ቅድስት ማርያም ዩኒቨርስቲ

St. Mary's University, Ethiopia

The Effect of an ATM Card on the Saving Culture of Customers

A Case Study on the Bank of Abyssinia

By

Ledetu Tekle

Submitted to St. Marry University as requirement for the degree of

Master of Arts in Project Management

July 2021

Addis Ababa, Ethiopia

The Effect of ATM Card on the Saving Culture of Customers:

A Case Study on Bank of Abyssinia

"THESIS SUBMITTED TO ST. MARRY'S UNIVERSITY, SCHOOL OF GRADUATE STUDIES INPARTIAL FULFILLMENT OF THE REQUIRMENTS FOR THE DEGEREE OF MASTER OF PROJECT MANAGMENT"

BY: LEDETU TEKLE

ADVISOR: SALEAMLAK MOLA (PHD)

ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

FACULTY OF BUSINESS

The Effect of ATM Card on the Saving Culture of Customers:

A Case Study on Bank of Abyssinia

By: Ledetu Tekle

APPROVED BY BOARD OF EXAMINERS

_____   _____

Dean, School of Business

_____   _____

Advisor

_____   _____

External Examiner

_____

Muluadam Alemu (Ph.D)   **July 13, 2021**
Internal Examiner   **Signature**   **Date**

DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of_____. All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

_____   _____

Name   Signature

St. Mary's University, Addis Ababa   June, 2021

ENDORSEMENT

This thesis has been submitted to St. Mary's University, School of Graduate Studies for examination with my approval as a university advisor.

Saleamlak Mola (Ph.D.)

Advisor   Signature

St. Mary's University, Addis Ababa   June, 2021

Acknowledgments

First and foremost, I would like to express my deepest gratitude to the almighty GOD & his son Jesus Christ who has been there for me every step of the way. God has given me all the energy when I was tired and all the strength while I was anxious. Many thanks to the Lord. **In God I trust!**

The second gratitude goes to Fiker Fisseha for all the extra support, valuable insights, and appreciation to finalize this thesis. I hope I will be part of your Ph.D. study.

I would also like to thank my parents for their unconditional love, encouragement, and patience for the duration of this thesis. **Family First!**

Last but not least, I would like to express my genuine thanks to my advisor Saleamlak Mola (Ph.D.), for his helpful comments, advice, and contributions. I also would like to thank the Bank of Abyssinia (BOA) staff for sharing with me valuable information and access for the study.
My final thanks also go to all the BOA customers who participated in this survey.

May God bless you all!

ABSTRACT

An ATM card is a payment card that helps facilitate a financial transaction by deducting money directly from a consumer's account to make the payment. Customers who use ATM cards frequently are more likely to spend more money than customers who use their cards rarely. This affects customers saving culture and this is a common problem for ATM card users. The main purpose of this thesis is to explore the effect of an ATM card on customers saving culture. It also assessed whether there is a link between being an active ATM Card user and spending of money. It further explored the contribution banks make towards the saving culture of customers through the facilitation of how ATM Cards are being utilised by the customer. The setting for the research was the Bank of Abyssinia and its selected five branches; the branches are chosen as they are identified as having a significant amount of active ATM Cards users. The study has applied a quantitative approach to address the aforementioned points of research. The finding of the study is that indeed there is a strong relationship between the use of an ATM Card and spending of money. Plus, the result also showed us that an ATM card affects customers saving culture. And banks contribution has a paramount effect on saving culture of customers. Finally, the study recommended Bank of Abyssinia to send an Alert/SMS message for every ATM card transaction, implement immediate deduction of account to make the customer feel the pain of payment, separation of ATM account & saving account is recommened and at last bank of Abyssinia should have to enable customers to choose their withdrawal limit by themselves.

Key Words: ATM card, spending, saving culture and banks contribution.

Contents

LIST OF ABBREVIATIONS AND ACRONYMS

ATM   **Automated Teller Machine**

BOA   **Bank of Abyssinia**

POS   **Point of Sale**

SPSS   **Statistical packaging for Social Science**

LIST OF TABLES

APPENDICES

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Access to cash is an important aspect of the daily functionality of life; in recent years Bank cards have made it so that the customer can get access to their account and obtain cash at any moment by the use of their credit and debit cards. Banks in Ethiopia have implemented both Automated Teller Machines (ATMs) and Points of Sale (POS) system machines in various parts of the country. Most of the machines (ATMs & POSs) are located in branch premises of the bank; however, it is also common to find them in sites like Hotels, supermarkets, Malls, Cinemas, lounges, etc.

An ATM card is a payment card that helps facilitate a financial transaction by deducting money directly from a consumer's account to make the payment (Zhang, *et al*., 2020). ATM cards eliminate the need to carry cash or physical checks by allowing the customer to make purchases and have the money be deducted directly from their savings; they also allow the customer to use an ATM to withdraw cash as and when needed (Maksum, Muda & Azhar, 2021). In addition, they can be used to carrying out a transaction by using a POS system or any other payment gateways whether in a physical shop or via e-commerce.

A savings culture is the act of the consumer developing a habit of saving their money (Costa-Font, Giuliano & Ozcan, 2018). To build a savings culture one needs to first understand that saving is not done because one has enough money but because you are willing to forego your current needs for a greater calling or future goals (Njoki, 2019). Saving culture can be considered as a practice of always keeping some amount of income aside instead of spending it all.

The term savings has been defined as the number of earnings that do not go into consumption (Narang, 2020). Saving is considered an important variable in the theory of economic growth determining both national and individual wellbeing (Ruppert, 2020). A nation's productive capacity depends on a healthy capital formation. Saving constitutes the basis for capital formation, investment, macro-economic stability, and growth of a country (Nga, 2007) (Nwachukwu & Odigie, 2009). Saving is a set amount of money that is not consumed immediately for various reasons such as buying goods and services (Prinsloo, 2000) (Mayama, 2007). It is a huge factor in the growth of a nation due to its ability to take

advantage of capital resources. It has the possibility to positively impact the economy of a country and the residents of that particular nation (De Jongh & Mncayi, 2019).

Most of the time, an ATM card is used when the customer wants to obtain physical cash outside of a traditional bank or the customer would like to use it to directly pay for a particular transaction at the merchant's physical site. On the other hand, the idea of a saving culture demonstrates that whilst the spending of money will eventually happen, it is the act of accumulating capital for the planned consumption of goods and services for spending that will take place in the future.

Several studies such as (Agarwal, Ghosh, *et al*., 2019), (Parker, *et al*., 2011) have shown that people that frequently use debit or credit cards tend to underestimate their past expenses in a given month, whilst overestimating their available funds, and hence spend more. This suggests that frequent use of an ATM card has an impact on the customer's saving culture.

According to Runnemark & Hedman (2015), the willingness to pay is higher for debit cards than it is for cash. The effect is actually sizeable, and it can be noted that the average transactional amounts increase by 22–54% when paying with a debit card (Runnemark & Hedman, 2015). Cash payments make it easier to control spending, and this effect is not solely due to cash-on-hand constraints. This explains why some people prefer cash in comparison with that of ATM cards in order to control their spending. The implication for consumers, with the on-going digitization of payments, is that they lose some control over their spending and affect their culture of saving. It is therefore the intention of this study to understand whether ATM cards contribute towards a decline or an increase in savings.

In this research paper, the researcher gives a prime attention to saving culture of the ATM card users. And this makes the paper very unique in nature since it assesses customers saving behavior. It also adds a paramount value to the bank in this case Bank of Abyssinia to review the banks policy, procedure and strategy of the card sales.

1.2   Background of Company

The Bank of Abyssinia is a private Ethiopian banking institution founded in 1996 in accordance with the 1960 Ethiopian Commercial Code and the Licensing and Supervision of Banking Business Proclamation No. 84/1994 by 131 shareholders (BOA, 2020). When the Bank officially commenced its operation, the total authorized and paid-up capitals are Birr 50 million and Birr 17.8 million, respectively (BOA, 2020). By 2020 the Bank's subscribed

and total expense has reached Birr 4.23 Billion and Birr 4.59 Billion, respectively; while the number of shareholders stood at more than 2,000. During the fiscal year of 2019/20, the total workforce of the Bank reached 6700. The Bank has continued to expand its branch networks and has opened more than 503 branches (BOA, 2020).

For the past five years, BOA has been aggressively implementing digital banking solutions and products as part of its service offering. The Bank has now installed more than 600 ATMs across various parts of the country and has reached more than 300 Point of Sale machines (BOA, 2020). To go along with its digital service of the BOA, the bank has now launched a new payment gateway service (E-commerce).

The data found in (BOA, 2020) demonstrates that BOA increased its number of ATMs from 50, in 2015 to 633, end of 2020, and the bank's strategic goals as demonstrated in the annually published reports show that there are plans to continue increasing digital access to its customers (BOA, 2020); this shows that there is a high demand for ATM services from its customers which needs to continue to be met.

1.3   Statement of Problem

Customers who use an ATM cards frequently are more likely to spend more money than customers who use their cards rarely. (Lazim, Sulaiman, *et al*., 2020) This is mainly due to the reason that an ATM card means increased access to cash anywhere, at any time as well as the availability of a digital payment gateway – meaning it is easier to make a payment for a transaction; often time it leads to unplanned purchases and spending (Sabrina, & Kumar, 2020). The implication of increased access is that there it has a great impact on the saving culture of customers. It is also clear that saving culture is directly related to well-planned cash management (Yaqub, Bello, *et al*., 2013). The long-term effect is that as the saving culture of customers becomes tedious and the amount decreases, it adversely affects the banks as it impact their operating capital and as a result the wider economy at macro level (Agarwal, Qian, *et al*., 2020).

From the observation carried out (Setiawan, Effendi, *et al*., 2020) the researcher also understand that there are a lot of cardholders that said an ATM card has affected their habit of saving culture negatively. Due to this, some of them even permanently quit accessing their ATM cards. This also has its own impact on the card as well as the digital banking industry.

As far as the researcher is concerned, there is limited research on this topic which primarily focuses on the saving culture of ATM card user. Rather, most of the studies emphasize the overspending of cash having the fact of digital payment availability. For instance, Agarwal, Ghosh, *et al*. (2019), identified in their study that consumers can often choose to pay a small receipt with cash and switch to digital payments for a larger receipt which clearly shows the impact of digital payment in cash spending. They also claimed that Cash is a more salient payment method than digital alternatives. When consumers move from cash towards digital payments, they might overspend due to the passive salience of paying for purchases.

