



**ADDIS ABABA UNIVERSITY**

**COLLEGE OF BUSINESS AND ECONOMICS**

**SCHOOL OF COMMERCE**

**DEPARTMENT OF DIGITAL MARKETING MANAGEMENT WITH  
SPECIALIZATION IN E-COMMERCE**

**THE IMPACT OF SOCIAL MEDIA MARKETING ON BRAND LOYALTY OF  
CUSTOMERS: THE CASE OF ETHIO TELECOM**

**A THESIS PAPER SUBMITTED TO DEPARTMENT OF DIGITAL MARKETING  
MANAGEMENT IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE  
DEGREE OF MASTERS OF SCIENCE IN DIGITAL MARKETING WITH  
SPECIALIAZATION IN E-COMMERCE (Msc)**

**By**

**Eyoel Beyene**

**Advisor – Dr. Hailemariam Kebede (PHD)**

**June, 2024**

**Addis Ababa, Ethiopia**

**APPROVAL SHEET**

**TITLE: THE IMPACT OF SOCIAL MEDIA MARKETING ON BRAND LOYALTY OF CUSTOMERS: THE CASE OF ETHIO TELECOM**

By:

Eyoel Beyene \_\_\_\_\_  
Signature Date

Approved by:

1. Hailemariam Kebede (PHD) \_\_\_\_\_  
Signature Date

2. Chairperson \_\_\_\_\_  
Signature Date

3. Internal Examiner \_\_\_\_\_  
Signature Date

4. External Examiner \_\_\_\_\_  
Signature Date

5. Department Head \_\_\_\_\_  
Signature Date

6. Dean of College \_\_\_\_\_  
Signature Date

### **Declaration**

I, Eyoel Beyene, declare that this thesis paper titled, ‘the impact of social media marketing on brand loyalty: A case study on Ethio Telecom’ is my own work and all the reference that I used in this study have all been properly cited.

By: Eyoel Beyene

Signature: - \_\_\_\_\_

Date: - \_\_\_\_\_

### **Statement of Certification**

This is to certify that Eyoel Beyene Tadesse has carried out this thesis work on the topic entitled with “The impact of social media marketing on brand loyalty of customers: A case study of Ethio Telecom” under my supervision. This work is enough for submission for the partial fulfillment for the award of masters of Art Degree in Marketing Management (MA).

**Advisor: Haile Mariam Kebede (PHD):** Signature\_\_\_\_\_ Date\_\_\_\_\_

## **Acknowledgements**

I would like to thank my research advisor Dr. Hailemariam Kebede (PhD) for his professional directions and support.

I also give thanks to my boss at work Mrs. Degsew Endale for being supportive and understanding. The digital customer coaches that have been very polite and supportive in giving me their insights and providing me with all the information I have asked for.

I am thankful for my friends and family for helping me out when I needed it the most and stood by me through thick and thin.

## **ABBREVIATION**

E-WOM – Electronic word of Mouth

ethio tel – Ethio telecom

VIF – Variance inflation factor

## **List of Tables**

*Table4.1. Overall Reliability*

*Table4.2. Cronbach's alpha result for each variable*

*Table4.3. Descriptive analysis for customer engagement*

*Table4.4. Descriptive analysis for customer reach*

*Table4.5. Descriptive analysis for customer sentiment*

*Table4.6. Descriptive analysis for e-WOM*

*Table4.7. Descriptive statistics for Brand Loyalty*

*Table4.8. Normality test*

*Table4.9. Collinearity test*

*Table4.10. Correlation analysis*

*Table4.11. Model Summary*

*Table4.12. Coefficients*

## **List of Figures & Charts**

*Fig1. Conceptual Framework*

*Chart One - Count of Sex*

*Chart Two - Count of Age Range*

*Chart Three - Educational Level*

*Graph – 1 – Homoscedasticity test*

## Table of Contents

|                                       |      |
|---------------------------------------|------|
| APPROVAL SHEET .....                  | II   |
| Declaration .....                     | III  |
| Statement of Certification.....       | IV   |
| Acknowledgements.....                 | V    |
| ABBREVIATION.....                     | VI   |
| List of Tables .....                  | VII  |
| List of Figures & Charts.....         | VIII |
| <i>Abstract</i> .....                 | XII  |
| CHAPTER ONE .....                     | 1    |
| INTRODUCTION .....                    | 1    |
| 1.1. Background of the study .....    | 1    |
| 1.2. Statement of the problem.....    | 2    |
| 1.3. Research questions .....         | 4    |
| 1.4. Objectives of the Study .....    | 4    |
| 1.4.1. General Objective.....         | 4    |
| 1.4.2. Specific Objectives .....      | 4    |
| 1.5. Significance of the Study .....  | 5    |
| 1.6. Scope of the Study .....         | 5    |
| 1.7. Definition of terms .....        | 5    |
| 1.8. Organization of the Study.....   | 6    |
| CHAPTER TWO .....                     | 7    |
| LITERATURE REVIEW .....               | 7    |
| 2.1. Theoretical Review .....         | 7    |
| 2.2. Social Media.....                | 7    |
| 2.3. Social Media Marketing .....     | 8    |
| 2.4. Online Customer Engagement ..... | 9    |
| 2.5. Customer Reach.....              | 10   |
| 2.6. Customer Sentiment.....          | 12   |

|   |    |
|---|----|
| 2.7. Electronic word of mouth (E-WOM) ..... | 13 |
| 2.7.1 The social drivers of WOM .....       | 13 |
| 2.7.2. The Emotional Drivers of WOM .....   | 14 |
| 2.7.3. The Functional Driver .....          | 14 |
| 2.8. About Ethio Telecom .....              | 15 |
| 2.9. Empirical Review .....                 | 16 |
| 2.10. Conceptual Framework.....             | 21 |
| CHAPTER THREE.....                          | 22 |
| RESEARCH METHODOLOGY .....                  | 22 |
| 3.1. Research Design.....                   | 22 |
| 3.2. Research Approach .....                | 22 |
| 3.3. Population of the Study.....           | 23 |
| 3.4. Sample Size .....                      | 23 |
| 3.5. Sampling Technique .....               | 24 |
| 3.6. Sources of Data Collection.....        | 24 |
| 3.7. Data Gathering Instruments.....        | 24 |
| 3.8. Data Analysis Method .....             | 24 |
| 3.9. Reliability & Validity .....           | 25 |
| CHAPTER FOUR.....                           | 26 |
| DATA ANALYSIS AND INTERPRETATION .....      | 26 |
| 4. Introduction .....                       | 26 |
| 4.1. Demographic Statistics.....            | 26 |
| 4.2. Reliability Test.....                  | 28 |
| 4.3. Descriptive Statistics.....            | 29 |
| 4.4. Homoscedasticity .....                 | 32 |
| 4.5. Normality Test .....                   | 33 |
| 4.6. Multi Collinearity .....               | 34 |
| 4.7. Correlation analysis .....             | 35 |
| 4.8. Regression analysis .....              | 37 |

|   |    |
|---|----|
| 4.9. Hypothesis Testing.....                  | 39 |
| CHAPTER FIVE .....                            | 41 |
| SUMMARY, CONCLUSION AND RECCOMENDATIONS ..... | 41 |
| 5.1. Summary .....                            | 41 |
| 5.2. Conclusion .....                         | 42 |
| 5.3. Recommendations .....                    | 42 |
| References .....                              | 45 |
| Lists of links .....                          | 51 |
| Appendix .....                                | 52 |

## ***Abstract***

This thesis investigates the impact of social media marketing on brand loyalty within the context of Ethio Telecom. With the increasing relevance of digital marketing, understanding the mechanisms through which social media influences brand loyalty is crucial for businesses. The study specifically examines four key variables: customer engagement, customer reach, customer sentiment, and electronic word of mouth (e-WOM). Data were collected using a survey distributed to Ethio Telecom customers active on social media, primarily focusing on Facebook and Twitter. The survey data were analyzed using SPSS to determine the relationships between the independent variables and brand loyalty. The findings indicate that all four variables significantly and positively impact brand loyalty, confirming the hypotheses proposed in the literature review. Customer engagement and e-WOM were found to have the most substantial effects, highlighting the importance of interactive and user-driven content. The study concludes with recommendations for Ethio Telecom to enhance its social media marketing strategies by fostering deeper customer engagement, expanding customer reach through targeted advertising, actively managing customer sentiment using sentiment analysis tools, and encouraging positive e-WOM through influencer partnerships and customer incentives. This research contributes to the understanding of social media marketing's role in brand loyalty within the Ethiopian telecommunications sector, providing valuable insights for both academics and practitioner.

**Keywords** - *Social media marketing, Brand loyalty, Ethio Telecom, Digital marketing, Customer engagement, Customer reach, Customer sentiment, Electronic word of mouth (e-WOM), Facebook, Twitter*

# CHAPTER ONE

## INTRODUCTION

### 1.1. Background of the study

Social media marketing has become an important part of the businesses that run in the time we live in. There doesn't seem much literature that is mainly focused on social media marketing rather it is about other related issues such as the purchasing behavior of customers, engagement tactics, customer relationship management and other related issues (Felix, R., Rauschnabel, P., & Hinsch, C., 2017). One of the important goals of research to marketers is to build and maintain brand loyalty. Brand loyalty can be understood as the consumer's ultimate relationship and degree of identification with the brand (Keller, 2008). The more a certain brand gets a more prominent meaning in the minds of customers it is going to eventually become hard to replace and will have a huge place in the hearts of customers. This loyalty from customers means more revenues and a greater market share for the companies in the marketplace (Erdoğan & Çiçek, 2012). There have been different means used by marketers to maintain the loyalty of their customers and the most recent one has been internet marketing and social media marketing which is in a way more specific than internet marketing (Keller, 2008).

Kaplan and Haenlein (2010) and Mangold and Faulds (2009) in their work about the potential of social media for brand awareness and customer engagement have recognized that social media plays a vital role in building brand communities and facilitating conversations. Content that was created by users and shared among other users, a brand that has an identity and is storytelling and campaigns that encourage interactions and conversations online between individuals were proven to be effective towards brand loyalty (Muniz & Izquierdo, 2014). Firms being responsive to

customer inquiries and complaints on time and preparing personalized contents to build a stronger emotional connection with the customer have shown great impact on the brand loyalty of customers (Brodie et al. 2013)

Through the power of big data and advanced analytics the data gathered through social media can be used to understand the customer's sentiment, the different loyalty drivers and overall behavior (Fang li et al., 2016).

