Cape Peninsula
University of Technology

THE INFLUENCE OF BLOCKCHAIN ON SOCIAL MEDIA MARKETING IN SOUTH AFRICAN BANKING INSTITUTIONS

by

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Thesis submitted in fulfilment of the requirements for the degree

Doctor of Commerce in Marketing

in the Faculty of Marketing

at the Cape Peninsula University of Technology

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District Six Campus

November 2023

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ABSTRACT

Financial institutions operate in a very competitive environment to better serve and retain their clients. As a result, financial institutions are increasingly embracing innovative ways including the use of technologies, to improve the services that they deliver to clients. Thus, many financial institutions such as banks employ social media for marketing their products and services. Some banks explore the possibilities of adopting blockchain for marketing. At the time of this study, no bank has adopted a complementary use of social media and blockchain in South Africa. This is the motivation of this study. This study aimed to develop a model that can be used to guide the complementary use of social media and blockchain for marketing in South African banks. In doing so, the factors that influence the tools were examined.

Qualitative methods were employed. The case study approach was applied. Two South African banks were selected using a set of criteria. Participants were selected from the banks used as cases in the study. Also, a set of criteria were used to select the participants. Data were collected from the participants using the semi-structured interview technique, which stopped at the point of saturation because there was no new information that was forthcoming. The University's (CPUT) research ethics were adhered to. For example, neither the organisations nor the participants' identities are disclosed in the study.

The data were analysed using the interpretive approach guided by activity theory (AT) as a lens. Based on the analysis, the factors influencing the use of social media and blockchain for marketing purposes by the banks were revealed. The factors were interpreted. Based on the interpretation a model was developed, which can be used to guide the complementary use of social media and blockchain for marketing by banks.

The study is original. At the time of the study, no work seems to have been conducted on how social media and blockchain can be complementarily used for marketing in South Africa, or elsewhere in the world. In the end, the study is evaluated, and recommendations are presented, which are intended to assist managers in the banking business and academics. The study has immense contributions from theoretical, practical, and methodological standpoints, which both business and academics can benefit from. Although the study is comprehensive and the aim and objectives are achieved, areas of further study are suggested.

ACKNOWLEDGEMENTS

I wish to thank:

The Almighty God for providing me with protection, strength, wisdom, and perseverance through the challenging yet rewarding journey of my study. Thank you for your inspiration and guidance.

Prof Tiko Iyamu, my supervisor for his unwavering support, belief in me and constructive feedback which shaped this research and helped me to become a better student. I will forever be grateful for having been your student.

Tshwaragano and Oagile Moche, my kids had to endure many hours of my absence during my studies. Your unconditional love sustained me during this demanding phase. Your presence provided motivation and happiness, reminding me of the broader purpose of reaching my goal.

My husband, Christopher Moche for his relentless support and enormous inspiration. For the countless family time, he sacrificed for me to pursue my studies. I am profoundly grateful.

My family, friends, colleagues, and the research forum community, who contributed in various ways thank you for being an integral part of this significant part of my academic and personal journey.

DEDICATION

To my kids, Tshwaragano Moche and Oagile Moche. Thank you for allowing me to be a student at the time that I had to be your mom. I dedicate this to inspire you to value education and reach for the best in life. Thank you for being my biggest fan.

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CHAPTER 1
INTRODUCTION

1.1 Introduction

For banks to do well competitively, they have to be progressively active in marketing their products and services. Thus, a South African banking institution is increasingly employing social media as a strategic tool for marketing and branding its products and services (Gavaza, Viljoen & Cilliers, 2019). This could be attributed to its benefits from different perspectives, such as cost-effectiveness and ease of information dissemination. According to Potgieter and Naidoo (2017), social media improves the quality of service and enhances client loyalty in South African banking institutions. In addition, through social media, some South African banks educate their clients about certain complex products, including creating transparency and brand awareness (Chikandiwa, Contogiannis & Jembere, 2013).

Based on these benefits, some South African banks subscribe to more than one social media platform. According to Gavaza et al. (2019), the approach seems to be working well primarily because many clients value the social media privacy dimension. Despite the successes and benefits, social media as a marketing tool presents different types of unique challenges in the areas of validated scales and variations in some of the platforms (Dwivedi et al., 2021). There have been efforts in trying to address some of the challenges, yet they persist (Parsons & Lepkowska-White, 2018). The challenges seemed to increase when some of the banks had to complementarily employ social media and blockchain for marketing purposes. Peres et al. (2022) attribute the challenges to lack of understanding of the tools and their applications.

Blockchain is considered a digital ledger that transacts records chronologically and publicly. Blockchain consists of several blocks, hence the term blockchain (Kshetri, 2017). Every block is referred to as a record of transactions from data that contain entities of records in various disciplines or fields. Completion of a block to its fullness, adds it to a chain and the formation of a new block begins.

However, some banking institutions, particularly in developing countries, encounter challenges in using social media as a marketing strategy. One of the challenges is reputational damage to product development (Potgieter & Naidoo, 2017). According to Dwivedi et al. (2021), social media presents unique challenges to different platforms. Many organisations are challenged in their quest to develop marketing strategies using social media. This led to Parsons and Lepkowska-White (2018) helping organisations in the use of social media as a marketing tool. This did not seem to work before the emergence of blockchain.

Blockchain is an emerging approach for communication and marketing. Moche and Iyamu (2023) argue that blockchain cannot be limited to cryptocurrency and that it redefines the meaning and importance of holistic marketing. The use of blockchain brings a different perspective to both the traditional and social media approaches of marketing and communicating with clients (Antoniadis, Kontsas & Spinthiropoulos, 2019). However, little is known about the influence social media and blockchain have on each other from the marketing perspective as little has been highlighted in research (Peres et al., 2023). Also, little is known about the influence of the complementarity of social media and blockchain in the South African banking sector. It does not seem to have been much researched.

1.2 Research problem

There is a gradual complementary use of social media and blockchain for marketing purposes by South African banks. Social media and blockchain for marketing purposes are well documented but separately (Parsons & Lepkowska-White, 2018; Kumar & Devi, 2014). Complementary use of both tools by South African banks have not been researched, hence some of the banks are not aware of any empirical evidence of the challenges that they might encounter in the future. On one hand, in the global space, the factors influencing the use of social media for marketing are unknown empirically (Yan et al., 2019). On the other hand, blockchain for marketing is in the infantry and banks are sceptical hence limited applicability (Ali, Ally & Dwivedi, 2020).

The problem is that how, why, and where the challenges exist in the complementary use of both blockchain and social media tools for marketing by a South African bank are not empirically known. Primarily, this is because little research seems to have been conducted in this area (Choi, Guo & Luo, 2020). Thus, the banks will continue to complementarily employ the tools in an unstructured and unguided manner. Some of the implications are (1) unnecessary overload and duplication of information, which causes confusion and dissatisfaction by the customers (Harris & Wonglimpiyarat, 2019); (2) data compromises and losses, which can be detrimental for the banks; and (3) some of the banks will continue to lose out from the benefits which the complementarity of both social media and blockchain offer from cost reduction and branding perspectives (Osmani et al., 2020). These problems can lead to a derailment of services and job losses. It is on this basis that this study is of critical relevance to a South African banking institution, employees in the bank, customers, academics, and the general society.

1.3 Significance of the study

The rationale and significance of the study are threefold:

i. The study has a significant impact and benefit to a banking institution in South Africa, as it offers empirical insights into the factors that influence the use of blockchain and social media for marketing purposes. This includes the complementary use of both tools by South African banks.

ii. The evidence that the study presents can enhance the marketing outlook and experience in South African banks.

iii. Managers will be more informed and improve in decision-making in the use of social media and blockchain within the South African environment.

1.4 Aim of the study

The aim is to develop a model that can guide the complementary use of blockchain and social media for marketing in South African banks. In doing so, the factors that influence the tools were examined.

Research objectives:

i. To examine the factors that influence the use of social media and blockchain for marketing in South African banking institutions.

ii. To identify the criteria for employing social media or blockchain for marketing products and services in South African banks.

iii. To understand the deterministic factors that cause confusion and conflicts between blockchain and social media in their complementary use for marketing products and services in South African banks.

iv. To develop a model based on the findings from the above objectives. Primarily, the model is intended to enable and support complementarity between blockchain and social media for the marketing of services and operations by South African banks. The model was developed through the following steps:

    a. Each of the findings was interpreted.

    b. The findings from both social media and blockchain perspectives were mapped to detect the areas of overlaps, conflicts, and gaps.

    c. Relationships between the factors were drawn towards the development of the model.

Research questions

To address the research problem, the following questions were articulated:

i. What are the factors that influence blockchain use for marketing in South African banks?

ii. What are the criteria for employing social media or blockchain for the marketing of banking products and services by banks in South Africa?

iii. What are the factors that cause confusion and conflicts between blockchain and social media in their complementary use for marketing products and services in South African banking institutions?

iv. How can a model be developed to address the challenges in the complementary use of blockchain and social media for marketing by banks in South Africa?

1.5 Literature review

The brief review is conducted in the three key areas of the proposed research. The areas are the traditional approach of marketing, social media marketing, and blockchain approach for marketing. In addition, activity theory is discussed.

1.5.1 Traditional marketing

Several authors define marketing in banking in many ways. Ronald et al. (2020) described marketing in banking as the science and art of exploring, creating, and delivering value to satisfy the needs of a target market at a profit**.** Thus, marketing is used to recognise the unfulfilled needs of clients. It is therefore used to "define, measure, and quantify the size of the identified market and the profit potential (Payne et al., 2020*)*. In addition, through marketing, banks promote and distribute their products and services to customers and potential customers (Ronald et al., 2022). According to Hamzah et al. (2020), bank marketing is an effort through which people are made aware of offerings that often inspire their engagement.

The traditional marketing approach makes processes, activities and communication easier with clients, partners and the general public (Payne et al., 2020). For many decades, traditional marketing was employed by banks. The approach is also seen as a form of advertisement particularly for adults and the working class (Ronald et al., 2020)). However, there are challenges with the traditional marking approach. Zoltners et al. (2021) explain one of the challenges is that the approach is typically forced on the clients by not having options. This marketing approach often results in a low response rate (Ronald et al., 2022). Also, there is often not enough time to update messages (Gonzalez-Arcos et al., 2021). Another critical challenge is cost. Marketing using the print media can be cost-prohibitive, with returns. In the last two decades, there has been a significant shift from traditional marketing to more dynamic approaches such as the use of social media.

1.5.2 Social media marketing

Social media entails various components such as mobile systems that enable and support content created by individuals and groups (Chen et al., 2022). The most popular social media platforms include Facebook, Twitter, YouTube, LinkedIn, and Instagram. Currently, over 3 billion people across the world are estimated to use social media (Mire, 2018). South Africans are among these 3 billion estimated users. The drastically increasing number of users can be attributed to the general belief that social media is considered the fastest approach to disseminating messages, linking people, and establishing relationships and friendships (Chen et al., 2022). The approach creates a huge volume of data, which many banks explore for their products and services.

Many people, including banking institutions, understand the power of social media. Hence, some banks explore: (1) how clients and potential customers apply social media; and (2) how to use the approach to enable and connect with customers, increasingly. However, social media is not prevalently explored for banking processes and events, to market products and engage with customers, across the world (Di Domenico et al., 2021; Chikandiwa & Contogiannis, 2013). It is increasingly realised that it is critical to leverage human engagement because it improves the banking experience (Dedu & Nițescu, 2014). The marketing head at Standard Bank Group (Carreira, 2017:3) recognises “the growing importance of social media as a marketing tool, actively reaching out to customers through Facebook, LinkedIn, and Twitter, as well as through blogs and customer forums”. She concentrated on the new product launch for success:

The use of social media is another great opportunity for many banks to foster their marketing strategies (Dwivedi et al., 2021). Miller (2019) advocates that businesses need to understand this to be successful and create a presence that is enacted by social media. However, social media is very important, which has posed challenges for many banks across the world (Cheung et al., 2021).

1.5.3 Blockchain for marketing

Blockchain is a structural approach to recording data or information in a strong manner which is difficult to easily amend and penetrate (Goldman, 2016). Banking institutions have a lot to gain from blockchain, owing to its potential to reduce costs (Mbaidin et al., 2023). South African banking Institutions will reduce interactions with intermediaries and counterparties which will in turn reduce maintenance costs. Ngai et al. (2016) explain how banking Institutions can secure transactional data through shared records as blockchain permits quicker transactions that are not available on the centralised platforms.

The interest in blockchain for marketing is gaining more momentum among banks. “Since 2019, the blockchain division of the ING Dutch Bank has been testing the technology to ensure confidentiality and increase the productivity of the Bulletproof Network. ING believes that the technology can help banks comply with the requirements of the European General Data Protection Regulation (GDPR) and protect the privacy of customers” (Polyviou et al., 2019:1).

“Blockchain is presumed to bring both opportunities and implications to the field of marketing” (Ertemel, 2018:44). The technology is envisioned to bring back the ownership of personal data to the customers and enable a more comprehensive understanding of customer behaviours about brands (Ertemel, 2018). Additionally, blockchain helps to strengthen trust, accountability and transparency for marketing purposes. Potentially, some of the challenges of marketing can be addressed. Ertemel (2018) claims that trust matters are especially apparent within e-commerce and need to be dealt with. Because of the limited trust existing in these online mediums, online businesses are not able to conduct as much business as they would be able to. Some trust matters relate to exclusive parameters, including a lack of understanding of the counterparty, uncertainties related to the asset’s journey throughout the supply chain, reliability of brand promises, and not knowing what happens when things go wrong (Ertemel, 2018).

Even though both social media and blockchain are useful tools for marketing, they have not been complementarily used, specifically, in South African banking institutions. Foreseen substantial problems with blockchain need to be overcome in attempts to complement it with social media as a tool for marketing by banking institutions. One of the main challenges is scalability (Khan et al., 2021), which can allow for complementarity with social media. Other challenges are unknown, at least at the empirical level (Grover, Kar & Janssen, 2019).

1.6 Activity theory

Activity theory (AT) focuses on activities and episodes including human actions within social systems (Iyamu, 2021). The theory is increasingly used in the studies of people that focus on human interaction, organisational and relationships (Cong-Lem, 2022.). In AT, the activity consists of a subject and an object, mediated by a tool (Engeström et al. 1999). As shown in Figure 1.1, AT also includes community, rules, and division of labour (Shaanika & Iyamu 2015), which signifies the social context where activities are carried out (Uden, 2007).

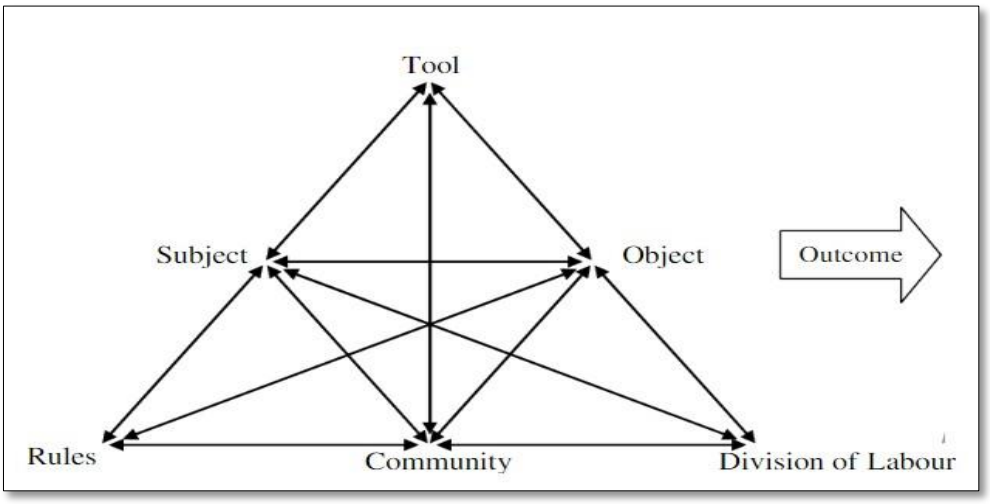


Figure 1.1: Engestrom's activity theory diagram (Engestrom, 1987: 78)

The above diagram, figure 1.1, reflects how all components of activity theory are interrelated for the desired outcome to be reached. It aims to understand how individuals engage in conditioning within a specific social and cultural environment. In this diagram, the subject refers to the individual or a group of individuals who are engaging in the activity while the object is the goal or purpose of the activity which is what the subject aims to achieve or accomplish. The subject uses tools which could be in the form of instruments or even technology to achieve the goal. While the subject uses these tools, some rules govern how the subject needs to operate, and those, at times, could be limitations to achieving the desired outcome. Rules are implicit or explicit guidelines, norms, or regulations that govern the activity and the interactions within the activity system. There is a community that includes the organisation or even the society in which the activity takes place. Division of labour refers to the tasks and responsibilities within the activity. The results of the activity, which can be both intended and unintended is the outcome.

Activity theory has been applied in many studies in the areas of social media (Kelly, 2018) and blockchain, primarily because it helps to examine interactions between people and the ways it shapes human activities (Mkhomazi & Iyamu, 2013). Daniels et al. (2010) argue that AT is useful in understanding the activities of user groups in the development of models and frameworks about the relationship between actors in an environment. Treiblmaier and Önder (2019) applied AT in their study about the impact of blockchain on the tourism industry. Forsgren and Byström (2018) employed AT to gain a better understanding of the use of multiple social media in the workplace.

Other theories such as organisational theory, grounded theory, and contingency theory were explored for this study. Activity theory was considered the most suitable primarily because of the study's objectives, presented above. The theory was applied:

I. To examine the activities that are involved in banking marketing to gain better insights into the factors that influence the use of blockchain for marketing in South African banking institutions.

II. To understand the roles and relationships between the various actors. This helps to better understand actors' roles in carrying out different activities using social media and blockchain for marketing purposes.

III. To examine the connection and relationship between the various tools, and to understand deterministic factors that cause confusion and conflicts between blockchain and social media in their complementary use for marketing products and services in South African banks.

1.7 Definition of key concepts

i. Banking institution: It is "a company engaged in the business of dealing with financial and monetary transactions such as loans", deposits, currency exchange, and investments (Plaskova et al., 2020).

ii. Blockchain: It is a "system of recording information in a way that makes it difficult or even impossible to change", cheat, or hack the system (Kshetri, 2017:1).

iii. Social media: "It can be defined as the platforms that facilitate communication through a specific social media tool or channel" (Neti, 2011:2). "Social media improves the marketing efforts of a firm by offering innovative ways to implement basic marketing programmes" (Blakeman, 2023).

iv. Marketing strategy: refers to an organisational plan to reach prospective consumers and turn them into customers of their products or services.

v. Traditional marketing: refers to an approach for advertising products and services to audiences using offline methods, which include print, broadcast, telemarketing, and direct mail.

1.8 Research paradigm

The research paradigm consists of methods and approaches that are employed to examine and understand phenomena (Saunders, 2016). Based on the research aim and objectives as stated above, the interpretive paradigm was employed in this study. The interpretive paradigm enables an understanding of the subjective meanings that persons assign to things, experiences, and situations (Sanchez et al., 2023). This is vital for this study, as it seeks to understand the views and experiences of the banks including their stakeholders and clients

about the use of social media and blockchain for marketing products and services. An interpretive paradigm is about the study of meanings that humans subjectively bring to things and actions (Stephens, 2023).

1.9 Qualitative research

Within the interpretive paradigm, the qualitative methods were followed in this research. Quantitative focuses on measurement and value, quantity and numbers (Kankam, 2019), which is not the focus of this study. The study's objectives inform the selection of the qualitative methods that were employed. According to Alharahsheh and Pius (2020), the qualitative method aims to provide specific understanding based on individuals' experiences with less generalisation. Also, qualitative provides rich descriptions of social constructs (Wahyuni, 2012) as being explored in this study. The qualitative method focuses on relationships, interactions, and meaning associated with things (Opara, 2023). From a qualitative methods perspective, a researcher finds it comfortable to examine and understand how things manifest themselves (Stephens, 2023).

1.10 Research design

"Research design is a desired plan that gives guidance throughout the intended research" (Alkurt et al., 2021: e22734). The multiple case study approach was used as the design by following Yin's (2003) guidelines. Two South African banks, one large and the other small (or medium-sized) were selected and used as cases for the study. The large bank represents the 'big four' while the small bank represents other banks in the country. This is primarily because the different categories (large and small) operate the same ways and are set up in a similar professional fashion. This case study approach is preferred because it allows in-depth research (Thomas, 2011). Schoch (2020) argues the uniqueness of the case study as a holistic approach to understanding phenomena better from the angle of a social system.

1.11 Delimitation of the study

The study does not cover the whole world as the researcher limited the research to South Africa. Participants had no gender or age limitations. The focus was the sales and marketing departments of the banks where the lists of all these staff are readily available from HR departments. Other participants were the banks' clients who had been exposed to social media marketing. As detailed in Chapter 3, a total of 23 of interviewees was determined by the point of saturation, which means that no new information was forthcoming. This study is limited to everyone who is influenced by blockchain in social media marketing in the two banking institutions.

1.12 Limitations of the study

There are three limitations to this study:

i. The study is limited to two South African banks. This means that banking institutions outside the boundaries of South Africa were not selected for the study.

ii. The outcome of the study was not quantified or measured.

iii. The study focuses on blockchain and social media from a marketing perspective only and not on the tech side.

1.13 Sampling in qualitative research

Sampling is considered a process in which many people are selected from a group of people (Pandey & Pandey, 2015). The participants for this study were not determined upfront as it was determined by information received from several interviews with different banks. Participants were from the sales and marketing departments including persons in the Public Relations (PR) departments of the bank. The number of interviewees was determined by saturation, a point of receiving repetitive information.

1.14 Unit of analysis

Participants were both male and female of different age brackets and from the sales and marketing departments of South African banks. Also, the participants have been in their role for at least two years or more as within two years any new employee would have gone through all the role-relevant training and have a clear understanding of their roles. Other participants were the banks' clients who had been exposed to social media marketing. The number of interviewees was reached at the point of saturation, as detailed in Chapter 3

1.15 Data collection

There are three main interview types of methods for collecting data: structured, semi-structured and unstructured (Whaley & Mesidor, 2023). Based on the study's aim and objectives, the semi-structured interview technique was used to collect data from participants, following Yin's (2013) explanation. Primarily, this is because the technique is most suitable for collecting qualitative data, as it provides the opportunity for conversation, "through which complexities are explained and new topics emerge" (Iyamu, 2018:9), and argue that the semi-structured interview allows participants to freely express themselves, thereby collecting rich data.

From the research questions, interview questions were formulated. Pilot interview sessions were conducted using two persons who did not participate in the actual study. This was to strengthen the questions. Criteria were used in selecting the participants to ensure the integrity and richness of the data (Iyamu, 2018). The number of participants (or interviews) was

determined by a point of saturation, which means that information was being repeated by other participants.

The study is purely qualitative as discussed above and data were collected as follows:

i. The interviews were tape-recorded (permission was sought from the participants).
ii. The interviews were transcribed. Each transcript was coded using pseudonyms to adhere to ethics and avoid the disclosure of the identities of participants.
iii. Responses from participants were grouped following the research questions.

