using digital technologies to acquire customers and build customer preferences, promote brands, retain customers and increase sales.

As Schmidt et al. (2008) adopt a more inclusive perspective and define digital marketing as "an adaptive, technology-enabled process by which firms collaborate with customers and partners to jointly create, communicate, deliver, and sustain value for all stakeholders". Digital marketing platforms are many that stimulate the performance of commercial banks. However, the customer convenience focuses on mobile banking, online services, Internet banking, Electronic query bank services, and ATM services.

Digital marketing platforms are Twitter, Facebook, Video marketing, Instagram, Email marketing, and Google search. Digital marketing vis à vis traditional marketing presents the reduction of advertising cost, immediate feedback, and Massive information dissemination. Other intervening variables that help digital marketing platforms to be well working are reliable network, Power availability, clients' perception, client's attitude, and Intention to use

2.2.2 Performance

Performance is the accomplishment of a given task measured against present known standards of accuracy, completeness, cost, and speed. In a contract, performance is deemed to be the fulfilment of an obligation, in a manner that releases the performer from all liabilities under the contract (Greuning, 2000).

According to Lorino, (2001) performance is defined in following ways (a) performance means, firstly, reaching the strategic objectives. This is actually the meaning of the concept of "efficacy". This concept forms the rational model in which the organization is perceived to be mechanically, which means that efficiency is implicitly taken into account in setting goals and effectiveness is measured quantitatively. (b) Performance is an unstable balance between efficiency and effectiveness.

Performance is also seen as a state of the enterprise's competitiveness, reached by a level of effectiveness and efficiency that ensure sustainable market presence. (c) Performance involves also the economic concept of creation of wealth or value to the organization. Thus, performance is a relation between cost (operation cost the organization) and the value of benefits obtained. The performance mainly indicated also by an increase of profitability, large market share, quality products/service package, reduction of bank queues, and customer loyalty.

2.3 Empirical Review

2.3.1 Digital marketing and the performance of commercial banks

Historically, banks took conservative, industry-specific approaches to defend against customer attrition, counting on customers to remain loyal simply because of the relative difficulty of changing banks. However, as they begin to accept that their brands can be displaced by more innovative, nimble and quick competitors and struggle to maintain relevance, banks are now employing strategies that look and feel a lot more like approaches used in the retailing industry.

In the context of the aforementioned trends, digital has become the most critical focus area for bank marketers today. While many now use new tools and techniques to improve reach, customer engagement and, more importantly, new business acquisition, most marketers are still trying to grasp what it means to “be” digital. With ongoing channel proliferation, marketers struggle to build out their strategies while reinforcing customer loyalty and brand awareness.

Corporations now highlight the importance of creating a “digital relationship” with customers (Phillips, 2015). Moreover, digital technologies and devices such as smartphones, smart products, the Internet of Things (IoT), Artificial Intelligence, and deep learning all promise significant transformations of consumers' lives in the near future. It is against this backdrop that this paper seeks to understand how the developments in digital technology are re-shaping the process and the strategy of marketing, and the implications of this transformation for research in the broad space we call “digital marketing”.

According to Kotler & Armstrong (2010), the 4P model (a model which helps to reach and find marketing goals) can be used as an indicator for better marketing. It can be implemented in digital marketing although it needs some customization, meaning that place must be reconsidered as a digital channel because there is no physical place for digital marketing. The term digital marketing comes from using an electronic device (smartphones, computer, and tablets, game consoles) to reach customers.

2.3.2 Marketing channels and the marketing mix

According to Armstrong and Kotler (2014) Marketing channels are persons, organizations or even other activities necessary for transferring ownership of goods from when they are produced to when they get to the final consumer of the product or service, meaning the means in which the products get to the end user. Some scholar terms it distribution channels they go ahead to stress that marketing channels are useful tools for management and are crucial to creating an effective and well-planned marketing strategy.

There are basically four types of marketing channels: Direct selling; Selling through intermediaries; Dual distribution; and Reverse channels. Essentially, a channel might be a retail store, a web site, a mail order catalogue, or direct personal communications by a letter, email or text message. Marketing mix comprises of the options available to a marketer in order to affect

the demand for a product or service according to Kotler and Armstrong (2014). This fundamental theory can be interpreted in the electronic marketplace to represent the e- product, e-price, e-place and e-promotion like the traditional marketing mix does.

According to Steven Dann in his book e-marketing strategies and application, say digital Marketing is basically the promotion of brands using all forms of digital forms of marketing mix on the internet most especially advertising mediums to reach the target segment. Those channels that do not include personal selling are done via Radio, mobile, Internet, Television, social media marketing and other less popular forms of digital media. In the biggest context, marketing electronically (e-marketing) can be considered as an innovative business practice involved with the marketing of goods, services, information and ideas through the Internet and other electronic means.

Strauss and Frost (2001) define it as: “The use of electronic data and applications for planning and executing the conception, distribution and pricing of ideas, goods and services to create exchanges that satisfy individual and organizational goals”. One potential problem that is likely to create confusion is the use of the terms: E-Marketing, Internet-marketing, E-commerce, E-business as termed by individual researchers. It is therefore important to differentiate between these terms for instance internet marketing some scholars have justified it to refer only to the Internet, World Wide Web, e-mails whereas e-marketing includes all of that is included in internet marketing plus all other E-Marketing tools like: Intranets, Extranets and mobile phones.

The marketing management has certainly played an important role to describe the most widely accepted view of the marketing philosophy and guidance for the implementation of the concept (Kotler, 2000). The marketing concept and the related concept have been of important components of the marketing academic and practice for quite some time. The fundamental importance attributed to this concept has triggered numerous projects while attempting to explore its application and relationship with other variance that affects business performance (Slater, & Naver, 2000).

In the views of Beckinsale, and Ram, (2006) ICT is defined as ‘any technology used to support the gathering of information, its processing, its distribution and how the support of all these are put to use. The increase in technological evolution, internalization and the consumerism of

completion are some of the conditions in the market that increases the competitive intensity levels (Avlonitis, and Gounaris, 1999).

Besides, using technology is a form of strategic innovation that is basically a different way of competing with competitors and also improving the financial of existing businesses (Ireland & Webb, 2007; Riddell, & Song, 2012). The progress in technology has provided an opportunity for commercial banks to introduce great innovations. The combination of banking services with electronic technologies means that commercial banks are able to advertise their products with ease and users are able to conduct banking services at any places overcoming challenges of traditional marketing platforms (Jalang'o, 2015).

E-marketing tools are developing swiftly as new technologies arise every day and firms are left with little or no choice rather to adopt these technological trends. A company using the internet as a part of its marketing mix is often perceived as a company at the leading edge of its sector.

The new e-marketing tools era has dramatically reduced traditional media dependence, including Yellow Pages and mailing-list brokers. One of the most effective popular e-marketing methods is the banner advertising which is a form of advertising, often small four-sided and horizontal shaped advert which very often appears in most sites.

The presence and importance for electronic-based business is immense. Banner adverts are typically hyperlinked to the advertiser's primary page or one with more information about the specific product or service advertised (Kaye & Medoff, 2001).

According to Banner works (2010), there are three common file types of banners: static, animated, and flash. Static web banners are cost effective and simple ads, often containing graphics and text. Static banners are the most widely recognized and accepted file sizes. Similarly, animated banners are types of banners which use animation in the text or images to transfer their messages the movement attracts viewers more than the static banners.

Flash banner is a sophisticated animated banner that flows smoothly like a movie and can also include sound. They can also be interactive, and include rollover buttons, checkboxes, in- banner navigation systems, sound on/off buttons, play-pause buttons, close buttons and so on (Banner works 2010).

Electronic mailing also known as e-mail has become an important online marketing tool as well. In addition to text, e-mail messages also contain pictures, videos and sounds, and can be personalized for certain customer groups (Kotler & Armstrong 2008, 503). Recent studies on e-mail marketing. This should not be left unsaid that nearly half of all businesses used e-mail marketing to reach their customers.

According to Kotler and Armstrong, e-mail can be the best direct marketing medium. Internet-based companies such as Amazon.com and Dell have been using email marketing successfully. Both companies have adopted a permission-based marketing approach and they offer highly personalized messages to customers. For instance, Amazon.com is known for sending marketing e-mails based on the customers' previous purchases (Kotler & Armstrong 2008).

However, given that fact, e-mail marketing has also some evident problems such as the spam messages. A spam message is an unwanted commercial e-mail message and at present 84% of all inbound e-mail is considered spam. Unwanted commercial e-mail messages may even distance the customer from the company and therefore companies are encouraged to ask for permission to send marketing e-mail messages. This approach is called permission-based marketing and is considered the new standard model for e-mail marketing (Kotler & Armstrong 2008, pg.503-504).

CHAPTER THREE: RESEARCH METHODOLOGY

This chapter is the methodological part introducing the approach/es used in this research. It was shown all the methods and techniques that have been applied for the interest of this research. It was indicated places of interest for the following major points respectively: research design, target population, criteria for sample selection, methods and instruments of data collection, pilot study, analysis methods and limitations of the research.

3.1. Research design

This study employed a descriptive cross-sectional survey design. The design was used to gather information on a population at a single point in time. This study was about determining the effect of digital marketing on traditional advertising as employed by the commercial banks in Rwanda. It was therefore justified that cross-sectional surveys were most suited in this study. Cross sectional survey is based on a single examination of a cross-section of population at one point in time.

Additionally, high reliability is easy to obtain by presenting all subjects with a standardized stimulus which ensures that observer subjectivity is greatly eliminated. In this type of research study, either the entire population or a subset thereof is selected, and from these individuals, data are collected to help answer research questions of interest (Kothari, 2004).

3.2 Population of the study

The target population in this research work is the employees and the customers of two selected commercial banks in Rwanda: Banks BPR, and Equity Bank. These Banks have different branches around the country; for the purpose of this research only employees at the main branches were involved. The target population was both 243 of employees and 95,500 of customers from BPR and Equity Bank in Kigali City.

Table 1: Target Population

Bank	Bank Staff	Bank Customers
BPR	158	35 000
Equity Bank	85	60,500
Total	243	95,500

Source: Data collected in 2018

3.3. Sample Size

According to Mathias and Jackson, (2001), a sample is a part of population, which is deliberately selected for the purpose of investigating the properties of the parent population. In this study, sample size is selected from the target population on the side of BPR and Equity bank. The margin errors vary between 5% and 10% while confidence level varies between 90% and 95% from the total reality. This study used the 10% of margin error and confidentiality level was 90%. According to Taro Yamane, (1982), the formula below was applied in this study.

Sample size for Banks' staff

$$n = \frac{N}{1 + (N * (e^2))} \quad \text{n= sample size} \quad \text{N= Total population} \quad \text{e= margin error}$$

$$n = \frac{243}{1 + (243 * (0.1^2))} = 70.8 \cong 71$$

The sample size per banks' staff was 71 respondents included by the selected 46 employees from BPR and the 25 employees from Equity Bank

Sample size for Banks Customers

$$n = \frac{95,500}{1 + (95,500 * (0.1^2))} = 99.89 \cong 100$$

The sample size per bank customers was 100 of respondents included by selected 37 of customers from BPR and the 63 of customers selected at Equity Bank.

Sampling Technique

The sampling techniques were convenience sampling technique for selecting customers from BPR and Equity Bank, while purposive sampling technique was used to select respondents' staff of BPR and Equity Bank who best met the research objectives.

3.4. Source of data

The information used in this research was originated from primary and second source, primary and secondary data were collected for the credibility of this research. This is because both primary and secondary data are very crucial. The primary data only offers the views of

respondents without philosophical ideas about empirical aspects of the subject. So, the two methods were help in equally the same way of helping researcher to understand the situation of using digital marketing in the respective Banks.

Primary data

Primary data are data collected in the process of investigation, from the field for the first time being and not being collected by someone in the past by use of questionnaires. It was the original information from the population under investigation.

