

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



THE RELATIONSHIP BETWEEN DIGITAL MARKETING, CUSTOMER
RELATIONSHIP MANAGEMENT, AND SERVICE QUALITY ON BRAND
EQUITY IN TELECOMMUNICATION INDUSTRY

By

AHMED A. M. AISH



UUM
Universiti Utara Malaysia

MASTER OF SCIENCE (MANAGEMENT)

UNIVERSITI UTARA MALAYSIA

2022

THE RELATIONSHIP BETWEEN DIGITAL MARKETING, CUSTOMER
RELATIONSHIP MANAGEMENT, AND SERVICE QUALITY ON BRAND
EQUITY IN TELECOMMUNICATION INDUSTRY

By

AHMED A. M. AISH



UUM
Universiti Utara Malaysia

Thesis Submitted to

School of Business Management

Universiti Utara Malaysia

In Partial Fulfillment of the Requirement for the Master of Science (Management)



**Pusat Pengajian Pengurusan
Perniagaan**

SCHOOL OF BUSINESS MANAGEMENT

Universiti Utara Malaysia

PERAKUAN KERJA KERTAS PENYELIDIKAN
(*Certification of Research Paper*)

Saya, mengaku bertandatangan, memperakukan bahawa
(*I, the undersigned, certified that*)
AHMED A. M. AISH (827795)

Calon untuk Ijazah Sarjana
(*Candidate for the degree of*)
MASTER OF SCIENCE (MANAGEMENT)

telah mengemukakan kertas penyelidikan yang bertajuk
(*has presented his/her research paper of the following title*)

**RELATIONSHIPS BETWEEN DIGITAL MARKETING, CUSTOMER RELATIONSHIP MANAGEMENT
AND SERVICE QUALITY ON BRAND EQUITY IN TELECOMMUNICATION INDUSTRY**

Seperti yang tercatat di muka surat tajuk dan kulit kertas penyelidikan
(*as it appears on the title page and front cover of the research paper*)

Bahawa kertas penyelidikan tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan.
(*that the research paper acceptable in the form and content and that a satisfactory knowledge of the field is covered by the research paper*).

Nama Penyelia : **PROF. DR. NOR AZILA BT. MOHD NOOR**
(*Name of Supervisor*)

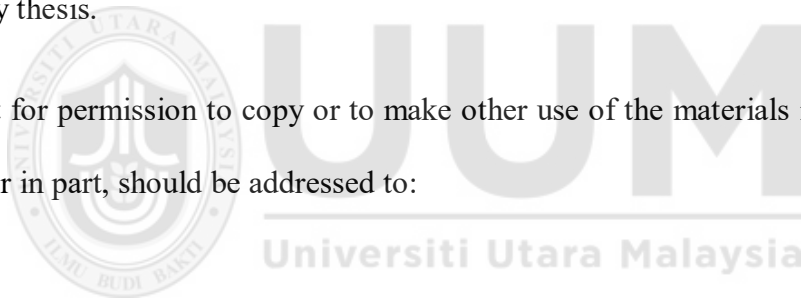
Tandatangan : 
(*Signature*)

Tarikh : **24 MAC 2022**
(*Date*)

PERMISSION TO USE

In presenting this thesis in fulfillment of the requirements for a postgraduate degree from Universiti Utara Malaysia, I agree that the University Library may make it freely available for inspection. I further agree that permission for copying this thesis in any manner, in whole or in part, for the scholarly purpose may be granted by my supervisors or in their absence, by the Dean of Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and Universiti Utara Malaysia for any scholarly use which may be made of any material from my thesis.

Request for permission to copy or to make other use of the materials in this thesis, in whole or in part, should be addressed to:



Director of Postgraduate Studies Unit, College of Business

Universiti Utara Malaysia

06010 UUM Sintok

Kedah Darul Aman

ABSTRACT

Building a strong brand with significant equity provides a host of benefits for business organizations. Understanding the sources and outcomes of brand equity provides managers with information how and where brands add value. While the brand equity associated with tangible goods has received a great deal of attention in the literature, a basic understanding of the nature of brand equity for services has yet to emerge. Most of what is known about brand equity for services is based on theoretical or anecdotal evidence. In addition, the presumed differences in brand equity associated with search-dominant, experience-dominant, and credence-dominant services has yet to be empirically examined. This study adopted the Theory of Customer-Based Brand Equity (CBBE) as an underpinning theory for its assumptions and to develop its model. The objectives of this study is to empirically test whether brand equity is influenced by digital marketing, customer relationship management (CRM) and service quality. A quantitative methodology was adopted. The data were based on online survey conducted among Jawwar Telecommunication company subscribers in the Gaza city, Palestine resulting in 150 respondents. Data were analyzed using correlation and multiple regression analysis in SPSS version 22. The results revealed that all the hypotheses were supported, indicating that digital marketing, CRM and service quality significantly influence brand equity. The results suggest that focusing on the constructs that create brand equity is more relevant to managers than trying to measure it as an aggregated financial performance outcome. This study offers theoretical and practical contributions for academics and professionals. The limitations of the study have been addressed and some valuable suggestions for future research work are offered.

Keywords: Brand Equity, Digital Marketing, Service Quality, Customer Relationship Management (CRM), Telecommunication Industry.

ABSTRAK

Membina jenama yang kukuh dengan ekuiti yang signifikan memberikan pelbagai manfaat kepada organisasi perniagaan. Memahami sumber dan pulangan ekuiti jenama memberikan pengurus dengan maklumat bagaimana dan di mana jenama boleh memberi nilai-tambah. Walaupun ekuiti jenama yang dikaitkan dengan produk telah mendapat banyak kajian dalam literatur, pemahaman asas tentang sifat ekuiti jenama untuk perkhidmatan masih terhad. Kebanyakan ilmu yang didapati berkaitan dengan ekuiti jenama untuk perkhidmatan adalah berdasarkan bukti teori atau anekdot. Di samping itu, perbezaan yang diandaikan dalam ekuiti jenama yang dikaitkan dengan dominan perkhidmatan, dominan pengalaman dan dominan kepercayaan masih belum dikaji dengan meluas secara empirikal. Kajian ini menerima pakai Teori Ekuiti Jenama Berasaskan Pelanggan (CBBE) sebagai teori asas untuk membuat andaian dan untuk membangunkan model kajian. Objektif kajian ini adalah untuk menguji secara empirikal sama ada ekuiti jenama dipengaruhi oleh pemasaran digital, pengurusan perhubungan pelanggan (CRM) dan kualiti perkhidmatan. Metodologi kuantitatif telah digunakan dalam kajian ini. Data diperolehi berdasarkan tinjauan dalam talian yang dijalankan dalam kalangan pelanggan syarikat Jawwar Telecommuniaction di bandar Gaza, Palestin yang melibatkan 150 responden. Data dianalisis menggunakan analisis korelasi dan regresi berganda dalam SPSS versi 22. Keputusan analisis menunjukkan bahawa semua hipotesis adalah disokong, menunjukkan bahawa pemasaran digital, CRM dan kualiti perkhidmatan mempengaruhi secara signifikan ekuiti jenama. Dapatan ini menunjukkan bahawa memfokuskan pada konstruk yang mewujudkan ekuiti jenama adalah lebih relevan kepada pengurus daripada cuba mengukurnya sebagai hasil prestasi kewangan agregat. Kajian ini menawarkan sumbangan teori dan praktikal untuk ahli akademik dan profesional. Batasan kajian telah dikemukakan dan beberapa cadangan untuk kerja penyelidikan masa hadapan ditawarkan. Kajian ini memberikan sumbangan dalam bidang teori dan praktikal kepada ahli akademik dan profesional.