1.16 Data collection – fieldwork

"The interview is a purposeful conversation between two or more people, requiring the interviewer to establish and ask concise and unambiguous questions, to which the interviewee responds" (Sekaran & Bougie, 2016:113). The techniques of interviewing are categorised into three types, structured, semi-structured, and unstructured (Whaley & Mesidor, 2023).

As specified in the section above, the semi-structured interview technique was used to collect data. Data were collected by using the face-to-face approach, where COVID-19 regulations allowed. Both telephonic and other teleconferencing technologies, specifically MS Teams were used to conduct the interviews.

1.17 Data coding and analysis

The coding was grouped into two units:

1. Unit A-data collected from employees of two banks.
2. Unit B- data collected from clients of two South African banks.

The activity theory model was used to guide the data analysis. The model consists of 6 components, which are Tools, Subject, Rules, Community, Division of Labour, and Object. The theory is discussed briefly in the literature review section and detailed in Chapter 2. The theory was applied to analyse the qualitative data, by following three main steps as follows:

i. Firstly, to examine the interactions that occur between the actors in the activities involving the use of blockchain for marketing. This was to gain insights into the influencing factors.
ii. Secondly, the roles and relationships between the various actors were examined. This was done to gain a deeper understanding of the tools (blockchain, social media), the people (subject) that are involved in it; and how rules are applied in the marketing activities of the banks. In addition, how the various tasks are shared or assigned to those who are involved in the use of social media or blockchain was examined through the Community and Division of Labour components.

iii. Finally, the connection and relationship between the various tools was examined to understand the deterministic factors that cause confusion and conflicts between blockchain and social media in their complementary use for marketing products and services in a South African bank.

1.18 Ethical consideration

Ethics were considered and given priority in this research. Thus, the following and other essential steps and cautions were taken and adhered to:

i. Based on the objectives as stated above, the study was of no harm or damage to any individual or group of individuals, race or gender.

ii. The objectives of the research were shared with the potential participants to voluntarily decide to participate or not to do so. Participants were not under pressure to take part in the research.

iii. Also, participants were informed that they may withdraw from the process at any given time should they feel uncomfortable.

iv. The data from the research will remain confidential and only be shared with the candidate and the supervisor.

v. The identity of the organisations and the participants will remain anonymous and represented with pseudonyms to cater for the POPI (Protection of Personal Information) Act.

vi. The candidate obtained ethical clearance from the university (CPUT) before embarking on the data collection.

1.19 Contributions of the study

The main theoretical contribution is the complementarity of blockchain and social media for marketing in banking institutions. There are numerous studies on both concepts, but they have not been combined in any study in the context of banking institutions. Another theoretical contribution is that publications from this work, add to existing literature in marketing, blockchain, social media, banking institutions, and developing countries.

The practical contribution is drawn from the model that would be designed to improve marketing strategy, to complementarily use blockchain and social media. It is intended to help marketing managers and strategists in developing and operationalising their marketing strategies on behalf of a bank.

Methodologically, the contribution of the study comes from how the two broad concepts, blockchain and social media are combined in a single model.

1.20 Structure of the thesis

The thesis consists of seven chapters. A brief description of each of the chapters as follows:

- Chapter 1: Introduces the entire study
- Chapter 2: Review of literature related to the study
- Chapter 3: Research design and methodology
- Chapter 4: Overview of the cases used
- Chapter 5: Data Analysis and Interpretation of Findings
- Chapter 6: Presents the model and discussion
- Chapter 7: Conclusion and Recommendation

1.21 Summary

The chapter serves as an introduction to the study, offering readers an in-depth look at the practical implementation. It offers a comprehensive view of the study's execution, providing an insight into the structure that not only guides but also promotes the study's direction, ensuring comprehensive coverage of all relevant topics to achieve the defined objectives.

CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

The objectives of this study are to examine the influence of blockchain on social media marketing and how to employ blockchain for marketing products and services in a South African banking institution. Based on these objectives, a literature review is conducted, focusing on the core aspects of the study, which are marketing as a strategic tool used by the banking sector, blockchain in the banking sector, and social media as a tool for marketing in the banking context. The literature review aimed to establish what has been covered in terms of related work and to understand existing gaps and how the gaps came to be within the banking sector.

This chapter is organised into nine main sections. The first section introduces the chapter, followed by a discussion on traditional marketing in the banking sector. In the third section, social media for marketing is covered. The fourth and fifth sections focus on blockchain as a marketing strategy and social media relationship with blockchain, respectively. The theory, activity theory, which underpins the study is discussed in sections six and seven. In the end, a summary of the chapter is provided in section eight.

2.2 Traditional marketing

Traditional marketing refers to any type of marketing that is not online (or internet-based) (Aljumah, Nuseir & Alam, 2021). This includes print advertising such as daily press and magazines; outdoor advertising; and radio and TV advertising. Scholars like Finne and Grönroos (2017) also indicate that traditional marketing is expensive for newly started businesses. Although the field of marketing has been extensively studied over the years, there remains a need for expansion and innovation. Thus, Kotler and Armstrong (2016) are of the view that some areas of the concept of traditional marketing are subject to contention. This is because a commonly accepted model or theory about traditional marketing is elusive (Ahlberg et al., 2023). Moreover, Schiffman (2019) is of the view that traditional marketing was premised on buying media space.

Another aspect is that traditional marketing strategies such as advertising on TV, billboards, and posters might not be as effective as they used to be (Ahlberg et al., 2023). Due to the intensive information overload that exists in recent times, old methods and ways of communication are hard to maintain (Karlöf & Karlöf, 2017). Strauss and Frost (2018) argue that contemporary audiences are more critical of marketing and expect more from it. Brindle (2017) contends that traditional marketing is also being disadvantaged by the fact that traditional media are getting more and more expensive. Roumieh et al. (2018) contend that to

raise product and service awareness, organisations employ a strategy of identifying a target market and then devising a marketing plan or an advertisement campaign.

Traditional marketing strategy involved defining a narrow target market and utilisation of direct or indirect marketing tools for attracting customers and growing market" (Kotler et al., 2021). However, Finne and Grönroos (2017) argue that digital marketing has become popular across the globe due to cultural, technological, and societal shifts. In essence, e-marketing has become phenomenal, including in the banking sector. Li and Palanisamy (2019) argue that e-marketing is only distinguishable from traditional marketing in its medium of communication. Yuwanda (2021) contends that e-marketing incorporates "advertising and marketing efforts to direct sales from e-commerce activity. For example, social media are increasingly being used for marketing purposes (Becker et al., 2017).

However, Roumieh et al. (2018) suggest that there is a disconnect between e-marketing and traditional marketing tools, which has been observed in some organisations and marketing campaigns. Grönroos (2019) argues that even though social media offers quick and immediate connections with customers, a fragmented and unsupportive integration with traditional marketing tools can negatively impact the marketing message and brand position of an organisation, a product, or a service.

Critically, Kotler et al. (2019) argue that traditional marketing or marketing at large has a reputation for exaggeration. Filip, Jackowicz and Kozłowski (2017) contend that this is a result of the fact that marketing has an increasing desire to shock a target market through contentious marketing practices and communications. However, Roumieh et al. (2018) argue that exaggeration and contentious marketing practices are not in tandem with the beliefs and values of some communities, such as Islam.

2.3 Social media in banking

Social media is rapidly evolving, changing the way people communicate (Sloan & Quan-Haase, 2017). Popular samples of social media include Facebook, Twitter, YouTube, LinkedIn, and Instagram (Choi, Guo & Luo, 2020). However, Chui et al. (2021) contend that social media allow "horizontal ways of communication" while Ali et al. (2019) argue that for a few, social media users interact with one another and naturally influence one another.

Social media is creating virtual or online communities (Boukis, 2019). However, Dwivedi et al. (2021) believe that online communities represent a virtual space that aggregates people with a mutual interest and enables people to speak with one another through computer-mediated mechanisms. The acceptance of social media continues to grow in contemporary times (Alamsyah & Indraswari, 2017). However, Stallone, Wetzels and Klaas (2021) argue that the

internet has become an efficient communication tool, which connects brands with potential customers. The Internet provides a ‘marketplace’ of ideas vital to democracy since it overcomes geographical limits (Wang & Bates, 2020). However, Miller (2019) submits that online social networks are based on centralised platforms suffering from certain problems.

It is indisputable that the increase of internet commerce in the 1990s and its ever-increasing growth are amid tremendous developments within the business environment (Rezayat, 2017) while Ali et al. (2020) argue that modern trends of digitalisation have significantly transformed and reshaped business practices, whole businesses, and even several industries. Bhatia (2017) argues that this can be because e-commerce significantly accelerates commodity circulation by eliminating intermediate links within the distribution channel.

Most organisations are now utilising e-marketing strategies, especially social media, to raise product awareness within target markets (Goulding et al., 2018). It is argued that the developments in e-marketing and social media have allowed organisations to define markets, and concurrently track and measure customer interests and perceptions. While Hussien and Aziz (2018) argue that the industry is not an exception to the current technological evolution, Mitic (2017) contends that social media marketing is also expanding in the industry of retail banking across the world, South Africa included. Thus, besides their socializing role, social media have also become key platforms for business, including within the banking sector.

New technologies and services may threaten to replace traditional banks in their entirety (Lee and Falahat 2019), while Aini and Hapsati (2019) contend that traditional banking business models (that predominantly require clients to visit a physical branch) are being challenged, including in South Africa. Naeem (2019) argues that in South Africa, the traditional banking approach offers consumers access to their bank’s website (responsive design), Internet banking services, access to (at least) an Android and IOS smartphone app, local, zero-rated data rights for these smartphone banking apps, mobile banking via USSD options and POS systems. However, Aini and Hapsati (2019) content that other studies indicate that though e-banking enables customers to undertake a large range of banking activities at any time and place at a small cost, the elimination of the role of humans in providing electronic services presents a challenge in gaining customer loyalty.

Challenges faced by marketing within the financial sector and a few of the challenges emanating from the fact that almost all financial services firms are unaware of the potential of e-marketing, Kim et al. (2020). Li and Palanisam (2019) argue that another important point is that some financial firms lack the essential expertise, resources, and knowledge to market successfully using electronic communication channels. Moreover, a major number of banks

face technical challenges in integrating their services and marketing offerings (Choi, Guo & Luo. 2020). In some instances, customers expect a seamless experience irrespective of the mechanism. They highly value more to communicating and interacting with the financial firm, yet most banks fail to acknowledge the importance of this (Jaiyeoba, Adewale & Quadry, 2018).

Some studies examine the dynamics of relationship marketing in e-banking by assessing the association between relationship quality and online customer loyalty at different phases of the relationship lifecycle (Garepasha et al., 2019). Imran et al. (2019) argue that another critical aspect raised in the literature pertains to the reliability of social media as platforms supporting relations between banks and their customers. Vemuri (2018) argued that metrics measuring the effectiveness of social media engagement and its impact on customer relationships are still vague.

2.5 Blockchain

Blockchain is an emerging approach for communicating and marketing. Crosby et al. (2016) argue that blockchain cannot be limited to cryptocurrency and that it redefines the meaning and importance of holistic marketing. The use of blockchain brings a different perspective to both the traditional and social media approaches to marketing and communicating with clients (Antoniadis, Kontsas & Spinthiropoulos, 2019). However, little is known about the influence social media and blockchain have on each other from the perspective of marketing as little has been highlighted in research (Li et al., 2018). Also, little is known about the influence of the complementarity of social media and blockchain in the South African banking sector which does not seem to have been much researched.

Blockchain has gained increased visibility in contemporary times, with its inclusion within the World Economic Forum's list of emerging technologies powering the fourth industrial revolution (Zheng & Boh, 2021). The growth of blockchain dates back to 2008 (Stallone, Wetzels & Klaas, 2021) while Satoshi Nakamoto, the unknown person, or group behind Bitcoin, demonstrated how blockchain might be used to resolve the problem of maintaining the order of transactions and avoid the double spending problem (Rosenberger, 2018).

Though blockchain was initially developed to serve as a distributed ledger for tracking Bitcoin transactions, it is useful in other business domains such as marketing (Ali, Ally, Clutterbuck & Dwivedi, 2020). The impacts of blockchain extend beyond Bitcoin and even beyond the financial industry to other business sectors (Ølnes, Ubacht & Janssen, 2017). Some studies have proposed a blockchain-enabled logistics finance execution platform (BcLFEP) as an integrated solution to facilitate logistic finance for e-commerce retail (Underwood 2016). In

essence, the scholars call for a blockchain agent model that grants mobile agents the capacity for underlying blockchain operations (Li et al., 2020). “

2.4 Social media and blockchain for marketing

Blockchain is an emerging approach for communication and marketing. Crosby et al. (2016) argue that blockchain cannot be limited to cryptocurrency and that it redefines the meaning and importance of holistic marketing. The use of blockchain brings a different perspective to both the traditional and social media approaches to marketing and communicating with clients (Antoniadis, Kontsas & Spinthiropoulos, 2019). However, little is known about the influence social media and blockchain have on each other from the perspective of marketing as little has been highlighted in research (Li et al., 2018). Also, little is known about the influence of the complementarity of social media and blockchain in the South African banking sector. It does not seem to have been much researched. The expositions below will assist in understanding the impact of social media and blockchain for marketing purposes.

2.4.1 Social media marketing

Social media marketing refers to a system that allows marketers to engage, collaborate, interact and harness the intelligence of crowdsourcing for marketing purposes (Chikwandiwa et al., 2018). Social media entails various components such as mobile systems that enable and support content created by individuals and groups (Chen et al., 2022). The most popular social media platforms include Facebook, Twitter, YouTube, LinkedIn, and Instagram. Currently, over 3 billion people across the world are estimated to use social media (Mire, 2018). South Africans are among these estimated 3 billion users. The drastically increasing number of users can be attributed to the general belief that social media is considered the fastest approach to disseminating messages, linking people, and establishing relationships and friendships (Chen et al., 2022). The approach creates a huge volume of data, which many banks explore for their products and services.

Many people, including banking institutions, understand the power of social media. Based on this, some banks explore how clients and potential customers apply social media to enable them to connect with customers, increasingly. However, social media is not prevalently explored for banking processes and events to market products and engage with customers, across the world (Di Domenico et al., 2021). It is increasingly realised that it is critical to leverage human engagement because it improves the banking experience (Dedu & Nițescu, 2018). The marketing head at the Standard Bank Group **(**Carreira, 2017) recognises the growing importance of social media as a marketing tool, by actively reaching out to customers through Facebook, LinkedIn, and Twitter, as well as through blogs and customer forums. She concentrated on the launch of the new product for success.

The use of social media is another great opportunity for many banks to foster their marketing strategies (Dwivedi et al., 2021). Miller (2019) advocates that businesses need to understand all these to be successful and create a presence that is endorsed by social media. However, while social media is very important, it has posed challenges for many banks across the world (Cheung et al., 2021).

For banks to do well, they have to be progressively active in the marketing of their products and services. Thus, South African banking institutions are increasingly employing social media as a strategic tool for marketing and branding their products and services (Gavaza, Viljoen & Cilliers, 2019). This could be attributed to its benefits from different perspectives, such as cost-effectiveness and ease of information dissemination. According to Potgieter and Naidoo (2017), social media improves the quality of service and enhances client loyalty in South African banking institutions. In addition, through social media, some South African banks educate their clients about certain complex products, including creating transparency and brand awareness (Chikandiwa, Contogiannis & Jembere, 2013).

2.4.2 Blockchain for marketing

The interest in blockchain for marketing is gaining more momentum among banks. “Since 2019, the blockchain division of the ING Dutch bank has been testing the technology to ensure confidentiality and increase the productivity of the Bulletproof Network. The ING bank believes that technology could assist the bank in complying with the European General Data Protection Regulation while protecting the privacy of clients (Polyviou et al., 2019:1).

It is assumed that blockchain brings both opportunities and implications to the field of marketing, Ertemel (2018). The technology is envisioned to bring back the ownership of personal data to the customers and enable a more comprehensive understanding of customer behaviours regarding brands (Grewal et al., 2018). Additionally, blockchain helps to strengthen trust, accountability, and transparency for marketing purposes. Potentially, some of the challenges of marketing can be addressed. Harvey et al. (2018) claim that trust matters are especially apparent within e-commerce and need to be dealt with. Because of the limited trust existing in these online mediums, online businesses are not able to conduct as much business as they would be able to. Some trust matters relate to exclusive parameters, which include a lack of understanding of counterparty, uncertainties related to the asset’s journey throughout the supply chain, reliability of brand promises, and not knowing what happens when things go wrong (Ertemel, 2018).

Other studies focus on the application of blockchain in advertising (Shrestha, Halgamuge & Treiblmaier, 2020). A critical argument is that blockchain improves brand positioning and corporate brand image by adopting brand-specific digital currencies and increasing brand storytelling capabilities (Boukis, 2019). Moreover, blockchain authenticates brand communication and, therefore, improves online brand advertising by reducing the need for intermediaries (Boukis, 2019). Researchers also focus on the verification of authenticity and the transferability of content whether text or video (Hasan et al. (2019).

2.4.3 Blockchain and social media

Even though both social media and blockchain are useful tools for marketing, they have not been complementarily used, specifically in South African banking institutions. Foreseen substantial problems with blockchain need to be overcome in attempts to complement it with social media as a tool for marketing by banking institutions. One of the main challenges is scalability (Yli-Huumo et al., 2016), which can allow for complementarity with social media. Other challenges are unknown, at least at the empirical level (Grover, Kar & Janssen, 2019).

Some studies also focus on the distribution of content on social media (Choi et al., 2020). Some studies focus on the issue of the rising amount of false data and fake information on social media (Guidi 2021; Wasserman & Madrid-Morales, 2018). In this age, a ‘fake news” industry has been created (Rodny-Gumede, 2018). However, the mushrooming of false information has complex cultural and social reasons (Wasserman & Madrid-Morales, 2018). Despite the prevalence of fake data, studies show interest in consumer-to-consumer platforms and their design, showing how blockchain can help consumers connect to and transact with each other, share personal data, and avoid the centralization of control by large e-commerce companies (Shrestha, Joshi & Vassileva, 2020; Shorman, Allaymounq & Hamid, 2019).

Based on these benefits, some South African banks subscribe to more than one social media platform. According to Gavaza et al. (2019), the approach seems to be working well primarily because many of their clients value the social media privacy dimension. Despite the successes and benefits, social media as a marketing tool presents different types of unique challenges in the areas of validated scales and variations in some of the platforms (Dwivedi et al., 2020). There have been efforts in trying to address some of the challenges; yet they persist (Parsons & Lepkowska-White, 2018). The challenges seemed to increase when some banks had to complementarily employ social media and blockchain for marketing purposes.

The case of trade finance can also illustrate the argument (Kowalski, Lee & Chan 2021). Trade finance represents all banks’ conditioning that supports trade deals (Committee on the Worldwide Financial System, 2017). The need to use trade finance stems from the indispensability to distribute pitfalls among trading associates involved in the exchange of

goods and to bridge the gaps among the manufacture, shipping charges, and separate payments for the goods (Schmidt-Eisenlohr, 2013). Still, trade finance has been hampered by trust issues embedded in the multifaceted nature of transnational trade (International Chamber of Commerce, 2018). Another relevant point emphasised is that trade finance processes necessitate repeated verification, checks, and validations of paper documents as well as collective trust among parties (International Chamber of Commerce, 2018).

Critically, three types of payment methods have been commonly used in international trade. These include the cash in advance, open account, and letter of credit approaches (Schmidt-Eisenlohr, 2013; Ahn & Sarmiento, 2019). However, trade finance is haunted by financial fraud (Ho, 2018; Kowalski, Lee & Chan 2021). Importantly, blockchain is commended for addressing trust issues in economic transactions and freeing trading partners from the necessity of implementing mechanisms to signal or convey trust (Economist, 2015). This is because it is an enciphered database shared, verified, and executed by a network of participants who have their immutable version of the ledger (GOScience, 2016; Zhao et al., 2016).

The above studies are key for this research which focuses on the influence of blockchain on social media marketing in South Africa's banking institutions. The area is generally under-researched hence the need for more studies.

2.5.1 Blockchain in financial institutions

The interest in blockchain started to increase several years ago to fix supply chains, healthcare systems, and even the democracy of several countries (Bhargava, 2019). Yet when the experiments were conducted on financial institutions, blockchain usage was low. In some instances, those who were interested found that the traditional, centralized databases could provide the same functionalities at a much lower cost.

Scholars have also suggested a framework that has three dimensions: blockchain-enabled financial benefits, challenges, and functionality, Beck et al. (2018). People, organisations, technology, economics, and policy are the five categories of the benefits dimension (Wat, 2002). Issues of trust, sharing and privacy constitute the people's benefits category (Wat, 2002). Moreover, literature on network security and smart contracts is also part of the benefits category (Ali et al., 2020). The challenges dimension consists of financial, regulation, operational, and adoption aspects (Ali et al., 2020). The functions dimensions are made up of point-to-point transmission, data ownership, data sharing, data protection, and distributed innovations (Ali et al., 2020). The framework is critical when discussing issues of blockchain and social media marketing in the banking sector.

Scholars note that blockchain is arguably the latest advancement in industries such as the financial sector, where trust is of prime significance (Ali et al., 2020). Blockchain is a novel decentralised and coded security that provides the capability for new digital services and platforms to be created through this emerging technology (Li et al., 2020). Blockchain technology was in the shadows of the bitcoin phenomenon for a long period, albeit in contemporary times it is now attracting attention in its own right and getting due recognition as a core technology in the FinTech family (Leidner & Yinga, 2019).

Scholars note that participants in a blockchain perform and support transactional activities through the computationally achieved consensus mechanism, and replace the intermediaries traditionally needed to instil trust among trading partners (Ducuing, 2019). Therefore, when utilising blockchain, one does not need to trust their counterparts or institutions, but rather one needs to trust the technology itself (Finck, 2018). The trust architecture of blockchain allows the automation of transactions based on self-enforcing rules (Chan, 2021). Crucially, Trivedi (2021) examined how blockchain influences the trust relationships among trading partners in the context of trade finance. The research indicates that the use of blockchain in trade finance improves the security of transactions and data exchanges and enhances the efficiency and quality of communication in trade processes (Kowalski et al., 2021).

It is argued that with the expansion of ICOs, blockchain attracts more attention from academia and industry (Huang, 2020). Li et al. (2020) argue that recent blockchain can be segmented into two categories. The first strand focuses on blockchain improvement to address technical challenges and limitations of the adoption of blockchain (Karim, 2022). Blockchain was initially introduced as a manner to conduct payments and transfers, hence security issue becomes one of the key concerns (Luo & Wen, 2017). Several possible types of common security breaches have existed in blockchain, including DDoS attacks, private account hacking using Trojan horses, or viruses from ads (Gan, 2021). Scholars also argue that another body of literature on blockchain is located in transdisciplinary fields, including IoT, manufacturing, logistics, supply chain, and healthcare, among others (Bhargava, 2019).