## **1.2. Statement of the problem**

The economy in which we now live in has customers that are connected to one another in webs of communities; and these communities are 'the new segments'. These new segments are formed by the customers themselves and are also bound by the boundaries that are defined by them. Companies will have to be polite and careful when trying to interact with these segments because if the community senses that they (the companies) are hunter for new customers or and type of irrelevant advertising, they will be ignored by the whole segment (Kotler, P., Kartajaya, H., & Setiawan, I., 2017). The internet has created new roads to finding customers, connecting with them and managing relationships, and social media channels are the ones with the most potential.

In today's business environment, which is defined by a world that is becoming more digitally linked, businesses must utilize social media platforms to promote their brands. Given the significant financial investments made by firms in social media marketing techniques, it is imperative to comprehend the concrete effects these campaigns have on brand loyalty. Even with the abundance of research on social media marketing, there is still a great deal of work to be done to fully understand the complex dynamics and causal links that control how social media initiatives affect the emergence and maintenance of brand loyalty.

The growing importance of social media marketing extends beyond the telecom industry to the broader economy, underscoring the necessity for comprehensive research in this area. Specifically, in the Ethiopian context, there are a few studies focused on social media marketing's impact within the telecommunications sector.

The study explores critical variables such as customer engagement, customer reach, customer sentiment, and electronic word of mouth (e-WOM), seeking to elucidate their individual and collective impact on brand loyalty. Understanding these relationships will provide valuable insights for academic research and practical applications, enabling businesses to optimize their social media marketing strategies to foster stronger customer loyalty and achieve better market outcomes. The increasing importance of social media marketing not only in the telecom industry but also in the economy, the lack of sufficient research on social media marketing, the potential it has for profiting the company and the potential for academic contributions have led the researcher to conduct this research. This research will try to identify the impact of the social media marketing implemented by Ethio Tel on the loyalty of its customers.

Ethio Tel has over 77 million customers and from those 38 million plus are internet and data users. In Ethiopia the number of social media users for example Facebook, has topped 8 million, and yet ethio tel still only has 1.7 million followers. This shows that ethio tel still has a lot to do or isn't doing something right. This research aims to fill this gap by examining how Ethio Telecom's social media marketing strategies influence customer loyalty.

### **1.3. Research questions**

#### **Main Research Question**

What is the impact of Ethio telecom's social media marketing on the brand loyalty of customers?

#### **Sub-research Questions**

- What impact does customer engagement and interaction on social media have on brand loyalty?
- Does customer reach on social media impact brand loyalty of customers?
- Does customer sentiment impact the brand loyalty of customers?
- What is the impact of electronic word of mouth on brand loyalty of customers?

### **1.4. Objectives of the Study**

#### **1.4.1. General Objective**

The general objective of this study is to identify the impact of social media marketing on the brand loyalty of customers of Ethio Tel.

#### **1.4.2. Specific Objectives**

The specific objectives of this study are:

- To determine how customer engagement and interaction impact brand loyalty
- To understand the impact of customer reach on the brand loyalty of customers
- To identify if customer sentiment on social media has a positive impact on brand loyalty
- To understand the impact of electronic word of mouth on brand loyalty

### **1.5. Significance of the Study**

Even though the importance of social media in marketing is growing rapidly, there doesn't seem to be enough research done within the Ethiopian context; and especially those ones that focus on telecommunications. This study can contribute to giving some valuable insights to people who choose to do more research work on the specific topic and the general topic of digital marketing as well. Furthermore, this study will be helpful not only to Ethio Tel but also to other companies who wish to work more on their digital marketing strategy.

### **1.6. Scope of the Study**

This study's focus is on the impact that social media marketing has on the brand loyalty of customers. Conceptually it will cover the different dimensions of social media marketing but will especially focus on customer online engagement, customer reach, customer sentiment and the electronic word of mouth. In terms of the target scope, the study took two social media platforms (Facebook, Twitter/X) into consideration. A combination of qualitative and quantitative data collection methods will be used to gather any information that is relevant for the study.

### **1.7. Definition of terms**

*Social media* - is the umbrella term that is used for a web-based software and service that helps users come together online and exchange, communicate and participate in any form of social interaction (Ryan, 2014).

*Social Media Marketing* - is a form of digital marketing that utilizes social media platforms to connect with the audience, build brand awareness, and promote products or services (Evans, D. 2016)

*Brand Loyalty* – is when customers make repeated purchases based on a psychological decision-making process as opposed to picking a brand at random (Tarpey, L., 1974).

*Customer Reach* - the number of unique individuals who see your brand's message or content across various marketing channels, particularly social media (Chaffey & Chadwick, 2020).

*Customer Sentiment* – is the overall emotional tone that customers express towards your brand. This can be positive, negative, or neutral and is often measured through social media listening, reviews, and surveys (Pena et al., 2017).

*Electronic Word of Mouth (E-WOM)* - are any comments, whether favorable or unfavorable, from prospective, real, or past clients that are posted online and accessible to many individuals and organizations (Hennig, 2004).

*Customer Engagement* - is the process of when a brand and its customers continuously interacting and developing a relationship through a variety of touchpoints and experiences that increase customer satisfaction and loyalty (Vanhamme, J., & Lindgreen, A., 2013).

## **1.8. Organization of the Study**

The research paper was structured into five parts. The first chapter covers background of the study, problem statement, research questions, objectives of the study, significance and scope of the study along with definition of terms related to the study. The second chapter contains a review of relevant literature that illustrates the study's practical features well in depth. The third chapter focuses on the research methodology and design. The fourth is about presenting the data and its analysis. The last chapter contains the summary and conclusion of the study along with the recommendation of the study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1. Theoretical Review**

#### **2.2. Social Media**

Social media is a term used to describe an internet-based service that allows for people to come together online and have a sort of discussion and exchange of ideas in a form of social interaction. The type of interaction can be in a lot of different ways including text, audios, pictures, videos and involves the sharing of existing content created by others, rating products and the discussion of topics that are viral or trendy (Ryan, 2014). Social media as defined by Safko and Brake (2009) is the activities, practices and behaviors among communities of people who have gathered online seeking to get or share information and opinions using a two-way conversational media. Social media has the attributes of a Web 2.0 in which they are tools that are used for communications and are user empowering and have two parties participating (Robinson, 2007).

Firms can advertise their products and services, provide any support or create a community of brand advocates throughout the various forms of social media (Erdoğan & Çiçek, 2012). The communication of customers on the various platforms about brands not only help customers in sharing information but also is another cost-effective way for companies to help boost their brand recognition and recall which in return will help brand loyalty (Gunelius, 2011).

### **2.3. Social Media Marketing**

Social media marketing and relationship marketing are more related in that companies are shifting from trying to sell more to establishing and managing relationships with consumers. Social media marketing is different from the traditional trends of marketing and requires more focus to establish a good brand image and a better brand loyalty (Gordhammer, 2009). Social media marketing as defined by Kawasaki, G., & Fitzpatrick, P. (2012) is "the act of leveraging various social media platforms to achieve specific marketing goals through content, engagement, and community building."

According to Ryan (2014) effective social media marketing is about developing skills of customer engagement which includes looking for what people are interested in and what they're talking about and then present valuable information by creating or managing suitable content for them. He also entails that companies should talk to them not at them and notes how hugely important it is to listen to them.

Social media marketing can be defined according to Dorenda–Zaborowicz, M. (2012) as a systematical use of innovative technologies and social networks to achieve the general and specific goals for a company.

Through widespread knowledge sharing, social media marketing technology guarantees the integration of operations, functions, information, people, and processes. It is a flexible and personalized digital application. The program encompasses a variety of IT breakthroughs, including Facebook, Twitter, Telegrams, Instagram, YouTube, and WhatsApp, where users and producers communicate and exchange information in real time. Moreover, the adoption of this technology is a purposeful socioeconomic activity; the word purposeful implies efficiency benefits that are well-known because of the removal of costly and complicated computer system

interfaces. The socioeconomic process entails adopting it to increase consumer satisfaction and/or competitive advantage, although adoption decisions are frequently made by a variety of actors, who would typically want to make well-informed decisions or take new circumstances into consideration before making decisions.

#### **2.4. Online Customer Engagement**

A company's choice of business, its customers, its goals and its overall digital marketing strategy are the main points a firm needs to focus on before deciding on its social media marketing strategy. According to Ryan D. (2014), some of the potential benefits of engaging customers through social channels are listed below.

- To stay informed - firms can figure out what customers are really thinking. They get valuable insight into how customers perceive their products, their attitude towards the firm's brand and about the industry in which the company is involved in. Engaging with customers on a social networking site can be truly revealing without the firm being intrusive and understanding customer is the key to effective digital marketing.
- Raise company profile - a proactive engagement on social media helps companies gain a sense of trust and helps build a good reputation of helpfulness and responsiveness.
- Leveling the playing field - the cost of doing research through focus groups and surveys to measure customer sentiment is very high; whereas through social media, a small firm may easily steep itself into social media and simply understand what customers are talking about through various tools.
- Influence the influencers - these influencers are a few but they are the ones who are the most active and have gained the trust of the customers. If targeting them is done right, then the good word they will put in will be immense for the firm's online reputation.

- Nurture brand advocacy - identifying customers with an already positive attitude towards a firm's brand, and then nurturing it to have them be brand advocates voluntarily will extremely help out the company. Encouraging employees to be part of conversations online as well is also another way it can expand its reach.
- Pass it on - if a firm does it right and hits the right note, viral content is the most powerful. It is just like word-of-mouth marketing except that when it's online, the content travels faster and further.
- Wisdom of the crowd - firms should understand that by harnessing collective intelligence of the online communities they could easily get the answers to some of the problems and issues they're facing. The different inputs they get online from customers will not only help them do more informed research and develop better decisions but also help them understand how much customers really care.