Other studies such as Lapavistas and Dos Santos (2008) have shown that there is a huge decline in deposits made into bank accounts after the break-through of the digital payment system. This research supports the idea that indeed technological developments such as ATM cards have made it easy for the customer to easily access their money and therefore influencing a decline in saving deposits.

In addition to the aforementioned studies, Soman (2003), as well as the study by Raghubir & Srivastava (2008), have shown that cash payment is perceived to be less favourable and, in some ways, creates anxiety for the customer due to the act of physically parting ways with their money. The studies highlight that there is high comfort when it comes to using an ATM card compared to cash because it is fast and there is no physical exchange of money involved.

This implies that an ATM card payment has impacted the saving culture of customers as they have become less committed to their saving habits. Plus, it also shows us that accessibility & availability of card banking products like ATM, POS and e-commerce, are making customer to not keep their saving promise. In another word, the above statements lead us that an ATM card users are more exposed for spending which align with poor saving practice.

The researcher also observed that there is a contradictory finding form researches to researches to mention some of them, the study finding by Parker (2011) and Soman (2003) has an opposed result. Plus, most of the studies are experimental which took insufficient sample size. Rather, on this research paper, the researcher took a much more sample size to get a better finding or outputs.

Moreover, the existing researches still lacks the concentration of ATM cards and their impact on the saving culture of customers, especially in the context of developing countries such as Ethiopia. It is possible that these countries have only recently started utilizing this development in banking technology; and as such research should be done to reflect this.

1.4   Research Questions

The major questions guiding this study are listed below:

1. What is the relationship between ATM cards and spending of money?
2. Is there a relationship between ATM card and poor culture of saving?
3. What can Bank of Abyssinia offer to minimize spending and improve the saving culture of ATM card users?

1.5   Objective of the Study

1.5.1   General Objective

The general objective of this research is exploring the effect of ATM Card on the Saving Culture of Customers.

1.5.2   Specific Objectives

Some of the specific objectives are listed below:

1. To assess the relationship between ATM card and spending of money.
2. To explore if there is an association between usage of ATM card and saving culture.
3. To identify ways in which Bank of Abyssinia could better serve their customers to manage their overspending and encourage saving;

1.6   Significance of Study

The research allows for a clearer understanding of the behaviour of customers who actively use their ATM cards and the attitude demonstrated towards saving. This will be by looking at the final fining of the research and mechanisms that could better improve the card holder's attitude towards saving. In addition, the result of this study will be utilized to alert the card users by providing the effects of ATM cards on customers saving culture.

The study also gives an insight to the Bank of Abyssinia by allowing them to dig deeper into the various strategies the bank could apply to increase the deposit of customers into saving accounts.

Moreover, this study add its own contribution to the literature and studies that have been done so far by analysing the relationship between ATM cards and the saving culture of customers. In addition, this study will be a great input for future related researches that can eventually solve an important problem in related topics. The results of this study will be utilized to develop an improved approach from the Bank of Abyssinia and also other Banks in Ethiopia.

The significance of this study is also paramount to providing valuable insight for customers, the Bank of Abyssinia, and also the overall digital banking industry. The study help the Bank of Abyssinia to revise its strategy on its digital channel products and also craft a better method for expanding card usage by looking at the findings of the study in detail.

1.7   Scope of the Study

1.7.1   Concept

The study only focused on card banking products and services, by analysing card-related payments and the impact this imparts on the customers' saving culture. It is not concerned with any other digital banking products like Mobile banking, Internet banking, etc. Plus, it gives major emphasis on the saving culture of customers who actively uses their ATM card.

1.7.2   Methodology

This research paper follows a quantitative research approach to help answer the research question by distributing questionaries' among the Bank of Abyssinia active card users. It involves a preliminary descriptive examination of the perceptions and experiences of ATM card users on their culture of saving. It is limited to between 150 to 170 customers who actively use their cards because of the time constraints involved in subsequent data analysis.

1.7.3   Geographical Limitation

The study focus on the Bank of Abyssinia and the effect an ATM card has on the saving culture of customers particularly at BOA Branches giving service in Addis Ababa in the

capital city of Ethiopia, these branches are selected by the number of active ATM cardholders. This help the researcher to get a clear understanding of the study is being done.

1.8   Limitation of the Study

The primary focus of this research is to assess the effect of ATM CARD on the saving culture of customers; in the case of the Bank of Abyssinia. Some of the limitations that could be experienced in this research are listed below:

- Information collected from ATM card users could vary because of the variation of perception.
- Data's are collected from selected branches located in Addis Ababa; the results might not generalize to the whole Bank of Abyssinia ATM card users.
- A well-organized data & information might not be available at the Bank of Abyssinia.
- Shortage of pieces of literature, articles, and book & published sources.
- The impact of covid-19 might be a challenge in distributing & collecting questionaries' as they might be a great contamination risk.

1.9   Organization of the Study

This research was organized into five chapters. The first chapter introduce the research topic and the concept behind it. The second chapter gives insight and reviews the various existing works of literature that are related to the topic. Chapter three give details of the research methodology that are applied in the research. Chapter four is the collection of data as well as carrying out an analysis on data and the interpretation as well as the insight that arises from it. The final chapter that is chapter five is a conclusion, recommendation and a summary of the final findings.

CHAPTER TWO

LITERATURE REVIEW

To recap, the key objectives of this paper are to identify if there is a relationship between ATM Card and spending, to identify in which way the customers' saving culture is affected due to ATM cards and at last, identifying what Bank of Abyssinia can do to minimize spending and improve the saving culture of ATM card users.

The research is not going beyond the concerns of the objectives identified above. It is exploring the link between ATM cards and the saving culture of its users, specifically in the context of Ethiopia.

2.1 Theoretical Literature

2.2.1 ATM Card Payment and Its relationship with spending

Overspending is the act of participating in a monetary outgoing transaction that will result in the consumer spending more money than he/she can afford (Sui, Sun, & Geyfman, 2020). The number of pieces of literature that have researched deeper into the connection of ATM cards and their impact on the consumer's levels of spending is very few.

The literature by Agarwal *et al*., (2019) states that one of the primary reasons why digital payments play an active role in overspending is because the user finds that money is not visible when an ATM card is being used for purchase. Moreover, according to his study an ATM card user is most likely to go for an extended period of time without checking and accounting for how much they have spent. This is an indication that the user has become less conscious of the amount of spending or over-spending and therefore is complacent to saving as a result.

Most works of literature such as (Michael & Becker, 1973), (Carter, 2014), and (Zellermayer, 1996) assume the standard economic theory of consumer behaviour. This is the idea that if there is more worry on the decision process of actually spending money, then the buyer will give more thought to the validity of the purchase and if it's worth it in comparison with the amount of money he/she has. This is a demonstration of the role of the decision point plays to influence the consumer to think about their expenses; thus, explaining that ATM cards will become triggers as the ease of use contributes towards removing the decision point from the buying process.

Another essential point is that the customer tends to underestimate the amount they have spent and also could not recall how much money they have left in their account (Sharma A, 2017). Decision-making is important because as Dutta, *et al*. (2003) highlight, that process is more emotionally hurtful if the consumer is having to part ways with their money physically. A similar statement is also expressed in Stavins (2017) in which it states that Cash payment is perceived to be painful because the consumer has to physically endure the act of parting with their hard-earned money. However, card payments are less emotionally painful to make because no cash exchanges hands (Zellermayer, 1996) (Boden *et al*., 2020), the act of paying for a purchase is a shorter process, meaning there is less time to deliberate on the decisions (Prelec & LoeInstein, 1998). In the study by Prelec and LoeInstein (1998), it is explained that ATM cards allow the consumer to distance from the pain of payment and enjoy the instant satisfaction of shopping with an ATM card; this is because the transparency of the financial amount is much less when compared with cash payments. Similarly, Soman (2001) also reiterates that if consumers do not see physical money going away, then they feel less pain, hence the comfort of cards leading to overspending.

2.2.2 How ATM Cards Affect Saving Culture?

Some consumers utilize ATM cards by withdrawing cash for the day or week or a certain span of time to spend on their purchasing activities (Mella, 1997). This is so that they have a mechanism of controlling their outgoings and have not spent more than they have to and affect their savings. However, it is important to note that ATM cards and the overall digitization of payments create access to their spending history as every use of the card is tracked (Orttung *et al*., 2009). This allows the consumer to examine their outgoings and make the necessary adjustments to their spending (Hernandez, R. 2010). Equally important to note is that this ability that the consumer has to track its spending happens after the money actually being spent; however, the cash payment methodology allows for an instant audit of spending: the accuracy of this is a matter for discussion, but it is far more accurate than that of what the customer assumes to have spent in comparison with card payments (Agarwal *et al*., 2019).

2.2.3   What Can Bank of Abyssinia Contribute?

Recently, banks have shown great improvements in the budget control mechanisms of digital payments. Jonker (2016) in his study suggested that for ATM card transactions, consumers would be preferred to set a predefined budget to minimize over-spending on a

different point of sales. Furthermore, Jonker (2016) also added that a continuous reminder and alert mechanism would protect consumers from overspending.

It must be noted that in the past five to ten years the increase in the level of internet access and the number of mobile users has meant that the Bank of Abyssinia can offer the consumer increased insight into their spending activities as mobile banking is now available (Fisher & Guha 2015). However, equally important to note is that that there is still much of the world that does not fully benefit from internet technologies. So, there is a literature gap that takes into account a rapidly developing ATM card culture without the visibility of internet banking to keep constant track of spending.

2.2 Empirical Literature

The empirical literature by Bertaut *et al*. (2008) Klee (2008), as well as Borzekowski *et al*. (2008), argues that the desire for budget and spending control drives consumers away from ATM cards. To further analyse their findings the researcher has observed relevant empirical literature in the scope of the research question at hand.

2.3.1 Relationship Between ATM Card and Overspending

The study by Wiggins (2008) identifies that ATM cards have made access to money and the spending of money so convenient that it has become easy to overspend. The issue is complex and is not straightforward; the study by Liu & Dewitte (2021) identified that there are several reasons for which this is a complicated issue, primarily the psychological elements that invite further investigation into the topic, for instance through the scope of the pain of paying. However, there are limited numbers of experimental researches that explore the topic in such depth.