2.6 Underpinning theory: Activity theory

Based on the objectives of the study as stated in Chapter 1 and briefly mentioned in the introductory section of this chapter, theories were explored. The theories explored for this study include the organizational theory (Jones & Jones, 2013), grounded theory (White & Cooper, 2022), and contingency theory (Shenkar & Ellis, 2022). Of the theories, activity theory (AT) was found to be the most appropriate to underpin this study. One of the strengths of AT is in interaction between actors in performing tasks (Iyamu, 2021), which helps to gain insights into the relationship between banks and their clients. Primarily, the theory is selected to underpin

the study because of its strengths in the formulation and application of rules and tools to achieve a specific purpose (object). Thus, the AT was applied in addressing the objectives of the as follows:

Firstly, AT helps to examine the activities that are involved in banking marketing to gain better insights into the factors that influence the use of blockchain for marketing in South African banking institutions. Dennehy and Conboy (2017) provide example of how using AT helps to understand the structure and human activities are influenced by social context.

Secondly, AT guides an understanding of the roles and relationships between the various actors. This helps to gain a better understand actors' roles in carrying out different activities using social media and blockchain for marketing purposes. Engeström and Pyörälä (2021) argued that an activity is a collection of human actions and that they lead to guided outcome using tools.

Thirdly, to examine the connection and relationship between the various tools, and to understand deterministic factors that cause confusion and conflicts between blockchain and social media in their complementary use for marketing products and services in South African banks. Following the explanation offered by Nehemia-Maletzky et al. (2018), which state that activities carried out by actors are consciously planned and that human consciousness is the basic principle of AT, it helps to critically gain an understanding of the roles and responsibilities including interrelationships of the actors and tools, For marketing purposes.

Activity theory has been applied in many studies in the areas of social media (Kelly, 2018) and blockchain, primarily because it helps to examine interactions between people, and the ways they are shaped by human activities (Mkhomazi & Iyamu, 2013). The theory focuses on activities and episodes including human actions within social systems (Iyamu, 2021). Daniels et al. (2010) argue that AT is useful in understanding the activities of user groups in the development of models and frameworks about the relationship between actors in an environment. Treiblmaier and Önder (2019) applied AT in their study on the impact of blockchain on the tourism industry. Forsgren and Byström (2018) employed AT to gain a better understanding of the use of multiple social media in the workplace. The increasing interest and use of the theory is because of the constituents of its model as shown in Figure 2.1. The components are closely interconnected with human activities and actions.

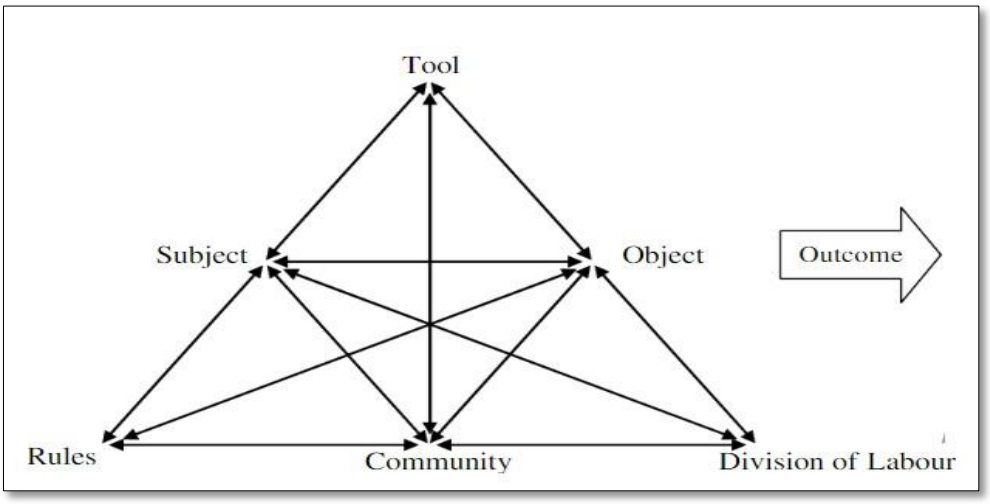


Figure 2.1: Engestrom's activity theory diagram (Engestrom, 1987: 78)

Activity is defined as a structure of actions influenced by the intentional interaction between subject and object (Bhattacherjee et al., 2013). Activity Theory is broken into several components; subject, tool, and object, where the subject is an individual/ person being studied and a source of the activity and the object is the activity intended and may be something material or intangible. A tool is a mediating device that can be an instrument, signs procedures, machines, methods, and laws by which action is executed (Moawad et al., 2013). Engestrom's modification of Vygostky's original theory offers for additional two units of analysis, which have an implicit effect on work activities. Firstly, are the rules, which are sets of conditions that help to determine how and why individuals may act and are a result of social conditioning. The second is the division of labour, representing individual roles and responsibilities of the subjects that are involved in an activity and involves the divisions of power and status. The two elements affect the community, and through this, groups of activities and teams of workers are anchored and can be analysed (Hyland, 1998; Verenikina, 2001). It is an interdependent system because of the collaborative efforts of its members. A subject may be part of several communities and a community, itself, may be part of other communities (Engestrom, 2001).

Activity theory is commended for accommodating changes in the ways organisations work, in shared objects and distributed activities, and in theorising new notions of collaborative work (Engeström et al., 1999; Spinuzzi, 2015). Arguably, activity networks are useful in conceptualising each element of an activity such as rules/norms and tools connected to other activities (Karanasios et al., 2021).

Some scholars explored the role of activity theory in studying crucial digital technologies such as social media, smartphones, blockchain, artificial intelligence, and algorithmic decision-

making (Karanasios et al., 2021). This research extends the use of AT for analysis, in the areas of blockchain and social media in the banking sector, in the South African context.

Just like most theories across academic fields, the activity theory has also been subjected to criticism (Karanasios et al., 2021). Some point out that activity theory faces the challenge of radical and fateful transformation in the objects of human activity (Sannino & Engeström, 2018). Engeström and Sannino (2020) contend that the need for radical change is exemplified by the COVID-19 pandemic and climate change. This is because, during the COVID-19 pandemic, digital platforms deepened and complicated “world view” gaps and fostered polarisation (Parra et al., 2021).

2.7 Activity theory and research in marketing

Activity Theory has often been used in the literature to examine human activity Frank and Marken (2021). This is because human activity is embedded in a field of interrelated social practices (Camargo-Henríquez & Silva, 2022). This study contends that studies utilising Activity Theory in marketing research are few and far between. More research is still needed in this domain.

Ferreira and Dennehy (2020) contend that activity theory has the potential to enable insights into the contradictory and complex systems of activity in which marketing practices reside. The scholars also assert that activity theory supports the understanding of the change, complexity, and uncertainty related to marketing contexts (Zdunczyk & Simpson, 2020). Illustrating the importance of activity theory in marketing, scholars contend that the dominant approach in marketing focuses on market knowledge (Calantone, 2018). It is argued that marketers are supposed to be endowed with the necessary skills in the field (Andreasen et al., 2020). Some scholars bemoan that the marketing knowledge perspective does not recognise the action as generative of knowledge (Ferreira & Dennehy, 2020).

Nuseir and AlShawabkeh (2019) contend that marketing knowledge is often related to individualistic and linear approaches to knowledge, which focus on individuals’ ability to interpret the context and apply the appropriate rule to achieve predetermined goals.

Considering the highlighted shortcomings, some scholars call for a practice theory, specifically, activity theory, in the marketing domain (Blackler & Engestrom, 2018). Critically, Ferreira and Simpson (2020) posit that the application of activity theory to the problem of marketing knowledge provides important insights into how the activity is constructed, and how tools and resources are available. Marketing has evolved from the dominant logic of the transactional perspective to include the relational, service-based, and networked view of co-production and

co-creation of value (Samoldin, 2020). Therefore, researchers have shifted attention from functional to cultural issues underpinning marketing practice (Andreasen et al., 2020).

Some contend that contradictions in activity systems are a central concept in Activity Theory (Lioutas et al., 2019). Therefore, researchers working with activity theory are encouraged to effect change through research into the contradictions of activity systems (Engeström, 2018), including in marketing.

An important observation made by scholars in the marketing domain is that marketing is facing increasing uncertainty and change in the competitive environment (Samli, Aydin & Şahin, 2020). Due to changes, there is a need to depart from the traditional dichotomies originating in the objective/subjective divide which inhibit the understanding of learning and knowing as simultaneous and interdependent with action (Simpson, Taylor & Padmore, 2020). Scholars also highlight that if marketing management in this networked/service logic is to be responsible for creating and managing new marketing knowledge, marketing knowledge and learning need to be understood differently (Achrol & Kotler, 2022). Activity theory contributes to the understanding of change deriving from the inherent contradictions of activity systems (Samli & Şahin, 2020). Thus, theorising marketing practice as an activity system brings on board the intertwined character of knowing, learning, and doing (Simeonova, 2018).

2.8 Conclusion

The chapter has extensively reviewed literature in the field of blockchain and social media for marketing purposes. Due to its focus and intentions, the study mainly paid particular attention to literature on blockchain and social media marketing in the banking sector. A blockchain is an emerging approach for communication and marketing. As earlier stated, blockchain cannot be limited to cryptocurrency, and it redefines the meaning and importance of holistic marketing (Crosby et al., 2016). In essence, the use of blockchain brings a different perspective to both the traditional and social media approaches to marketing and communicating with clients (Antoniadis, Kontsas, & Spinthiropoulos, 2019).

However, there is a dearth of studies exploring the nexus between blockchain and social media from a marketing perspective (Li et al., 2018). Moreover, little is known about the influence of the complementarity of social media and blockchain in the South African banking sector. This glaring lacuna makes this study necessary. However, the research is indebted to earlier research on social media and blockchain in South Africa and beyond.

The study also notes that much of the literature on blockchain and social media in the banking sector is largely ‘Western-centric’. Studies from the global South on the subject are few. More research on the subject is required especially in South Africa and Africa at large.

CHAPTER 3
RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The methodology is selected based on the objectives of the study as stated in the chapter, which is to examine the factors that influence the use of blockchain and identify the criteria for employing the concept for marketing products and services in a South African bank The research methodology as applied in this study comprises methods, approaches, and techniques, including philosophical assumptions. This chapter discusses the research methodology in the context that it is applied in the study. Another important topic discussed in the chapter is the ethics that were considered in conducting the study.

The chapter is organised into five main sections. The first section is the introduction. The second section discusses philosophical assumptions and the philosophical stance. The third section discusses the research approach and the research methods while the fourth section discusses the research design. The last section discusses data collection and data analysis.

3.2 Philosophical assumptions

A belief or doctrine from the development of knowledge is referred to as philosophy (Saunders et al., 2015). This means that the investigation and knowledge acquisition begins with assumptions, whether the phenomenon under investigation exists or not, and how it presumably exists. Three main assumptions span the undertaking of this study. First, it is assumed that South African banks could employ the concept of blockchain for marketing their products and services. Second, there is confusion between blockchain and social media in their complementary use for marketing products and services in South African banks, which is another assumption. The third assumption is that employing blockchain by South African banks needs criteria. Assumptions can be viewed from or based on different philosophies.

In research, the most common philosophical assumptions are axiology, epistemology, and ontology (Saunders et al., 2015). These philosophical assumptions influence research from different angles or contexts. This means that the assumption associated with philosophy shapes the thinking or views of the researcher. The three philosophies mentioned above are discussed in the context of this study.

3.2.1 Axiology in research

Axiology is a philosophy that associates value with entities such as objects or subjects and how society develops such ideals (Rosenthal, 2019). The philosophy helps to interpret the doctrine of value (Shokhin, 2020). Yulianto (2021) explains that, in the context of axiology, value is associated with usefulness. McGregor (2011) named its two kinds of values as ethics

(good and bad) and aesthetics (beauty and harmony). It is advisable, according to Thornley (2021), to endeavour to comprehend the significance, nature, and origin of the concepts of values and value judgment. It has tight ties to the philosophical subfields of ethics and aesthetics (Khambali et al., 2021). The value of research in the area of human conduct is ethics (Haryanti et al., 2021). Since values are perceived as subjective rather than objective, they can be fundamentally deceptive and obstruct the search for the truth (Thornley, 2021).

Here, objectivity is taken to be good and subjectivity to be evil, according to axiological principles. In contrast, the researcher in qualitative research discloses the values and biases they bring to the study as well as the value-leadenness of the data they collect (Creswell & Puth, 2018). The area of philosophy known as aesthetics is concerned with the foundations of art and beauty. It seeks to comprehend the nature of beauty in general and is concerned with harmony and beauty (Guba & Lincoln, 1994). Values of beauty are likely to be individualised and subjective (Kneller, 1971).

This study neither focuses on value nor aesthetics. Instead, as explained in Chapter 1 and briefly stated in the introductory section of this chapter, the study focuses on examining and gaining a better understanding of the factors that influence blockchain and the complementary use of blockchain and social media for marketing purposes in South African banks. Thus, the assumptions are not about the value and aesthetics of blockchain, marketing, or social media. Also, the axiological query addresses the participatory paradigm in terms of human flourishing (Gustafsson, 2020). Therefore, the process of social involvement in which there is a balance of autonomy, cooperation, and hierarchy both inside and between individuals, and groups is viewed as the key to human flourishing (Gorski, 2017). It is envisioned as being interdependent with the planet's ecosystem blooming (Hedrick, 2020). None of these postulations relate to the phenomenon undertaken in this study. Human flourishing is regarded as an end in itself and is viewed as intrinsically important participatory decision-making that enables people to take part in decisions that, in all social circumstances, in some way affect their well-being. Based on the above, the philosophy does not shape the thinking and focus of this study.

3.2.2 Ontology in research

The philosophy of ontology refers to the nature of reality (Król & Lubacz, 2022; Al-Ababneh, 2020). Webster (2013) describes ontology as a particular theory that is about the nature of being or the kinds of things that exist. In research, it also refers to the researcher's belief about the nature of reality, while in philosophical terms, it refers to the study of our existence and the fundamental nature of reality or being (Quinian, 2011). This means that philosophically, ontology focuses on reality and poses questions about the nature of reality and what is known

about a phenomenon (Maxwell, 2013). Thus, from an ontology perspective, assumptions are reached.

Philosophically, there are two main primary assumptions of this study. The first assumption is that blockchain can be employed for marketing purposes within the banking sector of South Africa. The second assumption postulates that blockchain and social media can be combined in carrying out activities and processes of marketing products and services by South African banks. These remain assumptions as there seems to be no empirical evidence. The existing studies on blockchain or social media for marketing focus on other sectors, such as tourism (Matikiti, Mpinganjira & Roberts-Lombard, 2018), agriculture (Mavilia & Pisani, 2022), and business in general (Morkunas, Paschen & Boon, 2019). Duffett and Wakeham (2016) focused on youth and communication.

Although ontology guides us to the nature of reality (Alharahsheh & Pius, 2020), how the objective or subject exists, and comes to being is not known. Hence, it becomes critical to gain that knowledge. This brings about another philosophical assumption, epistemology (Bertolaso & Rocchi, 2022; Bridges, 2016), to guide our understanding towards gaining knowledge on why things are the way that they are (Iyamu, 2018).

In the context of subjective-objective ontology, there is "a truly participative relationship with things and with the earth, a felt reciprocity, behind our literary abstraction" (Abram, 1996). This encounter is a transactional, participatory setting, as Heron and Reason (1997) explain. "Touching, seeing, or hearing something or someone does not speak to us about ourselves or about a being existing outside of ourselves. It conveys to us the idea of a being who is coexisting and resisting with us. Our subjectivity is lit by and participates in what is present (Heron, 1997). As a result, community-based research is interested in learning more about how individuals interpret the world around them.

3.2.3 Epistemology in research

Epistemology is the study of the landscape of knowledge itself. Its study focuses on our means of acquiring knowledge and how we can differentiate between truth and falsehood. Current epistemology generally includes a debate between rationalism and empiricism. Rationalists believe that knowledge is acquired using reason, while empiricists assert that knowledge is gained through experiences (Carlson, 2022).

The notion that there is objective "truth" out there just waiting to be revealed is rejected by constructionist epistemology (Anderson & Holloway, 2020). Truth or meaning, on the other hand, comes from our adherence to the truths of our world. In other words, independent of human activity or symbolic language, the "actual world" does not already exist. According to

subjectivist epistemology, reality may be expressed through many linguistic and symbolic systems and is shaped to serve the needs of individuals (Pachankis, 2022). As a result, humans give the world meaning and interpret it in a way that makes sense to them. The usefulness of subjectivist research is in demonstrating how a person's life experiences affect how they see the world.

Epistemology questions the relationship between the researcher and the reality or the phenomenon under investigation (Anderson & Holloway, 2020). This perspective implies that the object or phenomenon that the researcher can influence each other, hence creating a need for validation of the results of the research. Thus, epistemological assumptions carry on from where the ontology stops. Thus, in this study, the epistemological assumptions are three: (1) some factors influence employing the use of blockchain for marketing purposes in the South African banking sector; (2) employing blockchain requires criteria, to do so; and (3) it is possible to combine blockchain and social media, for the same purpose, to market and promote products and services of South African banks.

As mentioned above, the philosophical assumption of this study is ontology and epistemology. Based on these assumptions, a position is undertaken, referred to as a philosophical stance. The section that follows discusses philosophical stances in the context of this study.

3.3 Philosophical stance

In research, a philosophical stance is a direction undertaken toward establishing reality, facts, or experiments about an assumption (Anderson, 2023). The direction is fortified through an approach or approaches. The most common approaches in social sciences research are positivism, interpretivism, and critical realism (Mukumbang, 2023).

3.3.1 The positivism approach

Positivism is identified as a scientific approach to research that focuses on empirical analysis to test a given hypothesis. The research is conducted in a controlled environment and focuses on providing objective outcomes (Sánchez-Beristain et al., 2023). The research process is inflexible and relies on assumptions that the researcher is completely objective throughout the entire study and is not influenced or does not influence the object or phenomenon under investigation.

Positivism focuses on pure data and facts that are uninfluenced by human interpretation or bias and adopts the quantitative research method. A positivist approach, therefore, relies heavily on the validity, reliability, and generalisability of the data (Skinner *et al*., 2015). Quantitative research examines the relationship between variables which are measured

numerically and analysed using a range of statistical and graphical techniques (Saunders, 2016).

The positivist perspective is deductive and leans more on the quantitative (Dieronitou, 2014). Based on this, the positivist approach is not an appropriate philosophical stance for this study, which is qualitative and not quantitative. The researcher therefore explores the interpretive approach and is considered the most appropriate stance, philosophically.

3.3.2 The interpretivism approach

The interpretivism approach is inductive in that it builds theories to explain realities (Edirisingha, 2012). Thus, the interpretive approach is a general term that fits a particular view of organisational reality, based on the belief that reality is constructed or socially meaningful through understanding and agents' interpretation of events (Rezapour et al., 2023). Interpretivism incorporates the judgments, beliefs, perceptions, reasons, and attitudes of the subjects. It relies heavily on a qualitative approach and the outcomes of research conducted using this approach are normally scrutinised by other researchers (Sorooshian et al., 2023).

The interpretive philosophy's objective is to understand and interpret meanings in human behaviour instead of generalising and predicting cause and effect (Durnová & Weible, 2020). Based on the above, an interpretivism perspective has been adopted as it studies different human beings. The researcher finds it rather naive to approach a thesis without the understanding that values will interfere with what is being studied. Thus, the positivistic approach is therefore not applicable.

Based on the philosophical assumptions and stance, a position taken helps to select the research methodology for the study. Al-Ababneh (2020) argues that in social science, the selection of research methodology depends on how the phenomenon under study relates to philosophical issues.

3.4 Research approach

A framework for conducting a study is known as a Research Approach. It comprises a set of assumptions, beliefs, and values that guide the researcher in planning and conducting the study. Research approaches are the methods used to collect data for research (Sauer et al., 2022). There are strengths and weaknesses for each type of research approach while the choice depends on the nature of the research question.

3.4.1 Inductive

An inductive reasoning approach is a logical model whose principle is to develop phenomena from specific to general (Zhang et al., 2023). It is often associated with qualitative research but can also be used in quantitative research. When using an inductive research discourse, the researcher uses data collected to explain a particular phenomenon (Jones & Edwards, 2023). This theory can then be tested through further research, if necessary.

This is different from deductive research where the data collected is used to prove or disprove a hypothesis. In its purest form, inductive reasoning is seen as a bottom-up approach to research. This means that the researcher derives knowledge from empirical evidence with no regard for existing general theory (Yadav et al., 2022). However, it has been argued that this approach can cause important constructs and relationships to be missed by the researcher as they can easily get caught up in describing the phenomenon rather than explaining it (Teru et al., 2020). The inductive approach was followed in this research primarily because the study focuses on specific banking institutions in South Africa.

3.4.2 Deductive

The Deductive Approach is a logical process for arriving at a conclusion based on given premises. This type of reasoning starts with general rules or truths and applies them to specific cases to arrive at a logical conclusion (Shirav & Nagai, 2022). The approach is used in many different fields, including mathematics, science, and law. However, it was not suitable for this research (Secundo et al., 2022).

Assuming the propositions are sound, the rather stern logic of deductive reasoning can give you certain conclusions. However, deductive reasoning cannot increase human knowledge (it is *nonampliative*) because the conclusions yielded by deductive reasoning are *tautological statements* that are contained within the premises and virtually self-evident (Nagai, 2022). Therefore, while with deductive reasoning we can make observations and expand implications, we cannot make predictions about future or otherwise non-observed phenomena (Shams, 2022).

3.4.3 Abductive

The Abductive Approach is a research method used to generate new hypotheses by considering observations and current knowledge (Timmermans & Tavory, 2022). Baker (2019) acknowledges that this approach is often used in scientific research, as it can help lead to discoveries.

Abductive reasoning typically begins with an incomplete set of observations and proceeds to the likeliest possible explanation for the set (Thompson, 2022). Abductive reasoning yields the kind of daily decision-making that does its best with the information at hand, which often is incomplete (Baker, 2019). While cogent inductive reasoning requires that the evidence that might shed light on the subject be complete, whether positive or negative, abductive reasoning is characterised by a lack of completeness, either in the evidence, or in the explanation, or both (Secundo et al., 2022). According to Lin et al. (2023), a patient may be unconscious or fail to report every symptom, for example, resulting in incomplete evidence, or a doctor may arrive at a diagnosis that fails to explain several of the symptoms. Still, he must reach the best diagnosis he can. The abductive process can be creative, intuitive, and even revolutionary (Lin et al., 2023)

3.5 Research methods

Research methodology is defined by Gerrits and Pennink (2022) as the way the enquiry is piloted by the investigator. Research methodology is the actual method in which the researcher elects to sample, collect, and analyse data in line with a particular investigation (Osuagwu, 2020). The fundamental nature of methodology is arranging one's actions according to the nature of the problem at hand and the anticipated result that needs to be generated. Gerrits and Pennink (2022) present three types of research approaches, which are qualitative, quantitative, and mixed approaches. Quantitative and qualitative research methods are indicated below in Figure 3.1:

Quantitative	Qualitative
The emphasis of **Quantitative** research is on collecting and analysing numerical data; it concentrates on **measuring** the scale, range, frequency etc. of phenomena. This type of research, although harder to design initially, is usually highly detailed and structured and results can be easily collated and presented statistically.	**Qualitative** research is more subjective in nature than Quantitative research and involves examining and reflecting on the less tangible aspects of a research subject, e.g. values, attitudes, perceptions. Although this type of research can be easier to start, it can be often difficult to interpret and present the findings; the findings can also be challenged more easily.