## **2.5. Customer Reach**

Customer reach can be explained easily as creating, enlarging and sustaining a larger audience for the online content a brand creates. In the traditional ways brands were only able to reach their prospects through certain channels which had a pre-determined reach level which may also vary based on the type of channel used. But on a social networking site the reach level depends highly on the amount of effort the brand makes on the content it creates (Menezes, R. C., 2013). Digital marketers work hard to get prospects to connect with the brand online, mostly via getting them to use opt-in actions, such as “following” on Twitter, liking a page on Facebook or subscribing to a channel or a feed. In the digital age having a larger audience and being able to reach as many people as one can has huge strategic importance (Menezes, R. C., 2013).

Businesses can use the capabilities offered by the various social media platforms to increase their reach and interact with a wide range of audiences. Increased consumer reach makes it easier for companies and consumers to communicate frequently and consistently, which is crucial for sustaining brand loyalty (Laroche, Habibi, & Richard, 2013). According to Erdoğan and Çiçek (2012), social media strategies that are developed in a way that enhances customer reach contribute significantly to customer engagement, which strengthens the customer's emotional bond with the brand.

According to Tafesse and Wien (2018), organic reach is dependent on the content being viral and also the ability of the brand to create content that is more engaging and gets attention. On the other hand, paid reach is a sponsored one and targets a certain demography and is tailored to their preferences. (Voorveld et al., 2018). Paid reach guarantees content visibility to a larger and significant audience, while organic reach fosters credibility and trust. Both tactics are crucial.

The effectiveness of customer reach depends of many different factors such as the quality of the content posted, the frequency of posts and the different images and videos used (Ashley & Tuten, 2015). Furthermore, brands can use influencers and entice brand advocates to be able reach their followers' network more (Booth & Matic, 2011). The algorithms of the social networking sites and the different changes made by them also play a role in how content is prioritized in the user's feeds (De Vries et al., 2012).

According to (Hollebeek, Glynn, & Brodie, 2014) brands that are effective in utilizing their customer reach by creating more interactive and engaging content are more likely to see higher levels of customer engagement. The likes, comments, shares, and retweets the content gets serves as indicators of how good a brand is resonating with its audience. A high level of engagement is often related to increased customer loyalty, because the more a customer is

engaged with content and the brand the more likely they're to develop a favorable perception about it (Brodie, Ilic, Juric, & Hollebeek, 2013).

## **2.6. Customer Sentiment**

Customer sentiment refers to the attitudes and sentiments that customers have about a brand and is mostly obtained from social media engagements. The text data from social media platforms is analyzed using sentiment analysis, which is a subset of natural language processing, to find out if the sentiment is neutral, positive, or negative (Pang & Lee, 2008). Customer sentiment is the people's opinions, evaluations, appraisals, attitudes and emotions towards a certain product, service, brands, events or any subjects Zain *et al* (2022). Building and sustaining brand loyalty depends on a brand's ability to measure consumer satisfaction and engagement.

The different social networking sites that have become important for engagement provide the customers a place where they can share or express their opinions, feelings and experiences freely, which makes it very useful for brands to monitor and analyze these sentiments (Kaplan & Haenlein, 2010). According to Goh, Heng & Lin (2013), interactions on social media have a huge influence on customer perceptions and can improve brand loyalty if there is active engagement and responsive customer service.

A sentiment analysis score maybe a positive or a negative one; But both are important because it tells the firm to stop what they're doing and make a change of plan or keep doing what they're doing and working on maintaining it Zain *et al* (2022). The positive sentiments expressed on social media may lead the firm to increased loyalty and brand advocacy because a customer with a positive experience and a social media presence is more likely to share and recommend the brand to others which will in return foster a loyal customer base (Hollebeek, Glynn, & Brodie, 2014). A negative one on the other hand will have a damaging impact on loyalty of customers

and the brands that do not recover or address the negative feedback may face a declining customer loyalty (Kim & Ko, 2012).

There are various techniques and methods that can be used to analyze customer sentiment on a social networking site. Machine learning algorithms and neural networks have been the most effective and accurate when classifying and analyzing sentiments (Liu, 2012). Customer sentiment plays a critical role in social media marketing, influencing brand loyalty and customer engagement. By effectively analyzing and responding to customer sentiments, brands can foster positive relationships with their customers, enhancing loyalty and advocacy. As social media continues to evolve, advanced sentiment analysis techniques will become increasingly important in shaping successful marketing strategies Zain *et al* (2022).

## **2.7. Electronic word of mouth (E-WOM)**

Consumers communicate with each other because they want to connect with other people, benefit financially from doing so, show their care for other customers, or so that they can potentially feel better about themselves. The digital world enables consumers to share the different experiences and opinions they may have about certain products, services and brands to a whole lot of other customers (T. Hennig-Thurau et al. 2004).

According to Lovett, M. J., Peres, R., & Shachar, R. (2013), there are three main drivers for consumers to stimulate them to engage in word of mouth; They state these drivers as the social, the functional and the emotional drivers.

### **2.7.1 The social drivers of WOM**

The need for self enhancement or bettering oneself is a major motive for someone to engage in word-of-mouth communication. Wojnicki and Godes (2011) presented that customers use WOM

to show that they have a better knowledge or expertise about a certain product, service or brand and to achieve this using a positive WOM is far better than a negative one. They also stated that the higher a brand's quality is, the more consumers are to engage in a conversation about it.

Expressing their uniqueness is another motive for customers to talk about certain brands. Especially talking about brands that are more identifiable and unique give customers a sense of belongingness to certain type of group which is why the higher the degree of brand differentiation the more it generates WOM (Lovett, M. J. et al 2013).

The desire to communicate with others is also another motive under the social drivers. A relevant brand in a community and a more visible brand is more likely a conversation starter among a certain society which is another reason why choose to talk about certain products, services or brands (Lovett, M. J. et al 2013).

### **2.7.2. The Emotional Drivers of WOM**

The thought of a brand, a product or a service may bring up a certain emotion for a consumer; And this consumer may get the need to share his emotions with others. This is why satisfaction whether good or bad plays a vital role in generating WOM (Lovett, M. J. et al 2013). Brands or products with either a very high or a very low level of satisfaction levels are more likely to get more engagements than the ones with moderate satisfaction levels (Roberts 2004) & (Richins 1983).

### **2.7.3. The Functional Driver**

As Lovett, M. J., Peres, R., & Shachar, R. (2013) mentioned, the exchange of information happens in conversations and brands are more likely to be mentioned in them. And in these conversations, there's the one who gives the information and others who receive it. They also

state that a brand's 'complexity', which is the difficulty of getting more information about a certain brand plays a major role in WOM by stating the higher the complexity the more the people are to talk about it. Another statement made is the familiarity of the brand, product or service to a consumer. If a customer has better intelligence and is more familiar with a brand the more, he/she will be able to provide information, advise others and talk about it more (Lovett, M. J. et al 2013).

WOM can be vital in exploring intangible goods and being updated on observable attributes of search goods (Lovett, M. J. et al 2013). Service goods are hard to judge before consuming them which is why the experience of others can be helpful in the decision making of novices.

## **2.8. About Ethio Telecom**

Ethio telecom is one of the two telecommunications providers (and the largest) in Ethiopia. It has been around for over 128 years has over 70M mobile voice subscribers, 35M internet users and over 660K broadband subscribers. Along with its telecommunications service it also provides financial services to its customers. To add to it Ethio Tel has a very affordable and attractive digital cloud solution offer too. With it being the dominant firm in the market, it is active on a variety of social media platforms including Facebook, Twitter, Instagram, YouTube, Telegram and WhatsApp.

- Facebook - 1.3 million followers
- Twitter - 370K followers
- Instagram - 100K followers
- YouTube - 20K subscribers
- Telegram – 2 million subscribers

Ethio Tel has implemented a chatbot throughout all its social media channels where customers can help themselves with information, check their balances and bills, check the status of their subscriptions and chat with an agent if they need to.

The Ethiopian government has allowed the monopoly of Ethio Tel to end a few years back and opened the door to other interested telecom providers to enter the market and compete. This implies that the number of internet users will increase and so will the social media users.

## **2.9. Empirical Review**

Erdogomus & Mesut did a study in 2012 in Turkey and the results showed that the social media marketing strategy used by companies were most significant drivers of brand loyalty when the contents were interactive and advantageous. Relevant content and the shareability of the content to other people in their community and the presence of the brand on different social media channels were the second and third drivers. They suggested that if companies want to run effective social media marketing campaigns, they should consider the values they offer to customers and how much they mean to them. Based on the values they get, whether good or bad these customers will share their experiences to families, friends and other people in the social media community.

Customer engagement is a crucial factor in the success of social media marketing and its impact on brand loyalty. Empirical studies by Brodie et al. (2013) suggest that customer engagement, which includes interactions such as likes, comments, shares, and direct messages, significantly enhances the emotional connection between the customer and the brand. These interactions foster a sense of community and belonging, which in turn strengthens brand loyalty. The theory posits that the more a customer is engaged with a brand's social media content, the stronger their attachment and loyalty to the brand becomes. This is supported by the findings of Hollebeck,

Glynn, and Brodie (2014), who argue that customer engagement acts as a mediating variable that links social media marketing efforts to increased brand loyalty. Brands that actively respond to customer inquiries and encourage participation in discussions tend to see higher levels of engagement and, consequently, loyalty.

Studies by Laroche et al. (2013) highlighted the impact of social media on customer engagement and brand loyalty. By analyzing data from 600 social media users, they found that active participation in brand-related social media activities enhances both cognitive and affective engagement, leading to stronger loyalty. From this, the first hypothesis was formulated;

***H1:** Online customer engagement has a significant and positive impact of brand loyalty*

Expanding customer reach increases brand exposure and awareness, which are foundational steps in the customer journey toward loyalty. According to Huang and Su (2018), brands with a broader reach are more likely to be top-of-mind when customers make purchasing decisions, thus enhancing the likelihood of repeat purchases and loyalty.

Social media platforms are critical tools for expanding customer reach and building brand loyalty. Studies have shown that brands that effectively utilize social media to engage with customers see higher levels of loyalty (Hudson et al., 2016). Engaging content, timely responses to customer inquiries, and leveraging influencers are key strategies.

Customer reach refers to the extent to which a brand can connect with potential and existing customers through social media platforms. Empirical evidence from Laroche et al. (2013) indicates that broader customer reach achieved through social media marketing leads to greater brand awareness and visibility, which are essential precursors to brand loyalty. The theory is that as brands expand their reach, they attract more followers and potential customers who become

exposed to their content and messages. This increased exposure not only enhances the likelihood of customer interactions but also solidifies the brand's presence in the minds of consumers. Consequently, a wider reach facilitates a larger audience base that can be converted into loyal customers through consistent and engaging content, as demonstrated in the studies by Tafesse and Wien (2018).