In the study carried out by Runnermark & Xiao (2015), in which they studied if consumers are more likely to pay more via cash or cards, the study has investigated that the amount paid increases by 22-54% when paying by card. It is indicative of how the mode of payment is a primary factor in how much a consumer spends; the further implication being a multiplier impact on the amount of money they have left to save. Similarly, Ovetta (2008) also suggests that the lack of physical transparency of card payments makes it difficult to control spending and therefore saving; thus, explaining why consumers prefer to have cash payments as a way of tracking their outgoings to avoid over-spending impacting their savings efforts.

2.3.2   Does ATM card affect customer saving habits?

Various works of literature demonstrate that consumers are constantly having to address overspending and trying to restrain themselves and thus for having an impact on the type of payment method they choose to utilize. Studies such as Bertaut *et al.* (2008) as well as Fusaro (2008) argue that the essential need for saving and budgeting is what is driving away consumers from card payment methodologies. These are empirical studies that are into depth about the relationship between card instruments and savings. The literature by Ameriks *et al.* (2004) as well as Raghubir & Srivastava, (2008), whilst being theoretical also echoes the same message that there is a direct link of influence between the need to save and the choice of the payment instrument of the consumer. It must be noted however that whilst these the aforementioned pieces of literature do indeed identify a link, they have also highlighted that there should be more study conducted because the causal link is not explicitly evident but implied. A conflict also arises in the philosophy, as one of the means of saving money is to keep track of spending to the smallest detail; using a card allows for all spend to be tracked, and the studies by Arango (2011) and Schu & Stavins (2011) demonstrate this contradiction.

According to Runnemark & Hedman (2015), the willingness to pay is higher for debit cards than it is for cash. The effect is actually sizeable, and it can be noted that the average transactional amounts increase by 22–54% when paying with a debit card (Runnemark & Hedman, 2015). From the observation carried out in (Setiawan, Effendi, *et al.*, 2020) I can also understand that there are a lot of cardholders that said that an ATM card has affected their habit of saving negatively. Due to this, some of them even permanently quit accessing their ATM card. This also has its own impact on the card banking industry.

In an Ethiopian context, Worarko (2018) studied the impact of an ATM service on customers' saving rate, and he found that more than 54% of customers confirmed that an ATM service affected their saving rate. On the contrary, 42% of the respondents answered that ATM card service does not have any influence on their saving rate, rather they found the card more time-saving and reliable. These respondents are explicitly interested in using ATM card services because they can access the required amount of money they need when they need it from an ATM card-enabled machine. The research by Worarko (2018) has a gap that falls short in fully explaining the causal link between ATM cards and saving culture. This type of research gap is what the researcher of this paper trying to address

through the collection of data and customers' feedback to recommend what Bank of Abyssinia can offer to minimize overspending or improve ATM card users saving culture.

2.3.3   What Can Bank of Abyssinia Contribute?

There are several studies and innovations which are aimed at providing consumers with immediate insight into the amount of money they have left to spend when making ATM card payments. These encourage consumers to use electronic payment instruments more frequently instead of using cash. Banks, payment service providers, and telecom companies have recently responded to this surge in need by introducing several innovations (Jonker, 2016). For instance, banks provide apps for smartphones that enable consumers to check their bank balances whenever they want. In addition, consumers can now use their smartphones to make point-of-sale payments from a prepaid balance (Barnes & Corbitt, 2003). This keeps them from spending more than the amount that is left to them, similarly to cash in their wallets does (Olivia, 1997).

2.3 Conceptual Literature

The elementary step in this literature review is to address the basic definitions that the research question brings forth.

2.1.1 ATM Cards

ATM or Debit cards are first introduced to consumers in the 1980s to be utilized via Automated Teller Machine (ATM) cards. These cards are made to be accessible 24/7, which enabled increased convenience for customers. An "ATM card" is a plastic payment card that resembles a credit card but it is linked to the card owner's deposit account at a bank (Parker, *et al*., 2011). Parker (2011) also added that the customer is also not limited to one financial institution only, this is as banks have agreed to form networks that allow the customer to withdraw cash from any ATM; further increasing the convenience to customers.

ATM machines and merchant Point of Sale (POS) systems operate by way of communicating the transaction request electronically to the concerned authorizing entity: such as a bank or financial institution that is linked to the particular card. The entity then processes the authorization request to ensure that it is indeed a valid request by safeguarding against transactions via an expired card, stolen card as well as checking the availability of sufficient funds to cover the amount required for the transaction. Moreover, the security process of validating the pin code entered for the card also takes place. The authorizing

entity then transmits the approval or the denial for the transaction request back to the requesting network to send the message to the POS or ATM (Parker, *et al*., 2011).

ATM cards are authorized for use by Bank of Abyssinia such as banks and micro-financing organizations. Merchants that allow the use of POS systems in their organization need to be registered with the authorizing financial institution to be able to accept and process sales by use of ATM cards (Mthethwa, Barbour, 2016).

The Commercial Bank of Ethiopia (CBE), introduced an Automated Teller Machine (ATM) card service for local users in 2001 with its fleet of eight ATMs located in Addis Ababa, Ethiopia. CBE also has had a Visa Membership since Nov 14, 2005 (Fekadu, 2009). Although, it was Dashen Bank that issued the first visa card in 2005 (Worku 2009). Recently, the Bank of Abyssinia (BOA) became the first Ethiopian Bank to implement a payment gateway (BOA 2020), which is transaction transfer software, with Visa CyberSource. This is expected to support e-commerce businesses by allowing them to process online payments. The new service helps upcoming e-commerce businesses to accept payments through ATM cards, thereby expanding e-commerce acceptance in Ethiopia. It may also increase the way in which customers are able to utilize their bank accounts by now participating in e-commerce.

2.1.2   Cash and Deposits

Scheft (2006) identifies cash as a paper currency and metallic coins that are an actual physical transaction or payment means, which allow the purchase of goods and services. Scheft also explained the use of cash helps consumers to complete the purchase by handing over the cash to the merchant.

Deposit is referred to as the wealth that the consumer has which equates to a certain monetary value, either on the financial books of banks or funds, and can be converted into cash as and when needed (Irner, 2014). The consumer can make a purchase by use of cheques or ATM cards; this mechanism enables the buyer to still have the ability to use the funds from the deposit account as needed without the need for a physical form of cash to be exchanged; which is when a card payment instrument is useful (CroIll, *et al* 2009).

2.1.3   Saving Culture

The definition for the term 'saving' differs depending on the literature that is being observed, it is expansive and broad-based (Furnham, 1985). This research has decided to highlight the meanings that fit into an economic context and give an insight for the purpose of comparing and contrasting the existing meanings and definitions; it also refers to the psychological meaning of saving. In the economic context, saving is a residual income that remains after spending over time has been deducted (Lunt, & Livingstone, 1991). When looking at saving in the latter context of psychology, then it is defined as the act of withholding money for the current period for the purpose of using that disposable income at a future date (Wärneryd, 1989).

2.1.4   The Decision to Save

The study by Katona (1975) takes on the psychological approach to understanding the customers' saving culture and highlights that the average saver should be judged through two lenses: discretionary and residual saving. This is because once key habits are understood it will allow for the identification of the main influencing factor. Katona (1975) has presented three key habits for framing his theory:

    I.   Contractual Saving: in which instalment payments are made routinely to contribute towards a large purchase such as property through the attainment of a mortgage, thus, having to make obligatory savings.

    II.   Discretionary/optional saving: where the decision to save is deliberate and intentional.

    III.   Residual savings: in which the saving is occurring due to the person not spending all of their income, so saving by default.

This research paper explore the effects that ATM cards have on discretionary and residual savings as both streams are not binding to a particular saving mechanism theory.

There is also an element of self-control that must be noted when exploring savings culture and ATM cards; self-control is characterized by the will one has for self-discipline as well as the delaying of enjoyment (Baumeister, 2002). It has been empirically proven by Esenvalde (2011) that self-control is directly correlated with the savings behaviour of an individual and claims that it is a valid concept of explaining savings behaviour. The research

involved the collection of data from 272 individuals, and when the data was analysed, it showed that there was indeed a positive correlation between self-control and savings. Similarly, Sharma (2017), repeats the study of Esenvalde (2011) by demonstrating that indeed there is a link between spending and self-control as is shown not knowing how much to spend is actually the symptom of lack of self-control.

2.1.5   Savings in Sub-Sharan Africa

During the 1970s and 1980s, many countries in the African continent are going through short-term adjustments macro economically as well as the formation and passing of policies; consequently, the idea of saving was not of prime focus and was essentially neglected (Suher & Hoyer, 2020). The identification of the low rate of savings in sub-Saharan countries was deemed as the primary reason for the slow economic growth of the region (Aryeetey and Udry, 1999) (Schmidt-Hebbel *et al*., 1996). It was then in the 1990s when key policies began to shift to allow savings the economy seemed to have improved; this relation and sentiment are highlighted again in the study of Dovi (2008) as well in MIga (1997). These Researches have contributed towards peaking interests to understand what influences the saving culture in these countries.

2.4 Knowledge gap into Understanding ATM Cards and Saving

The study by Schreft (2006) gives credibility as to why this research paper is needed and why it fills the existing information gap and provide an insight into the effects that ATM cards have on consumer savings and within the Ethiopian context. In the same research, Schreft (2006) writes that based on the study conducted, that it was discovered Macroeconomists have not put their full focus on the impact that payment methods have on the decision-making process and how that translates into savings. The main focus on the majority of the studies seems far away from the aggregated impacts of the flow of payment decisions. The study also makes the point that the method of payment and how that affects savings as well as wider macroeconomic implications has not been studied enough. Whilst Schreft (2006), makes valid points, it lacks a particular understanding of the payment methods that exist and their impacts. Rather this research paper fill the gap by specifically studying ATM cards and their effect on customer consumption and saving.

In the paper by Incekara-Hafalir & LoeInstein (2009) in which the study analysed how ATM cards impact spending, it states that whilst an increase was observed, it was not significant enough. However, the context of the study is limiting as the analysis was done by

observing the daily lunchtime purchases of users in the setting of a developed world – the United States of America. There needs to be a case within the African context.

Parker (1999) has also highlighted that if the ATM card accumulates over-spending, the consumer will have income taken to cover the money the consumer. This further affecting the level of saving that the consumer can afford.

In this research paper, the researcher wants to give a major emphasis on Customers' daily expenses, just to make sure that they are not able to spend more than they can afford. However, with the widespread use of ATM cards, as well as the almost universal access to digital banking technologies, consumers can now also use their payment cards to examine their expenditures and to make sure they do not outspend their budget.