Secondary Data

Secondary data was collected from existing documents that has been compiled by others. These documents included any written materials that contain information about the issue wished to study. This data was collected from the documents provided by BPR, and Equity Bank.

3.5 Data collection techniques

The researcher to collect primary data, she used questionnaires designed and formulated to be answered by employees and customers of mentioned banks. This was also being used to be able to avoid inaccuracy that could occur when one uses only secondly data.

The researcher to collect secondary data, the physical and electronic library were used to understand the evolution of internet and its application, the evolution of e-marketing, its theories and application were read and many other journals and articles about the subject was be consulted.

This research was use only one types of data collection instruments which is questionnaires, where two types of questionnaires were formulated and multiplied then given to the respondents from bank staff and bank customers. The questionnaire was based on objectives of the research where they seek to understand ways in which the application of digital marketing has impacted the banks and their clients, digital marketing tools or methods they use while operating in the Rwandan banking sector during this technology rains. The questionnaire was set in English since if not all; most workers can read and write in the same language. Most questions are closed where the respondent has to tick the options and Likert scale method was also be used. The respondents were requested to add more options where possible, applicable and pleasant to them.

3.6 Data analysis and Presentation

3.6.1. Data analysis

According to the Nachmias (1978) data processing and analysis is defined as the link between data collection and analysis. It is concerned with transformation of the findings collected from the field into the system of the categories. In order to be presented in a more comprehensive form, data collection is not an end itself, unless data can be processed, analysed, and converted into information in format that can be helpful to the users. The study analysed the extent to which digital marketing affect the performance of selected banks here in Rwanda.

3.6.2 Data Presentation

According to Churchill, (1992), tabulation consists of simply counting the number of case that fall into varies categories. The edited and coded data was transferred into tables constructed basing mainly on the variables considered understudy. Tabulation involves counting cases falling into each of the classes or response. Tally marks were used to count the responses in order to make frequency distribution. The data collected from the field were analysed and summarized according to the major themes of objectives. Data was analysed using both quantitative and qualitative technique and the results were presented by using the descriptive methods of data analysis.

3.7 Limitations of study

This research was limited by a number of factors like time, funds, data and work schedule. As far as limitations concerned, the time, funds and data were not reasonable for collecting all necessary data related to the impact of digital marketing to the performance of selected bank here in Rwanda.

To overcome this constraint, the researcher developed the friendship with the population under investigation in order to get necessary information and again via cultivating and instilling a sense of trust in the minds of respondents by assuring them confidentiality and used some multiple skills like call backs, rearranging appointment and use of extensive coverage through cost minimization system. Another constraint that met during this research at Equity Bank was the lack of annual financial statements of the 5years, from 2013 to 2017.

CHAPTER FOUR: PRESENTATION, ANALYSIS, AND INTERPRETATION OF FINDINGS

This chapter presents the findings obtained from data collected in relation with the effect of digital marketing on performance of commercial banks in Rwanda especially from selected respondents both staff and customers of from BPR and Equity Bank Rwanda. The results are presented and interpreted in accordance with the research objectives such as to identify the common digital marketing platforms used by the commercial banks in Rwanda; to determine the extent to which the application of digital marketing has improved customers convenience as channel of performance in the commercial banks in Rwanda; to assess how the application of digital marketing help in reducing cost against traditional marketing in commercial banks in Rwanda.

4.1 Systematic presentation and Analysis of Data

The researcher went to the field of research (BPR and Equity Bank Rwanda) to distribute the questionnaires. The questionnaire was divided into two categories where there was questionnaire addressed to the bank staff included by 25 employees from Equity Bank and 46 employees from BPR. The questionnaire addressed to 37 customers from BPR and the 63 customers selected at Equity Bank. All respondents in both sides were given three days of responding the questions.

During the collection of answered questionnaires, the findings indicated the participation rate of respondents was 100.0% for answering the questionnaire.

This helps the researcher to continue with editing, coding, and make the tabulation in order to make statistical tables by using SPSS version 20.0. The starting section is concerned with data analysis of staff of both banks

4.1.1 Socio-Demographic Characteristics of Respondents

This section identifies gender balance, age, level of education, marital status, the experience of selected staff from BPR and Equity Bank who participated in this research.

Gender of Respondents

Gender is the range of characteristics pertaining to and differentiating between masculinity and femininity. The information contents on table 4.1 show gender balance distribution of respondents from BPR and Equity Bank.

Table 4.2: Gender Distribution of Respondents

Gender	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Male	16	64.0	26	56.5
Female	9	36.0	20	43.5
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

Table 4.1 shows that gender distribution of respondents of Equity Bank and BPR. During this research at Equity Bank, 64.0% were males, while in BPR, males were 56.5%. 36.0% respondents were females in Equity Bank; while 43.5% were females of BPR.

Maria (2003) argued that gender balance influences the performance of financial institutions where it maintains that the discrimination affects women is expressed in our societies mainly through the division of labour by sex, with the result that responsibility for household work and bringing up children devolves almost exclusively upon women; inequality between men and women in terms of access to productive resources and the benefits of these; limitations on participation in decision making processes and access to the various forms of public power. However, to increasing knowledge about the ways in which women in different groups and sectors of society participate in the performance, has highlighted the interconnection between gender balance, the environment and goals achievement of organization.

Age of respondents

Concerning to the ages of respondents during this study with staff of BPR and Equity Bank Rwanda, the table 4.2 presents the data as follows:

Table 4.3: Age Distribution of Respondents

Ages	Equity bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Between 21 and 30 years	8	32.0	17	37.0
31 and 40 years	6	24.0	18	39.1
Between 41 and 50 years	9	36.0	9	19.6
51 years and above	2	8.0	2	4.3
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

The table 4.2 presents the distribution of respondents by ages where the ages from 21 to 30 years were occupied by 35.2% of respondents at Equity Bank, and 37.0% respondents were in BPR. 31 and 40 years have been by 24.0% respondents in Equity Bank while in in BPR, they were 39.1% respondents. The range between 41 and 50 years were 36.0% in Equity Bank and 19.6% respondents in BPR. The ages of 51 years and above were 8.0% in Equity Bank while only 4.3% respondents were from BPR. Then, Equity Bank employs mature people while BPR hired youth than Equity Bank referring to data presented in the table 4.2.

Oribabor, E., (2000) said that age initiatives recruit employees across many financial activities, including planning for bank performance, compliance of bank operation, risk management, and marketing of financial services of the banks. However, to build long-term performance of any financial institution, age must engage across the services and learn about community needs and initiatives that serve all ages.

Marital Status of Respondents

Marital Status was found that civil status is any of several distinct options that describe a person's relationship with a significant other. This is included by married, single, divorced, and widowed are examples of civil status. These have any impact on the performance of commercial banks. In regard to marital status, the table 4.3 presents the findings as follows.

Table 4.4: Marital Status Distribution of Respondents

Marital Status	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Single	13	52.0	23	50.0
Married	12	48.0	23	50.0
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

Table 4.3 shows the distribution of respondent by marital status on staff of Equity Bank Rwanda and BPR. 52.0% of respondents were the single from Equity Bank while 50.0% were from BPR. 48.0% of respondents were married from Equity Bank and 50.0% respondents were married from BPR. Equity Bank employs majority single than married while in BPR, single and married are almost same. Amin (2017) argued that marital status influences performance of financial institution.

Education of Respondents

The findings shown in the table 4.4 illustrates data on education level of employees worked by Equity Bank Rwanda and BPR.

Table 4.5: Education Distribution of Respondents

Education level	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Masters' Degree	3	12.0	11	23.9
Bachelor's' Degree	22	88.0	35	76.1
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

The table 4.4 shows the distribution by education level of respondents from Equity Bank Rwanda and BPR. There is no illiterate employee in both Equity Bank and BPR where 12.0% respondents from Equity Bank who had Masters' Degree, while 23.9% of respondents from BPR who have masters. 88.0% respondents were from Equity Bank who have bachelor's Degree while 76.1% respondents were from BPR who have bachelor's Degree.

Experience of Respondents

In regard to the experience, the table 4.5 presents the data as follows.

Table 4.6: Distribution of Respondents by Working Experiences

Working Experiences	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Less than 1 year	1	4.0	9	19.6
2- 3years	15	60.0	9	19.6
4- 5years	9	36.0	15	32.6
6years and above	0	0.0	16	34.8
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

Table 4.5 shows the distribution of respondents by working experiences in Equity Bank Rwanda and BPR. 4.0% respondents from Equity Bank have experience less than 1 year while 19.6% of respondents who have less than 1year of experience were from BPR. 60.0% of respondents from Equity Bank have between 2-3years of working experience while only 19.6% of respondents in

BPR had the experience of 2 to 3years. 36.0% of respondents of Equity Bank have experiences of 4- 5years while BPR were 32.6% respondents. There is none who has experience of 6years and above in Equity Bank among the respondents met in this study while in BPR, more than 34.8% respondents have 6years and above of working experience in this Bank.

Paarlberg, (2006) argued that experience of employees in working within commercial banks helps effectively the business performance

4.1.2 Common digital marketing platforms used by the commercial banks in Rwanda

Digital marketing became popular because of the e-commerce, in other words, online shops. The main reason why digital marketing is being used in businesses is the lower cost and reachability compared to traditional marketing.

A digital marketing platform unveils key elements as standardized services via a programmatic application programming interface for building custom applications, extensions and integrations with other custom and commercial applications and data sources. Table 4.6 illustrates the information about the common digital platforms used in BPR and Equity Bank Rwanda as confirmed by their Staff.

Table 4.7: Common Digital Marketing Platforms used by BPR and Equity Bank Rwanda

	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Google Ad	4	16.0	10	21.7
Facebook	10	40.0	13	28.3
Instagram	10	40.0	13	28.3
Blogger	1	4.0	4	8.7
Tweeter	0	0.0	2	4.3
E-mail	0	0	4	8.7
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

Table 4.6 illustrates common digital marketing platforms used by BPR and Equity Bank Rwanda. Google Ad was confirmed by 16.0% in Equity Bank to be digital marketing platform while in BPR was confirmed by 21.7% of respondents. Facebook was on 40.0% in Equity Bank while in BPR, it was confirmed by 28.3% of respondents. Instagram was on rate of 40.0% in Equity Bank while in BPR, it was on rate of 28.3%. Blogger was 4.0% in Equity Bank while in BPR; it was confirmed by 8.7% of respondents. Tweeter was confirmed on zero rate at Equity

Bank while in BPR, was confirmed on 4.3% of respondents. E-mail was on zero also in Equity Bank while in BPR; E-mail was confirmed on 8.7% of respondents.

Bharghava (2015), digital marketing comes from using an electronic device (smartphones, computer, and tablets, game consoles) to reach customers. In other words, digital marketing means using one or more digital channels like Google Ad; Facebook; Instagram; Blogger; Tweeter; and E-mail to promote a product or a brand. Therefore, BPR and Equity Bank used Google Ad; Facebook; Instagram; Blogger; Tweeter; and E-mail for marketing their financial services to their clients as channel of reaching the performance.

Table 4.8: Perception of respondents on when their bank started using digital marketing platforms

	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Yes	22	88.0	34	73.9
No	3	12.0	6	13.0
Not sure	0	0.0	6	13.0
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

Table 4.7 shows the perception of respondents on when their bank started using digital marketing platforms. 88.0% of respondents in Equity Bank know when Equity Bank started using digital marketing platforms while 73.9% respondents from BPR; they know when this bank started using digital marketing platforms. 12.0% of respondents of Equity Bank, they did not know when this bank started using digital marketing platforms while 13.0% of respondents of BPR, they did not know when this bank started using digital marketing platforms. Zero rate in Equity Bank confirmed that they are not sure on when their bank started using digital marketing platforms while 13.0% respondents of BPR, they said that they were not sure about en their bank started using digital marketing platforms.

Schmidt, et al., (2008), Digital marketing as activities, institutions, and processes facilitated by digital technologies for creating, communicating and delivering value for customers and other stake-holders, it has grown over time from a specific term describing the marketing of products and services using digital channels to an umbrella term describing the process of using digital technologies to acquire customers and build customer preferences, promote brands, retain

customers and increase sales. All 100.0% of respondents from staff of BPR and Equity Bank Rwanda confirmed that they are aware about digital marketing platforms used by their banks.