Personalized marketing efforts enhance the effectiveness of customer reach strategies. Research by Lemon and Verhoef (2016) indicates that personalized communications, based on customer data and preferences, significantly boost customer loyalty by making customers feel valued and understood. From this, the second hypothesis was formulated;

***H2:** Customer reach has a significant and positive impact on brand loyalty*

Liu (2012) conducted a comprehensive review of sentiment analysis techniques and their application in marketing. The study found that sentiment analysis provides valuable insights into customer preferences and can predict future behaviors, such as purchases and brand advocacy.

Hudson et al. (2016) studied the effects of social media interactions on brand relationship quality. Their research indicated that positive customer sentiment, influenced by brand interactions on social media, enhances brand loyalty by strengthening the emotional bonds between customers and brands.

Customer sentiment, which encompasses the feelings and attitudes of customers towards a brand, plays a pivotal role in shaping brand loyalty. Empirical studies by Pang and Lee (2008) and further supported by Kim and Ko (2012), highlight that positive customer sentiment, often gauged through sentiment analysis of social media interactions, correlates strongly with increased brand loyalty. The theory asserts that when customers express positive sentiments

about a brand on social media, it not only boosts the brand's image but also encourages other potential customers to form favorable opinions. Positive sentiment acts as social proof, reinforcing the brand's credibility and trustworthiness. Conversely, negative sentiment can harm brand loyalty unless it is promptly and effectively addressed. Therefore, monitoring and managing customer sentiment is critical for maintaining and enhancing brand loyalty.

Kim and Ko (2012) investigated the impact of social media marketing activities on customer equity and found that positive customer sentiment generated through engaging content significantly boosts brand loyalty. From the above empirical review, the third hypothesis has been formulated;

***H3:** Customer Sentiment has a significant and positive impact on brand loyalty*

Jalilvand and Samiei (2012) demonstrated that e-WOM positively influences brand loyalty by affecting consumer attitudes and perceptions of brand credibility. Their study of the Iranian automotive industry showed that consumers who encounter positive e-WOM are more likely to develop a favorable attitude towards the brand, which in turn fosters loyalty.

Research by King, Racherla, and Bush (2014) explored the influence of e-WOM across different stages of the customer journey. They found that e-WOM plays a crucial role in the pre-purchase stage by shaping expectations and in the post-purchase stage by reinforcing satisfaction and loyalty. Positive e-WOM can thus act as a catalyst for repeat purchases and advocacy.

Electronic Word of Mouth (e-WOM) refers to the online exchange of information and opinions about a brand among consumers. Empirical research by Jalilvand and Samiei (2012) and Lovett, Peres, and Shachar (2013) underscores the significant impact of e-WOM on brand loyalty. The theory posits that positive e-WOM, generated through customer reviews, testimonials, and social

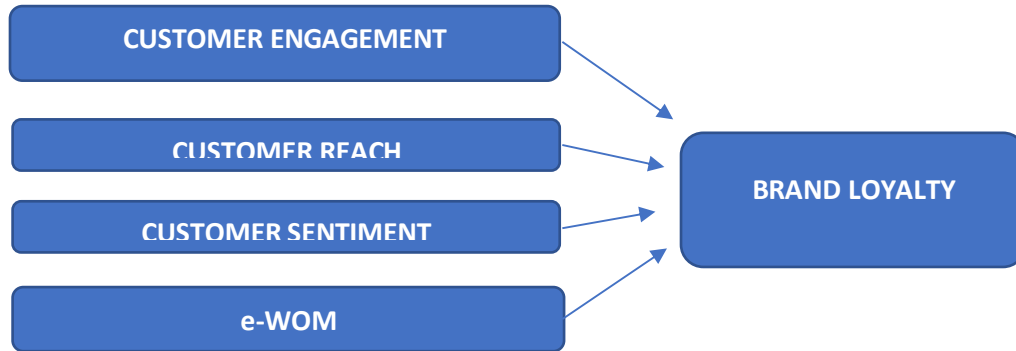
media shares, greatly influences the perceptions and attitudes of other consumers towards the brand. This influence is particularly strong because e-WOM is perceived as more trustworthy and credible than traditional advertising. Positive e-WOM acts as a powerful endorsement, encouraging repeat purchases and fostering brand loyalty. Furthermore, the study by King, Racherla, and Bush (2014) highlights that e-WOM not only affects the pre-purchase stage by shaping consumer expectations but also reinforces satisfaction and loyalty in the post-purchase stage, making it a crucial component of effective social media marketing strategies.

A study done by Wijaya, B., & Yulita, H. in 2020 on Lion Air airline illustrates how engaging and positive e-WOM fosters brand trust and favorable perceptions, leading to increased repurchase intentions and loyalty. Brodie et al. (2011) emphasizes the power of user-generated content (UGC) within e-WOM, showing how integrating customer voices creates a sense of community and brand ownership, strengthening loyalty. From this, the last hypothesis was formulated;

***H4: e-WOM has a significant and positive impact on brand loyalty***

## 2.10. Conceptual Framework

Based on the empirical literature reviews discussed the following conceptual framework has been proposed:



**Fig 1. Conceptual Framework** (Ismail, A.R. (2022))

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1. Research Design**

Out of the three types of research designs, this study used a quantitative research design. Quantitative research is a systematic empirical examination using statistical, mathematical, or computational methods to gather and examine numerical data. Researchers use this method to quantify and measure relationships, patterns, and trends within a given phenomenon. It is systematic and objective. Surveys, experiments, or statistical analysis of pre-existing datasets are frequently used in quantitative research to produce numerical results that can be generalized to a broader population. It seeks to deliver accurate and legitimate data so that scientists can make statistical conclusions and forecasts. (Cresswell, 2014).

#### **3.2. Research Approach**

An empirical research project's research design serves as a road map for gathering data. It serves as a "Blueprint" for empirical research that aims to test hypotheses or provide answers to research topics (Bhattacharjee, 2012).

The main aim of this study is to understand the impact that social media marketing has on the brand loyalty of customers. Because of that the study followed a deductive research approach. Deductive research is all about gathering knowledge from various previous literatures within the area of the topic, formulating hypotheses and then using those as a starting point (Bryman and Bell, 2011).

### 3.3. Population of the Study

The target populations for this study were people who are social media users and follow Ethio Tel on Facebook and X (Formerly twitter). The researcher assumed that even though Ethio Tel is active on other social media platforms, most of the engagements and mentions happen on these platforms.

### 3.4. Sample Size

The customers who follow Ethio Tel on the chosen three social media channels i.e. Facebook and X, have reached over 1.3 million and 370K and these numbers are getting higher and higher every day. Considering the increasing number of followers that it would be too expensive and unwise to use the whole of the population, the researcher will use the formula that was formulated by Cochran (1977) used for an infinite population.

$$n_0 = \frac{z^2 pq}{e^2}$$

Where n = required sample size

Z = is a measure of degree of confidence level at 95% (i.e., 1.96) <sup>2</sup>

q = Probability of negative response (0.5)

p = is a measure of probability of inclusion positive response (0.5)

e= Tolerable error (0.05) <sup>2</sup>

(1.96) <sup>2</sup> (0.5\*0.5)/ (0.05) <sup>2</sup> = 384.16 ~ 384 will be the total number of respondents that will be needed.

### **3.5. Sampling Technique**

The technique of sampling involves choosing a representative sample that accurately reflects the population. Probability sampling and nonprobability sampling are the two most used sampling strategies. In probability sampling, every member of the population has an equal chance of being chosen; however, in non-probability sampling, the likelihood of being chosen is uncertain (Bhattacharjee, 2012). Thus, convenience sampling was used to deliver the questionnaires online for this approach allowed for efficient data collection within a limited time frame and budget.

### **3.6. Sources of Data Collection**

Primary and secondary data sources are the two categories of data sources. Information that must be obtained from the original source is referred to as a primary data source. Conversely, secondary data sources are those that are derived from previously available or from sources that have been gathered for a different objective. Both data sources were used in this study.

### **3.7. Data Gathering Instruments**

The data for this study was gathered through structured questionnaires. These questionnaires will have two different sections. One for the demography of the respondents and the other will be questions about the topic. Respondents were asked to fill out on a Lickert scale from 1 to 5 with '1' being 'Strongly Disagree' and '5' being 'Strongly Agree'.

### **3.8. Data Analysis Method**

Data collected through structured questionnaire was analyzed by making use of SPSS (Statistical package for social science). An analysis of descriptive statistics, bivariate correlational analysis and standard multiple linear regression were used to answer the basic research questions asked in chapter one.

### **3.9. Reliability & Validity**

A crucial instrument for determining the degree of consistency of an attribute that needs to be measured is the reliability test. A measuring tool's stability, consistency, and dependability are also related to its reliability. One of the most widely used reliability measures is Cronbach's alpha. It indicates whether a scale is one-dimensional or multidimensional, as well as the degree to which items in a questionnaire are related to one another. The alpha value of the Cronbach's coefficient typically falls between 0 and 1. A higher level of internal consistency is indicated by higher Cronbach's coefficient alpha values. (Nawi, F. A. M., Tambi, A. M. A., Samat, M. F., & Mustapha, W. M. W., 2020). The most accepted value of Cronbach's coefficient alpha is 0.70 as it should be equal to or higher than to reach internal reliability. As per the Cronbach's coefficient alpha table below the data collected in this study was reliable.0.70 as it should be equal to or higher than to reach internal reliability. To assure the validity of the research paper all the variables are adopted from previous research works.

Validity is concerned with whether the findings are really about what they appear to be about (Saunders, M., Lewis, P., & Thornhill, A., 2003). It is the accuracy and meaningfulness of inferences, which are based on the research results. Since the respondents who took part in this study was voluntarily and questionnaires had no ambiguity the research results are taken as valid. Besides, analysis was made using different statistical tools.

# CHAPTER FOUR

## DATA ANALYSIS AND INTERPRETATION

### 4. Introduction

This chapter of the research paper incorporates four parts. The first part discusses about the sample characteristics of the respondents is presented using descriptive statistic. Then correlation analyses and regression analysis, as well as discussion of the result presented accordingly.