CHAPTER THREE

RESEARCH DESIGN AND METHDOLOGY

3.1 Introduction

The primary goal of this study is to test the research questions that relate to the effect of an ATM card on the saving culture of customers and to tackle the major statement of the problem which has been stated in Chapter I. Separate instruments to measure variables were utilized to this end. In this chapter, the methodology applied to test the research questions has been presented. The chapter has been organized into four sections: (3.2) Research approach (3.3) Population and sample design, (3.4) data collection & instrumentation (3.5) data analysis, and (3.6) Date validity & reliability.

3.2 Research Approach

The research problem along with the philosophy of research methodology would guide the choice of the appropriate research method. Susman and Evered (1978). The selection of the particular research method and data collection comes from the basis of knowledge claims such as positivist, social constructivism, advocacy or participatory and pragmatic pathways. O'Gorman & MacIntosh (2015). The analysis of the research data collected is then can be grouped into qualitative, quantitative, and mixed research approaches (Basias, 2018). The approaches are explained in the below sections:

3.2.1 Quantitative Approach

According to Goertzen (2017), a quantitative study is defined as a research process that deals with numbers and statistics which are collected to help systematically investigate a phenomenon and analyse the data that has been collected. Information or data is collected from existing pre-determined groups of subjects by using sampling methods and can be done through questionnaires and other survey methods like online surveys and polls. All of which gives numerical responses and are analysed through a mathematical lens (Apuke, 2017).

3.2.2   Qualitative Approach

A Qualitative approach is one in which the researcher often makes knowledge claims based primarily on the multiple meanings of individual experiences, socially and historically

constructed meanings, participation in issues, collaboration, or change-oriented with an intent of developing a theory or pattern. Qualitative research methodology is based on constructivist or advocacy and at times includes both perspectives (Leppink, 2017). Qualitative research is not intended to test a predetermined theory or hypothesis; instead, it is exploratory in nature and through induction, it builds theories or hypotheses (Bansal, Smith, & Vaara, 2018). The strength of qualitative research is what helps to generate a theory, however, it is often criticized for bias because of the researcher's interference (Mohajan, 2018).

3.2.3 Mixed Approach

According to Johnson and Onwuegbuzie (2018), mixed methods research is "the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts, or language into a single study". The mixed-methods approach, which is believed to mitigate the biases of quantitative and qualitative approaches, is one in which a researcher tends to base knowledge claims on pragmatic grounds employing strategies of inquiry that involve collecting both quantitative and qualitative data either concurrently or sequentially to best understand research problems (Mayiams & Moser, 2019).

3.2.4 Research Design Applied

Having taken the aforementioned approaches in mind, this research paper has applied a quantitative research method to address the research questions at hand as well as the major and specific objectives of the study. The goal of quantitative description is not a deep understanding of personal or individual perspectives of a phenomenon, but a more general understanding of patterns across a population of interest (Alase, 2017). In this case, the researcher distributes a questionnaire to collect data which are an input for data analysis.

When applying a quantitative method to research there are various research designs that can be taken, this research has decided to follow descriptive, explanatory and correlational research designs to conduct the study. Descriptive research design emphasizes determining the frequency with which something occurs at that specific moment (Alase, 2017). Descriptive research is designed to answer descriptive questions like: how many? What is the incidence of x? In addition, Descriptive surveys are used to develop a snapshot of particular phenomena of interest as it involves large samples (Störrle, H., 2017).

Whereas, correlational research design studies the extent to which two variables correlate or the relationship between two or more variables (Apouke, 2017). In this type of research design, the degree to which the variables are related is important as well as the direction of the relationship. Thus, looking at the research questions of this study descriptive, explanatory and correlational research designs are more suitable to examine the effect of ATM cards on customers' saving culture.

3.3   Population and Sample Design

3.3.1   Population

Birch-Chapman, *et al*., (2017) defines population as the entire group of individuals, events, or objects having common observable characteristics. The target population of this study was all the bank of Abyssinia active cardholders. As Husadha *et al*., (2019) clearly defined active card users are users which pass transactions using their debit/credit card at least for more than one transaction since receiving their ATM card. According to the BOA management information data, the target population size of the active card users is stated at 280,000.

3.3.2 Sampling Design

Out of the 590 branches under the Bank of Abyssinia 280 number of branches are based in Addis Ababa. With considerations given to the relative size, year of operation of the branches, the number of Active ATM card users, cost and availability of time, the researcher concentrated on five branches from Addis Ababa using purposive sampling method, namely: Ras Branch, Bole Branch, Lafto Branch, Arada Branch, and Tele Medhanialem branch. These branches are believed to be very large compared to the other BOA branches. Plus, there are a lot of active ATM card users on their ATMs as well as POS machines according to the MIS data that has been provided by the bank.

Based on the recommendation of (Eihgie, 2006); to make a more specific study, from all ATM Cardholders of the branches only active users were purposively selected. As they are believed to be regular customers and supposed to better understand the uses of an ATM card. Hence, the target population in this study was active card users who are frequently using their BOA ATM card.

In order to make generalizations with confidence about the construct under investigation, the appropriate sample size has to be considered. In this regard, the researcher used Convenience sampling technique.

Convenience sampling technique defines a process of data collection from population that is close at hand and easily accessible to researcher (J.F. Hair, 2003).This is done with the help of each selected branch managers. The plan was to select 50 customers from each 5 branches which give us a total of 250 active ATM card users.

And the required sample size is calculated using the below formula by (Bartlett *et al*., 2001).formula;

$$n = \frac{N}{1 + N(e)^2}$$

N= Population of study=250

E=degree of error expected=0.05

n= sample size

Which give us a calculation of

$$n= 250/1+250(0.05)2$$

$$=143$$

This number tells us that a sample size of 143 and above is sufficient to present good concise research findings when the overall total population contains a large number of units. The questionnaire has been distributed to all five BOA branches considering their number of active cardholders.

3.4   Data Collection & instrument

3.4.1   Primary Data Collection Methods

The researcher has used a primary data collection method in the study. The primary data was collected by the use of structured questionnaires; the researcher used a closed question format to collect precise data. A simple random technique was used to avoid bias when

collecting data from the sample population. The prerequisite for a random sample is that each and every item of the population has to be identified.

The researcher distributed the questionnaires to the target respondents at selected five BOA branches, which had a lot of active card-holders, and then collect them at a later agreed date. The respondents' reply was not influenced by the researcher and the answer they gave is of their own free will. This was one of the ways to avoid biases and in particular the interviewer bias. The data collected using the questionnaires were then tested for completeness.

According to Lietz (2010), structured questioners are an important method for collecting primary data, and that it further allows the researcher to be well focused on the specific research topic. The questionnaire was used because the researcher considered it to be more appropriate as respondents could answer at their convenience. The questionnaire was developed by the researcher based on the research objectives and benchmarking different literatures like Parker (2011), (Worku 2009), Agarwal *et al*., (2019), Soman (2001)(2003). The questionnaire began with an introductory statement, which specified the purpose of the research as purely academic. Respondents were encouraged to be objective in their responses since they are assured of confidentiality.

To determine the probable usefulness of the questionnaire and whether a further revision is needed prior to conducting the survey. The researcher circulated the prototype questionnaire for an academic expert for revision & modification. In addition, the pilot study was conducted to ensure the validity, sequence, and relevance of the questionnaire to this study.

As stated above, five purposely sampled Bank of Abyssinia branches are included in the survey. The target respondents are ATM cardholders who are using their card for various purposes. A questionnaire was distributed to 170 active ATM card users in 5 different BOA branches. The respondents have been chosen as they are deemed to be well knowledgeable in accessing their cards and could provide valuable inputs for the study at hand. These customers have been wisely selected by the branch managers by considering their habits of using card banking products as well as the relationship with the bank.

The survey is to be used through distributing self-administered questionnaires. A random sampling technique is employed to select respondents from each of the five branches. Questions are presented in the form of affirmative statements, which related to the relationship between ATM cards on over-spending and to identify their intention on the

challenge and opportunities for saving culture and to identify ways in which Bank of Abyssinia tackle overspending as well as maximize saving culture. In such a way, it enables the measurement of the respondent's opinions as genuine as possible.

The respondents were asked to indicate their level of agreement on a five-point Likert scale with the following ratings. Strongly agree (SA; or 5), agree (A; or 4), neutral (N; or 3), disagree (DA; or 2), and strongly disagree (SD; or 1). The numbers are indicated in the questionnaires to provide a feel of ordinal scale measurement and to generate data suitable for quantitative analysis. The questionnaire was a close-ended questionnaire to elicit guided responses and for easy analysis. To obtain additional information, the respondents are requested to provide open-ended responses if they have opinions that they feel the researcher would find useful.

3.4.2 Secondary Data Collection Methods

Secondary data is second-hand data that is readily available from other sources (Hox & Boeije, 2005). The researcher of this paper has decided to utilize secondary data because of the advantage it presents such as being less expensive and at the same time being easily and readily available. Through the literature review in chapter 2, the researcher has applied an appraisal and analysis of the findings. Data sources such as journals, books, and figures from existing pieces of literature have been utilized in the statement of the problem and background of the study as well as the aforementioned review of the literature. In addition to the above method, the researcher has also studied BOA Management Information System (MIS) data to collect some important numerical data such as the number of active cardholders, trends of customer's transactional analysis before & after acquiring of ATM cards.

For data analysis, SPSS (statistical package for social science) version 20 software was used to code all the required variables. Accordingly, the questionnaire items are coded and the data imported to the SPSS tool. To summarize the collected data Descriptive statistics methods such as frequency distribution, mean and median, and table's representation methods are used. For examining relationship, association, and generalization correlation analysis are used depending on the data type and SPSS association rule.

3.5   Data Reliability and Validity

3.5.1   Validity

Validity refers to the extent to which a particular test measures what the research actually wishes to measure. In order to improve the validity of the questionnaire, it is necessary that the questionnaire is reviewed and modified through experts (Hopkins, 2017). The questionnaire of this study has been developed based on reviewing research literatures and then is reviewed and modified by experts for improving its validity.

3.5.2   Reliability

Reliability refers to the consistency of measurement; it is frequently assessed by using the test-retest reliability method (Mohajan, 2017). Test-retest reliability is the degree to which scores on the same instrument are consistent over time. Reliability is increased by including many similar items on a measurement scale. It was enhanced through a pilot study that was done on 5 random respondents to ensure the data collected was reliable. It was edited for any mistakes in the question then the final questionnaire was prepared to use to collect data for analysis.