Figure 3.1: Research methodologies (Saunders et al., 2009:65)

3.5.1 Quantitative research

According to Nadkarni and Burns (2022), quantitative research is a strategy that is "purely scientific, tenable, fixed, and highly arithmetic." According to Saunders et al. (2016), quantitative research makes use of the relationships between variables. Graphs and arithmetic techniques are typically applied in this situation. According to Kulandhasamy (2022), quantitative research is the systematic examination of phenomena by the collection of measurable data and the application of mathematical, statistical, or computational methods. Quantitative research collects information using sampling techniques and the distribution of online questionnaires, polls, and surveys, for instance. Quantitative research gathers data from current and potential clients (Zhang, 2022).

One of the most distinguishing features of this type of research is that the results can be represented numerically (Nadkarni & Burns, 2022). It is possible to predict the future of a product or service and make changes based on a careful understanding of these numbers (Temprano, 2022). A survey conducted to determine how long it takes a bank teller to attend to a client when the client walks into the bank is an example of quantitative research (Asuman, 2022). A customer satisfaction survey can be administered to ask questions such as how long it takes a teller to assist a customer and how frequently a customer visits the branch to transact (Auman, 2022).

Quantitative outcome research is mostly conducted in the social sciences using statistical methods to collect quantitative data from the research study. Researchers use mathematical frameworks and theories related to the quantity under consideration in this research method (Wang, 2022). These research methods produce more logical, statistical, and unbiased results (Wang, 2022). The data collected is in a structured manner on larger samples that represent the entire population (Lee, 2022).

Based on the above, it is not ideal for the researcher to use this method as it does not take into consideration non-numeric information such as human emotions, beliefs, or imaginations. With quantitative research, you only gain insight into what you are asking the participant (questionnaire), and no further information can be relinquished (Fasset, 2009).

3.5.2 Qualitative research

Wahyuni et al. (2021) argue that qualitative research looks at the relationships and meanings between participants and their core lived experiences. It uses multiple methods of gathering and scrutinising information to conclude. It encompasses fewer uniform facts that provide scope for changing questions and actions during the exploration practice (Kankam, 2019). The qualitative approach provided a way of gaining deeper insights into what employees end users,

and customers feel about the influence of blockchain on social media marketing in a South African banking institution. The advantages of the qualitative approach include the fact that, during the interaction with the respondent, the researcher can clarify and dig deeper into the research problem and information provided by the respondent (Pius, 2020). In a qualitative approach, the researcher can easily gain an understanding of underlying causes, opinions, and motives for the matter in discussion (Ghorbani et al., 2023).

The qualitative approach allows the researcher an opportunity to gain a qualitative understanding of the underlying reasons and motivations of a certain situation (Kaiser, 2022). Within the interpretive paradigm, the qualitative methods was followed in this research. Quantitative focuses on measurement and value, quantity and numerical (Kankam, 2019), which is not the focus of this study. Based on the objectives of the study, the qualitative method is employed. According to Alharahsheh and Pius (2020), qualitative aims to provide specific understanding based on individuals' experiences with less generalisation.

The qualitative approach was chosen as the right tool for this study given that it is subjective and allows for examination and reflection on less tangible aspects of research subjects such as values, attitudes, and perceptions. The reasons for this decision include the following:

- The researcher gets close enough to study the subjects to observe (without participating) usually to understand whether people are genuine with their answers and access tacit knowledge.
- The researcher can explain and give clarity where the subject is not understood. It is an interactive session (Babbie & Mouton, 2009).
- The researcher can easily understand underlying causes, opinions, and motives for the matter in discussion.
- This approach provides insights into the problem or helps to develop hypotheses for potential further exploration.
- With the qualitative approach, the researcher can uncover trends in thought and opinion, and further dive deeper into the problem.
- In a qualitative approach, the sample size is smaller, therefore, making it easy for the researcher to select a few participants to fulfil a given quota.
- The sample is smaller and therefore, it is time-effective.

3.6 Research design

Research design is the desired plan that will give guidance throughout the intended research (Van Wyk et al., 2020). The overall plan or strategy used to research to answer the research questions or hypotheses is referred to as the research design (Bell et al., 2022). It describes

the procedures and methods for collecting and analysing data to test the research hypothesis, Thomas et al. (2022). The research design is an important component because it determines the validity of the research findings and their generalisability to larger populations (Rahman, 2020).

The case study approach is used as the design by following Yin's (2009) guidelines. Two South African, one large bank and one small bank, were selected as cases for the study. The large bank represents the 'big five' banks in the country, while the small bank represents the smaller banks in the country. In the South African context, a bank that have over four million clients is considered a larger bank. This is primarily because this study is intended to assist all medium-to-large banks in South Africa. This case study approach is preferred because it allows in-depth research (Thomas, 2011). According to Hesse-Biber and Leavy (2011), the case study is unique in its holistic approach to gaining a deeper understanding of a phenomenon within its social context.

3.6.1 Criteria for selecting the banks

A set of criteria was used to select the banks that participated in the study. This includes:

i. the bank must have deployed blockchain or social media or both for marketing purposes for more than twelve months. This is considered long enough to ascertain consequences and implications of deploying, using, and managing the tools in an environment
ii. the bank must be willing to participate in the study, which means access to organisation including its employees.
iii. for an employee to participate (or be selected) in the study, he/she must have been working with the tools for at least six months, which is also considered long enough to understand the benefits and challenges.
iv. the selected employee must be willing to participate, as no participant will be forced or compensated in the process. This was intended to increase the credibility of the selection and to make access easier.

The banks were given pseudonyms for this study. Oagile Bank, South Africa (OBSA) and Tshwaragano Bank, South Africa (TBSA) represent the large and small banks, respectively. Details about the organisations are presented in Chapter 4.

3.7 Data collection

Data collection is the process of collecting, measuring, and analysing accurate research data using standard, proven methods, Carrillo et al. (2022). There are three main types of methods for collecting data, which are structured, semi-structured, and unstructured (Lewis, 2012).

Based on the objectives of this study, the semi-structured interview technique was used to collect data from participants. Primarily, this is because the technique is particularly suitable for collecting qualitative data as it provides the opportunity for conversation, through which complexities are explained and new topics emerge (Iyamu, 2018). Lewis (2012) argues that the semi-structured interview allows participants to freely express themselves, thereby collecting rich data.

From the research questions, interview questions were formulated. Pilot interview sessions were conducted with two persons who did not participate in the actual study. This was to strengthen the questions. Criteria were used in selecting the participants, to ensure the integrity and richness of the data (Iyamu, 2018). The number of participants (or interviews) was reached at the point of saturation, which means that no new information was forthcoming. As shown in Table 3.1, a total of 23 people were interviewed. The study was purely qualitative as discussed above and data were collected as follows:

The interviews were tape-recorded (permission was sought from the participants) and transcribed. Each transcript was coded using pseudo names, to adhere to ethics and avoid disclosure of the identities of participants which will cater to the POPIA (Protection of Personal Information Act). Lastly. The responses from participants were grouped under the research questions.

Table 3.1: Participants

	Tshwaragano Bank	**Oagile Bank**
Participants (Sales Department)	6	3
Marketing Department	3	
Public Sector Department	1	
Clients	5	5
Total	15	8

“The interview is a purposeful conversation between two or more people, requiring the interviewer to establish and ask concise and unambiguous questions, to which the interviewee responds to questions” (Hà & Nguyễn, 2023). Interviews, as per Doering et al. (2023), are categorised into structured open-ended, semi-structured, and structured interviews. A semi-structured interview was used to collect the data. Data were collected by using the face-to-face approach, where COVID-19 regulations allow. Alternatively, both telephonic and other teleconferencing technologies, such as ZOOM, MS Teams, or SKYPE were used to conduct the interviews.

3.7.1 Criteria for selecting the participants.

Participants were chosen from the two banks as discussed and this included the employees of marketing and sales departments including their clients as the end user of social media and blockchain. An additional department, the public sector department was used for the Tshwaragano Bank of South Africa. While this specific department was not chosen as a participant from the onset, the sales employees referred the researcher to an individual in this department who happened to know more about blockchain.

3.8 Data analysis

Data analysis is defined by Copeland (2023) as the process by which answers to research questions are developed by examining and interpreting data. The analytical process involves the detection of matters, assessment of the suitability of the information, selecting the suitable approaches for responding to the research inquiries, application and evaluation of the methods, and summarising and communicating the results.

Data analysis is also a way of inspecting, cleansing, remodelling, and modelling information to discover useful information, informing conclusions, and supporting the higher cognitive operation. It is how researchers go from the mass of data to meaningful insights. (Mishra et al., 2021) see data analysis as a phase in which the information is studied and reasoned to answer the research question. Dries et al. (2021) further indicate that an analytical process includes the picking of concerns, data reliability and validity, and data consolidation and sharing.

Collecting data is a major aspect of any research. However, the process of analysing data becomes even more critical as it is dependent on the accuracy of the information collected (Pejić Bach et al., 2019). Qualitative data analysis is seen as the process of examining collected data using qualitative techniques to get an explanation. Amarasinghe et al. (2016) highlight the following qualitative data analysis methods: narrative analysis, content analysis, discourse analysis, and thematic approach.

3.8.1 Thematic analysis

Thematic Analysis organises and describes data in detail and further interprets various aspects of the research topic. It consists of six phases, including familiarisation with the data, generating initial codes, searching themes, reviewing themes, defining, and naming themes, and producing the report. It can be used to analyse the students' experiences and their reality by exploring ways broader (Braun, & Clarke, 2023). Thematic analysis can be used to analyse large qualitative data sets, as well as smaller ones, leading to rich descriptions, explanations,

and theorising (Castleberry & Nolen, 2018). The thematic analysis consists of four phases: data collection, data display, data reduction, and conclusion.

To fulfil this research, the thematic analysis method was used in this study. The reason for choosing this approach is to allow the researcher to gain enough information from the participants. Thematic analysis was considered for the study because the study seeks to interpret the experiences of interviewees. The analysis of this study focussed on the dialogues or interviews with the respondents. Thematic analysis is suited to this study because it was conducted with a small number of respondents.

3.8.2 Activity theory

Activity theory (AT) focuses on activities and episodes, including human actions within social systems (Iyamu, 2021). The theory is increasingly used in the studies of people that focus on human interaction, organisation, and relationships (McMichael, 1999). In AT, the activity consists of a subject and an object mediated by a tool (Engeström et al., 1999). As shown in Figure 3.2, AT also includes community, rules, and division of labour (Shaanika & Iyamu 2015), which signifies the social context where activities are carried out (Uden, 2007).

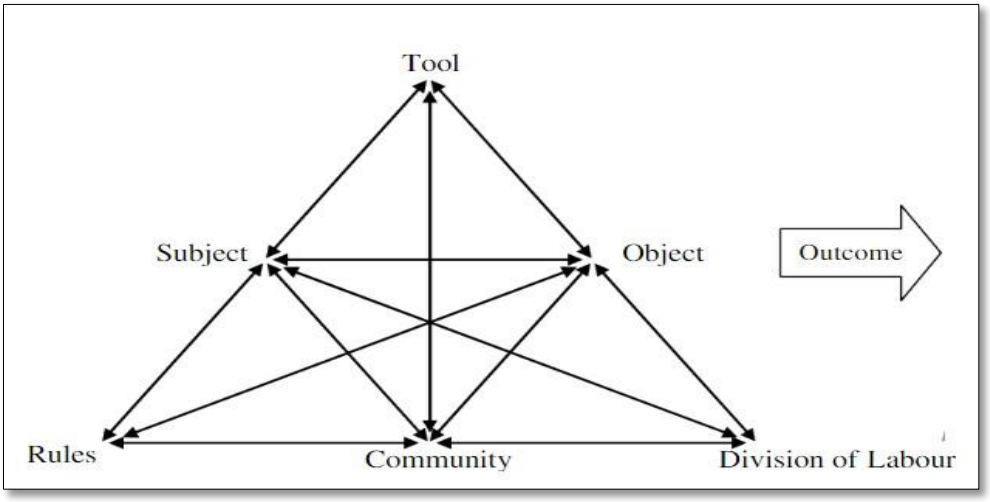


Figure 3.2: Activity Theory (Adapted from Engestrom, 2015)

Activity theory has been applied in many studies in the areas of social media (Kelly, 2018) and blockchain-primarily because it helps to examine interactions between people, and the ways activities shape and are shaped by human activities (Mkhomazi & Iyamu, 2013). Daniels et al. (2010) argue that AT is useful in understanding the activities of user groups in the development of models and frameworks about the relationship between actors in an environment. Treiblmaier and Önder (2019) applied AT in their study on the impact of blockchain on the

tourism industry. Forsgren and Byström (2018) employed AT to gain a better understanding of the use of multiple social media in the workplace.

Other theories such as organisational theory, grounded theory, and contingency theory were explored for this study. Activity theory is considered most suitable primarily because of the study's objectives, presented above. The theory was applied:

I. To examine the activities that are involved in banking marketing to gain better insights into the factors that influence the use of blockchain for marketing in a South African banking institution.

II. To understand the roles and relationships between the various actors. This helps to gain a deeper understanding of actors' roles in carrying out different activities using social media and blockchain for marketing purposes.

III. To examine the connection and relationship between the various tools, and to understand deterministic factors that cause confusion and conflicts between blockchain and social media in their complementary use for marketing products and services in a South African bank.

The activity theory model was used for the analysis. The model consists of 6 components, which are Tools, Subject, Rules, Community, Division of Labour, and Object. The theory was applied to analyse the qualitative data, by following three main steps as follows:

Firstly, to examine the interactions that occur between the actors in the activities involving the use of blockchain for marketing. This is to gain insights into the influencing factors. Secondly, the roles and relationships between the various actors were examined. This was done to gain a deeper understanding of the tools (blockchain, social media), the people (subject) that are involved in it; and how the rules are applied in the activities of marketing in the banks. In addition, how the various tasks are shared or assigned to those who are involved in the use of social media or blockchain was examined through the community and division of labour components. Finally, the connection and relationship between the various tools were examined to understand the deterministic factors that cause confusion and conflicts between blockchain and social media in their complementary use for marketing products and services in a South African bank.

3.9 Summary

The research design and methodology of the study are presented based on the aim and objective of the study. A qualitative strategy was then selected while semi-structured interviews were used to collect data as it allows for probing what is discussed and provides clarity where needed.

CHAPTER 4
OVERVIEW OF THE CASE STUDIES

4.1 Introduction

This chapter provides an overview of the cases studied. A case study approach was used based on the research objectives. As case studies, two South African financial institutions, Tshwaragano Bank and Oagile Bank, were used. The two banks were regarded as a single case study. As a result, the data gathered from the two financial institutions were analysed collectively. The remainder of this chapter is categorised into four sections. Section one provides a synopsis of the fieldwork conducted. The second section contains in-depth information about the two financial institutions used as case studies. The organisational culture of the cases is discussed in section three. Finally, the chapter's conclusion is presented.

4.2 Fieldwork

Semi-structured interviews with the two financial institutions were used to collect data. The use of semi-structured interviews as a data collection method was justified for two reasons: richness and flexibility. The technique enables instant probing by both the interviewer and the interviewee. This allows both parties to clarify their positions. Interview questions that served as guidelines were devised. The questions contributed to the interview process's consistency and uniformity. The interviews were conducted in the two bank locations, with some conducted outside the bank due to the presence of staff and customers. Some interviews were conducted virtually where face-to-face discussions were not possible, owing to the participants' availability and preferences. The participants were briefed on the topics to be covered during the interview process before the interview began. The permission to record the interview conversations was requested and granted by the participants. The recorded interviews were transcribed after each interview and later analysed.

4.3 Case studies

The researcher consulted the two financial institutions, Tshwaragano Bank and Oagile Bank to carry out research within their environments with a formal letter from the university. Each financial institution has its objectives and goals. They carry out similar activities but they are driven differently. While the intention was to select a small-to-medium bank and a bigger bank, one battled to find approval from the small-to-medium banks hence the decision to use the two big financial institutions. They were mainly selected because of their sizes and the roles they play as part of the South African financial institutions.

4.3.1 Case study one: Tshwaragano Bank

Tshwaragano Bank was established in 1966 as the Tshwaragano Bank Group, and it is one of the largest commercial banks in South Africa. The group maintains a primary listing under

‘Banks’ on the JSE, with a secondary listing on the Namibian Stock Exchange. The bank's mandate is to provide financial services to individuals and businesses in South Africa and across the African continent, with a focus on sustainable development and responsible banking practices. Tshwaragano Bank offers a range of banking products and services, including personal and business banking, wealth management, credit and investment products, and Islamic banking services. Tshwaragano Bank has also established various corporate social responsibility initiatives to support sustainable development and community empowerment.

Tshwaragano Bank offers an array of services to clients in a bid to help them build their wealth, secure their future and improve their financial well-being. These services include Personal Banking which includes saving and investment accounts, transactional accounts, credit cards, and loans. Business Banking offers tailored business solutions to SMEs and Corporates, Investment offers a wide range of investment options, and Insurance provides coverage for both individuals and businesses.

The overall objective of Tshwaragano Bank is to provide innovative financial services that are relevant to its clients and help them achieve their financial goals. The bank aims to be a responsible and sustainable corporate citizen, giving back to the communities it serves.

The sales and marketing departments at Tshwaragano play an important role in the success of the bank. The sales team’s focus is on identifying and acquiring new clients and growing the client base through a range of products that include personal banking, business banking, investments, and insurance. They work closely with the marketing team to ensure that their strategies are aligned with the bank's overall objectives.

4.3.1.1 Tshwaragano Bank sales department objectives

The objectives of Tshwaragano Bank’s sales department may vary depending on their specific area of focus within the bank, but they are aligned to the below objectives of sales:

1. Meeting sales targets: Like any sales team, Tshwaragano Bank’s sales department is likely to have specific sales targets that they are expected to meet or exceed.

2. Client acquisition and retention: The sales department is responsible for acquiring new clients and retaining existing clients by providing excellent service and presenting the bank's products and services compellingly.

3. Cross-selling and up-selling: In addition to acquiring new clients, the sales department may be focused on increasing revenue from existing clients by cross-selling their other products and services or upselling them to higher-tier products.

4. Relationship building: The sales department is also responsible for building strong relationships with clients and being a trusted advisor to them so that they continue to do business with the bank over the long term.

5. Market research and analysis: The sales department may also be tasked with conducting market research and analysis to identify new sales opportunities and areas for growth within the market.

4.3.1.2 Sale's departmental structure

The Tshwaragano Bank's sales department structure may vary depending on the specific area of focus within the bank, but it may include the following roles:

1. Sales Manager: Oversees the sales team and ensures that sales targets are met or exceeded. Provides guidance and support to team members and creates sales strategies and plans to achieve performance objectives.

2. Relationship Manager: Builds and manages relationships with clients, understands their needs, and presents solutions tailored to their specific requirements. Determines opportunities to cross-sell and upsell existing clients.

3. Sales Executive: Identifies and acquires new clients, presents the bank's products and services, and negotiates deals. In some cases, this role may also be responsible for managing existing client relationships.

4. Sales Support: Provides administrative support to the sales team, manages client databases, prepares sales reports, and assists with follow-ups and appointments.

5. Market Research Analyst: Researches industry trends, market opportunities, competitor analysis, and client preferences. Provides insights and analyses to the sales team to improve sales performance.

6. Customer Service Representative: Provides customer service and support to clients, answers inquiries, processes transactions, and resolves issues. May also cross-sell and upsell existing clients.

The structure of the Tshwaragano Bank sales department may also include other roles depending on the specific area of focus and business needs of the bank.

Description of sales segments:

Tshwaragano Bank Corporate and Investment Banking (CIB):

Tshwaragano Bank CIB offers the full spectrum of transactional, corporate, investment banking, and market solutions, characterised by a highly integrated partnership approach. These solutions include lending products, advisory services, leverage financing, trading, brokering, structuring, hedging, and client coverage. The cluster has expertise in a broad spectrum of product and relationship-based solutions, including specialist corporate financial advice, innovative products and services, customised transactional banking, and commercial property finance. Tshwaragano Bank CIB's primary client-facing units are Markets, Investment Banking, Property Finance, Transactional Services, and Client Coverage.

Tshwaragano Bank Retail and Business Banking:

Tshwaragano Bank Retail serves the financial needs of all individuals (excluding high-net-worth individuals serviced by Tshwaragano Bank Wealth) and small businesses with a turnover of up to R30m to whom it encompasses a wide range of banking and insurance products and services. The retail product portfolio includes transactional accounts, home loans, vehicle, and asset finance (including the Motor Finance Department), cards (both card-issuing and merchant-acquiring services), personal loans, and investments. The business banking portfolio offers the full spectrum of commercial banking products and related services to entities with an annual turnover from R30m up to R750m.

Tshwaragano Bank Wealth:

Tshwaragano Bank Wealth provides insurance, asset management, and wealth management solutions to clients ranging from entry-level to high-net-worth individuals. Insurance provides life and non-life insurance solutions for individuals and businesses, including simple risk, funeral, vehicle, personal accident, credit life, and investment solutions. Asset Management offers local and international unit trusts, cash management, and multi-management solutions. Wealth Management provides specialist services to meet the needs of high-net-worth clients locally and internationally, as well as trust and estate planning, stockbroking, and financial planning for the broader Tshwaragano Bank client base. Tshwaragano Bank Wealth has operations in several countries, including SA, Guernsey, the United Arab Emirates, and the Isle of Man.

Tshwaragano Bank Africa Regions:

Tshwaragano Bank Africa Regions is responsible for the group's banking operations and expansion activities on the rest of the African continent and has client-facing subsidiaries (retail and wholesale banking) in several countries including Eswatini, Lesotho, Namibia, Mozambique, and Zimbabwe. The cluster also holds around 21,2% investment in ETI, manages the Ecobank–Tshwaragano Bank alliance, and facilitates investment in other countries in Africa.

Centre:

Centre is an aggregation of business operations that provide various support services to Tshwaragano Bank Group Limited and includes the following clusters: Group Finance; Group Technology; Group Strategic Planning and Economics; Group Human Resources; Group Compliance; Group Risk; and Group Marketing, Communications, and Corporate Affairs. The Centre also includes Group Balance Sheet Management, which is responsible for capital management, funding, liquidity risk management, the management of banking book interest rate risk, margin management, and strategic intentions.