Kata kunci: Ekuiti Jenama, Pemasaran Digital, Kualiti Perkhidmatan, Pengurusan Perhubungan Pelanggan (CRM), Industri Telekomunikasi.

ACKNOWLEDGEMENTS

Firstly, I am thankful to Allah for providing me with the strength and motivation necessary to do this study. I would like to extend my appreciation to my supervisor, Prof Dr. Nor Azila for his thorough supervision, encouragement, and willingness to support me throughout this study. I'd want to offer my heartfelt appreciation to her for her passion and guidance. Her direction enabled the completion of this study. Finally, I would like to dedicate my study to my family, who have been my staunchest supports throughout my life. I am indebted to all of my family members for their support and encouragement throughout my studies.



TABLE OF CONTENTS

CERTIFICATION OF THESIS	Error! Bookmark not defined.
PERMISSION TO USE.....	iii
ABSTRACT	iv
ACKNOWLEDGEMENTS.....	vi
TABLE OF CONTENTS	vii
LIST OF TABLES.....	x
LIST OF FIGURES.....	xi
LIST OF APPENDICES	xii

CHAPTER ONE:INTRODUCTION

1.1 Introduction.....	1
1.2 Background of the Study	1
1.3 Problem Statement	4
1.4 Research Questions	6
1.5 Research Objectives	6
1.6 Scope of Study	6
1.7 Significance of the Study.....	7
1.7.1 Theoretical Contributions.....	7
1.7.2 Practical Contributions.....	8
1.8 Organization of the Thesis	8

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction.....	10
2.2 Brand Equity	10
2.2.1 Brand Awareness.....	12
2.2.2 Brand loyalty.....	13
2.3 Theory of Customer-Based Brand Equity (CBBE).....	13
2.4 Digital Marketing (DM)	14
2.5 Customer Relationship Management (CRM)	15
2.5.1 Dimensions of Customer Relationship Management	17
2.5.1.1 Knowledge Management (KM).....	17
2.5.1.2 Technology-Based CRM.....	18
2.6 Service Quality (SQ)	18
2.6.1 Service Quality Measurement	19
2.6.1.1 Tangible.....	20
2.6.1.2 Reliability	21

2.6.1.3 Responsiveness	21
2.6.1.4 Assurance	22
2.6.1.5 Empathy	22
2.7 Hypotheses Development	22
2.7.1 Digital Marketing and Brand Equity	23
2.7.2 Customer Relationship Management and Brand Equity.....	24
2.7.3 Service Quality and Brand Equity	24
2.8 Theoretical Framework	25
2.9 Chapter Summary.....	26

CHAPTER THREE: METHODOLOGY

3.1 Introduction.....	27
3.2 Research Design.....	27
3.3 Sample Size	29
3.4 Study Population and Sample	31
3.5 Sampling Design and Technique	31
3.6 Data Collection Procedures	32
3.7 Measurement And Instruments	32
3.8 Operationalization Of Variables	35
3.9 Pre-Test And Pilot Study.....	36
3.10 Data Analysis	37
3.11 Chapter Summary.....	39

CHAPTER FOUR: ANALYSIS AND FINDINGS

4.1 Introduction.....	40
4.2 Response Rate.....	40
4.3 Screening of Data and Preliminary Analysis	41
4.4 Analyses of Missing Values	41
4.5 Normality Test	41
4.6 Multicollinearity Test.....	41
4.7 Descriptive Statistics of Respondents Profile	42
4.8 Descriptive Analysis of the Constructs	45
4.9 Analysis of Correlation.....	46
4.10 Hypotheses Testing	47
4.10.1 Analysis of Multiple Regressions	47
4.11 Chapter Summary.....	49

CHAPTER FIVE:DISCUSSION AND CONCLUSION

5.1 Introduction.....	50
5.2 Recapitulation of the Study Findings	50
5.3 Discussion.....	51
5.3.1 The Influence of Digital Marketing on Brand Equity.....	51
5.3.2 The Influence of Customer Relationship Management on Brand Equity.....	51
5.3.3 The Influence of Service Quality on Brand Equity	52
5.4 Contributions of the Research.....	52
5.4.1 Theoretical Implications	53
5.4.2 Practical Implications.....	53
5.5 Limitations and Future Research	54
5.6 Conclusion	54
REFERENCES	56
APPENDIX A	67
APPENDIX B	72
APPENDIX C: Statistical Output	75

LIST OF TABLES

Table 3.1 Summary of Sampling Procedure	29
Table 3.2 Variable Measurement	31
Table 3.3 Definition of Key Terms	33
Table 3.4 Results of Pilot Study.....	34
Table 4.1 Response Rate.....	37
Table 4.2 Multicollinearity Test.....	39
Table 4.3 Gender of Respondents	40
Table 4.4 Age of Respondents	40
Table 4.5 Academic Qualification of the Respondents.....	41
Table 4.6 Place of Residence Respondents.....	41
Table 4.7 Descriptive Statistics of Variables	42
Table 4.8 Correlations of study.....	43
Table 4.9 Summary of Multiple Regression Analysis for Factors Influencing Brand Equity.....	45
Table 4.10 Summary of the Hypotheses	46

LIST OF FIGURES

Figure 2.1 Framework of the Study.....**Error! Bookmark not defined.**

Figure 3.1 G-Power Analysis.....**Error! Bookmark not defined.**



LIST OF APPENDICES

Appendix A: Questionnaire(English)	63
Appendix B: Questionnaire (Arabic).....	68
Appendix C: Statistical Output	71



CHAPTER ONE

INTRODUCTION

1.1 Introduction

The concept of brand equity has generated lot of interests and has been the central focus in research. The purpose of this study is to examine the factors influencing brand equity in the telecommunication industry. This chapter introduces the background of study, problem statement, research objectives, research questions, significance of the study and thesis organization.

1.2 Background of the Study

Consumers will find it easier to buy from a company with strong brand equity. Every time a consumer buys something, they don't have to go through the process of evaluating every product on the market. Consumers can be persuaded by a product's brand equity to believe that they will receive a product of consistently high quality (Mehdikhani & Valmohammadi 2021). The value of a well-known brand name, image quality, strong brand linkages, and other assets such as patents and trademarks are all examples of brand equity. If buyers continue to be attracted to no particular brand and instead make purchases based on product features, price, and comfort, with little consideration for the brand, brand equity prospects are restricted. If clients tend to purchase only one brand, even when competing brands give excellent items, digital marketing from the perspective of building strong and sustainable brand equity is becoming critical to doing business and securing growth in nearly every modern firm.