3.5.3   Ethical consideration

The researcher used the data from customers which has been collected through questionnaire; permission was obtained from the customers first. To maintain the confidentiality of the information provided by the respondents, the respondents was instructed not to write their names on the questionnaire and assured of that the responses was used only for academic purpose and kept confidential. Brief description of the central objectives, purpose of the study was given to respondents to participate in the study and provide pertinent information about the company under study. Finally, respondents were included in the study based on their free will.

CHAPTER FOUR

DATA PROCESSING, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter analyses and presents the data that was collected for the purpose of studying the effects of an ATM card on customers' saving culture. The analysis has been conducted through descriptive, explanatory and correlation methods. The descriptive analysis focuses on the detailed explanation of each statement from the questionnaire. All questions are briefly described by breaking down the participant responses using different statistical description methods. The data analysis was undertaken by utilizing the computer statistics package known as SPSS version 20.

4.2 Descriptive Statistics

Descriptive statistics is the term given to the analysis of data that helps to describe, show or summarize data in a meaningful way (Amrhein, Trafimow & Greenland, 2019). Descriptive statistics are very important because if data is simply presented as it is then that data would be hard to visualize and fully grasp what it is trying to show; especially in cases in which the amount of data is a lot (Healy, 2018). Descriptive statistics, therefore, enable researchers to demonstrate findings in a meaningful way and allow for a simpler interpretation of the data (Fritz & Morris, 2012).

All respondents who participated in this study have an ATM card and are active users at the Bank of Abyssinia Ras, Arada, Bole, Lafto, and Telemedhanalem Branches. A questionnaire of 170 was distributed among active card users of the bank, out of this 150 people responded to the questionnaire, which is 88.23% of the total amount distributed.

4.3 General Characteristics of Respondents

Part I and Part II of the survey questionnaires are designed to identify the customer's demographic characteristics and customer experience of active ATM card users at the Bank of Abyssinia. The Results of the demographic variables of the respondents are presented in the below tables.

The demographic statistics of the research are given in the table below (Table 1). Out of the total population of respondents, 40.0% are female and 60.0% are male. Hence the majority of the respondents are male. This shows that most of the participants were male.

Table1: Number of respondents by gender

Gender		
	Frequency	Percent
Male	90	60
Female	60	40
Total	150	100

Source: Researcher's Own Questionnaire Survey, 2021

The table below (Table 2) shows the respondents' age proportion in four age categories. The majority of customers are between the ages of 23-30 which consists about 60.7% of the population of the Study and following this the second prominent age group is between 31-40, which is 21.3% of the population and the third-largest group is made up of ages 18-23 which is 14.0% of the population. The remaining population is above the age of 41, which is 4.0%. The below table (Table 2) tells us that most of the participants in this study are under the age of twenty to forty or labelled as young participants.

Table 2: Age of the Participant

Age		
	Frequency	Percent
18-23	21	14
23-30	91	60.7
31-40	32	21.3
Above 41	6	4
Total	150	100

Source: Researcher's Own Questionnaire Survey, 2021

The table below (Table 3) shows the respondents' education levels in four categories. When the education level of the respondents was analyzed, the majority had a First Degree, which is 66.0% of the population; the second-highest group was those who had a Master's degree and above, which is 28.0% of the population. The third group was those that had a diploma, which is 4.0% of the population, and the last group are respondents that have high school level education, which is 2.0% of the population.

Table 3: Respondent Level of Education

Educational level		
	Frequency	Percent
High school	3	2
Diploma	6	4
BSC	99	66
MSC and above	42	28
Total	150	100

Source: Researcher's Own Questionnaire Survey, 2021

The table below (Table 4) shows the income level of participants. It shows that the majority of the participants had an income of above 10,000 Birr, which is 73.3% of the participants. The table also shows that 16.7% of respondents earn between 5,000 to 10,000 Birr. It can also be noted that 8.0% of respondents have an income of 2,000 to 5,000 Birr, with the remaining 2.0% earning below 2,000 Birr per month.

Table 4: Income level of respondent

Income Level		
	Frequency	Percent
Below 2000	3	2
2000-5000	12	8
5000-10000	25	16.7
Above 10000	110	73.3
Total	150	100

Source: Researcher's Own Questionnaire Survey, 2021

4.3.1   Testing the Research Questions

4.3.1.1   *Relationship between ATM cards and spending of money*

In the below descriptive statistics table, the relationship between an ATM card and overspending has been displayed. On each of the 10 questions, the participants are asked to respond to a choice item to indicate what they thought about the relationship between an ATM card and overspending. Each of these questions are scaled with a value of between 1 to 5, where 1 = Strongly Disagree, 2=Agree 3= Neutral 4= Agree, and 5= Strongly Agree.

Table 5: Relationship of ATM card and overspending

Statement	SD		D		N		A		SA		Mean	SD
	F	P	F	P	F	P	F	P	F	P	Statistic	Statistic
1. I believe an ATM card contribute to over-spending of money.	6	4.0	31	20.7	29	19.3	48	32.0	36	24.0	**3.51**	**1.180**
2. I spent a lot while using my ATM card.	5	3.3	31	20.7	25	16.7	62	41.3	27	18.0	**3.5**	**1.110**
3. My spending pattern increased after using an ATM card.	4	2.7	36	24.0	25	16.7	51	34.0	31	20.7	**3.47**	**1.155**
4. I spent a lot while holding an ATM card than not holding it.	2	1.3	36	24.0	16	10.7	62	41.3	32	21.3	**3.58**	**1.119**
5. I spent a lot using an ATM card while compared to cash.	14	9.3	40	26.7	20	13.3	48	32.0	27	18.0	**3.23**	**1.285**
6. Availability & Accessibility of ATMs & POS machines maximize my spending pattern.	7	4.7	34	22.7	33	22.0	48	32.0	28	18.7	**3.37**	**1.162**
7. While using an ATM card, I do not feel the pain of over-spending.	11	7.3	45	30.0	27	18.0	48	32.0	12	8.0	**3.03**	**1.141**
8. Small spending of cash is not recognized or remembered while using an ATM card, which leads to overspending.	4	2.7	42	28.0	23	15.3	49	32.7	30	20.0	**3.40**	**1.177**
9. Sometimes, I prefer not to hold my ATM card with me to control my spending.	17	11.3	36	24.0	16	10.7	40	26.7	40	26.7	**3.34**	**1.393**
10. I have spent too much money using my ATM card and then felt guilty about it afterwards.	11	7.3	47	31.3	22	14.7	42	28.0	28	18.7	**3.19**	**1.268**
Overall Average Mean = 3.35 & Standard deviation of 0.898												

Source: Researcher's Own Questionnaire Survey, 2021.

The above table (table 05) shows that a reasonable number of ATM card users agreed that possessing an ATM card does indeed contribute to the over-spending of money; for this, the mean score & standard deviation are found at 3.51 and 1.180 respectively. This also aligns with Soman's (2001) study in which he emphasised that consumers spend more using an ATM card as ATM card holders do not see actual physical money being spent, hence this feature of an ATM card creating comfort which leads to customers over-spending money. The respondents also agreed that they spend a lot while using an ATM card rather than cash, which took the mean average result in Likert scale as 3.5. This is supported by 18.0% of 'strongly agree', 41.3% 'Agreed' respondents, whereas 5 & 20.7% of respondents 'strongly disagree' and 'disagree', respectively. Similarly, most of the respondent feels that their spending frequency increased after using an ATM card, while compared to their experience in the past before an ATM card with a mean average value of 3.41. This is also in line with the study of Agarwal *et al*., (2019) which states that customer spending highly increases after the introduction of digital products. The respondent also spends an increased amount of money while holding an ATM card than not holding it with a mean average of 3.58. Likewise, the assessment also shows that customers spent more money using an ATM card while compared to using cash, this finding is also supported by the study of Prelec & LoeInstein (1998).

The mean average of 3.37 also tells us that customers are affected by the easy availability and high accessibility of ATM and POS machines. From this, it can be noted that a small majority of respondents agreed that the availability and accessibility of ATM & POS machines maximize their spending patterns. This is in line with the research finding of Wiggins (2008) in which the study identified that ATM cards have made access to money and the spending of money so convenient that it has become easy to overspend.

On another variable, customers also do not feel the pain of spending money while paying with an ATM card with a mean and mode, 3.19 & 4, respectively. In the same way, customers do not recognize small spending of cash using an ATM card which leads to over-spending of money. With this statement 20.0% respondents 'strongly agreed', 32.7% 'agreed', 15.3% 'neutral', 28.0% 'disagreed' and the rest 4% 'strongly disagree' on the issue that small spending of cash is not recognized while the payment is done through ATM card. This is in line with the study of Liu & Dewitte (2021) focused that due to less pain of payment customers spent a lot of money using their ATM card.

The participants also agreed that they prefer to leave their ATM cards at home, so as not to spend a lot of money or to control their spending. This shows a mean average and standard deviation, 3.34 & 1.393, respectively. At last, customers are assessed if they spent a lot of money with an ATM card and felt regret afterward, and the customers' response was (strongly disagree 7.3 %, disagree 31.3 %, neutral 14.7 %, 28% agree and 18.7% strongly agree) with a mean average of 3.19.

Having analysed the above table in regards to the relationship between ATM cards and overspending, the researcher also statically describe the second and most important research question, which is related to the saving culture of customers who have active ATM cards.

4.3.1.2 Relation Between an ATM Card and Poor Saving Culture

In chapter two, which is the literature review section, various outlooks on the relationship of an ATM card and the customers' saving practice are presented. In this section, the researcher has presented the outcomes for the assessment and findings of Bank of Abyssinia's ATM card customers and the impact it has had on their saving culture.

Table 6: ATM card and its relationship on poor saving culture

Statement	SD		D		N		A		SA		Mean	SD
	F	P	F	P	F	P	F	P	F	P	Statistic	Statistic
1. I believe an ATM card affects saving culture.	16	10.7	26	17.3	25	16.7	54	36.0	28	18.7	3.35	1.268
2. My culture of saving is more affected after using an ATM card.	13	8.7	36	24.0	20	13.3	50	33.3	31	20.7	3.33	1.283
3. I believe an ATM card contribute a lot for poor saving practice.	11	7.3	35	23.3	25	16.7	51	34.0	26	17.3	3.31	1.223
4. I believe using cash is more helpful to improve saving habit than using an ATM card.	14	9.3	44	29.3	25	16.7	55	36.7	12	8.0	3.05	1.166
5. Most of my ATM cash withdrawal is out of my	7	4.7	46	30.7	23	15.3	54	36.0	19	12.7	3.21	1.154

plan, which affects my culture of saving.											
6. Since ATM card gave me the accessibility to transact anytime anywhere, it affects my saving commitment or culture.	10	6.7	37	24.7	20	13.3	48	32.0	35	23.3	3.41	1.270
7. As there is no pain (spending feeling) while withdrawing cash through ATM card, I abuse my saving account.	9	6.0	49	32.7	28	18.7	44	29.3	19	12.7	3.10	1.173
8. I sometimes do not hold my ATM card not to disturb my saving practice.	13	8.7	45	30.0	14	9.3	49	32.7	29	19.3	3.24	1.304

Overall Average mean = 3.24 & Standard deviation of 0.994

Source: Researcher's Own Questionnaire Survey, 2021.