Table 4.9: The means that respondents know about digital marketing platforms

	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
E-mail	2	8.0	4	8.7
Phone Call	6	24.0	9	19.6
Visiting the bank	10	40.0	15	32.6
Television	3	12.0	9	19.6
Radio	3	12.0	8	17.4
Banners	1	4.0	1	2.2
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

The table 4.8 shows the perceptions of respondents on the means that respondents know about digital marketing platforms. It was found that E-mail; Phone Call; Visiting the bank; Television; Radio; and Banners were confirmed as the means that respondents know about digital marketing platforms at BPR and Equity Bank Rwanda. E-mail was confirmed on rate of 8.0% of respondents in Equity Bank while in BPR, E-mail was confirmed by 8.7% of respondents. Phone Call was on rate of 24.0% from Equity Bank while for BPR, phone call was confirmed by 19.6%. Visiting the bank in Equity Bank as confirmed by 35.2%, while BPR, it was confirmed by 32.6% of respondents. Television was on 12.0% in Equity Bank while BPR, it was 19.6% of respondents. Radio was confirmed by 12.0% in Equity Bank while BPR, it was confirmed by 17.4% of respondents. Banners was on rate of 4.0% in Equity Bank while in BPR, it was confirmed by 2.2% of respondents

Schmidt, et al., (2008) adopt more inclusive perspective and define digital marketing as an adaptive, technology-enabled process by which firms collaborate with customers and partners to jointly create, communicate, deliver, and sustain value for all stakeholders. Therefore, E-mail; Phone Call; Visiting the bank; Television; Radio; and Banners are the means that people should know in digital marketing platforms of various commercial banks.

Table 4.10: The digital marketing platforms followed mostly in Equity Bank and BPR

Digital marketing platforms	Equity Bank							
	Most Followed		Regular followed		Rarely followed		Less followed	
	fi	%	fi	%	fi	%	fi	%
Google Ad	15	60.0	10	40.0	0	0.0	0	0.0
Face book	14	56.0	5	20.0	6	24.0	0	0.0
Instagram	14	56.0	11	44.0	0	0.0	0	0.0
Blogger	11	44.0	10	40.0	3	12.0	1	4.0
Tweeter	16	64.0	6	24.0	3	12.0	0	0.0
E-mail marketing	11	44.0	12	48.0	1	4.0	1	4.0
	BPR Atlas Mara							
	fi	%	fi	%	fi	%	fi	%
Google Ad	22	47.8	19	41.3	5	10.9	0	0.0
Face book	17	37.0	27	58.7	2	4.3	0	0.0
Instagram	29	63.0	13	28.3	4	8.7	0	0.0
Blogger	19	41.3	24	52.2	2	4.3	1	2.2
Tweeter	29	63.0	15	32.6	1	2.2	1	2.2
E-mail marketing	20	43.5	24	52.2	1	2.2	1	2.2

Source: Field data, September 2018

Table 4.9 illustrates perceptions of respondents about the digital marketing platforms followed mostly by Staff of Equity Bank Rwanda and BPR.

Google Ad was most followed by 60.0% in Equity Bank and it was 47.8% in BPR; it is regular followed by 40.0% in Equity Bank and 41.3% in BPR; it is rarely followed by 10.9% in BPR.

Face book was most followed by 56.0% in Equity Bank and 37.0% in BPR; it was regular followed by 20.0% in Equity Bank and 58.7% in BPR; rarely followed by 24.0% in Equity Bank and 4.3% in BPR.

Instagram was most followed by 56.0% of respondents in Equity Bank and 63.0% in BPR; regular followed by 44.0% in Equity Bank and 28.3% in BPR; and rarely followed by 8.7% of respondents from staff of BPR.

Blogger was most followed by 44.0% in Equity Bank and 41.3% in BPR; regular followed by 40.0% in Equity Bank and 52.2% in BPR; rarely followed by 12.0% in Equity Bank and 4.3% in BPR; less followed by 4.0% of respondents in Equity Bank and 2.2% in BPR.

Tweeter was confirmed to be most followed by 64.0% in Equity Bank and 63.0% in BPR; regular followed by 24.0% in Equity Bank and 32.6% in BPR; rarely followed by 12.0% in Equity Bank and 2.2% in BPR. It was less followed by 2.2% respondents in BPR.

E-mail marketing was most followed by 44.0% in Equity Bank and 43.5% in BPR; regular followed by 48.0% of respondents in Equity Bank Rwanda and 52.2% in BPR. It was rarely followed by 4.0% and 2.2% in BPR. It was less followed in 2.2% of respondents.

4.1.3 The application of digital marketing has improved customers convenience in the BPR and Equity Bank in Rwanda

During this study with the staff from BPR and Equity Bank Rwanda, the researcher found that application of digital marketing has improved customers' convenience in these commercial banks in Rwanda where the services inquire from bank on the digital marketing platforms like mobile banking; account opening; account management; card payments; and money transfers.

Table 4.11: The services of Digital Marketing Platforms inquire in the Bank

Services of Digital Marketing Platforms	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Mobile banking	0	0.0	7	15.2
Account opening	0	0.0	6	13.0
Account management	7	28.0	15	32.6
Card Payments	7	28.0	7	15.2
Money transfers	10	40.0	10	21.7
Saving/withdraw	1	4.0	1	2.2
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

Table 4.10 illustrates the services of digital marketing platforms inquire in BPR and Equity Bank Rwanda. Mobile banking was confirmed by 15.2% in BPR; Account opening was on 13.0% IN BPR; account management was on rate of 28.0% in Equity Bank and 32.6% in BPR; Card Payments was on 28.0% in Equity Bank and 15.2% in BPR, Money transfers was confirmed by 40.0% of respondents in Equity Bank in Rwanda while 21.7% were from BPR. Saving/withdraw was confirmed on rate of 4.0% and 2.2% in BPR.

Table 4.12: Level of Performance of bank before using digital Marketing Platforms

Level of Performance of bank before	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Excellent	0	0.0	0	0.0
Very Good	0	0.0	0	0.0
Good	3	12.0	7	15.2
Fairly good	7	28.0	12	26.1
Fair	6	24.0	14	30.4
Not Good	9	36.0	13	28.3
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

Table 4.11 presents the perceptions of respondents on the level of performance of bank before using digital Marketing Platforms. 12.0% of respondents in Equity Bank confirmed that the performance of bank before was good at Equity Bank and 15.2% of respondents in BPR. 28.0% of respondents in Equity Bank were fairly good while it was 26.1% in BPR; 24.0% of respondents in Equity Bank confirmed that performance was Fair, and 30.4% respondents confirmed that performance before was fair in BPR, 36.0% of respondents in Equity Bank said that performance before using digital marketing platforms Not Good while 28.3% in BPR, performance was not good.

Table 4.13: The level of performance of bank after it started using digital marketing Platforms

Level of Performance of bank before	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Excellent	6	24.0	15	32.6
Very Good	12	48.0	24	52.2
Good	7	28.0	7	15.2
Fairly good	0	0.0	0	0.0
Fair	0	0.0	0	0.0
Not Good	0	0.0	0	0.0
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

Table 4.12 illustrates the perceptions of respondents on the level of performance of bank after using digital Marketing Platforms. 24.0% of respondents in Equity Bank confirmed that the performance of bank after using digital marketing platforms was excellent at Equity Bank and it was confirmed by 32.6% of respondents in BPR. 48.0% of respondents in Equity Bank were very Good while it was confirmed by 52.2% in BPR; 28.0% of respondents in Equity Bank confirmed that performance was Good, and 15.2% respondents confirmed that performance after was good in BPR.

4.1.4 The application of Digital Marketing Platforms helps in reducing marketing cost against traditional marketing in commercial banks in Rwanda

The progress in technology has provided an opportunity for commercial banks to introduce great innovations. The combination of banking services with electronic technologies means that commercial banks are able to advertise their products with ease and users are able to conduct banking services at any places overcoming challenges of traditional marketing platforms.

During this study at Equity Bank and BPR, the findings show that there are different advantages of digital marketing services such as reducing cost, less time spend, and Convenience on the bank. All respondents met during this research in both banks confirmed that using digital marketing in your bank comes as solution in offering quality services. Therefore, table 4.13 shows the perceptions of respondents on how the digital marketing reduces the cost of marketing.

Table 4.14: The level of how digital marketing reduce the cost of marketing for Bank as channel of performance

	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Very High	7	28.0	23	50.0
High	13	52.0	18	39.1
Moderate	5	20.0	5	10.9
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

Table 4.13 illustrates the perceptions of respondents about the level of how digital marketing reduce the cost of marketing for Bank as channel of performance. 28.0% of respondents in Equity Bank said that digital marketing reduces the cost very high. 50.0% respondents in BPR said that digital marketing reduce the cost of marketing for Bank. 52.0% respondents in Equity

Bank confirmed that digital marketing reduce the cost of marketing for Bank as channel of performance in high and 39.1% respondents in BPR said it is high. 20.0% respondents in Equity Bank said that digital marketing reduce the cost of marketing for Bank as channel of performance was moderate and 10.9% respondents confirmed that digital marketing reduce the cost of marketing for Bank as channel of performance was moderate.

Table 4.15: Marketing System which is more convenient for staff of Bank

Marketing System which is more convenient	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Digital marketing	23	92.0	34	73.9
An integration of the both digital and traditional marketing	2	8.0	12	26.1
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

Table 4.14 presents the perceptions on marketing system as more convenient for staff of Bank. 92.0% of respondents in Equity Bank confirmed digital marketing of marketing system is more convenient for staff of Bank while 73.9% respondents in BPR, they confirmed that digital marketing is more convenient for this Bank. An integration of the both digital and traditional marketing is more convenient for staff of Bank; this is confirmed by 8.0% respondents in Equity Bank and 26.1% respondents in BPR.

Table 4.16: Rate of digital marketing in reducing cost of operation for the bank

Rate of digital marketing in reducing cost	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Excellent	14	56.0	22	47.8
Very Good	8	32.0	16	34.8
Good	3	12.0	8	17.4
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

Table 4.15 shows where on the scale would respondents rate digital marketing regarding reducing cost of operation for their banks. 56.0% respondents in Equity Bank confirmed that the rate of digital marketing in reducing cost of operation was Excellent and 47.8% respondents in BPR. 32.0% respondents in Equity Bank confirmed the rate was very Good, and 34.8%

respondents in BPR. While 12.0% of respondents in Equity Bank said that they rate of digital marketing in reducing cost of operation for the bank as Good, and 17.4% respondents in BPR.

Table 4.17: The effective factors indicating the performance of bank

Effective factors indicating the performance	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Increased profitability	10	40.0	16	34.8
Large market share	4	16.0	6	13.0
Quality products/service package	4	16.0	10	21.7
Reduction of bank queues	3	12.0	6	13.0
Customer loyalty	2	8.0	6	13.0
Building customer retention for bank	2	8.0	2	4.3
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

Table 4.16 presents the perceptions of respondents on the effective factors indicating the performance of bank. Increased profitability was confirmed by 40.0% of respondents in Equity Bank and 34.8% respondents in BPR. Large market share was confirmed on rate of 16.0% in Equity Bank and 21.7% respondents in BPR, 13.0% respondents in BPR; Quality products/service package was on 16.0% in Equity Bank and 12.0% respondents in BPR; reduction of bank queues was on 12.0% in Equity Bank and 13.0% respondents in BPR; Customer loyalty was rated on 8.0% respondents in Equity Bank and 13.0% respondents in BPR, building customer retention for bank was on rate of 8.0% of respondents in Equity Bank and 4.3% respondents in BPR.