Brand equity performs three critical functions: (1) it serves to attract new clients to the business, (2) it serves to remind customers more about product offerings and services that the company offers, and (3) it serves to strengthen clients' emotional attachments to the brand (Parmar & Mann 2021). Brand equity is a term that refers to a customer's natural tendency to purchase a brand repeatedly.

Digital marketing can aid in the development of stronger consumer-producer ties. (Budiati, 2017). Digital marketing is a broad phrase that refers to targeted, quantifiable, and engaged marketing operations carried out through the use of infrastructure network systems and a network-connected device. Additionally, digital marketing firms should have been able to develop and employ a digital force to establish the company image; brand equity refers to the unique and distinct characteristics of a brand for website use.

Firms must prioritize critical elements such as security, accessibility, and navigation in the design of their download website, as the website has proven to be the most effective method of developing brand digital content (Budiati, 2017). Then, for successful brand management, it is critical to recognize customer brand equity. The primary objective of brand equity development for online businesses is to increase brand awareness; advertising choices are critical and may include selecting the optimal location (Tran, Mai & Taylor 2021).

CRM is a popular business strategy adopted worldwide by companies, researchers, and institutions that enable a company's success by increasing service efficiency and customer relationship sustainability (Anaam, Bakar, Satar & Kamrul 2021). CRM is the center of a

company's chain of success that targets the most fundamental actor (i.e., the customer). Increasing customer loyalty enables maximizing productivity; since the Jawwal company now has feedback on how to approach products using strategies obtained from CRM. Additionally, this study will examine the effect of customer relationship management (CRM) and service quality on overall brand equity among Jawwal company consumers when it comes to digital marketing.

Jawwal, the first Palestinian telecommunications company specializing in wireless communications, was founded in 1999 and operates in the West Bank and the Gaza Strip. Jawwal intends to be Palestine's leading ICT organization by providing modern infrastructure capable of keeping up with the latest technological advances in this sector and by providing all terrestrial, cellular, informatics, internet, and value-added services. After examining the indicators of the company's marketing department's level of use of social media and websites to promote its services, it is critical to examine the significance of the marketing services provided by Palestine Cellular Communications Company (Jawwal), one of Palestine's leading telecommunications and electronic service providers (El Talla, Al Shobaki, & Abu-Naser 2019).

It is based on information systems and regards them as the technical foundation for launch. The company is constantly improving its image with its users and continuing to increase their satisfaction with its product and services by working to improve the quality of its services and improve the effectiveness of its employees' performance, both of which will be based solely on integrated information systems.

1.3 Problem Statement

Telecommunications is one of several industrial services characterized by strong customer interaction with individually personalized service solutions, where customer satisfaction has been a growing focus of research attention (Sashi, 2021). Therefore, in every country, there are multiple telecom operators, each with good services. This creates a competitive, dynamic, and complex environment with high intensity in terms of competition. This study used Jawwal company as a case study in the aspect of digital marketing practices, customer relationship management (CRM), and service quality (SQ). The evolution of business and the severe rivalry in the labour market have resulted in a hunt for anything new in the business world and the work required to implement it. As a result, Jawwal seeks to benefit as much as possible from the usage of technology and works to cut costs to achieve the aim. It is necessary to work on improving the digital marketing aspect in Jawwal to work on attracting as many customers as possible, as Jawwal used to rely on traditional marketing in displaying the brand equity, so the use of digital marketing is a market that helps it spread more and be able to deal with customers. Furthermore, recent studies indicated that the demand for Internet services is an increase in Palestine (IBOC, 2019).

Data report showed that percentage of Facebook using in Palestine reached 92.2%, which is the highest percentage of the social media using the rate in Palestine, and Twitter usage increased by 25.6% (Hamad & Al Madhoun 2020). Also, Social networking sites had the highest percentage as a source of news and information in Palestine, followed by websites, and finally local radio broadcasts, and 41% of users purpose of using social media for working needs.

Moreover, Palestine's data showed that 86 percent of Palestine's shareholders own at least one smartphone or more 91 percent in the West Bank and 78 percent in the Gaza Strip. According to this study, 96 percent of people who were 20 years old and older used the internet through a smartphone. Only 22 percent used a computer (desktop or laptop) and 10 percent used a tablet to get on the internet (PCBS, 2019), Finally, statistics show that only 8 percent of internet users buy goods or services in Palestine. Thus, digital marketing is a common term for specifically aimed, measurable, and collaborative marketing activities that are done with intranets and a device that can connect to the network (Brzakovic, Brzakovic, Karabasevic & Popovic 2021).

Brand equity is the monetary value of intangible assets such as a well-known brand name, a positive image, strong brand interactions, and trademarks and patents. The chances of having a strong brand if customers don't care about a single brand and purchase because of the product's features, the price, the pleasure, and not because they care about the brand is poor. However, in 2020, the pandemic affected almost most industries, including the telecommunication industry (Amer, & Abdulwahhab, 2020).

According to Verma (2021), brand equity has been looked at from many different angles. The first point of view talks about brand equity when making marketing decisions. The second way to think about brand equity is to think about how much money a brand will make in the future compared to how much money the same product would make if it didn't have a brand name. Furthermore, a strong brand builds confidence in intangible items and services by allowing people to visualize them more clearly. It also increases the likelihood of future purchases, and attitudes toward a brand may reduce the risk of purchasing

services. As a result, a company's brand may be a valuable asset that benefits both consumers and companies (Salah, Yusof & Mohamed 2021). As a result, this study will look into the influences of digital marketing practices, customer relationship management, and service quality on Jawwal's total brand equity.

1.4 Research Questions

Three research questions (RQ) are offered based on the problem statement:

RQ1: What is the relationship between digital marketing practices and brand equity?

RQ2: What is the relationship between customer relationship management and brand equity?

RQ3: What is the relationship between service quality and brand equity?

1.5 Research Objectives

The current research aims to identify the relationships between digital marketing, CRM, and service quality factors on brand equity. Therefore, three objectives are outlined:

RO1: To examine the relationship between digital marketing and brand equity.

RO2: To determine the relationship between CRM and brand equity.

RO3: To investigate the relationship between service quality and brand equity.

1.6 Scope of Study

The telecommunications service industry was chosen for this study because communication over mobile networks has increased dramatically in terms of line demand and service utilization. This study only covers the influences of digital marketing tactics, customer relationship management, and service quality on total brand equity among Jawwal firm's subscribers, which is the largest telco company in Palestine.

1.7 Significance of the Study

This study provides some theoretical as well as managerial contributions in the field of digital marketing, CRM, and service quality studies, particularly in a telecommunication company. The Global System for Mobile communication industry in Palestine is one of the most dynamic and successful industries. In addition, Jawwal company is also expected to increase revenues to USD 18 million per year. Thus, this study aims to assist Jawwal company increases the number of its revenues and to strengthen the brand through digital marketing, consumer relationship management, and service quality. The findings of this study are expected to make a substantial contribution to theoretical and applied knowledge in the field of brand image. The following sections discuss each of these contributions.