A total of 343 responses were collected but 24 of those responses were not included in the research since the respondents do not follow Ethio Tel’s social media page on either of the social networking sites. So a total of 319 responses were taken and analysed for the purpose of this research.

### 4.1. Demographic Statistics

As shown in chart 1, of the total 319 respondents, the number of male of respondents is 223 which is 69.9% and the number of female respondents is 96 which covers 30.1%.

Count of Sex

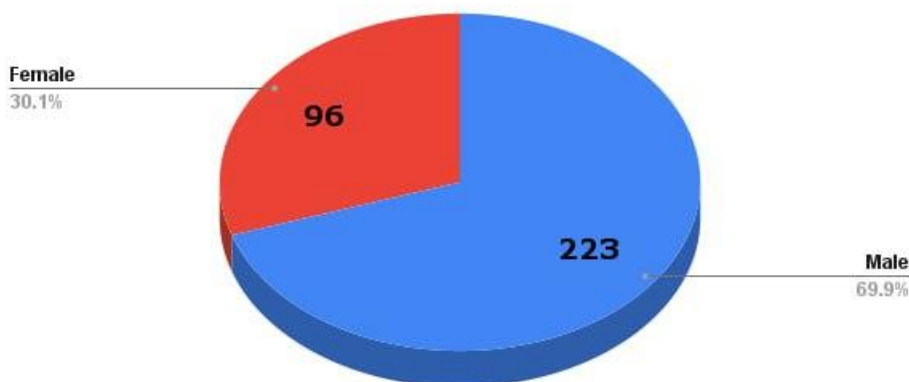
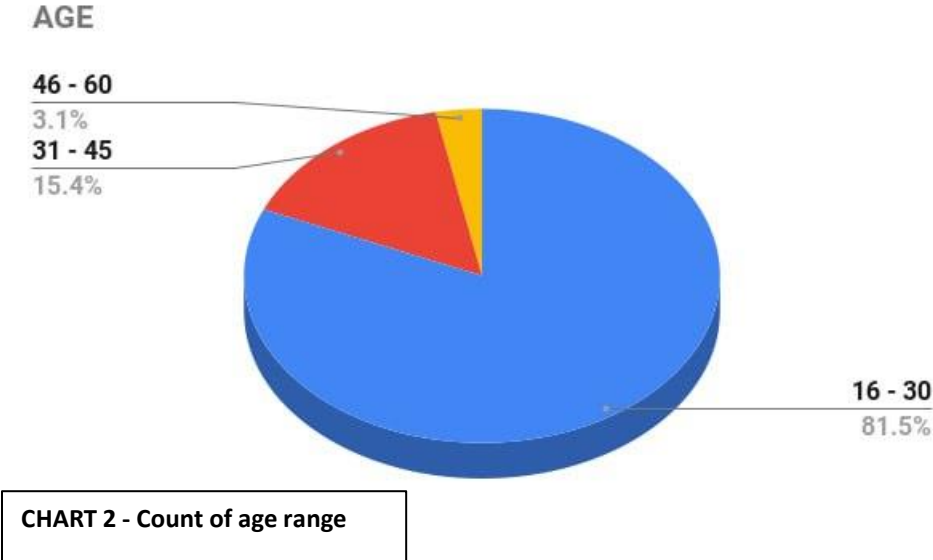


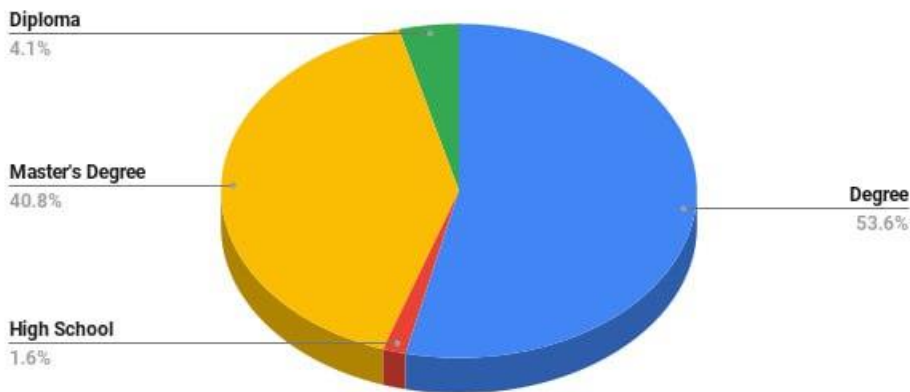
CHART 1 - Count of sex

As shown in chart 2, which shows the counts of the age ranges of the respondents, most of the respondents (81.5%) were in the age range of 16 – 30. The respondents within the age range of 31 – 45 held 15.4% and the age range between 46 – 60 had 3.1% of the response rate.



As shown in the third chart, which shows the educational level of the respondents, 53.6% of the respondents had a degree, 40.8% of them had a master’s degree, 4.1% of them had a diploma and 1.6% of the respondents had finished high school.

### Count of Educational Level



**CHART 3 - Educational level**

### 4.2. Reliability Test

As stated in chapter three, the reliability test is to be measured by Cronbach's alpha and the normal range is from 0 – 1. The accepted value for the alpha is greater than or equal to 0.70 and according to table 4.1 the overall reliability is 0.913 which indicates the study has a high reliability.

| Reliability Statistics |            |
|------------------------|------------|
| Cronbach's Alpha       | N of Items |
| .913                   | 5          |

**Table 4.1. Overall Reliability**

As seen on the below table 4.2, the alpha result for each variable is listed and all variables scored more than 0.70 which is between the acceptable range

|                    | Total Correlation | Cronbach's Alpha |
|--------------------|-------------------|------------------|
| CustomerEngagement | .707              | .909             |
| CustomerReach      | .704              | .909             |
| CustomerSentiment  | .839              | .881             |
| eWOM               | .835              | .884             |
| BrandLoyalty       | .822              | .885             |

**Table 4.2. Cronbach's alpha result for each variable**

### 4.3. Descriptive Statistics

Descriptive statistics were used to describe the basic features of the data in a study. It provided simple summaries about the sample and the measures. Descriptive Statistics was used to present quantitative descriptions in a manageable form; Each descriptive statistic reduces lots of data into a simpler summary (Gelman, 2007). Respondents were asked to rate their insight / observation on a five-point Likert type scale ranging from 1 being strongly disagree to 5 strongly agree for brand image dimensions. The results are presented in the table below.

| Descriptive Statistics                          |     |       |                |
|---|-----|-------|----------------|
| Customer Engagement                             | N   | Mean  | Std. Deviation |
| Ethio Tel replies to comments and messages      | 319 | 4.02  | .826           |
| I often react to posts from Ethio Tel           | 319 | 3.29  | 1.016          |
| I often comment on posts from Ethio Tel         | 319 | 3.09  | 1.084          |
| I often share posts or contents about Ethio Tel | 319 | 3.14  | 1.094          |
| Valid N (listwise)                              | 319 | 3.385 | 0.755          |

**Table 4.3. Descriptive analysis for customer engagement**

Table 4.3 shows the four statements in the questionnaire under the customer engagement variable. The average mean score is 3.385 and had an standard deviation of 1.005 which implies

that the respondents were more inclined to agree with the statements made about the online customer engagement of the company.

| Descriptive Statistics   |     |      |                |
|--|-----|------|----------------|
| Customer Reach   | N   | Mean | Std. Deviation |
| I often see new content on social media from Ethio Tel   | 319 | 4.10 | .820           |
| I feel more connected to Ethio Tel because of its presence on social media                           | 319 | 3.87 | .930           |
| I am likely to recommend Ethio Tel's brand to others because it is widely recognized on social media | 319 | 3.78 | .903           |
| Valid N (listwise)   | 319 | 3.91 | 0.747          |

**Table 4.4. Descriptive analysis for customer reach**

According to the above table 4.4, respondents were given the three statements listed. The average mean turned out to be 3.91 and had an standard deviation of 0.884. The results show that most of the respondents were inclined to agree to the statements made.

| Descriptive Statistics |   |      |                |
|------------------------|---|------|----------------|
| Customer Sentiment     | N | Mean | Std. Deviation |

|  |     |      |       |
|--|-----|------|-------|
| I feel very positive when I see Ethio Tel's brand mentioned on social media          | 319 | 3.93 | .833  |
| I trust the information shared by Ethio Tel on social media                          | 319 | 3.90 | .958  |
| I would defend Ethio Tel when someone else expresses a negative comment about it     | 319 | 3.51 | 1.012 |
| I usually post or comment positive experiences shared with Ethio Tel on social media | 319 | 3.35 | 1.068 |
| Valid N (listwise)   | 319 | 3.67 | 0.775 |

**Table 4.5. Descriptive analysis for customer sentiment**

For the third variable, as shown in the above table 4.5, four statements were made to understand the customer sentiment towards the company. The results showed an average mean of 3.67 and an standard deviation of 0.967 which implies that the respondents were more inclined to agree with the statements made.

| Descriptive Statistics   |     |      |                |
|--|-----|------|----------------|
| e-WOM  | N   | Mean | Std. Deviation |
| I often suggest others to like and follow Ethio Tel's social media page            | 319 | 3.63 | .958           |
| I have told others about something I have seen on Ethio Tel's social media page    | 319 | 3.93 | .734           |
| I have discussed about Ethio Tel's products & services with others on social media | 319 | 3.53 | .947           |
| Valid N (listwise)   | 319 | 3.69 | 0.681          |

**Table 4.6. Descriptive analysis for e-WOM**

The last independent variable, e-WOM had four statements made about it and were presented to the respondents. As shown in table 4.6, the average mean score is 3.69 and had an standard

deviation of 0.879 which also shows that the respondents were mostly inclined to agree with the statements made about the variable.