Table 4.18: The challenges faced by Banks when implementing digital marketing Platforms

challenges faced by Banks when implementing digital marketing	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Poor internet access	4	16.0	9	19.6
Computer illiteracy	6	24.0	12	26.1
Lack of knowledge of digital marketing service	11	44.0	15	32.6
Unreliable network	4	16.0	10	21.7
Total	25	100.0	46	100.0

Source: *Field data, September 2018*

Table 4.17 shows the list of the challenges faced by Banks when implementing digital marketing platforms as confirmed by staff of BPR and Equity Bank Rwanda. Poor internet access was confirmed on rate of 16.0% in Equity Bank and 19.6% respondents in BPR, computer illiteracy was on rate of 24.0% in Equity Bank and 26.1% in BPR; lack of knowledge of digital marketing service was on 44.0% in Equity Bank and 32.6% in BPR, Unreliable network was also confirmed on rate of 16.0% of respondents from Equity Bank Rwanda and 21.7% respondents in BPR.

Table 4.19: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.429 ^a	.184	.107	1.524

a. **Predictors: (Constant),** E-mail marketing, Tweeter, Face book, Blogger, Google Ad, Instagram

Table of model summary shows analysis of digital marketing Platforms included by mail marketing, Tweeter, Face book, Blogger, Google Ad, Instagram on performance of bank where R-Square was .184 while Adjusted R-Square was .107.

Table 4.20: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	33.504	6	5.584	2.403	.037 ^b
1	Residual	148.693	64	2.323		
	Total	182.197	70			

a. **Dependent Variable:** performance of banks

b. **Predictors: (Constant),** E-mail marketing, Tweeter, Face book, Blogger, Google Ad, Instagram

Table 4.20: Statistics Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	4.098	1.559		2.629	.011
	Google Ad	.204	.296	.091	.691	.092
	Face book	.347	.293	.162	-1.185	.040
1	Instagram	.013	.319	.006	-.042	.067
	Blogger	.148	.229	.081	.645	.021
	Tweeter	.179	.217	.104	.827	.012
	E-mail marketing	1.196	.497	.336	-2.407	.019

a. **Dependent Variable:** performance

A linear regression analysis and descriptive statistics methods applied to analyse data. A linear regression analysis has an equation of the form, $Y = a + b X$, where X is the explanatory variable and Y is the dependent variable. The slope of the line is b , and a is the intercept (the value of y when $x = 0$).

The study used a linear regression to analyse Digital Marketing Platforms in terms of “Google Ad; Facebook; Instagram; Blogger; Tweeter; and E-mail marketing” as independent variables, and with performance of Equity Bank and BPR in terms of " increased profitability; large market share; quality products/service package; reduction of bank queues; and customer loyalty” as dependent variables.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$$

Where, Y is dependent variable indicator which is “performance” X is independent variable factor which are “Digital Marketing platforms”.

The results show $Y = 4.098 + .204X_1 + .347X_2 + .013X_3 + .148X_4 + .179X_5 + 1.196X_6 + \varepsilon$.

Hence, X_1 represent Google Ad, X_2 represent Face book, X_3 is Instagram, X_4 is Blogger; X_5 presents Tweeter while X_6 shows E-mail marketing and ε represents standard errors.

As explained by the linear regression equation, it is clear that one-unit change of X_1 , X_2 , X_3 , X_4 , X_5 , and X_6 lead to change times 0.204; 0.347; 0.013; 0.148; 0.179; and 1.196 of dependent variable respectively. In the other case if all independent variable indicators are zero, the dependent variable equals to the constant (4.098).

4.2 Analysis results from customers of BPR and Equity Bank

The study conducted also in customers of both BPR and Equity Bank about what they know on digital marketing platforms implemented by these commercial banks and quality services received to these banks. The questionnaire was distributed to by 37 of customers from BPR and the 63 of customers at Equity Bank. The findings indicated the participation rate of respondents of 100.0% for answering the questionnaire.

4.2.1 Findings on Social Characteristics of Customers' respondents

The social characteristics of customers' respondents present gender balance, age, level of education, marital status, the experience of selected staff from BPR and Equity Bank.

Table 4.21: Gender balance of customers' respondents of Equity Bank and BPR

Gender	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Male	50	79.4	24	64.9
Female	13	20.6	13	35.1
Total	63	100.0	37	100.0

Source: Field data, September 2018

Table 4.20 illustrates the information about gender balance of customers' respondents of Equity Bank and BPR. 79.4% respondents were males in Equity Bank and 64.9% respondents were males in BPR. 20.6% respondents were females in Equity Bank and 35.1% respondents were females in BPR.

Table 4.22: Age distribution of Respondents

Ages of customers	Equity bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Less than 25 years	16	25.4	12	32.4
26-30years	23	36.5	13	35.1
31-40years	17	27.0	8	21.6
41 years and above	7	11.1	4	10.8
Total	63	100.0	37	100.0

Source: Field data, September 2018

Table 4.21 presents the ages of customers' respondents from Equity Bank and BPR. 25.4% respondents said that they have less than 25 years in Equity Bank and 32.4% respondents in BPR. 36.5% respondents in Equity Bank confirmed that they have ages between 26-30years

while 35.1% respondents in BPR. 27.0% respondents in Equity Bank said that they have 31-40 years old while 21.6% respondents in BPR. 11.1% of respondents in Equity Bank have ages of 41 years and above while 10.8% respondents in BPR.

Table 4.23: Marital Status Distribution of Respondent

Marital Status	Equity bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Single	32	50.8	12	32.4
Married	19	30.2	13	35.1
Divorced/Separated	9	14.3	9	24.3
Widowed	3	4.8	3	8.1
Total	63	100.0	37	100.0

Source: *Field data, September 2018*

Table 4.22 presents the data on marital status of customers' respondents of Equity Bank and BPR. 50.8% respondents in Equity Bank confirmed to be single while 32.4% respondents in BPR. 30.2% respondents in Equity Bank were married and 35.1% respondents in BPR. 14.3% respondents in Equity Bank were divorced/Separated and 24.3% in BPR. 4.8% respondents in Equity Bank were widowed and 8.1% respondents in BPR.

Table 4.24: Level of Education of Respondents

Level of Education	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Master's Degree	5	7.9	2	5.4
Bachelors' Degree	30	47.6	12	32.4
Secondary Level	18	28.6	13	35.1
O' level and primary	10	15.9	10	27.0
Total	63	100.0	37	100.0

Source: *Field data, September 2018*

Table 4.23 shows the level of education of customers' respondents in Equity Bank and BPR where 7.9% respondents in Equity Bank have master's Degree and 5.4% respondents in BPR. 47.6% in Equity Bank have bachelors' degree and 32.4% respondents in BPR. 28.6% respondents in Equity Bank have secondary level and 35.1% respondents in BPR. 15.9% respondents in Equity Bank have O' level and primary and 27.0% respondents in BPR.

Table 4.25: How long have you know digital marketing platforms of your Bank

	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Less than 1year	22	34.9	0	0.0
2-3years	21	33.4	12	32.4
4-5years	20	31.7	11	29.7
6-7years	0	0.0	5	13.5
8years and above	0	0.0	9	24.3
Total	63	100.0	37	100.0

Source: *Field data, September 2018*

Table 4.24 presents the results from respondents on how long they have known digital marketing platforms of their Banks. 34.9% respondents in Equity Bank have less than 1year of using digital marketing platforms. 33.4% respondents in Equity Bank have confirmed that they have 2-3years while 32.4% respondents in BPR. 31.7% respondents in Equity Bank have experience between 4-5years in using digital marketing platforms while 9.7% respondents in BPR. 13.5% respondents in BPR confirmed that they are using digital marketing platforms from 6-7years while 24.3% respondents in BPR said that they used digital marketing platforms of BPR.

4.2.2 Findings on the effect of Digital Marketing platforms to Customers of BPR and Equity Bank

During this study, the researcher found different effects of digital marketing platforms to customers of Equity Bank and BPR as confirmed by findings detailed in the table 4.25.

Table 4.26: Digital Platforms known by Customers of Equity Bank and BPR

Digital Platforms known by Customers	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Google Ad	19	30.2	35.1	35.1
Facebook	16	25.4	24.3	59.5
Instagram	11	17.5	18.9	78.4
Blogger	3	4.8	0	0.0
Tweeter	10	15.9	7	18.9
E-mail	4	6.3	1	2.7
Total	63	100.0	37	100.0

Source: *Field data, September 2018*

Table 4.25 presents information on how the researcher found digital platforms known by customers of Equity Bank and BPR are Google Ad which is known by 30.2% of respondents in Equity Bank and 35.1% in BPR. Facebook is known and used by 25.4% respondents in Equity Bank while in BPR, it was known by 59.5% respondents. Instagram is recently in Rwandan

commercial banks known by 17.5% in Equity Bank while in BPR; it was used by 78.4% respondents.

Blogger is known by less number of customers on rate of 4.8% respondents from Equity Bank. Tweeter is known by 15.9% respondents in Equity Bank while in BPR, it was by 18.9% respondents.

E-mail is used by 6.3% of respondents in Equity Bank while in BPR; it was 2.7% respondents who used E-mail. However, all of 100.0% of respondents' customers are aware about digital marketing platforms used by both banks (Equity Bank and BPR).

Table 4.27: The means used by customers to know about digital marketing of BPR and Equity Bank

Digital Marketing	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
E-mail	11	17.5	5	13.5
Phone Call	11	17.5	5	13.5
Visiting the bank	13	20.6	5	13.5
Television	11	17.5	5	13.5
Radio	10	15.9	10	27.0
Banners	7	11.1	7	18.9
Total	63	100.0	37	100.0

Source: *Field data, September 2018*

Table 4.26 presents the means used by customers to know about digital marketing of BPR and Equity Bank; 17.5% of respondents in Equity Bank used E-mail to know digital marketing and in BPR, it was used by 13.5% of respondents. Phone Call was used on rate of 17.5% respondents in Equity Bank while in BPR; it was used by 13.5% respondents.

Visiting the Bank was done by 20.6% respondents in Equity Bank and 13.5% respondents were in BPR.

Television was accessed 17.5% respondents in Equity Bank and in BPR, it was 13.5% respondents.

The 15.9% respondents in Equity Bank used Radio to know the digital marketing; and while 27.0% respondents know digital marketing of BPR.

Banners were on rate of 11.1% respondents in Equity Bank and in BPR, it was 18.9% respondents.

Table 4.28: Do you know when your bank started using the digital marketing platforms?

	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Yes	28	44.4	15	40.5
No	25	39.7	12	32.4
Not sure	10	15.9	10	27.0
Total	63	100.0	37	100.0

Source: *Field data, September 2018*

Table 4.27 presents the perception of respondents about if customers know when the bank started using the digital marketing platforms. 44.4% respondents in Equity Bank said “yes” that they know when this bank started using digital marketing platforms, and 40.5% respondents are in BPR. 39.7% respondents in Equity Bank did not know when banks started using digital marketing platforms and this is refused also by 32.4% respondents in BPR. 15.9% respondents in Equity Bank were not sure when this bank started using digital marketing platforms and 27.0% respondents in BPR; they are not sure about when this bank started using digital marketing platforms.

Table 4.29: Do customers follow the bank regularly on its digital marketing platforms?

	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Yes	62	98.4	37	100.0
No	1	1.6	0	0.0
Total	63	100.0	37	100.0

Source: *Field data, September 2018*

Table 4.28 shows information on if customers follow bank regularly on its digital marketing platform. 98.4% respondents said “yes” that customers follow bank regularly on its digital marketing platforms of Equity Bank Rwanda while in BPR; it was confirmed by 100.0% respondents. Only 1.0% respondent does not follow Equity Bank regularly on its digital marketing platforms.