1.7.1 Theoretical Contributions

From a theoretical perspective, this study is significantly advances the customer-based brand equity theory (CBBE) by providing empirical data on the influences of digital marketing, customer relationship management, and service quality on the overall brand equity. This study aims to add new knowledge by providing observational insights into overall brand equity efforts by focusing on brand equity, an area of the investigation process that has received relatively little attention in the mobile communication industry brand management literature. Thus, the research findings may serve as a starting point for a more complete knowledge of brand equity growth in general, as well as the critical role of digital marketing practices, customer relationship management, and service quality as critical sources of brand equity construction. This study tries to offer a significant contribution to the CBBE the service quality which have received scant attention in the literature. In this regard, the current study aims to close existing gaps and give a complete and integrative

framework revealing the antecedents-links of the proposed variables, particularly digital marketing practices, customer relationship management, and service quality to overall brand equity linkages.

1.7.2 Practical Contributions

The findings from this study can be used by Jawwal company's management to better understand the factors that affect overall brand equity and to increase their understanding of the critical role of digital marketing practices, customer relationship management, and service quality in developing overall brand equity. As a result, the management of the Jawwal company and its decision-makers will be able to comprehend the relationship between the planned marketing activities aimed at enhancing total brand equity building, both locally and globally.

1.8 Organization of the Thesis

This thesis is divided into five chapters. The first chapter discusses the study's context, problem statement, research questions, research objectives, research significance, and chapter organization.

Chapter 2 is devoted to a review of the literature and previous research on this issue. This chapter's review includes a brand equity study. This chapter discusses all of the factors that contribute to brand equity. Finally, the chapter analyses the selected independent variables and gives the research framework and hypotheses.

Chapter 3 describes the study's methodology, which includes the research design, sample size, and data collection, as well as the research instrument, operational definition and measurement of the variables, and data analysis methods.

Chapter 4 discusses the study's findings including the respondents' profile, reliability analysis, and results of hypotheses testing. This chapter concludes with a summary of the findings.

Chapter 5 summarizes and discusses the study's findings. Additionally, the current study's implications and limitations are discussed. It then follows with recommendations for future research and conclusion.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses the important variables mentioned in this study. The chapter is divided into two parts: the first identifies the main variables in this research from a literature review to provide a better understanding of the research topic and problem; finally, the hypotheses development and framework of the study are presented at the end of this chapter.

2.2 Brand Equity

The American Marketing Association (AMA) defines a brand as "a name, word, sign, symbol, or design, or a combination of them, designed to identify the products or services of one seller or group of sellers and to distinguish them from those of rivals." This concept highlights the significance of branding in differentiating goods and services from rivals, as well as the fact that brands provide value to both consumers and businesses (Islam et al., 2021). Aaker (1991) defined brand equity as " a collection of brand assets and liabilities connected with a brand, its name, and symbol that contribute to or detract from the value provided by a product or service to a company and/or its customers". It is predicated that brand equity is mostly determined by easy recognition and recall during split-second purchasing decisions (Qualtrics, 2019). Product-centric notions like perceived quality, loyalty, brand connections, brand awareness, and other proprietary assets like patents, channel relationships, and trademarks are examples of these assets.

According to Dharmawan and Hendrayati (2019), brand equity is a collection of associations and behaviors owned by the brand consumers, distribution channel members,

and corporations that enable a brand to improve strength, endurance, and quality that differentiates it from competitors.

In relation to that, Hanaysha and Al-Shaikh (2021), emphasized that securing competitive advantages requires more than simply positioning and communicating brand equity to external stakeholders. Given that, a firm's brand image is built on the skills and expertise of its employees, it is critical to incorporate employee perspectives to ensure effective brand management.

According to Jain (2017), brand equity is a term that refers to the value attached to a well-known brand name, a high-quality image, strong brand connotations, and other patented technology and trademarks. If buyers are disinterested in a brand and purchase based on product attributes, price, or convenience, and with little regard for the brand, brand equity is unlikely. If clients opt to purchase just one brand even when other brands provide stronger items, for example, in terms of price and convenience, the brand has a high equity value (Dharmawan & Hendrayati (2019)).

The worth of a brand, according to customers based on brand equity, is defined by the value of the consumer. Active consumer behavior toward a brand results in financial accomplishments and leverages in the firm's added value (Learning, 2021). Furthermore, consumer perception and behavior connected with brand-related customer-based factors like perceived quality, brand loyalty, brand association, and brand awareness are all considered when evaluating brand equity. According to Chen and Tseng (2010), customers based on brand equity theory defined brand equity in three categories brand loyalty, brand awareness, and brand image that affect brand equity.

2.2.1 Brand Awareness

Brand awareness refers to clients' capacity to recognize and recall a brand when they notice anything distinctive about the brand identity (Dewi, Oei & Siagian 2020). Brand identities encompass a variety of elements, including colors, logos, lettering, and other visual representations, and these identities help establish the brand's importance in the eyes of consumers (Lelis, 2021). Brand awareness is critical as the first step toward successfully positioning a company's brand in the market (Doni, 2020). When a brand is used as a cue, identification reflects consumers' ability to recall the brand from memory in a particular product category, whereas brand recall reflects clients' ability to recall the company from memory in a specific product category when the brand is used as a cue. When the first brand associated with a particular product category comes to mind in the minds of consumers, this is referred to as top-of-mind branding. The highest level of awareness is brand name dominance, which happens when the majority of customers can recall only one brand name in a recall test. On the other hand, brand awareness encompasses both brand recognition and recall (Hausken, 2020). Meanwhile, brand awareness is essential for developing brand equity (Kotler & Keller, 2016). It refers to the extent to which clients can identify a brand.

In advertising, a persuasive message is a strategy that is believed to be effective at increasing brand awareness. (Yang, 2018).

This indicates that digital advertising offers an excellent opportunity to increase consumer brand awareness. The company develops a brand image as a result of consumer brand awareness (Dabbous & Barakat 2020). Consumer brand awareness is measured using a variety of indicators, the most well-known of which are the following: aware of the brand, identify the brand, remember the brand, know the brand, and easy to search for the brand

(Doni Purnama Alamsyah & Febriani, 2020). Brand awareness is a valuable asset that influences consumer perceptions, preferences, and even behavior. It may affect brand purchasing behavior, thereby increasing brand loyalty (Bernarto et al., 2020).

2.2.2 Brand Loyalty

Brand loyalty can be defined as a measure of closeness that consumers feel about a brand. According to Song (2019), It is defined as a metric of customer loyalty to a brand that can detect whether a customer is going to transition to a competitor's brand due to pricing or other quality changes (Bernarto et al.,2020) Brand loyalty is described as a statement of commitment to a client's loyalty to a product or service that will remain constant and available in the future to ensure continued purchasing.