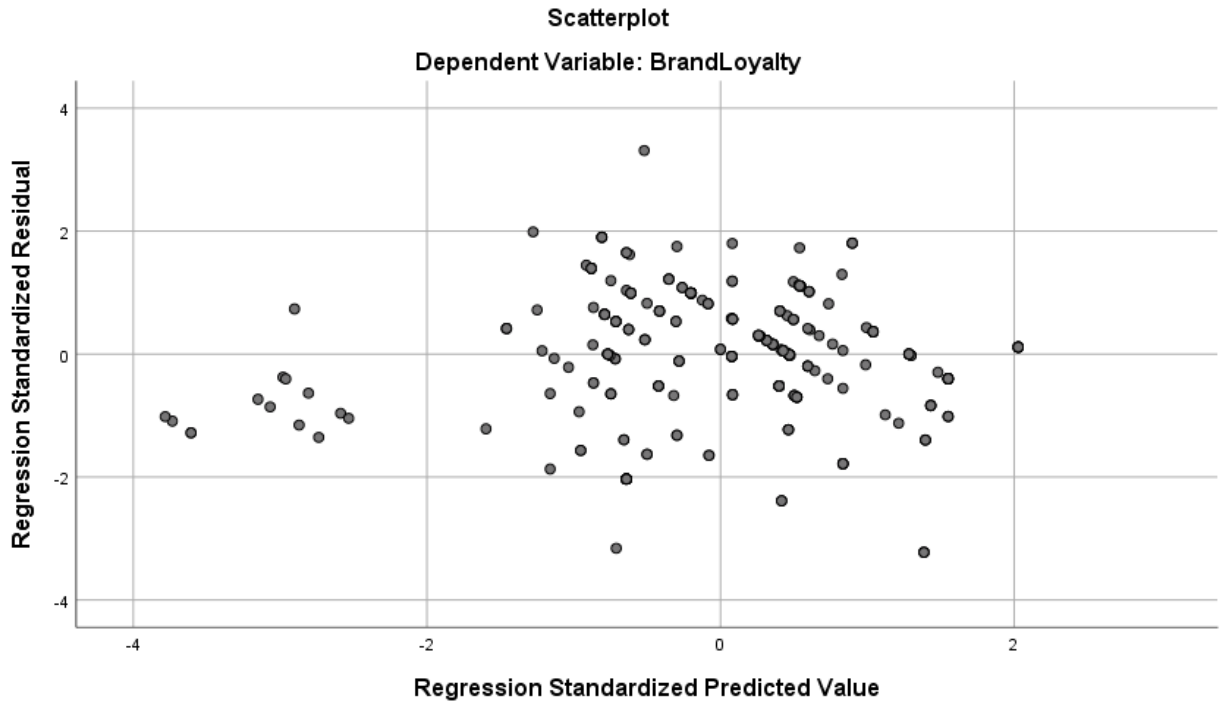
| <b>Descriptive Statistics</b>   |          |             |                       |
|---|----------|-------------|-----------------------|
| <b>Brand Loyalty</b>  | <b>N</b> | <b>Mean</b> | <b>Std. Deviation</b> |
| I often suggest Ethio Tel’s services to others  | 319      | 3.88        | .894                  |
| I often reconsider my decision based on information from social media before making a purchase from Ethio Tel | 319      | 3.73        | .852                  |
| I often participate on online contests organized by Ethio Tel   | 319      | 3.65        | .902                  |
| I am satisfied with Ethio Tel   | 319      | 3.62        | 1.066                 |
| Valid N (listwise)  | 319      | 3.62        | 0.731                 |

**Table 4.7. Descriptive statistics for Brand Loyalty**

The descriptive statistics for dependent variable as shown in table 4.7. show the mean and standard deviation results for the statements mad about brand loyalty. The average mean score is 3.62 with a standard deviation of 0.731 which shows that most of the respondents inclined to agree with the statements.

#### **4.4. Homoscedasticity**

In regression analysis, homoscedasticity refers to the premise that the variances of the residuals at each level of the independent variable's predictors are identical. That is, the spread of residuals should be constant along all of the independent variable's predictors. To perform a basic analysis, the researcher first creates a scatter plot in SPSS by plotting ZRESID (Y-axis) against ZPRED (X-axis). This allows the researcher to determine whether the assumptions of homoscedasticity and random errors have been met. ZRESID and ZPRED's graph ought to resemble a randomly distributed set of dots that are evenly spaced around zero.



**Graph – 1 – Homoscedasticity test**

As it can be seen in the scatter plot above, the data is per the assumptions of linearity.

#### 4.5. Normality Test

| Descriptive Statistics |   |          |          |
|------------------------|---|----------|----------|
|                        | N | Skewness | Kurtosis |

|                     | Statistic | Statistic | Std. Error | Statistic | Std. Error |
|---------------------|-----------|-----------|------------|-----------|------------|
| Customer Engagement | 319       | -.341     | .137       | -.056     | .272       |
| Customer Reach      | 319       | -1.127    | .137       | 1.705     | .272       |
| Customer Sentiment  | 319       | -.641     | .137       | 1.111     | .272       |
| E-WOM               | 319       | -1.080    | .137       | 2.313     | .272       |
| Brand Loyalty       | 319       | -1.359    | .137       | 2.503     | .272       |
| Valid N (listwise)  | 319       |           |            |           |            |

**Table 4.8. Normality test**

According to table 4.8., for Customer engagement, the skewness values are relatively close to 0, suggesting a distribution close to normal. While for the others the skewness slightly seems to be a more peaked distribution.

#### **4.6. Multi Collinearity**

To check if there is any multicollinearity among independent variables tolerance value and variance inflation factor (VIF) tests had to be made. The Variance Inflation Factor (VIF), which measures the impact of correlations between independent variable predictors on the accuracy of regression estimations, is used in the study to verify this. Ideally, the VIF factor should in the 1 - 10 range. The measure of tolerance indicates the extent to which the other independent variable predictors in the model do not account for the variability of the designated independent variable. If the value for tolerance is below 0.2 it means that the multiple correlations with other variables is high and suggests that multicollinearity is an issue. A good regression model must not have a multicollinearity issue or a strong correlation between its independent variable predictors and to say this needs to have a tolerance level greater than 0.2 and a variance inflation factor (VIF) value between 1 and 10 (SPSS Inc,2007).

| Coefficients |                     |                         |       |
|--------------|---------------------|-------------------------|-------|
| Model        |                     | Collinearity Statistics |       |
|              |                     | Tolerance               | VIF   |
| 1            | Customer Engagement | .502                    | 1.991 |
|              | Customer Reach      | .505                    | 1.980 |
|              | Customer Sentiment  | .321                    | 3.116 |
|              | E-WOM               | .330                    | 3.031 |

a. Dependent Variable: Brand Loyalty

**Table 4.9. Collinearity test**

So, as shown in the above table 4.8, the results for tolerance for all variables is above 0.2 and the results of the VIF values are below 10; which shows that there isn't any multicollinearity issue.

#### **4.7. Correlation analysis**

As Geoffrey et al. (2005) mentioned a basic and important measure that is used to understand the association of two or more variables is a correlation analysis. It shows the type of relations between the variables; if its either a negative relationship or a positive one; And also the intensity of the relationship with values between -1.0 - 1.0. It is expressed as a correlation coefficient( $r$ ) and if the results are between 0.1 and 0.3 the correlation is low and if it is in the range of 0.3 - 0.7 there is a moderate correlation. If the correlation results are between 0.7 - 0.9 it is considered large and if it is higher than that it means that the correlation is very large.

| Correlations        |                     |                     |                |                    |        |               |
|---------------------|---------------------|---------------------|----------------|--------------------|--------|---------------|
|                     |                     | Customer Engagement | Customer Reach | Customer Sentiment | E-WOM  | Brand Loyalty |
| Customer Engagement | Pearson Correlation | 1                   | .538**         | .667**             | .660** | <b>.646**</b> |
|                     | Sig. (2-tailed)     |                     | .000           | .000               | .000   | .000          |
|                     | N                   | 319                 | 319            | 319                | 319    | 319           |
| Customer Reach      | Pearson Correlation | .538**              | 1              | .665**             | .658** | <b>.643**</b> |
|                     | Sig. (2-tailed)     | .000                |                | .000               | .000   | .000          |
|                     | N                   | 319                 | 319            | 319                | 319    | 319           |
| Customer Sentiment  | Pearson Correlation | .667**              | .665**         | 1                  | .782** | <b>.778**</b> |
|                     | Sig. (2-tailed)     | .000                | .000           |                    | .000   | .000          |
|                     | N                   | 319                 | 319            | 319                | 319    | 319           |
| E-WOM               | Pearson Correlation | .660**              | .658**         | .782**             | 1      | <b>.777**</b> |
|                     | Sig. (2-tailed)     | .000                | .000           | .000               |        | .000          |
|                     | N                   | 319                 | 319            | 319                | 319    | 319           |
| Brand Loyalty       | Pearson Correlation | .646**              | .643**         | .778**             | .777** | 1             |
|                     | Sig. (2-tailed)     | .000                | .000           | .000               | .000   |               |
|                     | N                   | 319                 | 319            | 319                | 319    | 319           |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 4.10. Correlation analysis**

So, accordingly, table 4.8 shows that there is a moderate correlation between two of the variables and brand loyalty; And a large correlation between the other two and brand loyalty.

- Customer sentiment has the highest correlation with  $r=0.778$ , which is considered large.
- The second variable with a large correlation is e-WOM with a correlation of  $r=0.777$
- The third ranking correlation is customer engagement with a correlation of  $r=0.646$  which is a moderate correlation
- The last variable customer reach has a correlation of  $r=0.643$  which is also considered a moderate correlation.

#### 4.8. Regression analysis

The regression model shows the extent to which the causal independent predictors account for the variance in the dependent variable measure.

| Model Summary   |                   |          |                   |                            |               |
|---|-------------------|----------|-------------------|----------------------------|---------------|
| Model   | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1   | .833 <sup>a</sup> | .694     | .690              | .40711                     | 2.151         |
| a. Predictors: (Constant), e-WOM, Customer Reach, Customer Engagement, Customer Sentiment |                   |          |                   |                            |               |

Table 4.11. Model Summary

As seen in table 4.9, **R** equals 0.833 and shows the linear combination of the four independent variables used in this study strongly predict brand loyalty which is the dependent variable. The dependent variable's variance is explained by the four independent variables in the model to the extent indicated by the **R Square** value. Adjusted R square statistics are used to correct R square values and provide a more accurate estimate of population values. The result for R-square is 0.694 which means that the independent variables used in this study account for or explain 69.4% of the dependent variable and the remaining 30.6% is to be explained by other variables that aren't included in this study.