Table 4.30: The digital marketing platforms followed mostly by customers of Equity Bank and BPR

Digital marketing platforms	Equity Bank							
	Most Followed		Regular followed		Rarely followed		Less followed	
	fi	%	fi	%	fi	%	fi	%
Google Ad	24	38.1	30	47.6	7	11.1	2	3.2
Face book	41	65.1	15	23.8	5	7.9	2	3.2
Instagram	14	22.2	18	28.6	17	27.0	14	22.2
Blogger	6	9.5	17	27.0	24	38.1	16	25.4
Tweeter	14	22.2	18	28.6	19	30.2	12	19.0
E-mail marketing	16	25.4	35	55.6	6	9.5	6	9.5

Digital marketing platforms	BPR Atlas Mara							
	fi	%	fi	%	fi	%	fi	%
	Google Ad	22	59.5	15	40.5	0	0.0	0
Face book	18	48.6	12	32.4	5	13.5	2	5.4
Instagram	14	37.8	14	37.8	2	5.4	7	18.9
Blogger	1	2.7	11	29.7	19	51.4	6	16.2
Tweeter	8	21.6	9	24.3	15	40.5	5	13.5
E-mail marketing	10	27.0	20	54.1	2	5.4	5	13.5

Source: *Field data, September 2018*

Table 4.29 illustrates perceptions of respondents about digital marketing platforms followed mostly by customers of Equity Bank and BPR. Google Ad was most followed by 38.1% in Equity Bank and it was 59.5% in BPR; it is regular followed by 47.6% in Equity Bank and 40.5% in BPR; it is rarely followed by 11.1% in Equity Bank.

Face book was most followed by 65.1% in Equity Bank and 48.6% in BPR; it was regular followed by 23.8% in Equity Bank and 32.4% in BPR; rarely followed by 7.9% in Equity Bank and 13.5% in BPR. It was less followed by 3.2% in Equity Bank and 5.4% in BPR.

Instagram was most followed by 22.2% of respondents in Equity Bank and 37.8% in BPR; regular followed by 28.6% in Equity Bank and 37.8% in BPR. It was rarely followed by 27.0% of respondents in Equity Bank and 5.4% respondents in BPR. It was less followed by 22.2% respondents in Equity Bank and 18.9% respondents in BPR. Blogger was most followed by 9.5% in Equity Bank and 2.7% in BPR. It was regular followed by 27.0% in Equity Bank and 29.7% in BPR. It was rarely followed by 38.1% in Equity Bank and 51.4% in BPR. It was less followed by 25.4% of respondents in Equity Bank and 16.2% in BPR.

Tweeter was confirmed to be most followed by 22.2% in Equity Bank and 21.6% in BPR. It was regular followed by 28.6% in Equity Bank and 24.3% in BPR. It was rarely followed by 30.2% in Equity Bank and 40.5% in BPR. It was less followed by 19.0% respondents in Equity Bank and 13.5% in BPR.

E-mail marketing was most followed by 25.4% in Equity Bank and 27.0% in BPR. It was regular followed by 55.6% of respondents in Equity Bank, and 54.1% in BPR. It was rarely followed by 9.5% in Equity Bank and 5.4% in BPR. It was less followed in 9.5% of respondents in Equity Bank and 13.5% of respondents in BPR.

Table 4.31: What services do you inquire from your bank on the above Digital marketing Platforms?

	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Mobile banking	6	9.5	4	10.8
Account opening	12	19.0	4	10.8
Account management	19	30.2	13	35.1
Card Payments	20	31.7	12	32.4
Saving	6	9.5	4	10.8
Total	63	100.0	37	100.0

Source: *Field data, September 2018*

Table 4.30 presents the services of digital marketing platforms inquire in BPR and Equity Bank Rwanda. Services of digital marketing Platforms were mobile banking; account opening; account management; card payments; and money transfers in BPR and Equity Bank. However, Mobile banking was confirmed by 9.5% in Equity Bank and 10.8% in BPR. Account opening was on 19.0% in Equity Bank and 10.8% in BPR. Account management was on rate of 30.2% in Equity Bank and 35.1% in BPR. Card Payments was on 31.7% in Equity Bank and 32.4% in BPR. A money transfer was confirmed by 9.5% of respondents' customers from Equity Bank and 10.8% in BPR.

Table 4.32: Level of services of bank before using digital Marketing Platforms

	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Excellent	2	3.2	0	0.0
Very Good	2	3.2	4	10.8
Good	14	22.2	4	10.8
Fairly good	10	15.9	4	10.8
Fair	12	19.0	12	32.4
Not Good	23	36.5	13	35.2
Total	63	100.0	37	100.0

Source: *Field data, September 2018*

Table 4.31 presents the perceptions of respondents on the level of services of banks before using digital marketing platforms. The level of services of banks was Excellent before using digital marketing platforms as confirmed by 3.2% respondents in Equity Bank. Level of services of bank before was very good as 3.2% of respondents in Equity Bank confirmed it and it was also confirmed by 10.8% respondents of BPR. The level of services of bank before was good as 22.2% respondents in Equity Bank confirmed it and 10.8% respondents in BPR.

The 15.9% of respondents in Equity Bank said that level of services of bank before was fairly good; and 10.8% of respondents in BPR confirmed that the level of services of bank before using digital marketing platforms was fairly good. The 19.0% of respondents in Equity Bank confirmed that the level of services of bank before was fair while 32.4% respondents in BPR confirmed also it is fairly. 36.5% respondents in Equity Bank confirmed the level of services was not good and it was confirmed by 35.2% respondents in BPR.

Table 4.33: The quality services received by customers after implementing digital marketing Platforms

	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Excellent	22	34.9	13	35.1
Very Good	33	52.4	19	51.4
Good	8	12.7	5	13.5
Total	63	100.0	37	100.0

Source: *Field data, September 2018*

The table 4.32 shows the perceptions of respondents on the quality services received by customers after implementing digital marketing Platforms. 34.9% of respondents' customers in

Equity Bank confirmed that the quality services received by customers after implementing digital marketing Platforms were excellent and 35.1% respondents in BPR. 52.4% respondents in Equity Bank said that the quality services received by customers after were very good and 51.4% respondents in BPR confirmed also the quality services were very good. 12.7% respondents in Equity Bank confirmed that quality services received by customers after implementing digital marketing Platforms were good while in BPR was confirmed by 13.5% respondents.

Table 4.34: Using digital marketing platforms in the bank comes as solution of good services for customers

	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Yes	58	92.1	33	89.2
No	5	7.9	4	10.8
Total	63	100.0	37	100.0

Source: *Field data, September 2018*

During the study in the customers of Equity Bank and BPR, 92.1% respondents in Equity Bank said “yes” that using digital marketing platforms in the bank comes as solution of good services for customers and it was confirmed by 89.2% respondents in BPR. The 7.9% respondents in Equity Bank said “No” that using digital marketing platforms in the bank comes as solution of good services for customers and this is refused by 10.8% respondents in BPR.

Table 4.35: Effective factors determining influences of digital marketing on customer Satisfaction

	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Fulfilment of Services	16	25.4	10	27.0
Availability system	11	17.5	8	21.6
Speed and quick services	13	20.6	6	16.2
Customers’ responsiveness	13	20.6	7	18.9
Access, and usage of account	10	15.9	6	16.2
Total	63	100.0	37	100.0

Source: *Field data, September 2018*

The effective factors determining influences of digital marketing on customer Satisfaction of clients were fulfillment of Services as 25.4% respondents in Equity Bank and 27.0% respondents

of BPR confirmed it. Availability system was confirmed by 17.5% of respondents in Equity Bank and 21.6% respondents in BPR. Speed and quick services were confirmed by 20.6% respondents in Equity Bank and it was confirmed also by 16.2% respondents in BPR. Customers' responsiveness was on rate of 20.6% respondents in Equity Bank and 18.9% respondents in BPR. Access and usage of account was 15.9% respondents in Equity Bank and 16.2% respondents in BPR.

Table 4.36: The challenges faced by customers when they were using digital marketing services

	Equity Bank		BPR Atlas Mara	
	Frequency	Percent	Frequency	Percent
Poor internet access	20	31.7	10	27.0
Computer illiteracy	20	31.7	11	29.7
Lack of knowledge of digital marketing service	14	22.2	10	27.0
Unreliable network	9	14.3	6	16.2
Total	63	100.0	37	100.0

Source: *Field data, September 2018*

Table 4.35 shows the perceptions of respondents on the challenges faced by customers when they were using digital marketing services in BPR and Equity Bank. Poor internet access was confirmed by 31.7% respondents in Equity Bank and the 27.0% respondents in BPR. Computer illiteracy confirmed by 31.0% respondents in Equity Bank and 29.7% respondents in BPR. The lack of knowledge of digital marketing service was confirmed by 24.0% respondents in Equity Bank and 27.0% respondents in BPR. The unreliable network was 14.3% of respondents in Equity Bank and 16.2% respondents in BPR.

4.2.3 Statistical analysis of Digital marketing platforms of BPR and Equity Bank to the clients' services

This section shows the Statistical analysis for the results on Digital marketing platforms of BPR and Equity Bank to the clients' services. It presents table of Model Summary; ANOVA^a and Coefficients of determination.

Table 4.37: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.779 ^a	.606	.581	.18620

a. Predictors: (Constant), E-mail, Google Ad, Tweeter, Blogger, Face book, Instagram

The table of model Summary shows the R-Square of 0.606 while Adjusted R –Square was 0.581

Table 4.38: ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	4.966	6	.828	23.869	.000 ^b
Residual	3.224	93	.035		
Total	8.190	99			

a. Dependent Variable: *Using digital marketing platforms as solution to services*

b. Predictors: (Constant), E-mail, Google Ad, Tweeter, Blogger, Face book, Instagram

Table of ANOVA^a shows Sum of Squares of 8.190 included by Regression of 4.966 while Residual was 3.224.; Mean Square of 0.828 in Regression and Residual was 0.035.

Table 4.39: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
	(Constant)	.343	.110		
1 Google Ad	.050	.038	.122	1.300	.197
Face book	-.008	.030	-.024	-.282	.079
Instagram	.029	.024	.109	1.184	.040
Blogger	.002	.023	.007	.101	.020
Tweeter	.070	.024	.248	2.940	.004
E-mail	.212	.026	.654	8.298	.000

a. Dependent Variable: good services

A linear regression analysis and descriptive statistics methods were applied to analyse data. A linear regression analysis has an equation of the form, $Y = a + b X$, where X is the explanatory variable and Y is the dependent variable. The slope of the line is b , and a is the intercept (the value of y when $x = 0$).

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$ Where, **Y** is dependent variable indicator which is “Digital Marketing platforms” **X** is independent variable factors which are “quality services to customers”.

The results show that $Y = .343 + .050X_1 - .008X_2 + .029X_3 + .002X_4 + .070X_5 + .212X_6 + \varepsilon$

4.3 Analysis of financial performance ratios of BPR

The profitability ratio is considered as a measure of financial performance. Common profitability ratios used in analysing BPR’s performance include GPM, Net Profit Ratio (NPR), return on assets (ROA), return on equity (ROE).

Table 4.40: GPM Ratio of BPR

	2013 “Rwf ‘000”	2014 “Rwf ‘000”	2015 “Rwf ‘000	2016 “Rwf ‘000	2017 “Rwf ‘000”
Gross Profit (GP)	19989207	19,544,228	20,430,819	28,930,844	23,620,577
Net Sales	2060944	19,920,290	20,950,179	29,570,052	22,718,155
GPM Ratio	96.9%	98.1%	97.5%	97.8%	103.9%

Source: Secondary data, BPR annually reports, 2017

GPM indicates the percentages of sales available for expenses and profit after the cost of merchandise is deducted from sales. Table 4.39 above illustrates the profitability evolution of BPR. In 2013, GPM was 96.9%; in 2014, GPM was 98.1%; GPM was 97.5% in 2015 while in 2016, was 97.8% and in 2017, GPM of BPR became 103.9%. The increase of GPM Ratio of BPR was caused by implementing digital marketing platforms to serve their clients.