2.3 Theory of Customer-Based Brand Equity (CBBE)

According to the Theory of customer-based brand equity (CBBE), long-term cash flow, as measured by market share and reduced promotional costs, may indicate additional organizational value. Alternatively, this additional value may be perceived by a customer as enhancing the consumer's capacity to translate and retain massive amounts of information about a product, which is generated by brand strength. Because consumers determine to brand equity, the critical role of customers in a business's success cannot be overstated. Additionally, firms with a high brand equity have a greater likelihood of successfully expanding their brands and constructing barriers to entry for competitors.

Brand value is the financial result of management must be committed to harnessing brand strength through marketing initiatives to increase customer service, future earnings, and risk mitigation. Customers' perceptions and associations with a particular brand name

dictate its strength. As a result, brand equity conceptualization reflects the brand value and brand strength (Rafiki, Hidayat, & Razzaq, 2019).

Established as a multi-dimensional constructs, CBBE model incorporates brand associations and awareness, brand loyalty, perceived quality, and other intangible brand assets such as trademarks, patents, and channel relationships. These brand assets are focused on the creation of value for consumers and organizations. Customers' participation in differentiating the brand is necessary to generate this value. As a result, customers are crucial in the development of BEs. According to this theory, BE benefits firms in the following ways: it increases customer loyalty, increases resistance to competitive promotional activities, increases resistance to competitor entry, and increases perceived product quality (Rafiki, Hidayat & Razzaq, 2019).

2.4 Digital Marketing (DM)

Digital marketing is a broad word that refers to focused, measurable, and collaborative marketing operations (Pandey et al., 2020). In digital marketing, the emphasis swings away from organizations and toward individuals, with communications directed towards specific individuals rather than a broad population. Additionally, digital marketing and promotion are conducted via internet media. Promotional products and services will be communicated in a more pleasant, delicate manner, which can be more persuasive. Meanwhile, promotions can become even more intense when people share their experiences via social media posts or reviews on their blogs. Digital media has evolved into a ubiquitous form of communication in today's culture (Plantin & Punathambekar, 2019). Digital media has been ingrained in everyone's lifestyle; also, its use has aided everyone in doing normal tasks, including interacting, both individually and in mass communication.

According to Brzakovic et al. (2021), internet is an amazing marketing tool for organizations. Businesses can increase traffic to their websites by simplifying the usage of their social networking browsers. Digital marketing is a technique for persuading people to make purchases by providing them with a wealth of helpful and engaging information over an extended period. According to Yaghtin, Safarzadeh, and Zand (2020), It is critical to grasp the term "digital content marketing" (DCM) to appreciate how it relates to information that is both relevant and valuable and is disseminated via digital channels.

2.5 Customer Relationship Management (CRM)

CRM is a management tool that establishes, develops, maintains, and optimizes the customer-company connection (Salam, & El Montaser, 2021). CRM strategy is defined as a business's purpose to recruit, retain, and cooperate with existing clients to give higher value to both parties. CRM strategy focuses on the integration of various marketing programs into the supply chain activities of a business to generate improved service effectiveness while generating the desired value.

Customer relationship management is a complex concept that may be seen from a variety of perspectives. (Rahimi & Gunlu, 2016; Sofi 2020). CRM is defined as the culmination of several systems, such as transaction support networks, decision support systems, marketing information management (MIS), database marketing, and call center management. Additionally, it may include numerous business and technological procedures (Lis & Szepanska, 2015). CRM focuses on customer demands and integrates organizational strategy and business processes to transform these needs into business operations. The development of reciprocal value for business process entities (e.g., customers and the firm) is at the heart of the CRM strategy, as it helps the organization to acquire a competitive

edge and improve revenues by knowing, listening, and engaging with consumers. CRM is a business strategy for assessing and controlling customers maximizing long-term value (Schuttler & Musil, 2017). By successfully using CRM, brands can strengthen their ability to respond to new competitors and capitalize on opportunities for growth (Buttle & Maklan, 2019).

According to Hanaysha and Al-Shaikh (2021), CRM is a technology-enabled process that enables businesses to gather critical information about their customers' requirements and meet them to develop profitable partnerships. According to Mulyana (2020), CRM implementation has a huge impact on marketing performance.

Soliman (2011) noted that CRM is a technique for gaining a client's custom by extensive discussion with them in the hope of boosting the productiveness represented by the relationship between the customer and culture, retaining or increasing their loyalty, and then profitability. Companies may employ several CRM systems depending on their product, client base, and shareholder interests. As a result, CRM may need strong leadership, sound strategy, and operation in a company environment rich in social and cultural values (Schuttler & Musil, 2017). CRM provides several benefits, including a) cost savings, in which the use of technology saves money and human resources, increasing employee productivity; b) customer loyalty and satisfaction, in which CRM places the customer at the center, allowing for improved customer services; c) increased profits, in which cost savings and improved customer services enable customers to repurchase and pay more (i.e., customer loyalty); and gaining knowledge from customer data to retarget marketing efforts. Information, technology, people, and change are the four key drivers of CRM.

2.5.1 Dimensions of Customer Relationship Management

CRM's major goal is to establish a long-term customer connection to increase the value of both parties involved in the engagement. In general, CRM enables an organization to gather the necessary information from customers about their values, behaviors, needs, and preferences, thereby assisting the organization in achieving a competitive advantage and having a positive impact on organizational performance (Soltani & Navimipour 2016).

2.5.1.1 Knowledge Management (KM)

KM is an organizational technique that strives to record, communicate, and apply customer information and knowledgeable experience for the goal of meeting customers' requirements, developing better customer values, and maintaining superior firm performance. Knowledge management (KM) is a two-way learning process activity between the customer and the company that involves knowledge and experience sharing, learning activities, issue resolution, and making use of the advantages of the exchange process.

According to Ulah and Shams (2020), data, information, and knowledge obtained by customers KM are critical components of CRM since they enable organizations to build and develop connections with customers as well as a source of competitive advantage. KM is a term that refers to the whole of current and potential resources that are embedded in, accessible across, and derived from a social department's network of relationships (Bahar, Wahab, & Rahman 2020). saw knowledge management competence in a balanced socio-technical light, concentrating on technology, organization, and culture.

2.5.1.2 Technology-Based CRM

The majority of businesses rely on technology-based tools to facilitate client information exchanges generation. However, the effectiveness and efficiency with which these technology-based solutions are used determine their success (Dutu & Halmajan 2011). A customer-centric strategy, aided by technology-enabled service tools, is believed to result in increased client gratification and profit margin expansion (Ramesh, 2013; Tian & Wang, 2017; Pozza et al., 2018). However, as information technology advances, CRM has evolved into e-CRM.

According to Melovic et al. (2020), e-CRM as a business strategy for delivering high-quality services, establishing long-term relationships, and increasing profit. In light of these earlier studies, e-CRM is seen as a technology approach for sustaining customer connections and achieving corporate success in this study. A successful electronic customer relationship management system must incorporate information technology, information resources (customer database and effective customer interaction), and knowledge management.

2.6 Service Quality (SQ)

Generally, service is irrelevant. It exists only when producers and consumers occur together. As indicated in the following section, these definitions encompass a variety of features that distinguish service from tangible goods. Perhaps this is because it is difficult to ensure the behavioral consistency of service personnel; as a result, what the firm intends to provide may end up being radically different from what consumers receive.