The participants of the study have highlighted that an ATM indeed does impede their saving activities. This is highlighted in Table (06) as it demonstrates that the participants held the belief of an ATM card being an adversary to their saving activities with a mean and std. deviation of 3.35 and 1.268 respectively. Participant's response are (strongly disagree 10.7 %, disagree 17.3 %, neutral 16.7 %, 36% agree and 18.7% strongly agree). This is aligned with the findings of other researchers such as Runnemark & Hedman (2015) as it confirms the view that having an ATM card increases the willingness-to-pay of customers. It is the cumulative effect of spending that is causing the noticeable impact of reduced savings.

This is also a very important point that has been highlighted in the table above as the research has confirmed the customers believe that their culture of saving is more affected after the use of an ATM card, with a mean average of 3.33. This shows a correlation with the study of Setiawan, Effendi, *et al*.(2020) as their research found that an ATM had a negative impact on their culture of saving after actively using an ATM card.

The researcher also assessed customers' belief in the contribution of an ATM card to poor saving practice, and many of the respondents agree in this regard with a mean value of 3.31. This result is also aligned with the research of Raghubir & Srivastava, (2008) that there is a direct link of influence between the need to save and the choice of the payment instrument of the consumer.

On the other question, the researcher assessed whether cash transaction is more helpful to improving saving habits than ATM card, and the result shows that much of the respondents are neither agree nor disagree on this regard, rather they fall in the middle mean average. The result shows a mean average of 3.05 with ('strongly disagree' 9.3 %, 'disagree' 29.3 %, 'neutral' 16.7 %, 36.7% 'agree' and 8.0% 'strongly agree').

The research also assessed participants' thoughts on whether their cash withdrawal is out of their plan, which also affects their culture of saving. In this regard, a very little majority of the participants agreed in with a mean value of 3.21.

The ease of accessibility is another factor that the participants have determined as an extremely important component that affects their habit of spending and saving as evident by the high mean score of 3.41 and std. deviation of 1.270. This enlarges the critical and consequential aspect of having an ease of access to spend cash. This is also in line with the study of Liu & Dewitte (2021) as stated above.

Researches like Liu & Dewitte (2021) showed that an ATM card does not have a pain of payment due to the nature of its unnoticeable cash usage. The study at hand also confirmed the result of other studies by assessing customer's thoughts. From the above table, I can see that a mean average of 3.10 respondents agreed that their culture of saving is affected due to no/less spending feeling while using an ATM card. From this result, I can understand that there is not a lot of correlation between the pain of payment and saving culture.

Customers also assessed whether they leave/ put away their ATM card not to disturb their saving practice. The result showed that a small majority of the respondents agreed with this statement. To overlook each participant response ('strongly disagree' 8.7%, 'disagree' 30.0 %, 'neutral' 9.3 %, 'agree' 32.7% and 19.3% 'strongly agree').

4.3.1.3 Banks and their contribution to saving culture of ATM card users

This section shows what the results on the saving culture of the customers are when they utilized mechanisms that enabled them to have visibility on their spending such as text alerts

and spends statements. In this part, the researcher analysed five major close-ended questions and one open-ended question to get a clear picture. The table below presents possible considerations the bank could make to satisfy customers' needs.

Table 7: Banks and their contribution to saving culture of ATM card users

Statement	SD		D		N		A		SA		Mean	SD
	F	P	F	P	F	P	F	P	F	P	Statistic	Statistic
1. Alert message while using ATM withdrawal is very mandatory	3	2.0	5	3.3	10	6.7	55	36.7	76	50.7	4.32	0.894
2. Daily cash withdrawal limit need to be reduced to protect overspending.	19	12.7	41	27.3	18	12.0	36	24.0	36	24.0	3.19	1.398
3. Daily withdrawal limit need to be set by the card holders. *Meaning*: customers can maximize or minimize their withdrawal limit according to their budget plan.	5	3.3	17	11.3	19	12.7	56	37.3	53	35.3	3.9	1.110
4. Saving account and ATM card account need to be separated.	22	14.7	28	18.7	20	13.3	52	34.7	28	18.7	3.24	1.350
5. Immediate deduction need to be implemented on the bank system to feel pain of payment.	11	7.3	15	10.0	28	18.7	46	30.7	50	33.3	3.73	1.231
Overall Average mean = 3.67 & standard deviation of 0.740												

Source: Researcher's Own Questionnaire Survey,2021

The table above demonstrates that Banks need to implement alert messaging for their customers to utilize when using an ATM card has been used. In this regard, 50.7 participants strongly agree, 36.7 agreed, and below 10% of the respondent thought that an alert message is not mandatory. This takes a mean value of 3.35. From this statement, I can easily understand that alert message/SMS is highly mandatory to control spending patterns as well as saving activity. This statement is also supported by Junker (2016) in his study in which he emphasises that a continuous reminder and alert mechanism would protect consumers from overspending.

On another statement, a small majority of respondents agreed that daily cash withdrawal limits need to be reduced to protect the over-spending of money; this is with a mean value of 3.19. 12.7 % 'strongly disagree', 27.3% 'disagree', 12% 'neutral', and 24% each 'agreed' and 'strongly agreed'.

Besides this, a mean average of 3.9 shows that most of the customers want to set their cash withdrawal limit by themselves. To breakdown, 35.3 & 37.3 of respondents 'strongly agree' and 'agree' respectively. Whereas 3.3 respondents 'strongly disagreed' and 11.3 'disagreed' in this regard. The rest which is 12.7 are neutral on this statement. This result is in line with the study of Jonker (2016) as he suggested that for ATM card transactions, consumers would be preferred to set a predefined budget to minimize over-spending on a different point of sales.

On the other statement, participants are assessed whether their saving account and ATM card account need to be separated. A small majority of the respondents agreed on this question with a mean average of 3.24, which tells us that separation of saving account from ATM account will contribute a little for customers saving culture. This is also aligned with the research of Barnes & Corbitt (2003), using a different account or a different type of card as a prepaid card can give customers a better way of controlling their spending.

At last, on the statement, immediate deduction needs to be implemented on the bank system to feel the pain of payment, the participants are also asked whether an immediate deduction is mandatory to felt pain of payment or not. More than half of the respondents are agreed as seen in the above table. (Table 7).

4.4   Correlation Analysis

This research utilized the software known as Statistical Package for Social Science (SPSS) to analyse the relationship between an ATM card and Saving Culture. The table below shows the correlation between and among different variables by using the Pearson Correlation Coefficient (Hauke & Kossowski, 2011).

Table 8: Correlation of ATM card and saving culture

		ATMCard_n_Overspending	ATMCard_n_PoorSaving
ATMCard_n_Overspending	Pearson Correlation	1	.833[**]
	Sig. (2-tailed)		.000
	N	150	150
ATMCard_n_PoorSaving	Pearson Correlation	.833[**]	1
	Sig. (2-tailed)	.000	
	N	150	150
Banks_contribution	Pearson Correlation	.505[**]	.501[**]
	Sig. (2-tailed)	.000	.000
	N	150	150
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Researcher's Own Questionnaire Survey, 2021

The above correlation matrix shows the highest coefficient of correlation between over-spending and poor saving. There is a significant positive relationship between overspending of money and poor saving practice ($r = 0.833$, $n = 150$, $p \leq 0.05$). The other is that there is also a significant positive relationship between poor saving practice and bank's contribution ($r = 0.501$, $n = 150$, $p \leq 0.05$). From the above figure, it can be clearly understood that there is a strong relationship between overspending of money and poor saving culture; whereas it can also be understood that there is a relation between saving and banks contribution on some level.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

In the preceding chapter, the presentation and analysis of the data gathered have been reported. Chapter five consists of discussions on the major summery, conclusion, recommendation and finally recommendations for further research.

The study was conducted at the Bank of Abyssinia's five branches namely Ras Branch, Bole Branch, Lafto Branch, Arada Branch, and Tele Medhanialem branch. These branches are wisely selected because they have a lot of active ATM card users compared to other BOA branches.

The major objective of this study is to examine whether an ATM card affects customer saving culture or not. In addition, the study also assessed if there is a relationship between an ATM card and the over-spending of money. And also if an ATM card contributes to poor saving practice. Furthermore, it also analysed the banks' contribution for a better saving practice among ATM cardholders.

Accordingly, the finding showed that an ATM card has an effect on customer saving culture as an ATM card plays a great role in the overspending of money. As such, this study has highlighted the various factors which could lead to the overspending of money for ATM cardholders. Moreover, the low contribution of Bank of Abyssinia to minimize the overspending of ATM card users also has an impact on the poor saving culture of customers.

The research also tries to correlate different variables, the correlation result shows that the overspending variables are significantly and positively correlated with poor saving culture. The most correlated dimension is over-spending ($r=.833$) followed by bank contribution ($r=.505$).

5.2 Conclusions

The study analysed the effects of an ATM card on customers' saving culture by taking the Bank of Abyssinia as a case study. The researcher used a quantitative approach to analyse customer saving practices at five main branches of the bank.

In this section, the researcher discusses the major findings by aligning them with the three research questions which have been covered in previous chapters. It also compares and contrasts its results with the findings of other researchers.

What is the relationship between an ATM card and spending of money?

The main finding from research question one is that there is an indication that an ATM card contributes to the over-spending of money. This finding is consistent with previous researches carried out by Astin (1991) (1993, Pascarella & Terenzini (2005), Tinto (1999) as well Wiggins (2008); Liu & Dewitte (2021), Runnermark & Xiao (2015); Ovetta (2008); these researches indicate that an ATM card plays a great role in overspending of money.

Is there a relationship between an ATM card and poor saving culture?

On this research question, the findings show that an ATM card has little effect on customers' saving practice, meaning customers who use an ATM card have a poor culture of saving. From the finding showes that there is little relation between an ATM card and poor saving culture, which is supported by other researchers such as Raghubir & Srivastava, (2008), Arango (2011), and Bertaut *et al*. (2008).