Table 4.41: Net profit ratios of BPR

	2013 “Rwf ‘000”	2014 “Rwf ‘000”	2015 “Rwf ‘000	2016 “Rwf ‘000	2017 “Rwf ‘000”
Net profit	(5,166,512)	908,808	(1,974,793)	464,221	134,613
Net sales	20,609,44	19,920,290	20,950,179	29,570,052	22,718,155
NPM Ratio	(25.1%)	4.56%	(9.4%)	1.56%	5.92%

Source: Secondary data, BPR annually reports, 2017

The profit margin (after tax) tells you the profit per sales after all expenses are deducted from sales. The table 4.40 presents the net profit ratio in 2013 which was -25.1%; in 2014, net profit was 4562,2%; in 2015, NP was -9.4%; in 2016, NP was 1569,9% and in 2017, NP was 592,5% at BPR.

Table 4.42: Return on Equity of BPR

	2013	2014	2015	2016	2017
	“Rwf ‘000”				
Net income	(5,166,512)	908,808	(1,974,793)	464,221	134,613
Shareholder				41,532,112	41,666,725
Investment	13,781,375	15,880,898	13,862,885		
ROE Ratio	(37,48%)	5.72%	(14,24%)	1.11%	3.23%

Source: *Secondary data, BPR annually reports, 2017*

The table 4.41 shows that ROE was -37,48% in 2013; in 2014 ROE was 5722,64%; in 2015 became -14,24%; and in 2016, ROE was 1117,73% while in 2017, ROE was 323,07%.

Table 4.43: The Return on Assets of BPR

	2013	2014	2015	2016	2017
	“Rwf ‘000”				
Net income	(5,166,512)	908,808	(1,974,793)	464,221	134,613
Assets	157,438,892	157,717,236	171,566,020	251,602,802	266,939,622
ROA Ratio	(3,28)	5.76%	(1,15)	1.84%	5.04%

Source: *Secondary data, BPR annually reports, 2017*

The table 4.42 presents Return on Asset was in 2013 was -3,28%; in 2014; return on asset was 576,22%; in 2015, ROA was -1,15%; while the year of 2016, ROA was 184,50%; and in 2017, ROA was 50,42% at BPR.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION AND SUGGESTIONS

This chapter presents the summary of the findings, the discussions, conclusions and suggestions.

5.1 Summary of Major Findings

The major concern of this study was to assess the effect of digital marketing on performance of commercial banks in Rwanda. The specific objectives were to identify the common digital marketing platforms used by the commercial banks in Rwanda; to determine the extent to which the application of digital marketing has improved customers convenience as channel of performance of commercial banks in Rwanda; and to assess how the application of digital marketing help in reducing marketing cost against traditional marketing in commercial banks in Rwanda. The methodology used by this study was based on data from BPR and Equity Bank where a questionnaire was addressed to both staff and customers of both banks. The target population was 95,500 customers and 243 employees from BPR and Equity Bank.

The questionnaire was divided into two categories where there was questionnaire addressed to the bank staff who were 46 employees from BPR and the 25 employees from Equity Bank. Another questionnaire was distributed to 37 of customers from BPR and the 63 of customers selected at Equity Bank. All respondents in both sides were given three days of responding the questions.

During the collection of answered questionnaires, the findings indicated the participation rate of respondents was 100.0% for answering the questionnaire. This helps the researcher to continue with editing, coding, and make the tabulation in order to make statistical tables by using SPSS version 20.0.

The analysis of this study was divided into two parts where the first part presents the findings from Bank staff of BPR and Equity Bank Rwanda while the second part was also showing the results from bank customers of BPR and Equity Bank Rwanda. The study findings were summarized according to the research objectives

5.1.1 Common digital marketing platforms used by the commercial banks in Rwanda

The results were presented on table 4.6 which shows that Google Ad was used on 16.0% in Equity Bank to be digital marketing platform while in BPR was confirmed by 21.7% of respondents. Facebook was used on 40.0% in Equity Bank while in BPR, it was used by 28.3% of respondents. Instagram was on rate of 40.0% in Equity Bank while in BPR, it was on rate of 28.3%. Blogger was on 4.0% in Equity Bank while in BPR; it was confirmed by 8.7% of respondents. Tweeter was confirmed on zero rate at Equity Bank while in BPR, was confirmed on 4.3% of respondents. E-mail was on zero also in Equity Bank while in BPR; E-mail was confirmed on 8.7% of respondents.

5.1.2 The application of digital marketing has improved customers convenience in the BPR and Equity Bank in Rwanda

The results were on table 4.10 which confirmed that mobile banking was used on 15.2% in BPR; Account opening was on 13.0% IN BPR; account management was on rate of 28.0% in Equity Bank and 32.6% in BPR; Card Payments was on 28.0% in Equity Bank and 15.2% in BPR, Money transfers was confirmed by 40.0% of respondents in Equity Bank in Rwanda while 21.7% were from BPR. Saving/withdraw was confirmed on rate of 4.0% and 2.2% in BPR.

5.1.3The application of Digital Marketing Platforms helps in reducing marketing cost against traditional marketing in commercial banks in Rwanda

The findings on table 4.13 illustrate the perceptions of respondents about the level of how digital marketing reduce the cost of marketing for Bank as channel of performance. 28.0% of respondents in Equity Bank said that digital marketing reduces the cost at a very high level. 50.0% respondents in BPR said that digital marketing reduce the cost of marketing for Bank. 52.0% respondents in Equity Bank confirmed that digital marketing reduce the cost of marketing for Bank as channel of performance at high level and 39.1% respondents in BPR said it is high. 20.0% respondents in Equity Bank said that digital marketing reduce the cost of marketing for Bank as channel of performance was moderate and 10.9% respondents confirmed that digital marketing reduce the cost of marketing for Bank as channel of performance was moderate.

The table 4.14 presents the perceptions on marketing system as more convenient for staff of Bank. 92.0% of respondents in Equity Bank confirmed digital marketing of marketing system is more convenient for staff of Bank while 73.9% respondents in BPR, they confirmed that digital

marketing is more convenient for this Bank. An integration of the both digital and traditional marketing is more convenient for staff of Bank; this is confirmed by 8.0% respondents in Equity Bank and 26.1% respondents in BPR. Table 4.15 shows where on the scale would respondents rate digital marketing regarding reducing cost of operation for their banks. 56.0% respondents in Equity Bank confirmed that the rate of digital marketing in reducing cost of operation was Excellent and 47.8% respondents in BPR. 32.0% respondents in Equity Bank confirmed the rate was very good, and 34.8% respondents in BPR. While 12.0% of respondents in Equity Bank said that they rate of digital marketing in reducing cost of operation for the bank as Good, and 17.4% respondents in BPR.

5.2 Conclusion

The study further concludes that the internet is the main digital platform adopted most commercial banks as the digital marketing platform as it provides a communication platform on which digital content can be delivered to a wide population. However, there is an increased use of website design/development for bank, email marketing for banks, display advertising for banks, use of mobile apps for banks, online advertising and social media largely used for digital marketing that could have a huge impact on the performance of the commercial banks since digital marketing platform is likely to be the next frontier for business competition owing to its numerous benefits.

The study also concludes that regular advertising was critical for commercial banks in the wake of increased competition, technological changes, need for more interaction with customers, to reduce operation costs and increase profits, building up awareness and breaking through the consumer's selection process. In addition, regular advertising in the digital platforms provided an impetus to consumer action and thus helped in reaching out to new consumers.

Hence, it was more helpful for the commercial banks to advertise regularly in digital platforms than to have a one-time expensive advertising extravaganza. The findings of this study help to confirm that the problem of the study was solved, research objectives were achieved, and research questions were answered. This is an indicator significant effect of digital marketing and performance of commercial banks in Rwanda.

5.3 Recommendations

The study recommends that given that the traditional one-to-many way of sending marketing messages to potential customers is no longer enough and should be complemented by

collaborative communication media to achieve the most effective and competitive communication, management should increase their investment in digital platforms so as to be in a position to take full advantage of the digital marketing potential.

Digital marketing technology has greatly advanced playing a major role in improving the standards of service delivery in the financial institution sector and given that the high cost of acquiring the digital facilities and the lack of adequate IT infrastructure could act as a challenge to the adoption of digital marketing in Rwanda. However, the study recommends that the government through the relevant ministries has to increase its investment in laying of the fibre optic cable so as to provide the necessary IT infrastructure that would reduce the costs associated with the adoption of the digital marketing platforms by the commercial banks.

Due to the high growth rate of social communities most businesses ought to realize the potential of social media marketing in reaching the larger audience. The study recommends that the sooner the marketers dive in and begin experimenting in the Digital Marketing Platforms, the more successful they will be in the future. The use of digital communication platforms is important to commercial banks so as increase their visibility and increase their customer base.

5.4 Suggestions to Further Researches

The future researchers are advised to take this document as reference by considering other elements to show also the result of performance of commercial banks and accomplish what the researcher did not reach. The study explored the influence of digital marketing on performance of commercial banks in Rwanda; the study recommends that that similar study should be done in other industries other than commercial banks to check if there will be a variance in the results. Further researcher could be done to investigate whether digital marketing could lead to sustainable competitive advantage and business performance of commercial banks.

REFERENCES

- Abu Bakar, A. R., & Ahmed, Z. U. (2015). *Technology motivation in e-marketing adoption among Malaysian manufacturers*. *Journal of Transnational Management*, 20(2), 126-152.
- Aburime, U. (2005). *Determinants of Bank Profitability. Company-Level Evidence from Nigeria*. Action, P. (2013). *Poor people's energy outlook 2013: energy for community services*. Practical Action Publishing.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*.
- Al-Tamimi, H., & Hussein, A. (2010). Factors influencing performance of the UAE Islamic and conventional national banks.
- Aladwani, A. M. (2001). *Online banking: a field study of drivers, development challenges, and expectations*. *International Journal of Information Management*, 21(3), 213-225.
- Ambler, T., & Kokkinaki, F. (1997). *Measures of marketing success*. *Journal of Marketing Management*, 13(7), 665-678.
- Ambler, T., Kokkinaki, F., & Puntoni, S. (2004). *Assessing marketing performance: reasons for metrics selection*. *Journal of Marketing Management*, 20(3-4), 475-498.
- Arifin, Z. (2015). *The effect of dynamic capability to technology adoption and its determinant factors for improving firm's performance; toward a conceptual model*. *Procedia-Social and Behavioral Sciences*, 207, 786-796.
- Armstrong, G., Adam, S., Denize, S., & Kotler, P. (2014). *Principles of marketing*. Pearson Australia.
- Athanasoglou, P., Delis, M., & Staikouras, C. (2006). *Determinants of bank profitability in the South*
- Avlonitis, G. J., & Gounaris, S. P. (1999). *Marketing orientation and its determinants: an empirical analysis*. *European journal of marketing*, 33(11/12), 1003-1037.

- Avlonitis, G. J., & Karayanni, D. A. (2000). *The impact of internet use on business-to-business marketing: examples from American and European companies*. *Industrial Marketing Management*, 29(5), 441-459.
- Barnes-Leon, M. T., Catahan Jr, N. B., & Exley, R. M. (2010). *U.S. Patent No. 7,711,680*. Washington, DC: U.S. Patent and Trademark Office.
- Barney, J. (1991). *Firm resources and sustained competitive advantage*. *Journal of management*, 17(1), 99-120.
- Beckinsale, M., & Ram, M. (2006). *Delivering ICT to ethnic minority businesses: an action-research approach*. *Environment and Planning C: Government and Policy*, 24(6), 847-867.
- Buehler, S. A., Kuvatov, M., John, V. O., Milz, M., Soden, B. J., Jackson, D. L., & Notholt, J. (2008). *An upper tropospheric humidity data set from operational satellite microwave data*. *Journal of Geophysical Research: Atmospheres*, 113(D14).
- Chellappa, R. K., & Pavlou, P. A. (2002). Perceived information security, financial liability and consumer trust in electronic commerce transactions. *Logistics Information Management*, 15(5/6), 358-368.
- Churchill, N. C. (1992). *Research issues in entrepreneurship*. The state of the art of entrepreneurship, 579-596.
- Clark, B. H. (1999). *Marketing performance measures: History and interrelationships*. *Journal of marketing management*, 15(8), 711-732.
- Dang, U. (2011). *The CAMEL rating system in banking supervision*. A case study.
- Davis, F. D. (1989). *Perceived usefulness, perceived ease of use, and user acceptance of information technology*. *MIS quarterly*, 319-340.
- Davis, F. D. (1989). *Perceived usefulness, perceived ease of use, and user acceptance of information technology*. *MIS quarterly*, 319-340.
- Diamond, D. W., & Rajan, R. G. (2000). A theory of bank capital. *The Journal of Finance*, 55(6), 2431-2465.