Service quality is viewed as crucial to a service provider's success and survival (Hadi, Aslam & Amir 2019). Service quality is also described as the gap between buyers'

expectations and their perceptions of the rendered service; hence, if customer expectations exceed performance, the perceived service quality of the rendered service is less than adequate, resulting in buyer discontent. Perhaps this is because it is difficult to ensure the behavioral consistency of service personnel; as a result, what the firm intends to provide may end up being radically different from what consumers receive.

According to Brzakovic (2021), The SERVQUAL model defined service quality in ten categories, then a few years later, the same set of authors reduced those ten aspects to five: reliability, assurance, tangibles, empathy, and responsiveness. Numerous other scientists have also investigated the effect of service quality on customer satisfaction and loyalty using the SERVQUAL measuring scale. Although the SERVQUAL model was initially developed to assess the quality of trade businesses' services, it was only later that its application spread to other industries, including banking, informatics, telecommunications, and aviation companies' services.

2.6.1 Service Quality Measurement

As previously stated, the anticipated influence of tradition, ideology, communication, and word of mouth, as well as previous experience with this service and customer perception of the service, all contribute to the personal self. Mobile phone service providers are a critical component of the telecommunications industry (Hidayat, Mahardiko & Alaydrus 2020). Providing the highest quality services and products to clients is critical for success and sustainability in today's global and hypercompetitive GSM provider industry (Hajar, Ibrahim, Darun & Al-Sharafi 2020).

According to Tešić (2020), SERVQUAL only measures the delivery of service rather than the results, while Othman and Harun (2020), It is important to emphasize focus on the

SERVQUAL dimensions of the service or product, to the exclusion of the rest of the marketing mix. Customers are not in control, but must rely on the correctness (i.e., reliability) of the service given, but are also in control of the other dimensions of service delivery (Haron, Subar & Ibrahim 2020).

2.6.1.1 Tangible

The term "tangible" refers to the emergence of physical things such as buildings, equipment, and personnel (Han, Li, Cao & Jin 2020). Service tangibles have several distinguishing traits that set them apart from physical items (Heller et al., 2021). Service tangibles have a few things that make them different from physical things. The implications of the characteristics can be hard for customers to understand when they are evaluating service before, during, and after they use it (Cai & Chi 2021). Because services aren't tangible, it can be hard for an organization to figure out how their customers think about and judge the quality of their services (Taques et al., 2021).

According to Manthiou (2020), how people think about quality and service is based on the way things look and how people interact with them. concrete A big part of customer service is how big things are. In research and banking studies from other developing countries tangible dimension is a big factor (Khatab et al., 2019). Tangibility is made up of both physical and mental parts. The physical part is the proof of service, and the mental part is how you feel about the service you did (Gupta, Tanenbaum & Tanenbaum 2019). refers to these forms of concrete characteristics as an alternative, because it is not concrete that is

produced from service performance and it is a courtesy call to active duty (Shetty & Jain 2019).

2.6.1.2 Reliability

The capacity to execute the promised service continuously, confidently, and precisely is referred to as reliability. The most critical dimension of reliability in assessing service quality, frequently highlighted by, and hence a prerequisite for businesses to succeed in the market is the capacity to perform the service accurately and reliably (Gajewska et al., 2019). Also, reliability and ease of use are important features in the evaluation of technology-based services (Liébana-Cabanillas et al., 2020). Additionally, to fulfilling the promise and performance of the right portion of the service, as well as the availability of goods as part of the task "on the right of" quasi-dimensional.

2.6.1.3 Responsiveness

According to Othman (2019), the term "responsiveness" refers to the act of assisting and promptly serving customers. The dimension of a male's greatest frequency response has seemed to be the most influential factor in determining whether a service is satisfying or unsatisfying, based on the scale of performance dimension; for example, the speed and timeliness with which the service is delivered. Although it provides the same level of service quality as a typical "bricks and mortar" GSM supplier. Additionally, features can form a "bond" with an injury-time client if they continuously give high-quality services to them, pay special attention to such dimensions, answer to concerns about authenticity and reliability, as well as understand customer preferences (Maryunani, 2019).

This concept is backed by those who feel that consumers have a favorable opinion of the qualities of technology-based services because they assume that they would provide a speedier and more efficient service than an employee would (Vannucci & Pantano 2019).

2.6.1.4 Assurance

Assurance has been defined as employees' courtesy and knowledge, and their capacity to transfer confidence and trust to customers (Pakurár et al., 2019). The researchers' perspectives on the importance of assurance in terms of service quality are diverse. Assurance entails informing and listening to clients in their local language, regardless of their educational level, age, or nationality (Pakurár et al., 2019). According to the company, assurance refers to employees' attitudes and actions, as well as the staff's capacity to provide friendly, confidential, courteous, and competent services.

2.6.1.5 Empathy

Empathy involves the provision of care and attention to customers. According to Dennis (2020), There should be enough adaptability in the design of this technology to allow clients to order changes during the procedure and to provide customer support advisers, if necessary while keeping the "wait time" to a minimum. The essence of empathy is communicating a sense of the customer's uniqueness and specialness.

2.7 Hypotheses Development

A hypothesis is a logically hypothesized link between two or more variables based on a theoretical framework that can be experimentally tested to identify the predicted answer to the issue statement (Sekaran & Bougie, 2013). The primary goal of this research is to look at the influences of digital marketing, CRM and service quality on brand equity.

2.7.1 Digital Marketing and Brand Equity

Establishing online branding is one of the benefits of using social media for brands. According to Soinenen et al. (2021), the use of social media can assist businesses in identifying diverse viewpoints and analyzing changing client attitudes. This can provide insight into how the company can protect itself in the face of market shifts and the erosion of the company's brand value. The primary objective of any firm in developing a brand is to keep the brand visible to people in cyberspace (Ratana, 2018).

Furthermore, the greater the brand equity, the greater the customer preference for the brand (Sehar, Ashraf & Azam 2019). Customers will pay a premium price and remain brand loyal. According to Poturak and Softic (2019), In financial words, brand equity is equivalent to boosting the cash flow generated by a certain product in addition to selling the goods anonymously. Modern firms use both digital and traditional marketing viewpoints to establish a brand image and increase revenue. It is becoming increasingly critical in nearly every modern company (Dumitriu et al. 2019).

Desai (2019) focuses on how digital marketing attracts and engages clients via digital media. Digital marketing can reach all people, at any time, in any fashion, and from any location. Naturally, it outperforms conventional marketing, which is constrained by time, location, and user reach. As previously said, successful social media strategies may put a brand to work for you by satisfying customers' demands to create, consume, connect, and control on the social web (Ansari, Ansari, Ghorri & Kazi 2019). Therefore, it is hypothesize that:

H1: Digital marketing is positively influences brand equity.