What can Bank of Abyssinia offer to minimize overspending and improve the saving culture of ATM card users?

On the third research question, the finding shows us that the bank's contribution is a necessary part of minimizing the overspending of money and increasing the saving practices of an active ATM card user. This is also supported by several researchers like Jonker (2016), Barnes & Corbitt (2003), and Olivia (1997).

5.3 Recommendations

The study recommends to Banks and Bank of Abyssinia review and overhauls their services in the card banking industry.

Some of the recommendations for Bank of Abyssinia are listed below;

1. Alert/SMS messages to be sent to customers every time customers carry out a transaction on their ATM cards.

2. It is also highly advisable to implement immediate deduction of account to make the customer feel the pain of payment on the system.

3. Banks need to separate an ATM card account and a saving account so that customers are unable to abuse their saving practice. However, this only works for willing customers.

4. It's also highly suggested that the bank enables the customers to set daily withdrawal limits. It is also depend on customer's willingness.

5.4 Recommendations for Further Research

The research recommends further study should be carried out on the effects of an ATM card on customers' saving culture, this is since the research at hand mainly focused on customers of Bank of Abyssinia, and additional research should therefore be carried out in a similar manner on other banks. The results should then be compared to establish whether there is consistency among ATM card users in various banks.

This paper study also used quantitative methods to analyse customers saving culture; it did not apply qualitative or mixed methods which can be observation and interview data gathering to further benefit from having a clearer outlook on the study area. In addition, it is also recommended that researchers should take a large sample size to better investigate the issue.

Therefore, the researcher recommends further studies using varied methods of data gathering and analysis.

References

Agarwal, S., Ghosh, P., Li, J. and Ruan, T. (2019). Digital payments induce over-spending: Evidence from the 2016 demonetization in india.

Agarwal, S., Qian, W., Ren, Y., Tsai, H.T. and Yeung, B.Y.(2020). The real impact of FinTech: Evidence from mobile payment technology.

Alase, A(2017). The interpretative phenomenological analysis (IPA): A guide to a good qualitative research approach. International Journal of Education and Literacy Studies.

Ameriks, J., Caplin, A., & Leahy, J. (2004). The absent-minded consumer (No. w10216). National Bureau of Economic Research.

Appleton, J. V. (1995). Analysing qualitative interview data: addressing issues of validity andreliability.

Apuke, O.D.(2017). Quantitative research methods: A synopsis approach. Kuwait Chapter of Arabian Journal of Business and Management Review.

Arango, C. A., Huynh, K. P., & Sabetti, L. (2011). How do you pay? The role of incentives at the point-of-sale.

Aryeetey, Ernest and Udry, Christopher. (2000). Saving in Sub-Saharan Africa. CID Working Paper Series.

Bansal, P., Smith, W.K. and Vaara, E. (2018). New ways of seeing through qualitative research.

Barnes, S. J., & Corbitt, B. (2003). Mobile banking: concept and potential. International journal of mobile communications.

Basias, N. and Pollalis, Y. (2018). Quantitative and qualitative research in business & technology: Justifying a suitable research methodology.

Birch-Chapman, S., Jenkins, E., Coward, F. and Maltby, M. (2017). Estimating population size, density and dynamics of Pre-Pottery Neolithic villages in the central and southern Levant: an analysis of Beidha, southern Jordan.

BOA (2020), Bank of Abyssinia, Anuual Report 2020.

BOA 2020, Bank of Abyssinia, bankofAbyssina.com, accessed January 2021.

Boden, J., Maier, E. and Wilken, R. (2020). The effect of credit card versus mobile payment on convenience and consumers' willingness to pay.

Borzekowski, R., Elizabeth, K. K., & Shaista, A. (2008). Consumers' use of debit cards: patterns, preferences, and price response.

Carter, T. J. (2014). The psychological science of spending money. In The psychological science of money.

Chenitz, W. C., & Swanson, J. M. (1986). From practice to grounded theory: Qualitative research in nursing. Prentice Hall.

Costa-Font, J., Giuliano, P. and Ozcan, B. (2018). The cultural origin of saving behavior.

CroIll, D. R., Sheeran, R. A., & Warburton, B. A. (2009). U.S. Patent No. 7,559,461. Washington, DC: U.S. Patent and Trademark Office.

De Jongh, J.J. and Mncayi, N.P. (2019). An analysis on the key Macroeconomic drivers of consumer vulnerability in the South African economy.

Dillman, D.A., 2000. Procedures for conducting government-sponsored establishment surveys: Comparisons of the total design method (TDM), a traditional cost-compensation model, and tailored design. In Proceedings of American statistical association, second international conference on establishment surveys.

Dovi, E. (2008). Boosting domestic savings in Africa.

Dutta, R., Jarvenpaa, S., & Tomak, K. (2003). Impact of feedback and usability of online payment processes on consumer decision making.

Ehigie, B. O. (2006). Correlates of customer loyalty to their bank: a case study in Nigeria. International Journal of Bank Marketing.

Eisenhardt, K. M. (1989). Building theories from case study research. Academy of management review.

Esenvalde, I. (2011). Psychological predictors of savings behavior: contrasting the impact of optimism and burnout on self-control, achievement motivation and savings behavior.

Fisher, M., & Guha, R. (2015). U.S. Patent No. 9,020,836. Washington, DC: U.S. Patent and Trademark Office.

Foscht, T., Maloles, C., Swoboda, B. and Chia, S.L. (2010). Debit and credit card usage and satisfaction.

Furnham, A. (1985). Why do people save? Attitudes to, and habits of saving money in Britain. Journal of Applied Social Psychology, 15(5), 354-373.

Gall, M. D., Borg, W. R., & Gall, J. P. (1996). Educational research: An introduction. Longman Publishing.

Goertzen, M.J., (2017). Introduction to quantitative research and data. Library Technology Reports, 53(4), pp.12-18.

Hashim, D. B., Pin, F. B., & Isa, M. Y. B. M. (2017). Factors influencing savings rate in Malaysia. International Journal of Economics and Finance, 9(6), 52-56.

Hernandez, R. (2010). U.S. Patent No. 7,743,002. Washington, DC: U.S. Patent and Trademark Office.

Hox, J. J., & Boeije, H. R. (2005). Data collection, primary versus secondary.

Husadha, C., Handayani, M. and Yoganingsih, T. (2019). Customer Participation Rate for Replacement of Old ATM Cards Using BRI GPN ATM Cards.

Incekara - Hafalir, E. and LoeInstein, G. (2009). The impact of credit cards on spending: a field experiment. Available at SSRN 1378502.

Johnson, J.L., Adkins, D. and Chauvin, S. (2020). A review of the quality indicators of rigor in qualitative research. American Journal of Pharmaceutical Education, 84(1).

Katona, George. (1975). Psychological economics. New York: Elsevier

Klee, E. (2008). How people pay: Evidence from grocery store data. Journal of Monetary Economics, 55(3), 526-541.

Lapavitsas, C. and Dos Santos, P.L. (2008). Globalization and contemporary banking: On the impact of new technology. Contributions to Political Economy, 27(1), pp.31-56.

Lazim, N.A.M., Sulaiman, Z., Mas'od, A., Chin, T.A. and Awang, S.R. (2020), March. Measuring Post-purchase Regret and Impulse Buying in Online Shopping Experience from

Cognitive Dissonance Theory Perspective. In 2020 6th International Conference on Information Management (ICIM) (pp. 7-13). IEEE.

Lee, R. M., & Fielding, N. G. (2004). Tools for qualitative data analysis.

Leppink, J. (2017). Revisiting the quantitative–qualitative-mixed methods labels: Research questions, developments, and the need for replication. Journal of Taibah University Medical Sciences, 12(2), pp.97-101.

Lietz, P. (2010). Research into questionnaire design: A summary of the literature. International journal of market research, 52(2), pp.249-272.

Liu, Y. and Dewitte, S. (2021). A replication study of the credit card effect on spending behavior and an extension to mobile payments. Journal of Retailing and Consumer Services, 60, p.102472.

Lunt, P. K., & Livingstone, S. M. (1991). Psychological, social and economic determinants of saving: Comparing recurrent and total savings. *Journal of economic Psychology*, *12*(4), 621-641.

Maksum, A., Muda, I., & Azhar, I. (2021). Opportunties for implementation of non-cash transactions of supply chain management of village-owned business agencies. *Uncertain Supply Chain Management*, *9*(1), 69-78.

May, T. (2011). *Social research: Issues, methods and research*. McGraw-Hill Education (UK).

Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education. Revised and Expanded from" Case Study Research in Education."*. Jossey-Bass Publishers, 350 Sansome St, San Francisco, CA 94104.

Michael, R. T., & Becker, G. S. (1973). On the new theory of consumer behavior. *The Swedish Journal of Economics*, 378-396.

Mohajan, H. K. (2017). Two criteria for good measurements in research: Validity and reliability. *Annals of Spiru Haret University. Economic Series*, *17*(4), 59-82.

Miller, W. L., & Crabtree, B. F. (1992). Primary care research: A multimethod typology and qualitative road map.

Mohajan, H. K. (2017). Two criteria for good measurements in research: Validity and reliability. *Annals of Spiru Haret University. Economic Series*, *17*(4), 59-82.

Mohajan, H. K. (2018). Qualitative research methodology in social sciences and related subjects. *Journal of Economic Development, Environment and People*, *7*(1), 23-48.

Mthethwa, S., Barbour, G., & Thinyane, M. (2016, December). An improved smartcard for the South African Social Security Agency (SASSA): A proof of life based solution. In *2016 International Conference on Information Science and Security (ICISS)* (pp. 1-4). IEEE.

Muchena, F. N., & Onduru, D. D. (2011). *Institutes for Implementation of Green Water Credits in the Upper Tana, Kenya* (No. 16). ISRIC-World Soil Information.

MIga, F. M. (1997). Saving in sub-Saharan Africa: A comparative analysis. Journal of African Economies, 199-228.

Narang, L. (2020). Effects of Mobile-Based Financial Services on Migrant Households' Remittances and Savings.

Jonker, N. (2016). Cash as a budget control device. In *SUERF Conference Proceedings* (Vol. 1, pp. 37-44).

Nwachkwu Tochukwu, E., & Odigie, P. (2009). What Drives Private Savings in Nigeria. In *A Paper Presented at the Centre for the Study of African A Paper Presented at the Centre for the Study of African Economies (CSAE) Conference, University of Oxford, March*.