- Djan, M. N. (2016). *Assessing the impact of credit risk management on the performance of selected commercial banks in Ashanti Region-(Kumasi Metropolis)* (Doctoral dissertation).
- Durant, R. F., Kramer, R., Perry, J. L., Mesch, D., & Paarlberg, L. (2006). Motivating employees in a new governance era: The performance paradigm revisited. *Public Administration Review*, 66(4), 505-514. *Eastern European region*.
- Fishbein, M., & Ajzen, I. (1980). *Understanding attitudes and predicting social behavior*.
- Flamini, V., Schumacher, M. L., & McDonald, M. C. A. (2009). *The determinants of commercial bank profitability in Sub-Saharan Africa* (No. 9-15). International Monetary Fund.
- Frost, R., & Strauss, J. (2001). *Building effective web sites*. Prentice Hall Professional Technical Reference.
- Gagliardone, I., & Golooba-Mutebi, F. (2016). *The Evolution of the Internet in Ethiopia and Rwanda: Towards a "Developmental" Model*. *Stability: International Journal of Security and Development*, 5(1).
- Ghosh, S. (1998). *Making business sense of the Internet*. *Harvard business review*, 76(2), 126-135.
- Gopalakrishnan, S., Wischnevsky, J. D., & Damanpour, F. (2003). *A multilevel analysis of factors influencing the adoption of Internet banking*. *IEEE Transactions on Engineering Management*, 50(4), 413-426.
- Graham, N., Robson, J. G., & Nachmias, J. (1978). *Grating summation in fovea and periphery*. *Vision research*, 18(7), 815-825.
- Gul, I., & Hussain, M. (2011). Distributed cloud intrusion detection model. *International Journal of Advanced Science and Technology*, 34(38), 135.
- Gul, M., & Catbas, F. N. (2011). Structural health monitoring and damage assessment using a novel time series analysis methodology with sensor clustering. *Journal of Sound and Vibration*, 330(6), 1196-1210.
- Igbaria, M., & Tan, M. (1997). *The consequences of information technology acceptance on subsequent individual performance*. *Information & management*, 32(3), 113-121.

- International Monetary Fund. Asia and Pacific Dept. (2011). *Regional Economic Outlook April 2011*. International Monetary Fund.
- Ireland, R. D., & Webb, J. W. (2007). *Strategic entrepreneurship: Creating competitive advantage through streams of innovation*. *Business horizons*, 50(1), 49-59.
- Ismail, S., Malone, M. S., & Van Geest, Y. (2014). Exponential organizations. *Why New Organizations Are Ten Times Better, Faster, and Cheaper Than Yours (and What to Do About It)*.
- Jalango, B. O. (2015). *Effect of Digital marketing on the performance of Commercial Banks in Kenya*. University of Nairobi.
- Javid, A. Y., & Iqbal, R. (2008). Ownership concentration, corporate governance and firm performance: Evidence from Pakistan. *The Pakistan Development Review*, 643-659.
- Kaye, B. K., & Medoff, N. J. (2001). *World Wide Web: a mass communication perspective*. McGraw-Hill Higher Education.
- Khrawish, H. A. (2011). Determinants of commercial banks performance: Evidence from Jordan. *International Research Journal of Finance and Economics*, 81, 148-159.
- Kim, C. M. (2016). *Social media campaigns: Strategies for public relations and marketing*. Routledge.
- Kokkinaki, F., & Ambler, T. (1999). *Marketing performance assessment: an exploratory investigation into current practice and the role of firm orientation* (No. 99-114). Marketing Science Institute.
- Kotler, P. (2000). *Marketing management, millennium ed*. Prentic Hall.
- Kotler, P., & Armstrong, G. (2010). *Principles of marketing*. Pearson education.
- Lorino, P. H. I. L. I. P. P. E. (2001). *A pragmatic analysis of the role of management systems in organizational learning. Knowledge management and organizational competence*, 177-209.
- Lustig, C., Shah, P., Seidler, R., & Reuter-Lorenz, P. A. (2009). Aging, training, and the brain: a review and future directions. *Neuropsychology review*, 19(4), 504-522.

- Lwakabamba, S. (2005). *The development of ICTs in Rwanda: pioneering experiences*. At the crossroads: ICT policy making in East Africa, 213-224.
- Malunda, D., & Musana, S. (2012). *Rwanda case study on economic transformation: report for the African Centre for Economic Transformation (ACET)*.
- Miles, S. A., & Wool, G. M. (2000). *U.S. Patent No. 6,102,406*. Washington, DC: U.S. Patent and Trademark Office.
- Miles, Stephen Bell. *Web services strategy*. Diss. Massachusetts Institute of Technology, 2003.
- Morck, R., Yavuz, M. D., & Yeung, B. (2011). Banking system control, capital allocation, and economy performance. *Journal of Financial Economics*, 100(2), 264-283.
- Murthy, Y., & Sree, R. (2003). A Study on Financial Ratios of major Commercial Banks. *Research Studies, College of Banking & Financial Studies, Sultanate of Oman*, 3(2), 490-505.
- Naver, J. C., & Slater, S. F. (2000). *Marketing strategy and competitive Positioning*.
- Nazir, T. (2010). Analyzing Financial Performance of Commercial Banks in India: Application of CAMEL Model. *Pakistan Journal of Commerce & Social Sciences*, 4(1).
- Olweny, T., & Shipho, T. M. (2011). Effects of banking sectoral factors on the profitability of commercial banks in Kenya. *Economics and Finance Review*, 1(5), 1-30.
- Ongore, V. O. (2011). The relationship between ownership structure and firm performance: An empirical analysis of listed companies in Kenya. *African Journal of Business Management*, 5(6), 2120-2128.
- Ongore, V. O., & Kusa, G. B. (2013). Determinants of financial performance of commercial banks in Kenya. *International Journal of Economics and Financial Issues*, 3(1), 237-252.
- Oribabor, P. E. (2000). Human resources management, A strategic approval. *Human Resources Management*, 9(4), 21-24.
- Paarlberg, L. E., & Lavigna, B. (2010). Transformational leadership and public service motivation: Driving individual and organizational performance. *Public administration review*, 70(5), 710-718.

- Riddell, W. C., & Song, X. (2012). *The role of education in technology use and adoption: Evidence from the Canadian workplace and employee survey.*
- Said, R. M., & Tumin, M. H. (2011). Performance and financial ratios of commercial banks in Malaysia and China. *International Review of Business Research Papers*, 7(2), 157-169.
- Schmidt, V. A. (2008). Discursive institutionalism: The explanatory power of ideas and discourse. *Annual review of political science*, 11.
- Shankar, V., Inman, J. J., Mantrala, M., Kelley, E., & Rizley, R. (2011). Innovations in shopper marketing: current insights and future research issues. *Journal of Retailing*, 87, S29-S42.
- Sheikh, A. A., Shahzad, A., & Ishak, A. K. (2016). *The Effects of E-Marketing Uses, Market Orientation, Relative Advantage and Trading Partners Pressure on the Performance of Textile Business in Pakistan: A Mediated-Moderation Analysis.* International Journal of Economic Perspectives, 10(4), 562-580.
- Sheikh, A. A., Shahzad, A., & Ishak, A. K. (2016). *The Evolution Of E-Marketing In Business-To-Business (B2b) Environment And Its Impact On Firm Performance.* Journal Studia Universitatis Babes-Bolyai Negotia.
- Sheikh, A. A., Shahzad, A., & Ishaq, A. K. (2017). *The Growth of E-Marketing in Business-to-Business Industry and its Effect on the Performance of Businesses in Pakistan: Marketing Success.* International and Multidisciplinary Journal of Social Sciences, 6(2), 178-214.
- Singh, S. (2014). Top 20 Global Megatrends and their Impact on Business, Cultures and Society. *Frost & Sullivan*. Retrieved at March, 10, 2016.
- Slater, S. F., & Naver, J. C. (2000). *Intelligence Generation and Superior Customer Value,* 1Journal of the Academic of Marketing Science.
- Standage, T. (1998). *The Victorian Internet: The remarkable story of the telegraph and the nineteenth century's online pioneers.* Phoenix.
- Strauss, J., & Frost, R. (2001). *E-Marketing.* Prentice Hall.

- Van Greuning, H., & Bratanovic, S. B. (2000). *Analyzing Banking Risk. A Framework for Assessing Corporate Governance and Financial Risk Management*, The World Bank, Washington DC.
- Vega, A., Chiasson, M., & Brown, D. (2011). *SME Innovation Policy Evaluation: A Balanced Approach*.
- Vong, P. I., & Chan, H. S. (2009). Determinants of bank profitability in Macao. *Macau Monetary Research Bulletin*, 12(6), 93-113.

APPENDICES

Appendix I: QUESTIONNAIRES TO BE RESPONDEND BY SELECTED BANK

Dear Madam / Sir

I, MUTONI Dianah, MBA student at University of Rwanda, undertaking option Marketing. I am carrying out a research titled *“The effect of Digital Marketing on Performance of Commercial Banks in Rwanda”* for a partial fulfilment of a master’s degree in Marketing. I humbly request you to fill this questionnaire in order to allow me collecting more and adequate information. You have to tick in the boxes provided for the multiple-choice questions and write in the space provided for open questions. Information is only for academic purpose; therefore, will not be used to any third party.

Thank you very much for your kind collaboration.

MUTONI Dianah

Tel: 0788253004

Social demographic Characteristic of respondents

1. Gender

Male [] Female []

2. Age

Between 21 and 30 year old [] 31 and 40 years old []

Between 41 and 50 years old [] 51 years and above []

3. Marital Status

Single [] Married [] Divorced [] Widow []

4. Education level

Masters and above [] Bachelor’s degree []

Secondary level [] Primary level []

5. How long have you been working within this Bank?

Less than 1 year [] 2- 3years [] 4- 5years [] 6years and above []

Question 6

Which of these Common Digital Marketing Platforms used by your bank do you know?

- a) Google Ad
- b) Facebook
- c) Instagram
- d) Blogger
- e) Tweeter
- f) E-mail
- g) Other specify them.....

Question 7

Do you know when your bank started using the digital marketing platforms?

- a) Yes
- b) No
- c) Not sure

Question 8

Are you aware about digital platforms used by your bank?

Yes

No

If yes, which means of communication the bank did use?

- a) E-mail
- b) Phone Call
- c) Visiting the bank
- d) Television
- e) Radio
- f) Banners

g) Others please specify.....

Question 9

Do clients follow your bank regularly on your digital platform?

Yes

No

If yes, which is most followed most?

Platforms	Most Followed	Regular followed	Rarely followed	Less followed
Google Ad				
Face book				
Instagram				
Blogger				
Tweeter				
E-mail				

Question 10

What services do you inquire from your bank on the above Digital Platforms?

a) Mobile banking

b) Account opening

c) Account management

d) Card Payments

e) Money transfers

f) Others, please specify.....

Question 11

How was the service at your bank before using the Platforms?

Level of Performance	Excellent	Very Good	Good	Fairly good	Fair	Not Good
Tick						

Question 12

How would you rate the service you received from your bank after it started using the Platforms?

Level of Performance	Excellent	Very Good	Good	Fairly good	Fair	Not Good
Tick						

Question 13

Has using digital services at your bank changed your perception about your bank

Yes

No

Question 14

How does digital marketing reduce the cost of marketing for commercial banks?

- Very High
- High
- Moderate
- Low
- Very Low

Question 15

If given a chance to choose way of marketing, which one would you choose?