2.7.2 Customer Relationship Management and Brand Equity

CRM is defined in this research as a mix of several elements, including knowledge management and technology-based CRM. According to Shriedeh and Ghani (2017), these two activities are the most common CRM components although empirical studies investigating the integration of these components in one study framework are few. However, research has shown a link between CRM activities and organizational effectiveness (Chatterjee et al., 2021). Regardless of previous research, there are still few studies in poor countries that have looked at the impact of CRM on brand equity from a holistic perspective (Gholami & King, 2017). In reality, the formation of long-term connections between involved parties, the company, and the consumer is strongly linked to the firm's potential to achieve outstanding performance.

In addition, Abbasi (2014) discovered that CRM had a considerable impact on brand equity and its dimensions. Kim (2008) found that maintaining strong customer relationships greatly improved brand equity formation for a telecommunication companies. Therefore, the following hypothesis is developed:

H2: CRM is positively influences brand equity.

2.7.3 Service Quality and Brand Equity

The importance of service quality in achieving high organizational performance has been widely discussed in the literature. The advantages of service quality boost good word of mouth and clearly distinguish brand image. Scholars have found mixed outcomes despite a huge amount of evidence indicating the considerable effect of service quality on organizational performance. One potential explanation for the discrepancies is that consumer perceptions of service quality differ between nations owing to cultural

differences and industry reliance. As a result, the investigation of service quality on brand equity is still under progress. Service quality, on the other hand, has been proven to have a considerable impact on brand equity assets such as brand image and brand loyalty (Vannucci & Pantano 2019). Furthermore, earlier research has shown that service quality is a powerful predictor of brand equity development. As a result, the following hypothesis is proposed.

H3: Service quality is positively influences brand equity.

2.8 Theoretical Framework

The theoretical framework is a logical basis for the interrelationships among numerous variables (independent and dependent) that are determined via theories and literature study to arrive at a satisfactory solution to the issue statement. Furthermore, it gives a foundation on which to build the theory (Van der Waldt, 2020).

The theoretical framework for this study includes three independent variables namely digital marketing, CRM and service quality and one dependent variable which is brand equity. Figure 2.1 below shows the relationships between digital marketing, customer relationship management and service quality on brand equity.

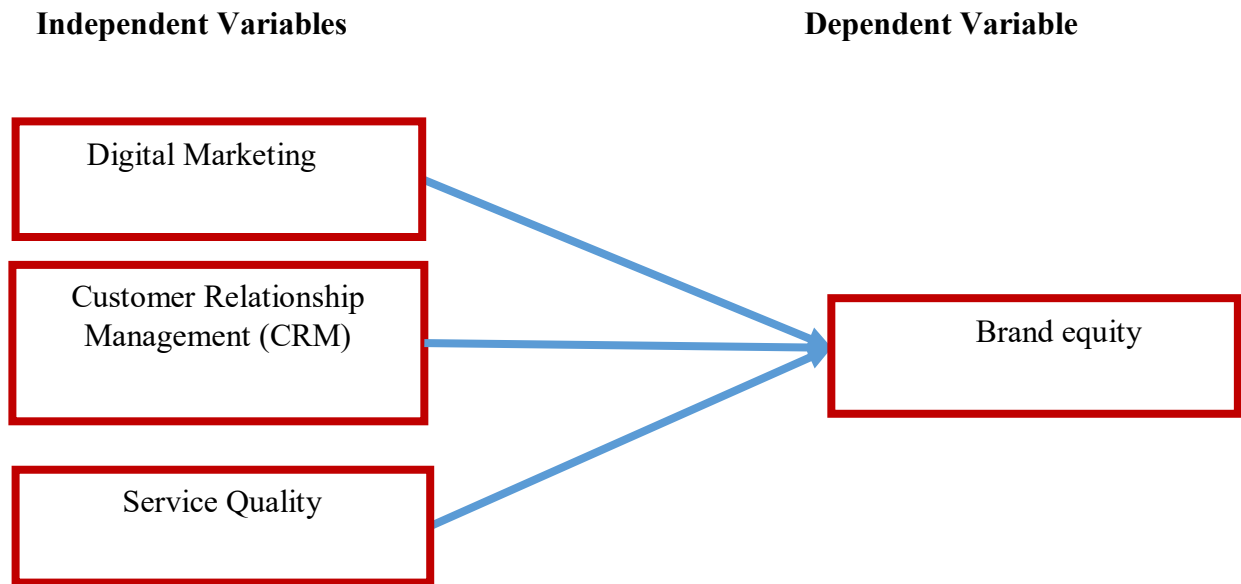


Figure 2.1 Theoretical framework

2.9 Chapter Summary

The core ideas of brand equity on digital marketing, CRM and service quality are presented in this chapter. To the end, this chapter ends with hypotheses development and a theoretical framework that guides this study.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter describes the method and procedure employed to examine the role of digital marketing, CRM and service quality on brand equity in telecommunication industry. This chapter also discusses the research design, operationalization of variables, population and sample of the study, and variable measurement. It also reports result of a pilot test and data collection procedure. The chapter ends with a discussion of the statistical techniques used for data analysis.

3.2 Research Design

Research design involves planning and structuring the research to achieve explanation of the findings. In this regard, Berry (1983) explained that the domain of research methodology is not confined within the limit of data collection and rules for confirmation, but greater ways of explanations. A research needs to be designed in such a way that the researcher is able to justify his/her research (Jonker & Pennink, 2010). The research design must clearly explain the different steps to be taken during a research program to reach the objective of a particular research (Sahu, 2018; Creswell, 2019).

Generally, there are three research approaches to answering research questions: quantitative, qualitative, and mixed method (Creswell, 2019). Sahu (2018) stated that a quantitative research is a kind of research in which systematic investigations having quantitative property and phenomenon are considered. This research approach allows the researcher to measure or quantify the phenomenon and analyze it numerically. This

approach also allows the researcher to deal with and find out a solution for a research problem in a concerted manner (Frankfort-Nachmias & Nachmias, 2017). In a particular research phenomenon, clear specification of both independent and dependent variables are required and quantitative research can do these with utmost efficiency and distinction (Matveev, 2002). In addition, keeping the main research focus on original goals, coming up with objective conclusions, examining hypothesis(es), isolating the driving variables, avoiding or minimizing the issue of subjective judgement are fruitfully dealt with by the quantitative method (Frankfort-Nachmias & Nachmias, 1992). Besides, the availability of mechanism for controlling observation, group surveys, or existence of different types of manipulating mechanism, and high level of reliability on collected data can be ensured (Balsley, 1970). Therefore, the present research used the quantitative approach instead of the two approaches.

With regards to time horizon, there are two options available. The first option is a longitudinal study and the second cross-sectional study. The longitudinal study is more appropriate when the researcher aims to seek how things vary over time, which requires data to be collected from the same sample units at multiple points in time (Sahu, 2018). In a longitudinal study, data are collected over an extended period.

On the other hand, in a cross-sectional study, data for dependent and independent variables are collected and measured at the same point of time (Bhattachherjee, 2012) where the sampled people are asked to reflect their past experience on research questions (Cooper & Schindler, 2016; Sekaran & Bougie, 2020; Zikmund, Babin, Carr & Griffin, 2018). The present study engaged in a cross-sectional study where data were to be gathered once to discover simultaneously the relationships between digital marketing, CRM and service

quality on brand equity. Furthermore, the present study selected cross-sectional over longitudinal design because of budget and time imposition. This study considered each subscriber of Jawwal company as response as a unit of data source.