Whether or not the assumption of independent errors is acceptable is expressed by the Durbin-Watson statistic. It is always assumed that the Durban Watson statistic has a value between 0 and 4. Positive autocorrelation is seen when the value is less than 2, and negative serial correlation is seen when the value is greater than 2. According to the conservative rule, figures larger than 3 or less than 1 should cause concern.(Field, 2005). In this case, the value is 2.151, which is close to 2 that the assumption has unquestionably been satisfied.

The objective of this study is to determine which independent variable best predicts the dependent variable. The standardized coefficient, Beta, is used to assess the influence of each independent variable on the dependent variable. The regression coefficient measures the average change in the dependent variable caused by a unit change in the independent variable. A greater Beta coefficient indicates that the independent variable is a better predictor of the dependent variable.

| Coefficients <sup>a</sup> |                     |                             |            |                           |       |      |                         |       |
|---------------------------|---------------------|-----------------------------|------------|---------------------------|-------|------|-------------------------|-------|
| Model                     |                     | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. | Collinearity Statistics |       |
|                           |                     | B                           | Std. Error | Beta                      |       |      | Tolerance               | VIF   |
| 1                         | (Constant)          | .289                        | .137       |                           | 2.109 | .036 |                         |       |
|                           | Customer Engagement | .119                        | .043       | .123                      | 2.784 | .006 | .502                    | 1.991 |
|                           | Customer Reach      | .116                        | .043       | .119                      | 2.702 | .007 | .505                    | 1.980 |
|                           | Customer Sentiment  | .326                        | .052       | .345                      | 6.268 | .000 | .321                    | 3.116 |
|                           | E-WOM               | .372                        | .058       | .347                      | 6.392 | .000 | .330                    | 3.031 |

a. Dependent Variable: Brand Loyalty

**Table 4.12. Coefficients**

The above table presents the standard coefficient value and the p-value of the variable examining the significance of the hypothesis. All the variables have a sig value of less than 0.05 which explains that all the variables have a significant role in determining brand loyalty.

With a beta value of 0.347 and a sig of 0.000, electronic word of mouth has the strongest significant contribution to explaining brand loyalty. At second place comes customer sentiment with a beta value of 0.345 and a sig of 0.000 making the second strongest contribution from the four variables in this study.

Customer engagement has a beta value of 0.123 and a sig of 0.006 and comes in third in making a significant contribution. The last variable making the least significant contribution from all the variables in this study is customer reach, having a beta value of 0.119 and sig of 0.007.

#### **4.9. Hypothesis Testing**

##### **H1: Online customer engagement has a significant and positive impact of brand loyalty**

The first hypothesis is supported because the p-value of customer engagement is 0.006 which means it does have a significant impact on brand loyalty. It also has a beta value of 0.123 so it has a positive impact too; So as customer engagement increases so does brand loyalty.

##### **H2: Customer reach has a significant and positive impact on brand loyalty**

The second hypothesis is supported because the p-value of customer reach is 0.007 which means it does have a significant impact on brand loyalty. It also has a beta value of 0.119 so it has a positive impact too; so as customer reach increases so does brand loyalty.

##### **H3: Customer Sentiment has a significant and positive impact on brand loyalty**

The third hypothesis is supported because the p-value of customer sentiment 0.000 which means it does have a significant impact on brand loyalty. It also has a beta value of 0.347 so it has a positive impact too; So as customer sentiment increases so does brand loyalty.

**H4: e-WOM has a significant and positive impact of brand loyalty**

The fourth hypothesis is supported because the p-value of customer engagement is 0.000 which means it does have a significant impact on brand loyalty. It also has a beta value of 0.345 so it has a positive impact too; so as e-WOM increases so does brand loyalty.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECCOMENDATIONS

#### 5.1. Summary

This research was conducted to find out the impact of social media marketing on brand loyalty by taking customer engagement, customer reach, customer sentiment and e-WOM as independent variables. The findings have been summarized below;

- On the descriptive statistics analysis, the average mean scores for all the variables were well more than 3 (ranging from 3.385 - 3.91). This implies that most of the respondents were inclined to agree with the statements made about the variables in the questionnaire.
- The tolerance level for all the variables were all above 0.2 and the VIF results were all under 10 suggesting that the study doesn't have a multicollinearity issue and that the independent variables are not highly correlated with one another; and also the estimates of the regression coefficients are more reliable and accurate.
- The correlation analysis showed that customer engagement and customer reach had a moderate correlation with brand loyalty while customer sentiment and e-WOM had a large correlation with customer sentiment being the highest. This implies that there is a strong association and that the independent variables of the study can explain a significant portion of the variance in the dependent variable.
- The result for R-square is 0.694 which means that the independent variables used in this study account for or explain 69.4% of the dependent variable and the remaining 30.1% is to be explained by other variables that aren't included in this study.

- The regression analysis showed that all variables had a positive beta value and also had p-value of below 0.05. All the variables had a significant contribution with e-WOM being the highest and customer reach being the lowest. So as customer engagement, customer reach, customer sentiment and e-WOM increase so does brand loyalty.

## **5.2. Conclusion**

The study's purpose was to investigate the impact of social media marketing on the brand loyalty of customers following a deductive research approach. It started out with asking one main research question which was to find out the impact social media marketing had on brand loyalty and the by following it with four sub-research questions which were about asking if the independent variables selected impacted brand loyalty. It was conducted on Ethio telecom by choosing two social networking sites in which Ethio tel is mostly active and engaging with customers and then convenience sampling was used to deliver the questionnaires. The data gathered was analyzed using the SPSS tool and conducting different analysis methods. The descriptive analysis showed that most of the respondents were inclined with the statements made about all the variables. The independent variables showed no correlation with one another and had a 69.4% share in explaining the variance of brand loyalty. All the independent variables had a significant and positive impact of brand loyalty which supports all four of the hypotheses that were made in the literature review.

## **5.3. Recommendations**

So based on the findings of the research, the researcher chooses to make certain recommendations that would be helpful to Ethio tel and other companies in enhancing brand loyalty through social networking sites.

Given that customer engagement has a moderate but significant correlation with brand loyalty, it is recommended that Ethio Telecom invest in strategies that foster deeper engagement with their customers on social media platforms. This can be achieved through interactive content, regular updates, and prompt responses to customer inquiries (Hudson et al., 2016).

Although customer reach had the lowest beta value, its positive impact on brand loyalty suggests that expanding the company's reach on social media is beneficial. Ethio Telecom should consider leveraging advertising tools on social media platforms to target a broader audience and increase their visibility (Ashley & Tuten, 2015).

The high correlation between customer sentiment and brand loyalty indicates that positive customer perceptions significantly enhance loyalty. It is crucial for Ethio Telecom to monitor and manage customer sentiment by using sentiment analysis tools to track and respond to customer feedback effectively. Creating campaigns that resonate emotionally with the audience can also boost positive sentiment (Kim & Ko, 2012).

With e-WOM having the highest impact on brand loyalty, Ethio Telecom should encourage satisfied customers to share their positive experiences online. This can be facilitated through referral programs, testimonials, and incentivizing reviews. Active engagement with influencers and brand advocates can amplify positive e-WOM (Gruen, Osmonbekov, & Czaplewski, 2006).

As the study shows that 30.1% of the variance in brand loyalty is explained by factors not included in this research, it is essential for Ethio Telecom to continuously monitor their social media strategies and adapt to new trends and customer behaviors. Conducting regular research and staying updated with the latest developments in social media marketing can help in identifying additional factors that influence brand loyalty (Felix, Rauschnabel, & Hinsch, 2017).

Positive e-WOM significantly impacts brand loyalty by enhancing brand credibility and customer perceptions (Jalilvand & Samiei, 2012). Therefore ethio tel should encourage satisfied customers to share their positive experiences on social media. Highlight testimonials and reviews from happy customers in your marketing efforts.

Continuous monitoring and adjustment of social media strategies are essential for maintaining brand loyalty (Ashley & Tuten, 2015). So, regularly reviewing the performance of its social media campaigns using analytics tools and being flexible and ready to adjust strategies based on what works best for engaging and retaining its audience would be crucial.

Sentiment analysis helps in understanding customer emotions and sentiments towards the brand (Liu, 2012). This information can be used to tailor marketing strategies and improve customer satisfaction. Employing sentiment analysis tools to monitor customer feedback and sentiment on social media and then use this data to address negative sentiments promptly and reinforce positive feedback is also an important thing to consider for ethio tel and also other firms.

## References

- Alkhalaf, A., Al-Salaymeh, M., Alshare, F., & Eneizan, B. M. (2017). The Effect of Brand Awareness on Brand Loyalty: Mediating Role of Brand Commitment. *European Journal of Business and Management*, 9(36).
- Ashley, C., & Tuten, T. (2015). Creative strategies in social media marketing: An exploratory study of branded social content and consumer engagement. *Psychology & Marketing*, 32(1), 15-27.
- Balachandran, S., Grapentine, T., & Liu, H. (2017). The impact of source influence and sentiment on brand loyalty via electronic word-of-mouth. *Decision Support Systems*, 94, 84-92.
- Bergkvist, L., & Taylor, C. (2022). Reviving and Improving Brand Awareness As a Construct in Advertising Research. *Journal of Advertising*, 51, 294 - 307.
- Bhattacharjee, A. (2012). *Social Science Research: Principles, Methods, and Practices*. 2nd ed., Zurich, Switzerland: Global Text Project.
- Bianchi, C., & Andrews, L. (2015). Investigating marketing managers' perspectives on social media in Chile. *Journal of Business Research*, 68(12), 2552-2559.
- Booth, N., & Matic, J. A. (2011). Mapping and leveraging influencers in social media to shape corporate brand perceptions. *Corporate Communications: An International Journal*, 16(3), 184-191.
- Brodie, R. J., Hollebeck, L. D., Juric, M., & Ilic, M. (2011). Customer engagement: conceptual framework and research propositions. *Journal of Service Research*, 14(3), 250-264.