- a) Digital marketing
- b) Traditional marketing
- c) An integration of the both digital and traditional marketing

Question 16

Where on the scale would you rate digital marketing regarding reducing cost of operation for the bank of your bank?

Level of Performance	Excellent	Very Good	Good	Fairly good	Fair	Not Good
Tick						

Question 17

What are the effective factors indicating the performance of your bank?

- Increased profitability
- Large market share
- Quality products/service package
- Reduction of bank queues
- Customer loyalty
- Building customer retention for bank

Question 18

What could be the challenges you faced when implementing digital services?

- a) Poor internet access
- b) Computer illiteracy
- c) Lack of knowledge of digital marketing service
- d) Unreliable network

THANK YOU

QUESTIONNAIRES TO BE RESPONDEND BY SELECTED BANK CLIENTS

Dear Madam / Sir

I MUTONI Dianah, MBA student at University of Rwanda who undertake the option of Marketing. I am carrying out a research entitled *“The effect of Digital Marketing on Performance of commercial banks in Rwanda”* for a partial fulfilment of a master’s degree in Marketing. I humbly request you to fill this questionnaire in order to allow me collecting more and adequate information. You have to tick in the boxes provided for the multiple-choice questions and write in the space provided for open questions. Information is only for academic purpose; therefore, will not be used to any third party.

Thank you very much for your kind collaboration.

MUTONI Dianah

Tel: 0788253004

1. What is your sex.....
2. How old are you?
3. What is your Marital Status?
4. Which level of your Education?
5. How long have you known digital marketing used by your Bank?

Question 6

Which of these Common Digital Platforms used in your bank do you know?

- h) Google Ad
- i) Facebook
- j) Instagram
- k) Blogger
- l) Tweeter
- m) E-mail

Question 7

Are you aware about digital platforms used by your bank?

Yes

No

If yes, through which means did you know about digital marketing platforms?

h) E-mail

i) Phone Call

j) Visiting the bank

k) Television

l) Radio

m) Banners

n) Others, please specify.....

Question 8

Do you know when your bank started using the digital marketing platforms?

d) Yes

e) No

f) Not sure

Question 9

Do you follow your bank regularly on its digital marketing platforms?

Yes

No

If yes, which one do you follow mostly?

Platforms	Most Followed	Regular followed	Rarely followed	Less followed
Google Ad				
Face book				
Instagram				
Blogger				

Tweeter				
E-mail				

Question 10

What services do you inquire from your bank on the above Digital Platforms?

- g) Mobile banking
- h) Account opening
- i) Account management
- j) Card Payments
- k) Money transfers
- l) Others, please specify.....

Question 11

How was the quality of service at your bank before using the digital Platforms?

The quality of service	Excellent	Very Good	Good	Fairly good	Fair	Not Good
Tick						

Question 12

How would you rate the quality service you received from your bank after it started using the Digital Platforms?

the quality of service	Excellent	Very Good	Good	Fairly good	Fair	Not Good
Tick						

Question 13

Do you see that using digital marketing in your bank comes as solution in offering quality services?

- Yes
- No

If yes, which effective factors among the following of your Satisfaction while using digital marketing in your bank?

- Fulfillment of Services
- Availability system
- Speed and quick services
- Customers' responsiveness
- Access, and usage of account

Question 14

What could be the challenges you faced when you were using digital services?

- e) Poor internet access
- f) Computer illiteracy
- g) Lack of knowledge of digital marketing service
- h) Unreliable network
- i) Any other

THANK YOU

APPENDIX II: FINANCIAL STATEMENTS OF BPR AT THE END OF YEAR 2014-2017

Banque Populaire du Rwanda Limited
Statement of comprehensive income
For the year ended 31 December 2014



	Notes	Year ended 31 December:	
		2014	2013
		Rwf'000	Rwf'000
Interest income	1	19,544,228	19,989,207
Interest expense	2	(3,574,340)	(3,713,987)
Net interest income		15,969,888	16,275,220
Fee and commission income	3 (a)	4,362,501	4,482,370
Fee and commission expense	3 (b)	(1,521,428)	(2,009,971)
Net fee and commission income		2,841,074	2,472,399
Foreign exchange income		375,101	1,093,895
Other operating income	4	734,228	767,933
Total operating income		19,920,290	20,609,447
Net impairment charge on loans and advances	5	(826,591)	(3,020,617)
Operating expenses	6	(17,626,006)	(24,428,442)
Profit / (loss) before taxation		1,467,694	(6,839,612)
Income tax (expense)/credit	8	(603,327)	1,628,658
Profit/ (loss) for the year		864,366	(5,210,954)
Other comprehensive income (net of tax):			
Items that will not be reclassified to profit or loss			
Deferred income tax credit on revaluation of buildings		44,442	44,442
Total comprehensive income for the year		908,808	(5,166,512)

	Notes	31 December:	
		2014	2013
		RwF'000	RwF'000
Assets			
Cash and balances with the National Bank of Rwanda	9	17,841,866	17,035,123
Amounts due from other banks	10	2,936,133	893,257
Government securities and other bonds	11	16,016,634	30,424,964
Equity investments	12	78,134	78,134
Loans and advances	13	104,969,914	92,823,379
Current income tax recoverable		1,294,061	1,053,368
Other assets	14	1,297,960	1,238,820
Deferred tax assets	25	892,771	1,451,656
Intangible assets	16	868,567	1,103,533
Property and equipment	17	11,521,197	11,336,658
Total Assets		157,717,236	157,438,892
Liabilities			
Customer deposits	18	125,806,947	125,956,079
Amounts due to other banks	19	5,154,770	7,641,946
Credit funds	20	1,635,895	1,755,094
Finance lease liabilities	21	38,355	284,331
Borrowings	22	1,874,713	-
Provisions for litigations	23	738,931	865,525
Other liabilities	24	6,586,727	7,154,542
Total Liabilities		141,836,338	143,657,517
Equity			
Share capital	26	16,491,238	15,300,524
Revaluation reserves	27	1,611,896	1,798,495
Accumulated losses		(2,222,237)	(3,317,644)
Total Equity		15,880,898	13,781,375
Total Equity and Liabilities		157,717,236	157,438,892

The notes set out on pages 31 to 64 form an integral part of these financial statements.

The financial statements on pages 27 to 64 were approved for issue by the Board of Directors on

18/4/2015

and signed on its behalf by:



 Ramona A. A. A.



 HABIMANA EMMANUEL

Statement of comprehensive income

	Notes	2016 Frw'000	2015 Frw'000
Interest income	1	28,930,844	20,430,819
Interest expense	2	(5,657,106)	(3,340,308)
Net interest income		23,273,738	17,090,511
Fee and commission income	3 (a)	5,872,634	4,486,086
Fee and commission expense	3 (b)	(1,149,389)	(1,240,715)
Net fee and commission income		4,723,245	3,245,371
Net trading income	4	922,198	96,403
Other operating income	5	650,871	517,894
Total operating income		29,570,052	20,950,179
Other income	6	-	392,028
Operating expenses	7	(11,407,603)	(9,806,115)
Personnel expenses	8	(13,060,923)	(9,913,664)
Impairment charge on loans and advances	14	(2,898,666)	(806,257)
Depreciation and amortisation	16,17	(2,215,128)	(1,842,717)
Loss before income tax		(12,268)	(1,026,546)
Income tax expense	9	(651,512)	(992,689)
Loss for the year		(663,780)	(2,019,235)
Other comprehensive income (net of tax):			
Items that will not be reclassified to profit or loss			
Deferred income tax credit on revaluation of buildings		-	44,442
Total comprehensive (loss) for the year		(663,780)	(1,974,793)

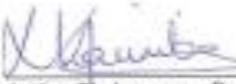
Statement of financial position

	Notes	2016 Frw'000	2015 Frw'000
ASSETS			
Cash and balances with the National Bank of Rwanda	10	31,382,217	17,034,261
Amounts due from banks	11	7,184,240	1,966,799
Government securities and other bonds	12	21,604,851	19,251,840
Loans and advances	13	168,234,274	117,683,693
Current income tax recoverable	24 (b)	669,908	1,237,516
Other assets	15	10,017,065	997,340
Intercompany receivables	28 (c)	478,046	-
Intangible assets	16	2,214,286	2,536,937
Property and equipment	17	9,817,915	10,763,724
TOTAL ASSETS		351,682,802	171,566,029
LIABILITIES			
Deposit from customers	18	165,716,251	125,235,532
Deposit from banks	19	22,879,345	10,763,125
Provisions for litigations	20	113,483	481,902
Credit funds	21	1,530,107	1,688,991
Borrowings	22	5,614,622	1,874,713
Other payables	23	12,632,327	7,999,396
Deferred tax liability	24 (a)	262,891	55,476
Intercompany payables	28(d)	1,321,664	-
TOTAL LIABILITIES		210,879,699	157,783,135
EQUITY			
Share capital	25	43,027,580	16,491,238
Share premium	25	1,796,665	-
Revaluation reserves	26	1,508,197	1,508,197
Credit risk reserve	27	1,642,057	-
Accumulated losses		(5,842,387)	(4,136,550)
TOTAL EQUITY		41,532,112	13,862,885
TOTAL EQUITY AND LIABILITIES		351,682,802	171,566,029

The financial statements on pages 8 to 51 were approved for issue by the Board of Directors on

29/03/2017 and signed on its behalf by:


 Managing Director


 Acting Chairperson - Board of Directors

The notes set out on pages 12 to 51 form an integral part of these financial statements.

Reviewed by external auditors
Condensed statement of comprehensive income

	30/09/2017	30/09/2016
	Frw'000	Frw'000
Interest income	23,620,577	21,419,836
Interest expense	(5,765,457)	(4,104,774)
Net interest income	17,855,120	17,315,062
Fee and commission income	5,079,191	4,259,498
Fee and commission expense	(1,027,610)	(798,837)
Net fee and commission income	4,051,581	3,460,661
Foreign exchange income	526,764	748,429
Other operating income	284,690	565,469
Total operating income	22,718,155	22,089,621
Operating expenses	(7,326,800)	(8,379,948)
Personnel expenses	(8,751,687)	(10,519,386)
Impairment charge on loans and advances	(4,958,183)	(827,490)
Depreciation and amortisation	(1,484,626)	(1,697,222)
Profit before income tax	196,859	665,575
Income tax expense	(62,246)	(201,354)
Profit for the period	134,613	464,221
Other comprehensive income (net of tax):		
Items that will not be reclassified to profit or loss	-	-
Total comprehensive income for the period	134,613	464,221

Condensed statement of financial position as at 30 September 2017

	30/09/2017	31/12/2016
	Frw'000	Frw'000
ASSETS		
Cash and balances with the National Bank of Rwanda	30,439,717	31,382,217
Amounts due from banks	8,492,875	7,184,240
Government securities and other bonds	41,438,098	21,604,851
Loans and advances	164,667,714	168,234,274
Current income tax recoverable	900,163	669,908
Other assets	9,025,560	10,017,065
Intercompany receivables	17,502	478,046
Intangible assets	1,852,615	2,214,286
Property and equipment	10,105,378	9,817,915
TOTAL ASSETS	266,939,622	251,602,802
LIABILITIES		
Deposit from customers	173,332,960	165,716,251
Deposit from banks	36,691,244	22,879,345
Provisions for litigations	169,421	113,483
Credit funds	1,466,557	1,530,107
Borrowings	2,503,581	5,614,622
Other payables	10,769,768	12,632,327
Deferred tax liability	262,891	262,891
Intercompany payables	76,475	1,321,664
TOTAL LIABILITIES	225,272,897	210,070,690
EQUITY		
Share capital	43,027,580	43,027,580
Share premium	1,796,665	1,796,665
Revaluation reserves	1,508,197	1,508,197
Credit risk reserve	-	1,042,057
Accumulated losses	(4,665,717)	(5,842,387)
TOTAL EQUITY	41,666,725	41,532,112
TOTAL EQUITY AND LIABILITIES	266,939,622	251,602,802