As part of this research, we focused on Tshwaragano Bank Retail and Business for our study. The marketing department is responsible for promoting the services and products offered by Tshwaragano Bank, using a wide range of platforms including social media, digital advertising, sponsorships, and events. Its primary goal is to create brand awareness, build customer loyalty and generate leads for the sales team.

i. Marketing Department objectives

The marketing department's objectives may include increasing brand awareness, generating leads and revenue, creating and executing effective advertising campaigns, conducting market research, analysing customer behaviours, managing social media presence, and developing and fostering relationships with clients and stakeholders. These objectives are aligned with the organisation's aims and objectives as stated above.

ii. Marketing's departmental structure

The sales and marketing team at Tshwaragano Bank is structured to ensure that it achieves the bank's goals. The Chief Marketing Officer works closely with the Head of Sales to strategize and implement campaigns, promotions, and events to drive business growth. The marketing team is separated into Brand and Customer Experience, Digital, Data and Analytics, and Sponsorships and Events. This is to ensure that each aspect of the marketing strategy is covered and receives the attention it deserves.

Tshwaragano Bank's marketing department structure and their roles are to a large extent the below:

1. Chief Marketing Officer (CMO): Responsible for leading the marketing department and developing the overall marketing strategy to achieve organisational goals.

2. Marketing Director: Reports to the CMO and oversees the development and execution of marketing programmes.

3. Brand Manager: Develops and maintains the brand strategy, ensuring that all marketing activities are consistent and aligned with the brand's values and message.

4. Advertising Manager: Manages all aspects of advertising, including developing, executing, and analysing ad campaigns to support the organisation's goals.

5. Communications Manager: Responsible for managing internal and external communications, including press releases, social media, and other outreach efforts.

6. Digital Marketing Manager: Responsible for developing and executing digital marketing strategies, including online advertising, website development, and social media outreach.

7. Market Research Manager: Conducts market research, analyses customer behaviour, and identifies market trends to inform marketing strategy decisions.

8. Public Relations Manager: Manages the organisation's public image and reputation, coordinates with media outlets and journalists, and develops public relations strategies

In conclusion, the sales and marketing departments at Tshwaragano Bank are essential parts of the bank's success. The team's focus on identifying new clients and promoting the bank's services through innovative and relevant marketing strategies ensures that it remains a leading financial services provider in Africa. With its range of products and services that cater to the financial needs of individuals and businesses, Tshwaragano Bank remains committed to helping clients achieve their financial goals.

4.3.2 Case study two: Oagile Bank

Oagile Bank was established in 1838 as the Eastern Province Bank. It is one of the oldest banks in South Africa and currently operates as a division of Oagile Bank Limited, a financial services provider.

Oagile Bank's main responsibility is to provide a range of financial services to individuals, businesses, and corporations, including banking, investment, insurance, and wealth management services. Oagile Bank's main objective is to help its customers achieve their financial goals by providing a high level of service, innovative products and solutions, and expertise in financial management.

Oagile is known for its customer-centric approach and has been recognised globally for its innovative digital banking solutions. Its objective is to continuously improve its services and products to meet the ever-changing needs of its customers while ensuring that it operates sustainably and responsibly.

In addition to its commercial activities, Oagile Bank also has a strong social responsibility programme that focuses on promoting education, health, and socio-economic development in the communities it serves.

4.3.2.1 Oagile Bank's objectives include the following:

1. To analyse its financial performance and its ability to generate sustainable profits while meeting the stakeholders' needs.
2. To evaluate Oagile Bank's digital banking strategies and their impact on customer satisfaction and loyalty.
3. To investigate Oagile Bank's product development process and its ability to meet the changing customers' needs in a competitive banking industry.
4. To investigate Oagile Bank's marketing strategies and their effectiveness in promoting brand awareness and attracting new customers.

4.3.2.2 Oagile Bank sales department objectives

Oagile Bank is a financial institution that offers a range of banking services to its customers. The sales department of Oagile Bank is responsible for generating revenue by promoting and selling the bank's products and services.

The objectives of Oagile Bank's sales department include:

1. Increase customer acquisition: One of the primary goals of the sales department is to attract new customers and expand the customer base. This can be achieved through various methods such as targeted marketing campaigns, offering competitive products and services, and providing excellent customer service.

2. Drive customer retention: The sales department aims to retain existing customers by building strong relationships and providing personalised solutions that meet their financial needs. This

includes offering tailored products, providing ongoing support, and addressing any concerns or complaints promptly.

3. Cross-selling: Oagile Bank's sales department focuses on cross-selling and upselling existing customers to additional products and services. This involves identifying customer needs and recommending relevant products that complement their existing banking relationship.

4. Achieve sales targets: The sales department sets specific sales targets that align with the overall business objectives. These targets may include revenue targets, product-specific targets, or customer acquisition targets. The sales team works towards achieving these targets through effective sales strategies, training, and monitoring performance.

5. Enhance customer experience: The sales department aims to provide an exceptional customer experience throughout the sales process. This involves ensuring prompt and accurate information, efficient handling of inquiries and applications, and maintaining transparency in all dealings.

6. Market expansion: Oagile Bank's sales department may to some extent have objectives related to expanding its presence in new markets or geographical areas. This could include identifying potential growth opportunities, establishing strategic partnerships, and implementing targeted marketing initiatives in those markets. It's important to note that these objectives are aligned with the overall business goals of the bank.

iii. Sales departmental structure

The sales department structure of Oagile Bank may vary at any specific time as it is based on the organisation's specific needs and size at a specific time. However, a typical sales department structure includes the following roles:

1. Sales Manager: This is the head of the sales department who oversees all sales activities and sets sales targets and goals.

2. Sales Team Leaders: They are responsible for managing a team of sales representatives and ensuring they meet their targets. They offer assistance, encouragement, and training to the team members.

3. Sales Executives: These are the frontline sales professionals who interact with customers and clients. They are responsible for generating leads, building relationships, and closing sales deals.

4. Key Account Managers: They focus on managing and nurturing relationships with key clients. Their main objective is to maintain and grow existing client accounts.

5. Business Development Managers: They explore new business opportunities, identify potential clients, and develop strategies to expand the customer base. They collaborate closely with the sales team to create potential customer opportunities.

The sales department and marketing department of Oagile Bank typically work closely together to achieve the organisation's sales and marketing objectives. The marketing department of Oagile Bank is responsible for developing and implementing marketing strategies to promote the bank's products and services, enhance brand awareness, attract new customers, and retain existing customers.

6. Sales Operations: This team handles administrative tasks and sales analytics and supports the overall sales process. They ensure smooth operations and provide the necessary tools for the sales team.

7. Sales Support: They assist the sales team with administrative tasks, such as order processing, documentation, and customer inquiries. They act as a liaison between the sales team and other departments.

The department's objective is to drive business growth and increase market share by effectively positioning Oagile Bank in the competitive financial services industry.

Here are some key responsibilities and objectives of the marketing department at Oagile Bank:
1. Brand management: The marketing department is responsible for managing the Oagile Bank brand and ensuring brand consistency across all marketing activities. This includes developing brand guidelines, creating brand messaging, and maintaining a strong brand image in the market.

2. Marketing strategy and planning: The marketing department develops comprehensive marketing strategies and plans that align with the bank's overall business objectives. This involves identifying target markets, understanding customer needs and preferences, and determining the most effective marketing channels and tactics to reach and engage customers.

3. Advertising and promotions: The marketing department designs and executes advertising campaigns, promotions, and other marketing initiatives to create awareness and generate interest in Oagile Bank's products and services. This includes traditional advertising, digital marketing, social media campaigns, content marketing, and public relations activities.

4. Product marketing: The department is responsible for developing and promoting Oagile Bank's product portfolio. This includes conducting market research, competitor analysis, and customer segmentation to identify opportunities for new products or enhancements to existing products. The marketing team also ensures that the product messaging is impactful and effectively communicated to the target audience.

5. Customer relationship management: The marketing department plays a role in customer retention and loyalty by implementing customer relationship management (CRM) strategies. This includes customer segmentation, personalised marketing campaigns, loyalty programmes, and customer feedback analysis to enhance customer satisfaction and drive repeat business.

6. Market research and analysis: The marketing department conducts market research and analysis to identify emerging trends, customer preferences, and competitive landscape. This helps Oagile Bank to stay ahead of the competition, anticipate customer needs, and develop effective marketing strategies.

7. Performance measurement: The marketing department tracks and evaluates the effectiveness of marketing campaigns and initiatives. This involves analysing key performance indicators (KPIs) such as customer acquisition, conversion rates, brand recognition, and customer satisfaction. The department uses these insights to refine marketing strategies, optimise budget allocation, and drive continuous improvement.

In summary, the marketing department of Oagile Bank is responsible for developing and executing marketing strategies to promote the bank's brand, products, and services. Their objective is to drive business growth, increase market share, and build strong customer relationships through effective marketing campaigns and initiatives.

Oagile Bank Marketing Structure:
Oagile Bank's marketing departmental structure typically includes various roles and functions that work together to plan, execute, and evaluate the bank's marketing strategies and campaigns. Some common roles found in a marketing department include:

1. Marketing Head: This is the overall leader of the marketing department, responsible for setting goals, developing strategies, overseeing budgets, and managing the team.

2. Marketing Specialists: These individuals specialise in specific areas of marketing such as digital marketing, branding, product marketing, market research, advertising, public relations, or events management. They work closely with other team members to implement marketing initiatives.

3. Content Managers: They are responsible for creating and managing marketing content, including website copy, social media content, email campaigns, and advertising materials. They work closely with designers, writers, and other specialists to ensure consistent and effective messaging.

4. Creative Team: This team includes designers, copywriters, and video producers who work together to create visually appealing and engaging marketing materials that align with the bank's brand.

5. Analytics Team: This group is responsible for tracking and analysing marketing data to measure the effectiveness of campaigns, identify trends, and make data-driven decisions. They may also conduct market research and customer surveys to gain insights into customer behaviour.

6. Customer Relationship Management (CRM): This team ensures that the bank maintains strong relationships with customers through personalised marketing campaigns, customer loyalty programmes, and customer retention strategies.

7. Marketing Operations: This team manages the day-to-day operations of the marketing department, including budgeting, project management, vendor management, and coordination with other departments within the bank.

The sales and marketing departments work together to achieve the banks' goals. Here are some ways in which these departments collaborate:

1. Strategic alignment: The sales and marketing departments align their strategies and goals to ensure a common direction. They may collaborate to develop a comprehensive sales and marketing plan that outlines target markets, customer segments, messaging, and promotional activities.

2. Lead generation: The marketing department plays a crucial role in generating leads through various marketing channels like advertising, content marketing, social media, and events. These leads are then passed on to the sales department for further nurturing and conversion.

3. Messaging and positioning: The marketing department creates and communicates the bank's brand message and value proposition. They develop marketing collateral, advertising campaigns, and digital content that sales representatives can use to effectively communicate the bank's offerings and advantages to potential customers.

4. Sales enablement: The marketing department provides the sales team with the necessary tools and resources to support the sales process. This includes product information, sales presentations, customer data, competitive analysis, and sales training materials.

5. Collaboration on campaigns: Sales and marketing departments may collaborate on joint campaigns or promotions to generate awareness, engage customers, and drive sales. This could involve integrating sales activities with marketing initiatives such as targeted email campaigns, sales promotions, or cross-selling efforts.

6. Feedback and collaboration: The sales department provides valuable feedback to the marketing department regarding the effectiveness of marketing campaigns, customer response, and competition. This information helps the marketing team to refine their strategies and tactics.

Overall, the sales and marketing departments of Oagile Bank work together closely to drive revenue, enhance brand awareness, and deliver a consistent and compelling message to customers.

4.4 Summary

In conclusion, blockchain technology represents a potential solution for South African banking institutions looking to improve their social media marketing efforts. While certain challenges must be overcome, the opportunities presented by blockchain technology are vast. The two South African financial institutions together with their clients used as case studies are documented in this chapter. The documentation included information about the cases' organisational backgrounds, sales and marketing departmental objectives, clients, and departmental structures.

The departmental structure influenced the organisational culture and the roles and responsibilities of the employees and their clients. As a result, roles and responsibilities were associated with less power as one moved down the departmental structures. The sales and marketing departments, and the organisation's policies and standards, guided employees' responsibilities. Sales and marketing similarities and differences existed between the two financial institutions. These differences could be attributed to the different goals and environments in which each financial institution operates. However, both financial institutions are governed by the same rules and regulations and hence they operate more similarly.”

CHAPTER 5
DATA ANALYSIS

5.1 Introduction

This chapter presents the analysis of the data. The data were collected based on the objectives of the study, as stated in Chapter 1, and revisited in Chapter 3 of this thesis. As discussed in Chapter 3, qualitative data were collected from two organisations, which are used as cases in the study. The analysis, thus, focuses on exploring the influence of blockchain on social media marketing in South African banking institutions. The analysis employs the activity theory (AT). The theory is introduced in Chapter One and comprehensively covered in Chapter Two.

The chapter is structured into four main sections. The first and second sections introduce the chapter and provide an overview of the analysis, respectively. The next section presents the analysis of data from the two cases used in the study, respectively. In the fourth section, the findings from the data analysis are presented. Finally, a summary of the chapter is presented.

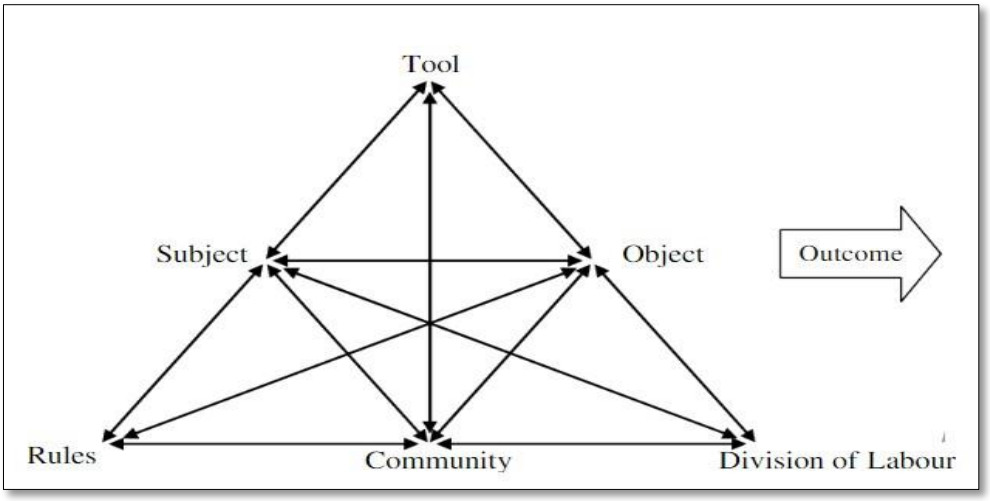
5.2 Overview of the analysis

Based on the study's aim, qualitative data were collected from two South African banks, as comprehensively discussed in Chapter 3. Both the semi-structured interview was used to collect the data. The banks are Oagile Bank, South Africa (OBSA) and Tshwaragano Bank, South Africa (TBSA). Details about the banks are presented in Chapter 4. As explained in the chapter, the names used herein, are pseudonyms, in adhering to research ethics and the South African POPI Act of 2013. The rationales for using two organisations (banks) are also discussed in Chapter 3. This includes the criteria used for selecting the organisations (cases), among many banks in the country, presented in section 3.6.1.

This is an empirical study. It therefore entails participants' views, opinions, or experiences to be cited (or referenced) to support the data analysis, using the interpretive approach. For ease of referencing of the data, a formatting standard is adopted. The standard format consists of information about the participant. The first two characters represent the organisations (OB for Oagile Bank and TB for Tshwaragano Bank); P (n+1) represents the number assigned to the interviewee; the page number of the text (or texts); C represents clients; PS represents public sector participant of the bank; MP represents the marketing department participants and the line number of the page (or pages). An example of the referencing standard format is as follows: OBP3; 4:20-21. A similar standard is used to cite the documents that were gathered as part of the data.

The AT model is used as a lens for the analysis. The rationale for selecting AT, including a review and discussion about the theory, is presented in Chapters 1, 2, and 3. As shown in

Figure 5.1, the AT model consists of six components, Tool, Subject, Rules, Community, Division of Labour, and Object. The analysis follows the components in its sequence to examine the possible complementary use of blockchain and social media for marketing purposes by the Banks.



5.3 Analysis of the data

Using AT, the data analysis is conducted and presented case by case. This means that the analysis of OBSA and TBSA are separate. It does not mean a comparison of the cases. The reason for separating the analysis was to enable distinctiveness in the findings. However, the findings from both cases are combined (see section 2 of Chapter 6).

5.4 Case #1: Oagile Bank

Oagile Bank South Africa (OBSA) was established over a hundred years ago. As detailed in Chapter 4, it is one of the leading financial institutions in South Africa. OBSA offers a wide range of banking and financial services to individuals, businesses, and corporate clients. With its extensive network of branches and ATMs across the country, Oagile Bank provides convenient access to its various products and services. As explained in Chapters 3 and 4, the bank was selected to participate in this study. The data collected from both employees and the clients of the bank were analysed. The analysis is presented in the remainder of this section.

5.4.1 Activity theory: Tools

In AT, tools can be physical such as a hammer, or non-physical entities, including language, culture, or a process, Uden (2007) explains. In the context of this study, the physical and non-physical are both technical and non-technical entities such as blockchain and social media solutions, including the processes involved in them. In OBSA, some of the social media tools (solutions) employed for marketing purposes include Facebook, Twitter, LinkedIn, Instagram,

YouTube, and the Internet. OBSA uses these social media platforms to share information about their products and services and interact with the clients also, by making brand awareness. This was explained by one of the employees who participated in the study as follows:

> "Yes, I do see Oagile Bank adverts on social media like Facebook, but I do not comment on them because the marketing department deals with them" (OBP2; 5:179-180).

Some of the non-technical tools at the OBSA are processes, rules, and standards, which govern the use, administration, and management of blockchain or social media for marketing purposes. However, when, and how the tools are applied influence and deter the outcome. When the tools are applied to achieve their intended purposes varies due to evolvement. According to Iyamu (2021), in the context of AT, tools are constantly evolving, and influenced by innovations and advancements. Thus, the tools are used at organisational and individual (employee and client) levels. At the organisational level, tools are employed for both operational and strategic purposes, to enact goals, objectives, and processes. Individuals use tools to provide and receive services. Thus, OBSA draws on tools, intentionally, to implement its marketing strategy and operation towards enhancing service delivery.

The employees adopt some of the tools for interacting with existing and new clients, towards achieving the marketing objectives of the bank (OBSA). According to O'Leary (2010), tools are used to shape how humans interact and connect. The tools refer to the technological components that facilitate the execution of marketing strategies on blockchain platforms, as well as the social media platforms used by banks. These tools serve as enablers, allowing banks to engage with their audience effectively, establish trust, and promote their services. However, the tools require awareness and knowledge in employing them, for baking purposes. An employee states as follows:

> "I need human interaction to make me understand blockchain. Also, many of my employees do not know about it. So, you don't have the support to say let me go back to this banker who can give me this information" (OBCP1; 3:112-114).

On the blockchain side, tools such as smart contracts and decentralised applications provide the means to create secure and transparent transactions. These tools ensure the integrity of financial processes, enabling banks to offer innovative services such as peer-to-peer lending and remittances. By utilising blockchain tools, banks can enhance customer experience,

streamline operations, and reduce costs. Additionally, social media platforms act as powerful tools for banks to connect with their customers and prospects. Thus, a unit within the bank is dedicated to employing it for services. According to one of the participants:

> "There is a specific department that deals with responding to social media, so the user handles for Oagile Bank will respond, compliment, or comment on Facebook because they have the mandate to do so" (OBP2; 5:181-183).

Despite the increasing use of blockchain to advance marketing strategies and operations, OBSA has not listed it as a tool in the organisation. Blockchain is a tool that could be used to effectively manage the bank's risk and save time for marketing processes and transactions. Thus, at the individual level, there is a lack of awareness about the tool and how it could assist the organisation for marketing purposes. This has an impact on competitiveness from the marketing of products and services' perspectives. Some of the participants affirm their lack of awareness and knowledge of blockchain, as follows:

> "We don't know about blockchain. To be honest with you in the banking sector, the blockchain is not something that we can say we were told about. All we know is that our system as a bank is somehow secured" (OBP1; 16:545-549).

> "I do not know into detail with regards to blockchain, but I do understand what it is, and it is just a bit of understanding I would give an example like your Bitcoin, it's sort of a blockchain that is being used for information" (OBCP1; 3:79-81).

One of the implications of the lack of awareness is trust. Even though some of the employees do not understand or know how the tool works, they have challenges that relate to trust in the adoption of the tools. Also, some employees in the marketing unit of the organisation are sceptical about the use of social media as a tool for financial transactions.

> "I do not trust blockchain by banks that much. I think when it comes to finances, the bank still needs to do more for us to trust even social media, for instance, and even the use of blockchain, I think there's more that needs to be done. It's for people who've got an understanding of what they're doing, how it's working, and what are the pros, and cons for a layman like me who's not technologically savvy. I stay away from such things" (OBCP1; 3&4:102-107).

This makes awareness an essential aspect of the adoption and use of the tools for marketing purposes in the organisation. At the time of this study, the lack of awareness creates uncertainty among the employees as well as the clients.

5.4.2 Activity theory: Subject

In the context of AT, subjects represent actors with consciousness, and hence actors are only living beings with needs and motives (Vinthagen & Johansson, 2013). Within the OBSA environment, actors include clients and employees. As actors, employees and clients depend on each other for the successful operation of the organisation's objectives. Thus, they are both equally important to the organisation as the business ceases to exist without the other.

The employees in OBSA include commercial managers, private bankers, and mobile consultants. Based on the structure of the organisation, the employees are in various units. The employees were categorised into different units based on factors which include their skills and knowledge about the specific unit's products and services. The employees in the marketing unit are tasked with the responsibility of increasing the wallet share for the bank. The employees employ social media marketing to increase their wallet share while blockchain could enhance the subject's ability to retain existing clients and be competitive in the market they operate in. One of the employees briefly explained:

> "The bank has an aggressive social media campaign to communicate its value proposition to the different target markets" (OBP3; 5:173-174).

The bank deploys social media to market its products and services. What is even more important is how employees use social media tools for marketing purposes. Firstly, the employees employ social media via different channels such as the intranet (internal website) and extranet (external website), to create awareness of OBSA's new offerings and existing products. Secondly, it is about the content, which must be created in a way that is relevant and useful to the intended consumers. These factors make the role of subjects critically important. One of the participants in this study, a client explains as follows:

> "I think, lately, what I've realized is that some of the most interesting information about products and services, I get via social media, such as Twitter. Thereafter, 'I would follow up with my banker" (OBCP1; 2:64-68).