O'Gorman, K., & MacIntosh, R. (2015). Mapping research methods. *Research methods for business and management: A guide to writing your dissertation*, 50-74.

Olivia Mellan (1997), Overcoming Overspending: A Winning Plan for Spenders and Their Partners, Walker & co.

Orttung, M., Greco, A., LoIll, T., & Newman, P. (2009). U.S. Patent Application No. 11/768,882.

Ovetta Wiggins (July 20, 2008), "Calling on Gospel to Call Off Debt", Washington Post

Parker, C., Wironen, J., Mollie, M. G., & Mahoney, K. J. (2011). Debit card fundamentals and their use in government programs. In Class Technical Assistance Brief Series.

Parker, J. A. (1999). Spendthrift in America? On two decades of decline in the US saving rate. *NBER macroeconomics annual*, *14*, 317-370.

Pham, L. T. M. (2018). Qualitative approach to research a review of advantages and disadvantages of three paradigms: Positivism, interpretivism and critical inquiry. *University of Adelaide*.

Prelec, D., & Loewenstein, G. (1998). The red and the black: Mental accounting of savings and debt. *Marketing science*, *17*(1), 4-28.

Prelec, D., & Simester, D. (2001). Always leave home without it: A further investigation of the credit-card effect on willingness to pay. Marketing letters, 12(1), 5-12.

Raghubir, P., & Srivastava, J. (2008). Monopoly money: The effect of payment coupling and form on spending behavior. Journal of experimental psychology: Applied, 14(3), 213.

Rahi, S., Alnaser, F. M., & Abd Ghani, M. (2019). Designing survey research: recommendation for questionnaire development, calculating sample size and selecting research paradigms. *Economic and Social Development: Book of Proceedings*, 1157-1169.

Reybold, L. E., Lammert, J. D., & Stribling, S. M. (2013). Participant selection as a conscious research method: Thinking forward and the deliberation of 'emergent'findings. Qualitative Research, 13(6), 699-716.

Runnemark, E., Hedman, J., & Xiao, X. (2015). Do consumers pay more using debit cards than cash?. *Electronic Commerce Research and Applications*, *14*(5), 285-291.

Ruppert, K. (2020). Household savings, capital investments and public policies: What drives the German current account?.

Schmidt-Hebbel, K., & Serven, L. (2000). Does income inequality raise aggregate saving?. *Journal of Development Economics*, *61*(2), 417-446.

Schreft, S. (2006). How and why do consumers choose their payment methods?. *FRB of Kansas City Working Paper*, (06-04).

Schuh, S., & Stavins, J. (2010). Why are (some) consumers (finally) writing feIr checks? The role of payment characteristics. Journal of Banking & Finance, 34(8), 1745-1758.

Setiawan, M., Effendi, N., Santoso, T., Dewi, V. I., & Sapulette, M. S. (2020). Digital financial literacy, current behavior of saving and spending and its future foresight. *Economics of Innovation and New Technology*, 1-19.

Sgier, L. (2012). Qualitative data analysis. An Initiat. Gebert Ruf Stift, 19, 19-21.

Sharma, A. (2017). Self-rationing efficiency of repeated eating-out expenses: does experience matter?. *Journal of Hospitality & Tourism Research*, *41*(3), 259-277.

Smith, J., & Firth, J. (2011). Qualitative data analysis: the framework approach. Nurse researcher, 18(2), 52-62.

Soman, D. (2001). Effects of payment mechanism on spending behavior: The role of rehearsal and immediacy of payments. Journal of Consumer Research, 27(4), 460-474.

Soman, D. (2003). The effect of payment transparency on consumption: Quasi-experiments from the field. *Marketing Letters*, *14*(3), 173-183.

Sowell, E. J., & Casey, R. J. (1982). Assessing Mathematics Understanding: Combining Task-Analytic Conceptual Hierarchies and Modes of Representation.

Stavins, J. (2017). How do consumers make their payment choices?

Störrle, H. (2017, June). How are conceptual models used in industrial software development? A descriptive survey. In *Proceedings of the 21st International Conference on Evaluation and Assessment in Software Engineering* (pp. 160-169).

Strauss, A., & Corbin, J. (1990). Qualitative research.

Suher, J., & Hoyer, W. D. (2020). The moderating effect of buying impulsivity on the dynamics of unplanned purchasing motivations. *Journal of Marketing Research*, *57*(3), 548-564.

Sui, L., Sun, L., & Geyfman, V. (2021). An assessment of the effects of mental accounting on overspending behaviour: An empirical study. *International Journal of Consumer Studies*, *45*(2), 221-234.

Susman, G. I., & Evered, R. D. (1978). An assessment of the scientific merits of action research. Administrative science quarterly, 582-603.

Wärneryd, K. E. (1989). On the psychology of saving: An essay on economic behavior. Journal of Economic Psychology, 10(4), 515-541.

Worako, A.W. (2018). Impacts of ATM Services on the Customers Saving/Withdrawal Rate in the Commercial Bank of Ethiopia, Akaki Branch. J Account Mark, 7(286), p.2.

Worku, G. (1970). Electronic-banking in Ethiopia-practices, opportunities and challenges. *The Journal of Internet Banking and Commerce*, *15*(2), 1-8.

Yaqub, J. O., Bello, H. T., Adenuga, I. A., & Ogundeji, M. O. (2013). The cashless policy in Nigeria: prospects and challenges. *International Journal of Humanities and Social Science*, *3*(3), 200-212.

Zellermayer, O. (1996). *The pain of paying*. Carnegie Mellon University.

Zhang, W., Shi, J., Li, R., Han, Z., Li, L., Li, G., ... & Li, Q. (2020). Effectiveness of Olaparib Treatment in a Patient with Gallbladder Cancer with an ATM-Inactivating Mutation. *The oncologist*, *25*(5), 375.

Customers Survey Questionnaire

St' Mary University College

Department of Project Management

(To Be Filled by Bank of Abyssinia customers)

Dear Participant,

I would like to thank you in advance for taking your time to fill out this questionnaire.

The questionnaire has been prepared to assess the 'Effect of an ATM Card on Customers' Saving Culture' for partial fulfillment of a Post-graduate program in Project Management at St' Mary University College. The main objective of this research question is to study the saving culture of customers who are actively using their ATM card for various purposes. It also tries to identify new ways that can help the card banking skim support their customers in their saving efforts.

The questionnaire has been sectioned in to three parts: the demography of participant, the customer experience, and customers' perception of the effect an ATM card is having on saving culture.

Your genuine answer to the questions has an immense value to the completion of this study. Therefore, kindly please indicate your response by following the direction provided below.

All the information that you provide will be kept strictly confidential and anonymity of your identity is guaranteed. Thus, it is not necessary to write your name or any related personal data.

If you have any question regarding on this survey, please contact the owner of this research paper with the following address:

Name of Researcher: **Ledetu Tekle**

Mobile Phone Number: **0913723764**

Email address:lidetutekle@gmail.com

Part One: Demography of Participants

Direction: Please select the appropriate response category by ticking the box against each question.

1. **Gender:** ☐ Male ☐ Female

2. **Age:**

   ☐ 18-23 ☐ 23-30 Years

   ☐ 31-40 Years ☐ Above 41

3. **Educational Level:**

   ☐ Elementary ☐ High School ☐ Diploma

   ☐ Bachelor's Degree ☐ MSC and Above

4. **Level of Income**

   ☐ Below 2000 ☐ 5000- 10,000 Birr

   ☐ 2000 - 5000 Birr ☐ Above10,000 Birr

Part Two: - Customer Experience

Direction: Please select the appropriate response category by ticking the box against each question.

	Yes	No
1. **Do you agree that an ATM card ease of life?**	☐	☐
2. **Do you feel comfortable while using an ATM card?**	☐	☐
3. **Do you recommend an ATM card to your close friends or families?**	☐	☐

4. **How long have you been using Bank of Abyssinia ATM card?**

☐ Less than 1 year

☐ 1-2 year

☐ More than 2 years

5. **How often do you use Bank of Abyssinia ATM card?**

☐ Very often

☐ Often

☐ Not that much

6. **How satisfied are you with Bank of Abyssinia ATM card service?**

☐ Very satisfied

☐ Satisfied

☐ Not satisfied

Part Three: - Customer perception on ATM card and Saving culture

Direction: Please indicate your degree of agreement/disagreement with the following statements by putting checkmark (√) on the point that best suits your agreement level from the adjacent choices.

i. Relationship between an ATM Card and Over- spending.					
Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
11. I believe an ATM card contribute to over-spending of money.					
12. I spent a lot while using my ATM card.					
13. My spending pattern increased after using an ATM card.					
14. I spent a lot while holding an ATM card than not holding it.					
15. I spent a lot using an ATM card while compared to cash.					
16. Availability & Accessibility of ATMs & POS machines maximize my spending pattern.					

Statement					
17. While using an ATM card, I do not feel the pain of over-spending.					
18. Small spending of cash is not recognized or remembered while using an ATM card, which leads to overspending.					
19. Late deduction or late SMS response makes me to think that I am not spending.					
20. Sometimes, I prefer not to hold my ATM card with me to control my spending.					
21. I have spent too much money using my ATM card and then felt guilty about it afterwards.					

ii. Experience of an ATM card user and their Saving Culture

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9. I believe an ATM card affects saving culture.					
10. My culture of saving is more affected after using an ATM card.					
11. I believe my ATM card do not have to be linked with my saving account.					
12. I believe an ATM card contribute a lot for poor saving practice.					
13. I believe using cash is more helpful to improve saving habit than using an ATM card.					
14. Most of my ATM cash withdrawal is out of my plan, which affects my culture of saving.					
15. Since ATM card gave me the accessibility to transact anytime anywhere, it affects my saving commitment or culture.					
16. As there is no pain (spending feeling) while withdrawing cash through ATM card, I abuse my saving account.					
17. I sometimes do not hold my ATM card not to disturb my saving practice.					

iii.	**Banks Contribution to minimize overspending or maximize saving culture**					
Statement		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Alert message while using ATM withdrawal is very mandatory						
2. Daily cash withdrawal limit need to be reduced to protect overspending.						
3. Daily withdrawal limit need to be set by the card holders. *Meaning*: customers can maximize or minimize their withdrawal limit according to their budget plan.						
4. Saving account and ATM card account need to be separated.						
5. Immediate deduction need to be implemented on the bank system to feel pain of payment.						
Additional Comments on banks offer to minimize over spending and improve saving culture:						

Thank you for your time!