- Bryman, A., & Bell, E. (2011). *Business Research Methods*. Oxford University Press: Oxford.
- Chaffey, D., & Chadwick, A. (2016). *Marketing in the digital age: Strategies for delivering value in a connected world*. Pearson Education Limited.
- Chaffey, D., & Chadwick, A. (2020). *Digital marketing & ecommerce strategy*. Pearson Education Limited.
- Chernatony, L., & Riley, F. (1998). Defining A "Brand": Beyond The Literature With Experts' Interpretations. *Journal of Marketing Management*, 14, 417-443.
- Dorenda–Zaborowicz, M. (2012). *Marketing w social media.*, 3, 59-79.
- De Vries, L., Gensler, S., & Leeﬂang, P. S. (2012). Popularity of brand posts on brand fan pages: An investigation of the effects of social media marketing. *Journal of Interactive Marketing*, 26(2), 83-91.
- Erdoğan, İ. E., & Çiçek, M. (2012). The Impact of Social Media Marketing on Brand Loyalty. *Procedia - Social and Behavioral Sciences*, 58, 1353-1360.
- Evans, D. (2016). *Social Media Marketing: An Hour a Day*. John Wiley & Sons.
- Eze, S. C., Chinedu-Eze, V. C. A., & Awa, H. O. (2021). Key Success Factors (KSFs) Underlying the Adoption of Social Media Marketing Technology. *SAGE Open*, 11(2).
- Felix, R., Rauschnabel, P., & Hinsch, C. (2017). Elements of strategic social media marketing: A holistic framework. *Journal of Business Research*, 70, 118-126.
- Gelman, A. and Hill, J., 2006. *Data analysis using regression and multilevel/ hierarchical models*. *Cambridge University Press*.

- Goh, K. Y., Heng, C. S., & Lin, Z. (2013). Social media brand community and consumer behavior: Quantifying the relative impact of user- and marketer-generated content. *Information Systems Research*, 24(1), 88-107.
- Gruen, T. W., Osmonbekov, T., & Czaplewski, A. J. (2006). eWOM: The Impact of Customer-to-Customer Online Know-how Exchange on Customer Value and Loyalty. *Journal of Business Research*, 59(4), 449-456.
- Hennig-Thurau, T., Gwinner, K., Walsh, G., & Gremler, D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, 18, 38 - 52.
- Hennig-Thurau, T., Gwinner, K., Walsh, G., & Gremler, D. D. (2010). The impact of corporate social media marketing on customer relationship management. *Journal of Service Research*, 13(2), 333-344.
- Hollebeek, L., Glynn, M., & Brodie, R. (2014). Consumer Brand Engagement in Social Media: Conceptualization, Scale Development and Validation. *Journal of Interactive Marketing*. 28. 10.1016/j.intmar.2013.12.002.
- Huang, R., & Su, L. (2018). The Role of Brand Image Congruity in Chinese Consumers' Brand Preference. *Journal of Business Research*, 86, 203-215.
- Hudson, S., Huang, L., Roth, M. S., & Madden, T. J. (2015). The influence of social media interactions on consumer–brand relationships: A three-country study of brand perceptions and marketing behaviors. *International Journal of Research in Marketing*, 32(1), 27-41.

- Ismail, A.R. (2022). The impact of social media marketing on brand loyalty through customer engagement, customer reach, and electronic word of mouth (e-WOM). *Novelty Journals*
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59-68.
- Keller, K.L. (2008). *Strategic Brand Management: Building, Measuring and Managing Brand Equity*. Third Edition. New Jersey: Pearson Prentice Hall.
- Keller, K. L. (2012). *Strategic Brand Management: Building, Measuring, and Managing Brand Equity*, 4th Edition. Prentice Hall.
- Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research*, 65(10), 1480-1486.
- Kim, J., & Jin, B. (2007). The role of brand awareness and brand image in the formation of mode loyalty. *International Journal of Hospitality Management*, 26(2), 349-367.
- Kotler, P., Kartajaya, H., & Setiawan, I. (2017). *Marketing 4.0: Moving from Traditional to Digital*. Wiley.
- Laroche, M., Habibi, M. R., & Richard, M. O. (2013). To be or not to be in social media: How brand loyalty is affected by social media? *International Journal of Information Management*, 33(1), 76-82.
- Li, Fang Fang & Larimo, Jorma & Leonidou, Leonidas. (2020). Social media marketing strategy: definition, conceptualization, taxonomy, validation, and future agenda. *Journal of the Academy of Marketing Science*. 49. 51-70. 10.1007/s11747-020-00733-3.

- Liu, B. (2012). Sentiment analysis and opinion mining. *Synthesis Lectures on Human Language Technologies*, 5(1), 1-167.
- Lovett, M. J., Peres, R., & Shachar, R. (2013). On Brands and Word of Mouth. *Journal of Marketing Research*, 50(4), 427–444.
- Menezes, R. C. (2013). Advantages of strong brands on customer reach and customer engagement on social media marketing. Erasmus University, Rotterdam School of Management, Department of Marketing Management.
- Nawi, F. A. M., Tambi, A. M. A., Samat, M. F., & Mustapha, W. M. W. (2020). A review on the internal consistency of a scale: the empirical example of the influence of human capital investment on Malcom Baldrige quality principles in TVET institutions. *Asian People Journal (APJ)*
- Pang, B., & Lee, L. (2008). Opinion mining and sentiment analysis. *Foundations and Trends in Information Retrieval*, 2(1-2), 1-135.
- Peña, J. L., McAfee, A., Yao, Y., & Luo, J. (2017). Sentiment analysis in social media for brand marketing. *Entropy*, 19(4), 108.
- Perera, C.H., Nayak, R., & Long, N.V. (2019). The Impact of Electronic-Word-of Mouth on e-Loyalty and Consumers' e-Purchase Decision Making Process: A Social Media Perspective. *International Journal of Trade, Economics and Finance*.
- Severi, E., Ling, K. C., & Nasermodeli, A. (2019). The impacts of electronic word of mouth on brand equity in the context of social media. *Journal of Marketing and Communication*, 8(2), 101-115.
- Tafesse, W., & Wien, A. (2018). Implementing social media marketing strategically: An empirical assessment. *Journal of Marketing Management*, 34(9-10), 732-749.

- Tarpey, L. (1974). A Brand Loyalty Concept—A Comment. *Journal of Marketing Research*, 11, 214 - 217.
- Van Rekom, I. (2009). Consumer engagement in e-commerce: Conceptual framework and propositions. *Journal of Research in Interactive Marketing*, 5(4), 309-329.
- Vanhamme, J., & Lindgreen, A. (2013). The quest for customer engagement through social media: A conceptual model. *Journal of Marketing Management*, 29(3-4), 456-478.
- Voorveld, H. A., Van Noort, G., Muntinga, D. G., & Bronner, F. (2018). Engagement with social media and social media advertising: The differentiating role of platform type. *Journal of Advertising*, 47(1), 38-54.
- Völckner, F., & Sattler, H. (2006). Brand awareness effects on consumer decision making: The mediating role of evoked
- Zain, S., Ramli, N., & Adnan, R. (2022). CUSTOMER SENTIMENT ANALYSIS THROUGH SOCIAL MEDIA FEEDBACK: A CASE STUDY ON TELECOMMUNICATION COMPANY. *International Journal of Humanities Technology and Civilization*.

## **Lists of links**

<https://doi.org/10.1080/00913367.2022.2039886>

<https://doi.org/10.1362/026725798784867798>

<https://doi.org/10.12775/NM.2012.003>

<https://doi.org/10.1177/21582440211006695>

<https://doi.org/10.1002/dir.10073>

<https://doi.org/10.1177/002224377401100215>

<https://doi.org/10.15282/ijhtc.v7i2.8739>

<https://doi.org/10.1016/J.JBUSRES.2016.05.001>

<https://doi.org/10.1561/1500000011>

[www.ethiotelecom.et](http://www.ethiotelecom.et)



4. Which of the following social networking sites do you use? (You may select both)

Facebook

X (Formerly, 'twitter')

5. Have you 'liked' or followed Ethio Tel's social media page on either of the two social networking sites?

Yes

No

**Part II: Social Media Marketing Variables**

Please indicate the extent to which you agree or disagree to each of the following statements by putting "X" or "√" marks.

| V1   | Customer Engagement                             | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|------|---|-------------------|----------|---------|-------|----------------|
| CE1  | Ethio Tel replies to comments and messages      |                   |          |         |       |                |
| CE 2 | I often react to posts from Ethio Tel           |                   |          |         |       |                |
| CE 3 | I often comment on posts from Ethio Tel         |                   |          |         |       |                |
| CE 4 | I often share posts or contents about Ethio Tel |                   |          |         |       |                |

| V2   | Customer Reach   | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|------|--|-------------------|----------|---------|-------|----------------|
| CR1  | I often see new content on social media from Ethio Tel   |                   |          |         |       |                |
| CR 2 | I feel more connected to Ethio Tel because of its presence on social media                           |                   |          |         |       |                |
| CR 3 | I am likely to recommend Ethio Tel's brand to others because it is widely recognized on social media |                   |          |         |       |                |

| V3  | Customer Sentiment          | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|-----|-----------------------------|-------------------|----------|---------|-------|----------------|
| CS1 | I feel very positive when I |                   |          |         |       |                |

|      |  |  |  |  |  |  |
|------|--|--|--|--|--|--|
|      | see Ethio Tel's brand mentioned on social media                                      |  |  |  |  |  |
| CS 2 | I trust the information shared by Ethio Tel on social media                          |  |  |  |  |  |
| CS 3 | I would defend Ethio Tel when someone else expresses a negative comment about it     |  |  |  |  |  |
| CS 4 | I usually post or comment positive experiences shared with Ethio Tel on social media |  |  |  |  |  |

| V4   | E - WOM  | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|------|--|-------------------|----------|---------|-------|----------------|
| EW1  | I often suggest others to like and follow Ethio Tel's social media page            |                   |          |         |       |                |
| EW 2 | I have told others about something I have seen on Ethio Tel's social media page    |                   |          |         |       |                |
| EW 3 | I have discussed about Ethio Tel's products & services with others on social media |                   |          |         |       |                |

| V5   | Brand Loyalty   | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|------|---|-------------------|----------|---------|-------|----------------|
| BL 1 | I often suggest Ethio Tel's services to others  |                   |          |         |       |                |
| BL 2 | I often reconsider my decision based on information from social media before making a purchase from Ethio Tel |                   |          |         |       |                |
| BL 3 | I often participate on online contests organized by Ethio Tel   |                   |          |         |       |                |
| BL 4 | I am satisfied with Ethio Tel   |                   |          |         |       |                |