The employees execute the OBSA strategy by using social media platforms such as Twitter and Instagram, allowing the banks to reach a wide range of users who are active on these

platforms. OBSA increases its visibility and reaches a larger audience by using social media as a tool for marketing. One other benefit is targeted marketing where banks can tailor their advertisements and promotions on social media to specific demographics or customer segments. Visibility, advertisement, and promotions are some of the heterogeneous uses of social media for marketing. Some of the clients understand the usefulness of social media, as alluded to by a client who participated in this study, stating:

> "By using Twitter and Instagram, I think it's a smart way that they're doing, and I appreciate it definitely" (OBCP3; 2:61-62).

The heterogeneity should extend beyond a set of a tool (platform or solution), to maximise resources used by the actors. This includes a complementarity between social media and blockchain, for marketing processes, events, and activities. This helps the OBSA to remain flexible, and to accommodate the needs and changing preferences of the customers. Despite the lack of awareness that is identified, empirically, OBSA has not relented in its efforts. According to one of the employees:

> "The bank is considering the benefits of exploring blockchain to drive customer experience" (OBP3; 5:188-189).

The heterogeneity is an advantage that should extend beyond a set of a tool (platform or solution), to maximize resources used by the employees. Trust in social media and blockchain is a concern for some clients due to personal experience on social media where fraudsters often try to hack clients' information or banking accounts. As a result, some clients do not feel comfortable using social media for banking-related communication. However, they prefer using social media for non-banking purposes, such as staying updated on trends in the housing market. This increases the need for fortification of security in the areas of social media and blockchain for marketing purposes. One of the clients explained:

> "I really don't want to communicate with the bank via social media because intruders tried to hack my details. Each time I receive communication through social media, the first thing that comes to mind, is it's a scam. This is also because many people have been scammed via social media" (OBCP2; 2:63-64 & OBCP2; 1:46-47).

Thus, security is critical and not negotiable. What is even more critical is how the actors adopt security through their adaptation channels to protect the bank and its clients, while executing their marketing strategies. Hence, it is crucial to streamline the actors' roles and responsibilities

in their use of social media and blockchain for marketing purposes. This involves training employees on how to use blockchain and social media platforms effectively and efficiently.

5.4.3 Activity theory: Rules

In AT, rules are one of the key components that shape and guide human activities within a specific context. According to Engeström (1999), rules emerge because of the interaction between individuals, the tools they use, and the specific context in which they are engaged. OBSA has rules that govern the use of social media marketing. Some of the rules are made obligatory passage points (OPP), which govern the staff as they employ social media for their marketing activities. Iyamu (2021:74) defines OPP as "a narrow path that forces actors to converge on a certain topic, action, or purpose." From a governance structural perspective, some employees of the bank explained as follows:

> "There is a specific department that deals with responding to social media marketing, so their user handle for Oagile Bank will respond, compliment, or comment same on Facebook because they have the mandate to do so" (OBP2; 5:181-183).

> "There's a marketing team with a bunch of the multi advertisers and the young people who come up with ideas and some get approved, while some don't get approved. That department is responsible for social media marketing" (OBP1; 11:377-380).

Thus, rules play fundamental roles from two perspectives, on how each tool (social media or blockchain) is or can be adopted and in the complementarity of both tools, for marketing purposes. Moawad et al. (2013) however, cautioned that rules can enable or constrain the events or processes involved in an activity. On one hand, rules instil the practices of security and privacy of clients' information during marketing activities. OBSA adheres to the South African legislation, the Protection of Personal Information (POPI) Act of 19 November 2013. On another hand, the POPI Act constrains free access to individuals' contact using social media or blockchain. From a constraints angle, an employee shared his view:

> "So POPIA and other rules are a bit of a stumbling block to everyone in general as that makes it difficult for other departments to contact the client without consent especially if they are not the relationship bankers" (OBP1; 8:270-272).

The government legislation (POPIA) guides the actors' intentions and goals to establish interactions and market products and services of OBSA. As a result, and they wish, OBSA marketers are constrained in contacting and interacting with potential clients, using social media or blockchain. This then requires a policy that demonstrates security alignment with the government legislation. The policy allows clients to demand more information from OBSA marketers. According to one of OBSA's employees, who participated in the study:

> "So, clients at times see things via social media marketing and then query that social media marketing stuff with us for better understanding and more information" (OBP2; 5:188-189).

In the adoption and use of social media or blockchain, rules are important and serve a critical part of marketing processes in the banking environment. What is even more important is the transparency of the rules that show or demonstrate consistency and predictability. This is intended to boost confidence in the clients, in embracing social media and blockchain for transactions and interactions with the bank. It is emphasised that clients need to be comfortable and trust that their platform is secure in adopting blockchain or social media for services, interactions, and transactions. One of the participants explained:

> "Banks need to adopt blockchain in their social media marketing if they can control and protect the end user and promise 100% of their lives that the system will never be hacked or corrupted" (OBCP3; 4:124-126).

Rules are induced into governance. According to Iyamu (2022: 163), governance consists of standards, policies, and principles. Primarily, this is important in two aspects at OBSA. Firstly, it protects the adoption and use of social media or blockchain for marketing against the employees' resistance. At OBSA, some employees and clients are sceptical about blockchain, for reasons such as security. Rules can be used to highlight the mitigation strategies. Secondly, governance can be employed to define the adoption and use of the tools (social media and blockchain), to ease resistance and ensure security. This allows OBSA to innovate while maintaining necessary control and adherence to regulations. Enforcing rules consistently across all levels of the organisation can be challenging.

5.4.4 Activity theory: Community

In AT, a community consists of a group of people who share a common interest or goal. In the context of OBSA, many communities were involved in marketing activities. One of the communities focuses on providing marketing services to clients and potential clients. This is the focal aspect of this study. Other communities include those that provide technical and

managerial support to the marketing team, including a group of bank clients who engage with the bank regularly via social media marketing for new products or services. This was explained by one of OBSA's clients who prefers to be communicated via social media platforms as per below:

> "Yes, I am on most social media platforms and I definitely prefer that social media be used as a tool to either market the bank's products or even maybe offer them to me" (OBCP1; 2:73-75).

In OBSA, these communities are formed in line with the organisational structure, to ensure distinctive deliverables and functions towards achieving the objectives of the bank. In OBSA, the marketing community uses social media platforms such as LinkedIn, Twitter, Instagram, and Facebook for marketing purposes. The platforms enable the marketers to create another community between themselves and the clients, referred to as a virtual community. It allows the marketing employees to directly, connect and interact with clients in providing services which include brand awareness. According to one of the employees who participated in the study:

> "I am a subscribed user of Twitter, Instagram, WhatsApp, and Facebook. So, from time to time, on any of these social media platforms, I receive information about products or service offerings from Oagile Bank" (OBP1; 12:411-414).

In OBSA, the community is critical for knowledge sharing which happens via their social media platforms in a form of marketing. The community serves as a space for sharing knowledge, experience, and expertise. For example, when clients need more information regarding a specific product or service, they send their requests and receive information via their various communities. In OBSA, a unique approach is employed in the communication and interactions within communities. It is referred to as direct messaging (DM). As synonymous with many clients, one of the participants explains the benefits as follows:

> "Lately, what I've realized is that I receive some of the most interesting information about OBSA's products and services via social media like Twitter. Also, the bank interacts and shares more information about a product or a service with us. The bank communicates with us via direct messaging (DM) or using our email addresses" (OBCP1; 2&3:65-71).

However, communities (marketing, technical, and managerial supports) in OBSA encounter challenges. One of the most crucial challenges is not having trust in social media or blockchain adoption and use. While clients use social media platforms, the complementary use of social media and blockchain creates trust challenges. Trust is an essential foundation for collaboration and the effective functioning of a community. Building trust among community members and maintaining it can be a challenge, especially in financial transactions, in virtual or online circumstances. One of the clients shared his concerns in an advisory manner, as follows:

> "I do not trust blockchain that much. I think when it comes to finances the bank needs to do more for us to trust social media and the use of blockchain. I think there's more that needs to be done. People have got to understand how blockchain works, including an understanding of the pros and cons. Otherwise, a layman like me who's not technologically savvy stays away from such things" (OBCP1; 3&4:102-106).

Community fosters collaboration between employees (on behalf of the bank) and clients, on the one hand. On another hand, it nurtures working relationships between the various teams (communities, e.g. technical and managerial supports) that focus on executing the marketing strategies of OBSA. The communities enact the rules that enable the execution of marketing strategies and objectives. Thus, the tools used by marketers remain critical in achieving their goals and objectives. Another area of concern is awareness. It is therefore crucial to address the confusion posed by a lack of understanding of trust or security in using social media and blockchain.

5.4.5 Activity theory: Division of labour

In AT, the division of labour is concerned with how tasks (activities) are allocated among members of a community (Lioutas et al., 2019). Allocation of tasks is guided by factors such as the roles, responsibilities, skill sets, and capabilities of individuals or groups. It is a process that is underlined by criteria and requirements. Also, the structure within a community can be a determinant in the allocation of tasks. The factors, criteria or requirements are aimed at a desired outcome.

For marketing purposes, the tasks involved in marketing OBSA products and services could be divided into two main categories, strategic and operational. In OBSA, some of the marketing tasks, from both strategic and operational perspectives include advertising, creating content, publishing content, and enabling tools (social media platforms). The division of labour

contributes to making the marketing activities of OBSA easier and more visible on social media platforms. According to one of the clients that participated in this study:

> “That's what I'm saying that on all social media platforms that I have subscribed to, and I see Oagile Bank’s marketing” (OBP1; 13:449-452).

In addition, the division of labour allows activities to be tracked, traced, and monitored as employees execute their tasks and interact with clients or publish content on social media platforms. Tracking, tracing, and monitoring of activities are additional or different types of tasks that are allocated. Also, in the process of interaction, more information is often needed by clients. The marketing team, of different expertise, provide additional information, answers questions, and sets up appointments with various specialists if needed. One of the employees provided a detailed explanation as follows:

> “When the client is interested in a service or a product, they see via social media marketing and come to you as their banker to let you know that they have seen some advertisement about your bank. They normally ask you to explain more about what has been advertised. Sometimes we're not even aware of what they are referring to and we start doing our own research about that specific marketing and end up referring them to the specialist as we do not know” (OBP1; 14:465-471).

Other factors include expertise, collaboration, and teamwork, which are vital to the marketing activities of OBSA. Within this context, in OBSA, the division of labour allows individuals to develop specialised knowledge and skills by carrying out assigned tasks to them, such as enablement of social media, publishing content, and creating content. The division of labour promotes collaboration and teamwork. This is because individuals or teams work together, in the process, complement each other's skills, share knowledge, and gain more insights. This means that the more specialised the team or individuals involved in the marketing activities are, the easier the allocation of tasks. Also, this increases the maximal use of social media for marketing purposes. One of the employees explained:

> “And sometimes I advise the client that for me as their banker to go deeper or for them to understand better, I might need to set up an appointment with a specialist. Then I set up that appointment for them so that the specialist can elaborate and have a way forward with the client.” (OBP1; 13:470-473).

However, in OBSA, there are some challenges to how the division of labour is employed. This includes communication and coordination difficulties experienced in the allocation of tasks, and in using social media for marketing. The difficulties include inefficient communication and coordination among individuals or groups. One of the implications is that it can lead to delays and misunderstandings of marketing products and services in the use of social media. Also, the challenges hinder progress and goal attainment.

5.4.6 Activity theory: Object

In AT, an object refers to the goal or purpose of an activity (Iyamu & Shaanika, 2019). It can be seen as the driving force behind an individual's actions and behaviours within a particular activity system. In the context of this study, the object of OBSA's marketing activity is having more people enrol in the company's products and services. This makes the social media tools used to garner more enrolment critical. It is an object that exists in the context of the bank's marketing services as social media is used to market the bank's products and services.

> "There's a marketing team with a bunch of the multi advertisers and the young people who come up with ideas and some get approved, while some don't get approved. That department is responsible for social media marketing in the bank" (OBP1; 11:377-380).

From the OBSA client's perspective, the object refers to Facebook, Instagram, and Twitter as these are the platforms clients are subscribed to via social media where they see the bank's advertisements. From both the subjects (employees and the bank's clients) these objects are critical because they are tools or platforms used for communication with each other like when the bank communicates with their existing and prospective clients that they are the best bank, banking transactions, and marketing their products and services. They play a role in how the bank contacts and engages with its clients at the end of the day. One of the participants explained:

> "Yes, I subscribe to Twitter, Instagram, WhatsApp, and Facebook. So, from time to time on all these platforms, you will see something about Oagile Bank, especially nowadays saying Oagile Bank has won the most valued brand in South African Brands in 2023" (OBP1; 12:411-414).

OBSA uses social media and employees are on the same page on the use of social media. On the other hand, OBSA's use of blockchain for its services is not known at this stage. However, it can be noted that OBSA is considering the benefits of exploring blockchain to enhance the customer experience. Based on this information, both social media and

blockchain are existing objects. While social media is currently critical for communication and marketing purposes, blockchain is not currently utilised but is being considered for the potential future. This is affirmed by some of the employees, as follows:

> "No, the bank does not make use of blockchain at this stage. The technology utilized is legacy systems that are difficult to integrate into new technologies" (OBP3; 5:182-184).

> "The bank is considering the benefits of exploring blockchain to drive customer experience" (OBP3; 5:189-190).

Effective communication via aggressive social media campaigns for OBSA Bank advising its existing clients and prospective clients about how great OBSA is and having won the Bank of the Year from the digital perspective is one of the benefits. Social media provides an opportunity to reach a large audience and potentially attract new clients as seen when OBSA's clients interviewed saw OBSA's marketing on social media and reached out to their bankers for more information. These social media platforms allow direct engagement with the customer allowing for feedback, inquiries, and building customer relationships as noted by one of the clients who participated in the study where they would be required to send direct messaging (DM) or even email addresses for the bank to respond directly to them.

> "When you want more information about a product or a service seen via social media, they will tell you that they will communicate with you via direct messaging (DM) or you can leave your email address and they will send you the details" (OBCP1; 2&3:69-71).

> "I think businesses can leverage off your blockchain and social media in the sense that it's going to be easy for them to reach people. So, one of the improvements is that people who are on those platforms using blockchain do not have to go far and wide to find information" (OBCP1; 5:162-165).

In OBSA, challenges of the object include privacy and security. Social media platforms may expose the bank and its customers to potential privacy and security risks as per one of the client's feedback who participated in the study.

5.5 Case #2: Tshwaragano Bank

Tshwaragano Bank South Africa (TBSA) is a financial institution in South Africa. It is the second organisation (bank) selected as a case for this study. The rationale for its selection is

presented in Chapter 3. The details about the organisation are discussed in Chapter Three. TBSA offers a wide range of banking and financial services to individuals, corporations, and businesses. TBSA provides innovative solutions, personalised customer services, and a strong focus on assisting clients to achieve their financial goals. As explained in Chapters One, Three, and Four, data were collected from both clients and employees of TBSA. The approach employed in collecting the data is also discussed in Chapter 3 The analysis of the data using the activity theory is presented below.

5.5.1 Activity theory: Tools

As stated in the analysis section of Case #1, tools in AT can be any facility such as a computer network, and software. This can include social media and blockchain applications, which are the focus of this study. TBSA employees employed several social media tools (platforms) for marketing purposes, to achieve the organisation's objectives. From the marketing department, tools refer to the various marketing channels and platforms used by the employees on behalf of the bank, such as social media, digital banner advertising, radio, TV ads, public relations, and events. The Social Media platforms used by TBSA are Twitter, Facebook, LinkedIn, Instagram, TikTok, and YouTube.

In TBSA, social media platforms are primarily used for two reasons. The first reason is contact and awareness. Through social media, the marketing specialists reach out to existing and prospective clients, to create awareness about TBSA's brand, new products, and services. The second reason is that the marketing unit or department collects information about clients' needs and interests to develop new products and improve services. The platforms assist TBSA in reaching as many people as possible in a short period rather than having to walk on the street looking for customers. Some of the employees explained as follows:

> "We use Facebook, Twitter, LinkedIn, Instagram, TikTok, and YouTube. The reason we use these platforms is because they are the most popular and many people subscribe to them. In South Africa, about 19 million people are often online at a time. Therefore, it is easier to connect with people" (BTMP1; 6:179-184).

> "So, to maximise the bank's return on investment, we monitor our performance. As an example, if Twitter marketing is not working well for us, for instance, we will drop Twitter marketing and maybe focus our spending on Instagram, LinkedIn, or Facebook to make sure we maximize our return on investment" (BTMP2; 2:36-31).

TBSA intends to adopt blockchain applications to facilitate the monitoring and control of crypto asset services, ensuring compliance, regulatory requirements, and mitigating risks. However, many of the employees did not understand the concept of blockchain. This includes how blockchain could be a tool for resolving challenges that are associated with the safety and security of a client and the bank's information. Thus, awareness and training were inevitably required.

Despite the limited knowledge and lack of awareness among employees, some of the clients were familiar with the tool. At the time of this study, some of the clients had a good understanding of how blockchain can be employed and that it is safe. Also, it was understood to the extent that the tool has not been hacked, unlike other social media platforms like Facebook. One TBSA client who participated in this study explained as follows:

> "A blockchain, like I said, is on the cloud. It is based on the structures and the codes. If somebody did not do something at that time, you cannot crack it. With social media, it is easy for you to crack the code" (BTCP4; 5:160-164).

The use of social media and blockchain presents benefits to the organisation, individual clients, and employees. However, awareness remains a challenge. On one hand, some potential benefits of using blockchain in the banking industry include increased safety and security. On another hand, TBSA and its clients seem to be struggling to get past the challenges posed by the tools. The challenges hinder promoting the awareness of the tool in the organisation. It also assists with transparency in transactions, a faster and more efficient way of sharing information between the bank and their clients. According to one of the participants:

> "Blockchain is a conduit that has been used mainly for cryptocurrency. People are starting to learn more about blockchain, so if blockchain is one of the safest and the most secure conduits for transactions between banks and individuals, it can also be as good as being one of the safest ways for information sharing among us as clients and the bank. I think the banks are missing a huge opportunity considering the safety and the security that the blockchain comes with for the banks, and with it being so highly regulated, I think the bank can just win with the use of blockchain" (BTCP4; 5:169-177).

Based on the promises of blockchain, TBSA embarked on a pilot process, to ascertain the tool's usefulness for marketing purposes. Despite this effort, TBSA does not have a policy or strategy document that defines the adoption, use, and management of the tool, which is

another challenging factor. There is a need to understand and mitigate risks associated with blockchain. The lack of policy and understanding can hinder the ability to effectively adopt and implement blockchain solutions, for marketing purposes. Some of the participants briefly explained:

> "We are carrying out a pilot exercise about the use of blockchain, from the Tshwaragano bank's perspective. Anyone you ask for a policy document; tell you how sorry they are because they don't have that document." (BTPS; 1:38-39).

> "We don't have a policy document that defines blockchain. That is one of the reasons why we are challenged in the organisation when it comes to blockchain. We do not understand it and don't know how to deal with it." (BTPS; 1:43-51).

Awareness of the blockchain in the organisation is a challenge, from both staff and clients' perspectives. Awareness is a critical part of the adoption and use of the tool because it enables clients and employees to be conversant and skilled in blockchain. Also, the awareness helps the actors (subject) in measuring the effectiveness of marketing efforts and assessing the return on marketing investment. This allows them to determine which platforms or strategies are most effective and make informed decisions on budget allocation. In AT, tools are utilised by subjects to carry out an activity towards achieving the outcome (Mutasa & Iyamu, 2023).

5.5.2 Activity theory: Subject

In the context of AT, subjects are living beings, individuals or groups who engage in purposeful activities (Eteläpelto et al., 2013) and are also referred to as actors (Stetsenko, 2020). The actors perform activities consciously (Engeström & Sannino, 2021). In TBSA, the subjects include marketing managers, public sector managers, mobile bankers, commercial managers, and private bankers. In TBSA, marketing activities require interaction and relationships between the marketers (employees) and clients, to be successful. TBSA's employees are often assigned various roles and responsibilities in completing the activities of marketing such as marketers and those who will monitor the usage and success of any marketing campaign. Should a specific marketing not get the required audience, then the marketers move on to another social media platform as they need to reach as many clients as possible. This means that each employee or group has different skills and training in the areas of marketing.

> "We need to make sure that what we spend gets a good return on our marketing investment. So, as an example, if social media marketing on Twitter is not working well for us, then obviously for instance, we will drop that

> and maybe boost our spending on Instagram, LinkedIn, or Facebook to make sure we maximise our return on investment." (BTMP2; 2:38-42).

In TBSA, the employees are responsible for marking spread across the structures of the organisation. This makes structure important in terms of coordination of marketing activities on behalf of the organisation. This is to ensure and improve performance in providing better services for the clients based on employee's diverse knowledge and skills. Some of the units within the structure of TBSA include the public sector, sales, and marketing. The employees in the public sector unit seem to be the only division tasked to work on blockchain at this stage. At the time of this study, blockchain was being piloted in the organisation. One of the employees briefly explained as follows:

> "As a bank, we would like to be known as a crypto asset service provider through blockchain and we are running with the concept now, quite a testing phase with two clients whom we are taking through the process of checking what are some of the risks and how do we mitigate the risk on blockchain." (BTPS; 1:14-17).

Despite the importance of blockchain, there is a lack of knowledge and understanding of blockchain and social media by employees and clients of TBSA. This raises challenges from both employees' and clients' perspectives. It affects the use or how the tools can be used to improve services to clients, from the employee's viewpoint. From the client's standpoint, the challenge limits them in attempts to engage with the bank via the tool. Thus, training is key to addressing this growing challenge of know-how, in empowering the employees with the knowledge required, specifically on blockchain. The delay in executing this training may negatively affect competitiveness. Based on the significance of training, one of the employees explained:

> "We have developed training to teach this and busy as well as commercial banking we have developed training to teach business managers about blockchain crypto and that blockchain is not crypto and vice versa type of scenario." (BTPS; 1:23-25).

As TBSA strives for success, retention is critical from two angles. Firstly, client retention is crucial. This includes acquisition, which necessitates an understanding of the client's needs and concerns. Secondly, the retention of employees is central as the organisation continues to train and equip them with the necessary skills and knowledge to generate prompt solutions using social media and blockchain. In the case of TBSA, social media advertising allows for

customer service interactions, where customers can send messages and receive assistance without having to call and wait in a call centre queue. Below is what was explained by some of the participants in the marketing department of TBSA:

> "Another benefit would be that we get to conduct customer service through social media, so maybe back in the day, people would have to call the bank to get any type of assistance they needed. But now they can just send us a message on our social media platform, and we will respond. Those are the two benefits, customer service, and awareness." (BTMP1; 2:54-58).

5.5.3 Activity theory: Rules

In AT, rules refer to the guidelines, norms, or procedures that regulate and shape the behaviour of actors, and activities are performed in communities within rules (Moche & Iyamu, 2023). In TBSA, the rules are split into three main parts; internalisation, externalisation, and government. Internationalisation involves the rules within the organisation. The rules that focus on clients, partners, and collaborations are referred to as externalisation. The laws and legislations of the country that concern the organisation are referred to as government rules. The rules define and set the boundaries of interaction between individuals in using tools to complete activities.

Also, the rules are used to define roles, responsibilities, and relationships among participants who undertake an activity. Thus, the rules can, fundamentally, be referred to as a governance tool. On one hand, some rules guide the selection of a tool among the many, such as social media networks. On another hand, there are rules for the deployment and use of the selected tool. In TBSA, social media is used to advertise on platforms like Facebook, Twitter, Instagram, and YouTube. The marketers monitor the usage regularly and switch from one platform to another to maximise resources and reach as many clients as possible.

> "Tshwaragano Bank has rules around the use of social media, and we all need to do our compliance training to understand these rules. For example, staff are not allowed to sell on behalf of Tshwaragano Bank on social media but are encouraged to advocate for the bank. The bank has mandated people to engage on social media." (BTMP1; 6:202-207).

The rules are purposely for governance because they help to provide a sense of order and predictability. There is uniformity in the rules around the use of social media. TBSA's employees are consistently working around those rules as part of engaging their clients. The employees understand that only mandated individuals can engage with clients over social

media platforms. This is primarily for two reasons. First, it is purposed to protect the organisation, TBSA. The second reason is to enable and ensure that the clients experience the same type of service. Some of the participants explained as follows:

> "Clients are using social media, but I can't advertise or talk about my work on social media because the bank only allows mandated staff to engage on social media. Sometimes, the client will call you about something that they saw on social media, and we can take it from there." (BTP3; 6:219-221).

> "I do not use social media to advertise the bank's products or services because there are rules on this. You need to get approval from the bank to use social media for marketing and I do not have that approval." (BTP4; 4:134-136).

From the government's perspective, one of the rules that apply to the organisation is the Protection of Personal Information (POPI) Act of 2013. TBSA adheres to rules to protect client information while the clients are still able to engage us on social media platforms regardless of their chosen method of communication. One of the participants explained as follows:

> "On the other hand, we have POPIA which gives the client more options. If clients consent to say they don't want to be contacted, then we don't have to contact them. However, we can still use social media platforms like Facebook or Twitter, and they may engage us should there be a need. But if they have given their consent to be contacted, they must know that they can be expecting a call from the call centre, which a lot of people do not like those calls." (BTP3; 9:349-354).

As revealed by the participants, blockchain and social media are not complementarily used in TBSA at the time of this study. However, through its governance focus, rules can play a critical role in how blockchain and social media can be complementarity used for the marketing of the products and services of the bank. This can be attributed to the fact that banks in South Africa are highly regulated. For example, due to a lack of policy in the deployment and use of blockchain, TBSA had to close all accounts belonging to clients who had any dealings with the blockchain via cryptocurrencies. This was because TBSA was constrained and lacked the know-how to mitigate the risk associated with blockchain. This is a security issue that is embedded in rules or governance. One of the employees briefly explained:

> "We don't have a policy document that talks to blockchain and that is one of the reasons we are challenged when it comes to blockchain. We do not understand it and don't know how to deal with it." (BTP; 2:43-45).

Rules can also contribute to the creation of new practices, innovations, and changes within the activity system. Importantly, rules are not fixed or static. It is essential for comprehending how participants navigate and make sense of their environment, and for understanding the broader socio-cultural context in which activities take place. While banks are aware of the benefits of blockchain, TBSA had to close clients' accounts, however, through subjects (employees and clients) and realised that there is a need to understand the use of blockchain. Hence, the pilot was established. At the time of this study, TBSA was exploring the implementation of blockchain. This includes formulating the rules to guide its operationalisation in the organisation.

5.5.4 Activity theory: Community

In AT, a community is a group of individuals who share a common interest, goal, or activity. In TBSA there are several communities involved in the bank's marketing activities. The communities consist of both internal and external groupings. The internal groups (communities) are referred to as departments or units. Some of the internal communities are Public Sector and Marketing departments. The groups of clients constitute an external community. The external community is further categorised based on products and services that clients are interested in; or are qualified for. Thus, requirements are used to define the products and services communities a client belongs. Also, internal communities employ tools such as social media or blockchain, guided by requirements, in interacting with the external community, and in carrying out their marketing obligations or tasks.

The focal community in TBSA is the marketing department. The primary focus of the marketing department (community) is to promote the products and services of the bank to new and existing clients. Marketing employees use social media platforms such as Twitter, Facebook, LinkedIn, and Instagram to advertise and raise awareness about products and services on behalf of TBSA. However, the use of social media is not as straightforward as we are meant to believe. Some rules and guidelines are bound by the requirements of the TBSA. One of the participants explained below:

> "The main aim of advertising is to raise awareness and it assists in reaching a broader audience as compared to walking on the streets and possibly seeing 3 or if you are lucky 10 clients." (BTMP1; 1:22-24).

The public sector department of TBSA was tasked with implementing blockchain technology at the time of this study. They are currently in the testing phase, working with real clients to understand the risks involved and how the risks can be mitigated. These communities realise the need for TBSA to use blockchain to better serve the clients, hence they have been working tirelessly on this project for months at the time of the interview. This is explained by one of the participants below:

> "This closed group is testing the risk element of blockchain and monitoring the progress." (BTPS; 2:47).

In TBSA, communities play an important role in monitoring the reach of their advertisements. Each platform has analytics that allow them to see how many people have seen their posts. This means that there is a need for alignment between the analytics and social media platforms. TBSA has two types of marketing, paid social media marketing, and organic social media marketing. Organic social media marketing focuses on branch awareness while paid social media marketing focuses on sales campaigns to increase the bank's market share.

TBSA uses paid media on social media platforms, which includes links that lead people to the bank's website where they can open an account. However, organic social media is not strategically designed to get customers but rather to raise awareness, inform, and entertain clients. All these benefits are made possible because of the marketing department of TBSA. Two of the participants explained as follows:

> "Each social media platform has what they call analytics, so through the analytics, I can see how many people saw the post." (BTMP1; 1:17-18).

> "At Tshwaragano Bank, we've got two types of social media, paid media which has a link that leads people to the Tshwaragano Bank website, and they can click to open an account, and organic social media, which is just to raise awareness and entertain and inform. It's not strategically designed to get customers, it's just for people who already know Tshwaragano Bank." (BTMP1; 1:31-35).

While there are several benefits to the use of social media to interact with clients, TBSA's communities do have challenges. Some of the challenges are privacy and security concerns. It has been argued that social media platforms can pose risks to personal privacy and data security (Van der Schyff et al., 2020). According to Baako and Umar (2020), scammers and fraudsters exploit these channels to compromise client's identities or organisations' services.

The client community is concerned about this, especially due to the scamming experience they have had.

Thus, the communities require effective leadership and governance to ensure their smooth functioning. This includes establishing guidelines, rules, and mechanisms for decision-making and conflict resolution. The lack of leadership and governance creates trust issues with the client communities. Due to the bank not having clear guidelines on how to deal with blockchain, clients lost trust in the bank and employees were left behind, which created uncertainty. Below was explained by a participant in the study:

> "The use of social media to advertise products is fine, but not to engage clients on social media. I think there's too much fraud going on in this world now. Don't you think by doing that we're giving criminals more access to what's going on in the bank or what products they're busy with?" (BTCP1; 2:56).

5.5.5 Activity theory: Division of labour

In AT, division of labour refers to the distribution of tasks and responsibilities among individuals within a social system or organisation (Durkheim, 2023). It is an important concept because it helps to coordinate collective action, enhance efficiency, and optimise the use of available tools. In TBSA, the division of labour was observed in both horizontal and vertical ways, which was caused by the spread of activities. In horizontal ways, marketing labour (activity) was shared between departments (or units) in TBSA. Social media platforms are used to promote products and services, while the sales department uses the platforms, primarily, to contact clients. Within each department, many employees participated in an activity. At both departmental and individual levels, requirements were used to guide the distribution of tasks in completing each activity.

Also, the allocation of tasks was for both operational and strategic purposes. Operational entails day-to-day activities and the strategic intent encompasses future activities. At both operational and strategic levels, some of the tasks include content development, uploading content to the platform, providing support for the content, and managing the content for marketing purposes. This makes the use of social media or blockchain multi-dimensional. However, there was no task or intent to complement the use of social media and blockchain for marketing purposes in the organisation. One of the participants briefly explained as follows:

> “Banks are using social media marketing. We see this happening already when the banks advertise their products and services on social media. Their marketing is working.” (BTCP4; 2:81-87).

The multi-dimensional nature of the use of social media or blockchain for marketing means that the allocation of its tasks was defined and guided by the skill set. This necessitates the development and retention of skilled personnel. This is because each task or function requires a specific skill. TBSA uses social media platforms to promote its products and services by advertising on different social media platforms. This makes the division of labour critical to enhancing marketing and customer outreach efforts using different social media channels by the TBSA marketing department. A participant briefly explained:

> " So, as an example, if social media marketing on Twitter is not working well for us, then obviously, we will drop that platform and focus our attention on other platforms such as Instagram, LinkedIn, or Facebook to make sure we maximise our return on investment for TBSA.” (BTMP2; 2:38-41).

The public sector department focuses on the use of blockchain, on behalf of TBSA. Many employees participated in the project, to deploy (implement) blockchain for marketing purposes. Many tasks were undertaken, from the initiation to the implementation plan stages of blockchain. The tasks were assigned to individuals and groups based on skill. For example, some individuals were tasked to engage with the business units on how and the need to change the current situation. Another group was assigned the responsibility of formulating policy that will govern blockchain. One participant explained the logic in the allocation of some tasks relating to blockchain implementation in the organisation as follows:

> “I am glad that you are thinking ahead and studying blockchain because we are now testing blockchain until September 2023 and by October 2023 we would have gone back to the group (TBSA) to change the policy. Remember testing is not on our system because we don’t have a system to test blockchain. We are checking transactional activity and behaviour, including monitoring potential risk.” (BTPS; 2:61-67).

Although tasks are shared or allocated to groups and individuals, collaboration is critical. It promotes corroboration and enhances the quality of activity, which increases competitiveness. However, it has never been easy for some groups or individuals to synchronise their efforts. Thus, collaboration sometimes creates challenges in TBSA. Inevitably, the marketing unit

needs to work closely with the sales team towards achieving a common goal. One participant briefly explained:

> "Sometimes there is an influx of account applications caused by social media campaigns. So then, we must always prepare the sales team that's handling that campaign inbox. They need to be quick in executing those sales leads as we call those "hot leads." Should we not contact the clients immediately, those hot leads become cold." (BTMP2; 7:215-222).

The division of labour is driven by the power and status that employees hold in TBSA. This power and status can be seen in how the employees engage with each other and drive the business to achieve its objectives.

5.5.6 Activity theory: Object

In AT, an object drives and guides the actions of individuals within an activity system (Pettersson, 2021). It can be seen as the motive or goal that the individual seeks to achieve through their participation in a particular activity (Iyamu & Shaanika, 2019). In the context of this study, the object is the use of social media and blockchain by TBSA, for marketing purposes. TBSA believes that using social media for banking purposes can be effective in reaching and engaging customers. The use of social media marketing reduces the number of clients going into the branch as the goal of TBSA is to make it convenient for clients to transact most cost-effectively for the bank. One of the participants explained:

> "So, I guess social media marketing is most cost-effective for the bank as it alleviates a lot of feet coming into the branch, which is obviously convenient for the clients. We want to try and make it as easy as possible for our clients." (BTMP2; 4:125-129).

TBSA is in the testing phase for blockchain, and several employees (subjects) are involved in this pilot. The pilot is done to create a policy that will govern the use of blockchain as the bank currently does not have anything to guide it in its use. Therefore, from TBSA's public sector team perspective, an object is the use of blockchain to better serve the client and be competitive in the market TBSA operates, hence the need to do this pilot to change the current situation. One of TBSA's public-sector employees briefly explained.

> "We are doing these blockchain pilots from the Tshwaragano bank's policy perspective. Anyone you ask for policy document; they tell you how sorry they are because they don't have that document." (BTPS; 1:38-39).

> “The pilot is to check current risks and if those risks can be managed on the blockchain platform that the client uses or not and hence there are two real clients we are working with just to monitor their blockchain usage at this stage.” (BTPS; 1:15-17).

From the client’s perspective, an object refers to social media platforms used, like Twitter, Facebook, LinkedIn, Instagram, and analytics in raising awareness, customer service, and increasing sales as seen by hot leads created by different campaigns. The main aim of advertising for TBSA is to raise awareness as explained by the marketing employees of TBSA to remind people who already know about the bank that they are there. This was briefly explained by one participant:

> “Well, here at Tshwaragano Bank, the main aim of advertising is to raise awareness and it assists in reaching a broader audience as compared to walking on the streets and possibly seeing 3 or if you are lucky 10 clients. People are always online on these social media platforms hence social media marketing reaches most of the clients.” (BTMP1; 1:21-24).

While the public sector department is clear on the need to use blockchain, the sales and marketing departments of TBSA seem to be far from the understanding of blockchain and its existence which could be challenging for TBSA to achieve its goal if its employees are not on the same page on blockchain. This could save the bank and its employees a few resources. Some of the participants briefly explained.

> “When I say blockchain, I am talking about banking clients that are doing blockchain crypto and a blockchain in the sense of the platform where we start talking about my banking contracts.” (BTPS; 1:7-8).

> “I don't think any of my colleagues know about blockchain either. It might be something that our analytics team might be using at a group-wide enterprise level. And I know when we transfer data it has to be via secure HTTP sites, but that's not blockchain. I'm sure it's going to become a more critical topic that we will have to know more about as time goes on, you know.” (BTMP2; 9:292-296).

5.6 Findings from the analysis

Based on the above data analysis, the factors that seem to influence the deployment of social media, blockchain, or both for marketing purposes were identified from the two cases (organisations), OBSA and TBSA. The identifications were done using subjective reasoning from the perspective of the interpretive approach. Separately, the findings are presented below.

Case #1: OBSA

In OBSA, five (5) factors were found to influence the use of social media and blockchain. The findings are as follows:

i. Awareness
ii. Interaction
iii. Security
iv. Training
v. Governance

Case #2: TBSA

Like the OBSA, six (6) factors were found to have an influence on social media and blockchain for marketing purposes in TBSA. The factors are listed as follows:

i. Awareness
ii. Skill development and retention
iii. Governance
iv. Requirements
v. Security – privacy
vi. Operationalisation

Although the findings from the cases are separated as presented above, it is not for comparison. It is to put the findings in the respective case before a detailed discussion. In the next Chapter, the findings are discussed in detail.

5.7 Conclusion

The chapter presented an analysis of the data collected from the two South African banks. The

analysis was carried out through Activity Theory. The operation of AT factors in the analysis enabled the researcher to identify specialised and non-technical factors that impact the use of blockchain for marketing, identify the criteria for employing blockchain for the marketing of products and services, and understand the deterministic factors that create confusion and conflicts between blockchain and social media in their reciprocal use for marketing products and services in a South African bank. Without the exertion proposition as a lens, it would have been delicate to identify and understand all these factors.

CHAPTER 6
FINDINGS AND INTERPRETATION

6.1 Introduction

Data were collected and analysed to achieve the aim of the study, which is to develop a model that can guide the complementary use of blockchain and social media for marketing by South African banks. Using activity theory (AT), the analysis is presented in Chapter 5. From the analysis of the two cases used in the study, influencing factors were identified. The factors are presented in the previous chapter and revisited in this chapter. In this chapter, the findings are interpreted towards developing a model.

This chapter is organised into five main sections. The chapter is introduced in the first section, followed by an overview. In the third section, the findings from the two cases are mapped. The fourth section presents the interpretation of the mapping outcome, which leads to the development of the model. Finally, the chapter is summarised.

6.2 An overview

This chapter presents a comprehensive view of the findings and interpretations from the perspective of the researcher. Using AT as a lens, thorough analysis and investigation have provided important patterns, trends, and insights regarding the study's main themes. The chapter includes the mapping of the findings from the analysis, a model for the marketing complementarity of blockchain technology and social media that offers insightful interpretations that add to the study's larger context, and the chapter's conclusion is covered in the section that follows.

6.3 Mapping the findings from the analysis

As identified and presented in Chapter 5, the findings from the analysis of the two cases (OBSA and TBSA) are shown in Table 6.1. The findings are mapped to ascertain the most influencing factors that generally apply to the organisations.

Table 6.1: Findings from the cases

Case #1: OBSA		Case #2: TBSA
Awareness	↔	Awareness
Governance	↔	Governance
Interactive		Operationalisation
Security	↔	Requirements
Training	↔	Security – privacy
		Skill and retention

As shown in Table 6.1, the findings from the two cases are mapped. An arrow is used to indicate the similarity between the two sets of findings. In the mapping of the findings, similar factors, such as governance were combined. Thereafter, the remaining findings, a total of seven (7) factors from both cases are combined. These are (1) Awareness; (2) Governance; (3) Interactive; (4) Operationalisation; (5) Requirements; (6) Security; and (7) Skillset. The factors determine and influence the deployment and use of social media, blockchain, or complementarity of both for marketing purposes in the South African environment.

6.4 A Model for complementarity of blockchain and social media for marketing

based on the influencing factors, Awareness; Governance; Interactive; Operationalisation; Requirements; Security; and Skillset from the mapping, a model is developed (see Figure 6.1). The model is aimed to guide the complementary use of blockchain and social media for marketing in a South African bank. As revealed in the data analysis, none of the factors influence the use of social media, blockchain, or their complementarity in isolation. This means that the factors are either interconnected or interdependent, to influence the use of social media or blockchain, in operationalising the activities and processes of marketing by employees. The relationships between the factors are indicated with arrows, as shown in Figure 6.1 (Model).

Furthermore, each of the factors is discussed below. Thus, the discussion should be read with the model to gain a better understanding of how the factors influence the use of the tools (social media and blockchain for marketing purposes.

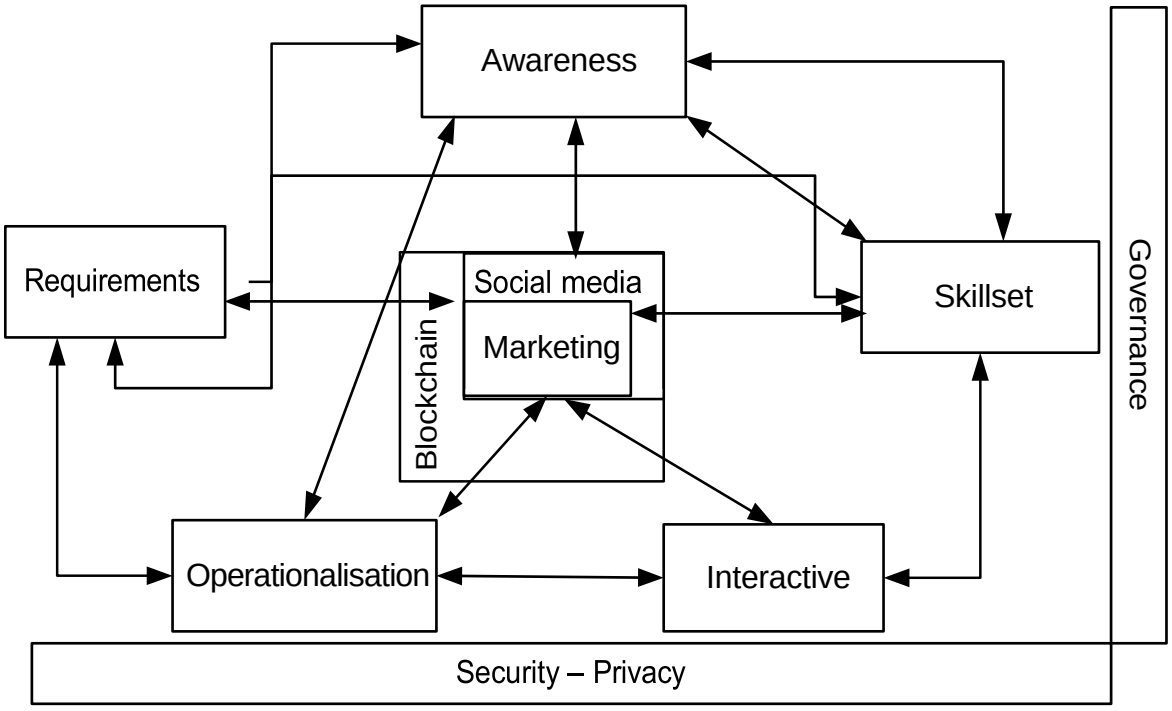


Figure 6.1: Social media and blockchain model for marketing

6.4.1 Awareness

Awareness of the use of social media for marketing in financial institutions is critical. This is because social media or blockchain enables employees (or marketers) to connect with clients, build a brand reputation, and even gather market insights (Naeem, 2020). The importance of awareness of the use of blockchain for marketing is to enhance security, streamline financial processes, and promote transparency for clients and financial institutions. Tan and Saraniemi, (2023) argue that it is more significant when combining both social media and blockchain for marketing for making secure and transparent transactions, fostering trust, and ensuring data integrity. Each employee must be aware of the tools that are there for them to use like blockchain, social media for marketing, or even a combination of both to achieve the goals and objectives of the bank (Naimi-Sadigh et al., 2021).

Lack of awareness of blockchain use, social media, or a combination of the two leads to misunderstanding and confusion (Ostern, 2020). Shehata and Montash (2020) suggest that the lack of awareness leads to missed opportunities for enhancing customer engagement, improving efficiency, and getting a competitive edge. Awareness of both blockchain and social media use for marketing is critical; hence the lack of this hinders effective strategies to reach the target market, maximise market potential, and lastly leverage innovation by the financial institutions (Upadhyay, 2020).

6.4.2 Requirements

The importance of requirements in the use of social marketing and blockchain in marketing is to provide all employees with clear guidelines for content creation, how to measure the success of the campaigns, creating relevant campaigns for a targeted audience, and at the end of the day making sure that all these requirements are aligned to the strategy of the organisation (Madhani, 2022). While Ledikwe (2020), argues that well-defined requirements assist in maintaining consistent brand awareness (Tan & Saraniemi, 2023), contends that it enhances engagements with the targeted markets and credibility and transparency of marketing through the social media and blockchain space.

The lack of clear requirements in blockchain for marketing may lead to interoperability issues hindering collaboration and limiting marketing to the broader community (Rejeb et al., 2020). The lack of requirements on social media for marketing may result in the wrong target markets being a focus point and difficulties in measuring the success of marketing and not cost-effectiveness as the main aim of marketing (Korcsmáros & Csinger, 2022). A well-defined requirement is crucial as it enhances overall business performance when employees know what is required from them and how to go about achieving the business goals in both the use of social media and blockchain to better serve the clients (Agarwal, 2021).

6.4.3 Interactive

Interactivity in any organisation is key to the success of the business and its continuity. It is then critical to use social media and blockchain for marketing to enhance clients' and employees' engagements and foster a community that is trusting and loyal to each other. This is what organisations need for their survival, a loyal client (Madhani, 2022). In the social media landscape, interactive marketing encourages participation from the targeted audience, and brand visibility and it reaches most of its audience. While in the blockchain space, interactive elements can assist users in providing feedback which organisations can use to create innovative solutions or even better their current solutions to clients (Rabby et al., 2022). Interactivity in blockchain contributes to the success and adoption of blockchain by those who are sceptical of the use of blockchain (Rozak et al., 2021).

The absence of interactivity in social media leads to reduced targeted clients' interest in what is being marketed and makes social media marketing more expensive as it no longer reaches more clients (Bushara et al., 2023). The lack of interactivity in blockchain for marketing reduces the targeted audience's engagement and limits its intended results of awareness of blockchain. Embracing interactivity is important to cover all the negativity around social media and blockchain and clears any confusion on the complementary use of both for marketing to maximise the impact of marketing (Joachimsthaler, 2020).

6.4.4 Operationalisation

Operationalisation is part of the process through which theoretical concepts are translated into practice. It therefore has satisfactory influences on how social media or blockchain is used or managed for marketing purposes. From a production standpoint, Fatorachian and Kazemi (2018) argued that operationalisation is an enabler of concept. It provides a mechanism for translating things, concepts, or innovations into reality or practice.

However, there are challenges, and one of them is how to facilitate the operationalisation of innovation in an organisation (Jaaron & Backhouse, 2018). According to Seeber (2020), another challenge of operationalisation is to provide suitable representations of other related factors. This is critical because the factors revealed in the analysis are interrelated or interdependent to influence the use of social media or blockchain for marketing in an organisation. Thus, a specific design or definition that specifies the scope, boundaries, variables, and measurables is required, to ensure precise focus of the operation.

6.4.5 Skillset

The importance of training staff on blockchain is to ensure that they have the skills and knowledge to leverage technology's potential for enhancing business processes and driving innovation while being competitive in the market they operate in (Kant, 2021). Happy employees tend to have great attitudes and influence the morale of the entire team, and this can happen when they know and enjoy what they do daily because they have been trained to be the best in the market. Atherton (2023) argues that training staff on social media for marketing is critical to harnessing the power of social media platforms like Facebook, Twitter, and Instagram for effective brand promotion, customer engagement, and driving business growth.

The lack of training of employees on social media may lead to missed opportunities for online marketing, brand visibility, staying competitive in a digital world, and great customer engagement which leads to retaining of staff (Cartwright & Raddats, 2021). So, if the financial institution fails to retain trained employees this may result in a loss of expertise in the long run, knowledge, and continuity of the bank in using blockchain or social media in marketing. Kurdi and Alshurideh (2020) argue that the loss of trained staff will lead to increased costs in recruiting and training new staff while impacting client service.

6.4.6 Governance

The importance of governance in blockchain for marketing is for the establishment of policies, rules, protocols, and easier decision-making processes while ensuring accountability and

transparency to all related parties (El Khatib et al., 2022). It promotes the use of blockchain to those who are not comfortable seeing that rules or policies are created to protect their interests. Governance in social media promotes collaborations and fosters trust that assists in resolving any disputes that could arise knowing that the rules are there to be followed and guide users (Daskal et al., 2020).

The lack of governance in social media and blockchain leads to the frustration of users as there are no guidelines on how their disputes can be resolved (De Filippi et al., 2020). This leads to trust issues as clients are sometimes not treated fairly and transparency becomes a challenge. The absence of governance may damage the good reputation the organisation has created and erode the trust of the clients (Tavanti & Tait, 2021).

6.4.7 Security

It is important to have security in the use of blockchain and social media for marketing to ensure the integrity and trustworthiness of the transactions and data while preventing fraud and unauthorised access to client information and data manipulation (Eriksson et al., 2020). Kethan and Basha (2022) argue that the bank will retain any client and have loyal clients when they have a trusting relationship with their bank.

A lack of security in social media for marketing may cause a breach of the Protection of Personal Information Act (POPIA) for customers due to identity theft from data breaches (Kumar et al., 2022). This could also damage the brand reputation which could lead to the loss of clients and the continuity of the business (Koonin, 2020).

6.5 Summary

The findings presented are important as they assisted in the development of the model that can guide the complementary use of blockchain and social media for marketing in South African banks. The interpretations enabled a deeper understanding of the findings which assisted the researcher in answering the objectives of the study. Lastly, through the analysis of the study, findings were identified and interpreted. The interpretation of the findings guided the development of the model.

CHAPTER 7
CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

This chapter is the apex of the study which encapsulates the essence of the research journey undertaken. Data was collected through semi-structured interviews as a technique for the two cases chosen to represent financial institutions in South Africa. Data analysis was done using activity theory (AT) as a lens, which aided the researcher in viewing the factors that influence the use of blockchain and social media marketing in a South African banking institution beyond normal settings. As we navigate this concluding chapter, our primary objective is to combine the findings that were identified from the analysis chapter. Lastly, it is to draw meaningful connections and offer thoughtful recommendations that go beyond the immediate scope of the study that can be implemented as part of the model developed.

The remainder of this chapter is as follows: The first section presents the summary of each chapter while the second section outlines the research evaluation, the outcomes, the contribution of the research, and the benefits of the study are then outlined. The benefits are twofold: contribution to the existing body of knowledge and also to further research, and the limitations of the study. Section six concludes the study. The recommendations are the ninth section followed by the summary of the entire study where all aspects are concluded to achieve the objectives of the study.

7.2 Summary of the chapters

The study is divided into seven chapters. Each chapter addresses a part and contributes to achieving the aim and objectives of the study. The importance of each chapter is briefly discussed below.

Chapter 1: Introduction

This chapter serves as the gateway to the entire thesis, setting the stage for the entire research endeavour. It provides an overview of what the study entails, which includes the research problem, aim, objectives, and research questions. The aim was to develop a model that could guide the complementary use of blockchain and social media for marketing in a South African bank.

While several financial institutions had some ideas about social media marketing the complementary use of both social media and blockchain for marketing was creating confusion. Hence, one of the objectives was to understand the deterministic factors that cause confusion and conflicts between blockchain and social media in their complementary use for marketing products and services in a South African bank.

The chapter introduces the literature review and the research methodology applied to the study. The literature review is based on five key terms: 1. banking institutions, 2. social media, 3. blockchain, 4. traditional marketing, and 5. marketing strategy. The literature review helped to identify gaps where further research is needed. Lastly, the methodology section introduces and justifies the research philosophy, research approach, research strategy, data collection techniques, data analysis, ethics considered, the significance, and the contributions of the study.

Chapter 2: Literature Review

This chapter provides a detailed literature review. The review was guided by the objectives of the study, as presented in section 1.4 of Chapter 1. The literature helped to gain a better understanding of existing gaps within the topic, the use of social media and blockchain for marketing purposes by banking institutions. The other part of the literature review covers the theory, AT, that underpins the study. Primarily, the review of the theory focuses on applying it in the context of business sciences and marketing perspectives.

Chapter 3: Research methodology

This chapter presented the methodology applied to the study. This comprises philosophical assumptions, philosophical stance, research approach, research methods, design, data collection, and data analysis guided by AT. The data collection technique is semi-structured interviews. In the chapter, explanation is provided on why and how these approaches, methods, and techniques were applied in the study.

Chapter 4: Overview of the case study

This chapter introduced the two cases studied and the specific reasons the two were selected. These are two South African financial institutions, and both approved for their organisations to be used as cases for the study. This included the organisational structures of the two and the different departments which were part of the study together with their clients.

Chapter 5: Data Analysis

The analysis of the data is presented in this chapter. At the beginning of the chapter, an explanation is provided on how AT is used as a lens for data analysis. Toward the end of the chapter, the findings from the analysis are listed.

Chapter 6: Findings and Interpretation

The findings and interpretation were presented, and this included an overview of the chapter, a mapping of the findings from the analysis, a model for complementarity of blockchain and

social media for marketing, interpretations of the findings, and lastly the summary of the chapter.

Chapter 7: Conclusion and Recommendations

This is the conclusion and recommendation chapter that presents a summary of the research journey and its contribution to the body of knowledge and future studies as well as the contribution of the study.

7.3 Evaluation of the research

This section presents the evaluation of the study. This is to ensure that the aim and objectives as stated in Chapter 1 are achieved. Also, it confirms that the most appropriate methods, approaches and techniques were selected for the study. Martensson (2016) argues that the objectives of the study should be revisited in evaluating a study. Thus, the objectives of the study were the focus of the evaluation, as tabulated in Table 7.1. Dane (2010) suggests the use of six components: who? what? where? when? how? why? for the evaluation of a study. As shown in Table 7.1, the six components are used to evaluate the research.

Table 7.1: Evaluation of the study

Component	Evaluation of the study
What	The study aimed to develop a model that can guide the complementary use of social media and blockchain for marketing purposes in South African banks. In doing so, the factors that influence the use of social media and blockchain for marketing in South African banking institutions were examined; the criteria for employing social media or blockchain for marketing products and services in South African banks were identified; and the factors that cause confusion and conflicts between social media and blockchain in their complementary use for marketing products and services in South African banks were determined.
Where	Where refers to the geographical location, where the phenomenon is studied. The study was conducted in South Africa. Two South Africa-based banking institutions were used as cases in the study. The institutions were selected because they were considered the best fit for the study. A set of criteria was used to guide the selection of the institutions. This is explained in Chapter 3.
Who	Who represents the subject, meaning the people involved in the use of blockchain and social media for marketing the bank's products and services. This involves the marketers, part of the marketing employees of the bank who go out to clients via social media platforms and engage their clients. They

Component	Evaluation of the study
	engage the clients via marketing campaigns. It also includes the clients who use all these tools to engage the banks on what they need. This helps to examine the influencing factors in the use of social media or blockchain for marketing purposes.
When	When refers to the time that social media and blockchain are used in the study. These tools (social media and blockchain) are used as part of marketing the bank's products and services to reach as many clients as possible. These tools are used as they are regarded as cost-effective as compared to traditional marketing. Clients are also able to engage the bank at any point in time during the marketing campaigns. This reveals how the influencing factors manifest themselves in marketing processes.
How	The how refers to how these tools are used for marketing products and services on different social media platforms like Facebook, Instagram, Twitter, and YouTube. This helps to examine how social media can be complementarily used with blockchain for marketing in South African banking institutions.
Why	The why helps to examine the justification for deploying social media, blockchain, or both, for marketing purposes in South African banking institutions. This assisted in following the narratives and revealed why certain things happened in the way that they did in the process of using the tools in the banking institutions that were used as cases in the study. Subsequently, the factors contribute to the outcome of the study, which is the model that is developed.

7.4 Summary of the outcomes

The study aimed to develop a model that can guide the complementary use of blockchain and social media for marketing in a South African bank. To achieve the aim, objectives were formulated, as presented in Chapter 1. Thus, the outcomes of this study align with its objectives, explained as follows:

To examine the factors that influence the use of social media and blockchain for marketing in a South African banking institution

In achieving this objective, questions such as: What are some of the challenges in adopting and using social media or blockchain?; and What are the benefits of employing the tools for marketing purposes? were asked using the semi-structured interview technique. From a qualitative viewpoint, various responses were gathered from the interviewees. The responses

were combined and examined (analysed) using the components (tools, subject, rules, community, division of labour, and object) of AT.

How the components of AT were applied is explained in Chapter 3 and an overview of it is presented in Chapter 5. From the analysis, the factors that influence social media and blockchain were revealed. As presented in Chapter 5, the factors include Awareness, Interactive, Security, Governance, and Operationalisation.

To identify the criteria for employing social media or blockchain for marketing products and services in South African banks

The primary objective is to reach the criteria used to employ social media and blockchain for marketing purposes. In doing so, questions were asked such as what criteria can be used to guide the employment of social media or blockchain for marketing products and services in South African banks? What are some of the factors that influence the criteria?

As in the first objective, the semi-structured interview technique was used to elicit responses. As stated in Chapter 3, this is primarily the technique that allows for probing questions for clarity and gaining a better understanding of the responses. Using the AT as a lens for data analysis, the factors that consist of the criteria that can guide the deployment of social media or blockchain were revealed. This includes security, privacy, and specialised (skilled) personnel collaboration. The outcome of the research offers a model that could be used for social media and blockchain, providing insights into better marketing effectiveness.

To understand the deterministic factors that cause confusion and conflicts between blockchain and social media in their complementary use for marketing products and services in a South African bank

The study seeks to gain a better understanding of the deterministic factors that cause confusion and conflicts as per the above objective. To achieve this objective, questions were asked like, what are the factors that cause confusion and conflict between the two tools (blockchain and social media)?

Through an in-depth analysis, the study shared these factors and the outcome was the reasons for the confusion and conflict. This is because there, blockchain is not known to most employees and clients. There are also no rules to guide the financial institutions on the use of blockchain and to mitigate this risk, training will be offered to employees who in turn will empower clients so that they can make better decisions on the use of the products.

7.5 Contribution of the research

The study contributes to both business and academic domains from three perspectives, theoretical, methodological, and practical. The contributions are highlighted as follows:

7.5.1 Theoretical contribution

Theoretically, the study contributes to academics and business. On the academic front, it adds to the literature in the areas of social media and blockchain, from marketing and banking perspectives. Also, there is limited literature in these areas from the developing countries and African viewpoints. An article has already been published in this regard that adds to existing knowledge in traditional marketing, blockchain, social media, and South African banking institutions. Another significant contribution is, while there is little literature about social media and blockchain, the complementarity of both for marketing literature does not seem to be in existence.

The contribution to the business; the main theoretical contribution is the development of the model for the complementary use of social media and blockchain for marketing by South African Banking institutions. It is theoretical as the model has not been tested as yet.

7.5.2 Methodological contribution

The use of AT to underpin the study is the primary methodological contribution of the study. Although the theory has been used many times, it does not seem to have been employed to examine the complementarity of social media and blockchain for marketing purposes. Thus, it advances the use of the theory in commerce or management science research.

7.5.3 Practical contribution

The proposed model is one of the main practical contributions of the study. The practical contribution can be viewed from three standpoints. Firstly, the proposed model can be used to guide the development of policies, standards, and principles in a banking institution. Based on the policies, standards, and principles, social media platforms and blockchain can be complementarily deployed for marketing purposes. Thus, the fears concerning stability and security can be addressed. Secondly, in practice, the study reveals the factors that influence the complementary use of both tools, which can be used to develop organisational strategy. Thirdly, an understanding of the factors can be useful to business managers, marketing specialists, and organisational strategists to improve the efficiency and effectiveness of marketing products and services.

7.6 Benefits of the study

The benefits of the study are in two ways; the contribution to the body of knowledge and the domain of social media and blockchain in South African banking institutions, as follows:

7.6.1 Body of knowledge

The study of the complementary use of blockchain and social media for marketing will contribute to the body of knowledge in that it will add to the existing literature. While there is a lot of study done on social media and blockchain, the study of the use of both is not known. The study will bring new ways of doing business in the marketing space and add to the AT literature.

7.6.2 Blockchain and social media in South African banking institutions.

From the researcher's point of view, there are important benefits to South African banking institutions because the use of blockchain and social media for marketing has not been tested. However, the model developed will guide the marketing managers and the bank as a whole on which tools to use for which platforms.

7.7 Limitations of the study

The study identified three limitations of the study as per below:

i. The study is limited to South African banking institutions only, where the two cases were also within South African banks only. The research can only be generalised within the areas of the study.
ii. There was no use of numbers and therefore the outcome of the study is not measurable.
iii. While blockchain is related to the use of technology, the study only focused on the use of social media and blockchain for marketing South African banking products and services.

7.8 Future studies

The study developed a model that can guide the complementary use of blockchain and social media for marketing in South African banks. Based on this model, marketing and sales managers can work together and implement this model to test it as part of providing a better service to the client and reaching most of their clients through social media and blockchain. Further to this study, another theory can be used partly to evaluate the adoption of the model. The Technology Acceptance Model (TAM) can be used to evaluate how users feel about the complementary use of both tools and their adoption.

7.9 Recommendations

The aim and the objectives of the study were addressed through the data analysis and the interpretation of the findings. The following main gaps were identified:

7.9.1 Blockchain awareness

As reflected in the study, financial institutions operate in a competitive environment and their continuity in business is dependent on the revenue they make. For banks to achieve this, they need tools to better serve the new and existing clients while providing convenience to these clients. Blockchain is regarded as the future for marketing that could solve all the security concerns clients and employees have. Blockchain is also cost-effective and saves time as transactions like payments and contracts will be finalised immediately.

While blockchain can do so much for banks in marketing their products and services, only a handful (clients and employees) know about blockchain or even its use. Training is needed from the bank's side to empower and educate their employees on its use. Once the employees are empowered, they will empower clients and build trust on the blockchain, which is currently a challenge.

7.9.2 Lack of governance

Financial institutions are more often governed by rules and regulations to protect the institution and its clients. It can be understood from the findings that while blockchain is not known as such, the biggest challenge is that there are no policies and rules to govern its use. Blockchain technology is designed to provide transparency, security, and decentralisation. However, without governance, this creates concerns and risks to clients and the banks.

1. Regulatory Compliance: Banks are subject to various rules and regulations. Without proper rules governing blockchain, banks are at risk of failing to comply with regulations, which could lead to legal battles and potential shutdowns.
2. Market confidence: The lack of governance could lead to a lack of trust and reputation that could erode trust in blockchain. Banks and clients could lose interest in blockchain and this could affect its adoption and success in the future.

To mitigate the risks, blockchain projects must establish strong governance structures that uphold the values of accountability, transparency, and regulatory compliance to reduce these risks. By creating these rules and making them known to everyone, employees and banks will then be on the same page on blockchain and know what to expect. This would create trust in the process and encourage blockchain usage.

7.10 Summary

The closing and recommendations are presented in this chapter based on the findings identified in Chapter 6. The recommendations are given based on those findings which are a result of the data analysis in Chapter 5. The model developed has not been tested as yet. The use of both blockchain and social media is not known hence the confusion that is created by its use. Lastly, the chapter presented the benefits, future studies, and recommendations of the study.

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APPENDICES

Appendix A: Data Collection questions

Main Question:

How can a model be developed to address the challenges in the complementary use of blockchain and social media for marketing by banks in South Africa?

Sub-Questions

i. What are the factors that influence blockchain use for marketing in South African banks?
ii. What are the criteria for employing social media or blockchain for the marketing of banking products and services by banks in South Africa?
iii. What are the factors that cause confusion and conflicts between blockchain and social media in their complementary use for marketing products and services in South African banking institutions?

Interview with employees participants:
1.1. What are the approaches or tools that you use for sales or marketing services or purposes in the organisation?
1.2. Why do you think this approach/tool is selected for the services?
1.3. How is this approach/tool applied or used for the services that you provide to your clients?
1.4. What are some of the benefits for using this approach/tool?
1.5. In your view, why do you think the approach/tool is able to assist you to achieve those benefits?
1.6. If I may ask, how long have you been using this approach/tool in the organisation?
1.7. What are some of the challenges that you have experienced in using the approach/tool?
1.7.1. Why do you think you experience these challenges? Please share some examples with me?
1.8. What are some of the challenges that you think some of your colleagues have encountered in using the approach/tool?
1.8.1. Why do you think your colleagues encounter those challenges?
1.9. Do you think there is the same understanding and view about the approach/tool that are current used in the organisation?
1.9.1. Why do you think so? Please share some examples with me.
1.10. In your view, how do you think the approach/tool can be enhanced?
1.11. How about social media, do you make use of it for your services?
1.11.1. How is it used?
1.11.2. How do you think your colleagues are using it?
1.12. How about blockchain, do you make use of it for your services?
1.13. If yes, why? If no, why not?
1.14. What impact has the adoption of blockchain had on the customer experience in South African banks?

Interview with customer participants:

1. Bank normally calls its clients for new products and services, have you ever been

contacted regarding any new products/ increase your existing facilities by the bank?
2. If yes, how was your experience?
3. In your opinion, how do you think the bank gets your information and calls you more often for the products that you do not have?
3. What banking platforms do you prefer between digital platforms and face to face platforms?
4. If any, please provide reasons for your preferred platform.
5. Would you prefer that banks keep on calling/engaging you on what is out there in the market that could benefit you?
6. If yes, how would you like to be communicated to?
7. How do you think banks can use social media to market its products?
8. What do you think can be used to help foster more trust and transparency in social media marketing for banks?
9. Have you heard of blockchain technology before?
10. How well do you understand the concept of blockchain and its potential impact on social media marketing in banking institutions?
11. How likely are you to trust a bank that uses blockchain technology in their social media marketing campaigns?
12. Do you think blockchain can improve the security of social media in banking institutions? 13. Do you think blockchain can help to minimize fraudulent activities on social media accounts of banking institutions?
14. Would you be willing to invest in a banking institution that implements blockchain in their social media marketing campaigns?
9. What improvements do you think blockchain can bring to social media marketing for banking institutions in South Africa?
10. How important do you think it is for banking institutions?

Appendix B: Participants Consents

Cape Peninsula
University of Technology

FACULTY OF BUSINESS AND MANAGEMENT SCIENCES

Individual Consent for Research Participation

Title of the study: The influence of blockchain on social media marketing in South African Banking institutions

Name of researcher: Maggy Moche
Contact details: email: Mag.moche@gmail.com Phone: 083 587 7148

Name of supervisor: Prof Tiko Iyamu
Contact details: email: IYAMUT@cput.ac.za Phone: 071 677 0300

Purpose of the Study: Is to develop a model that can guide the complementary use of blockchain and social media for marketing in South African banks.

Participation: My participation will consist essentially of Bank employees from one large bank and one medium to small banks and the end user which will be clients of any banking institutions.

Confidentiality: I have received assurance from the researcher that the information i will share will remain strictly confidential unless noted below. I understand that the contents will be used only for Doctorate thesis or journal and that my confidentiality will be protected using pseudo names which will cater for POPI (Protection of Personal Information) act.

Anonymity will be protected in the following manner. No photos or location of participants will be used while pseudo names will be used to protect the participants.

Conservation of data: The data collected will be kept in a secure manner by digitally recorded interviews which will be encrypted and kept in a password-controlled environment. The data will be shared only with the supervisor. Please note that the original will be kept for audit purposes.

Voluntary Participation: I am under no obligation to participate and if I choose to participate, I can withdraw from the study at any time and/or refuse to answer any questions, without suffering any negative consequences. If I choose to withdraw, all data gathered until the time of withdrawal will destroyed.

Additional consent: I make the following stipulations (please tick as appropriate):

	In thesis	**In research publications**	**Both**	**Neither**
My image may be used:				
My name may be used:				
My exact words may be used:				
Any other (stipulate):				

Acceptance:

I, (print name)_____

agree to participate in the above research study conducted by Magdeline Moche of the Faculty of Business Commerce: Marketing at the Cape Peninsula University of Technology, which research is under the supervision of Prof Tiko Iyamu.

If I have any questions about the study, I may contact the researcher or the supervisor. If I have any questions regarding the ethical conduct of this study, I may contact the secretary of the Faculty Research Ethics Committee at 021 469 1012, or email address : naidoove@cput.ac.za.

Participant's signature: _____
Date: _____

Researcher's signature: _____

Date: _____