According to Slattery et al. (2019), surveys and questionnaires are powerful research tools to create meaningful data through correct construction, implementation and management. Questionnaires refer to a specific tool, also known as an instrument for gathering information through series of questions and are usually self-administered. In the present study, a survey method was employed to collect data. Kerlinger and Lee (2000) mentioned that survey research is best suited to collect facts, beliefs or attitudes relating to personal and social aspects.

In the same vein, Kotler, Keller, Koshy, and Jha (2009) noted that survey method is used to learn knowledge, beliefs, preferences and satisfaction. Cooper and Schindler (2006) mentioned that as a versatile approach all categories of abstract information can be collected through survey research. Additionally, questionnaires are less costly and less time consuming than observation. In the context of Palestine telecommunication industry, this approach was deemed suitable because previous researchers had used this method (Atmowardoyo, 2018). However, due to the pandemic where the government imposed movement control order at certain areas in Palestine, the online survey method was utilized.

3.3 Sample Size

The sample size decision is influenced by a variety of factors, including the nature of the research, statistical analysis, data analysis program selection, and practical concerns (Memon, 2020). According to Sekaran (2018), it is critical to have a trustworthy and valid sample size in order to generalize the findings from the sample to the population under

study. To put it another way, the sample size should be statistically trustworthy and accurately represents the population parameters within a tight margin of error. GPower is one of the most recent approaches for estimating sample size (Prajapati, Dunne, & Armstrong 2010). As shown in Figure 3.1 below, the sample size for this study was first estimated using G-Power analysis, the minimum sample size was decided as 129. Second, using the ten times rule, the assumption showed that the sample size must be greater than 10 times of all model's links pointed towards latent variable (Memon et al., 2020). Even though the sample size computed was 129, it was decided to distribute double ($n=258$) in order to get a better response rate.

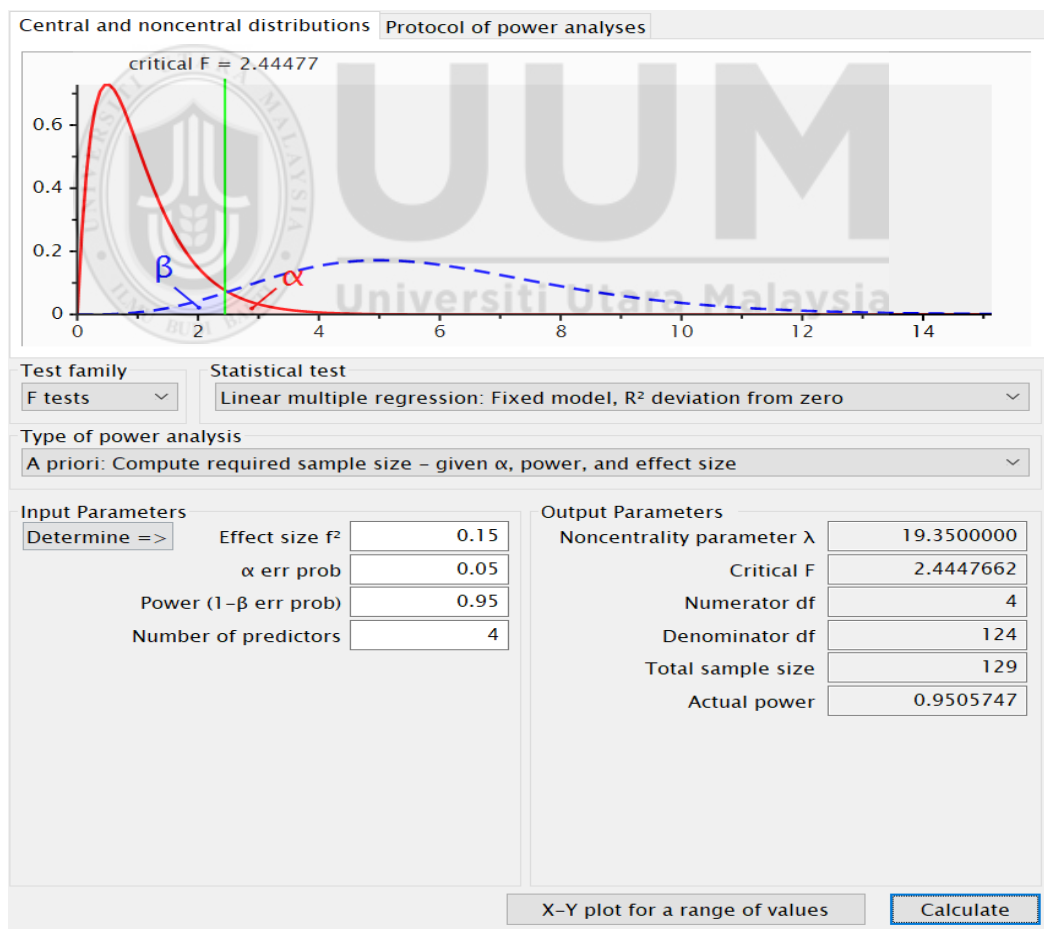


Figure 3.1 G Power

3.4 Study Population and Sample

Sahu (2018) noted that quantitative nature of a research depends on the collection of data, the accuracy of data collected, and the consistency and efficiency of the data. Therefore, a discussion on the population, sampling frame, sampling size and data collection procedure is apt, as follows.

Population is defined as the full universe of people or things from which the sample is selected (Greener, 2008) or a collection or totality of well-defined objects (Sahu, 2018). In the present study, general population comprised all the telecommunication subscribers in Palestine. In this study, the sample was Jawwal subscribers in the Gaza strip. Additionally, respondents were requested to engage in this study by completing a google form questionnaire. The 258 targeted respondents were contacted using various social media platform such as Facebook, WhatsApp, Instagram and Telegram. They were chosen using convenience method. The summary of sampling procedure is shown in Table 3.1.

Table 3.1 Summary of Sampling Procedure

Metric	Descriptive Statistic for Online Questionnaire
Sample size	129 (G*Power)
Sample frame	Jawwal subscribers
Sampling method	Convenience sampling
Sampling unit	A resident of the Gaza strip

3.5 Sampling Design and Technique

The two most common ways of data collecting and analysis are probability sampling and nonprobability sampling. In probability sampling, each individual in the population has an

equal chance of being chosen as a sample subject, whereas nonprobability sampling refers to sampling procedures that are not based on random selections (Andridge & Valliant 2021). A non-probability sampling design was utilized in this investigation, which is a less strict method. This sampling approach is strongly reliant on the researchers' skills. Kalton (1983) classified non-probability approaches into three categories: chance, convenience, or accidental sampling; judgment or purposive sampling or expert choice; and quota sampling. Convenience Sampling is a sort of non-probability sampling in which a sample is drawn from a subset of the population that is near at hand.

3.6 Data Collection Procedures

The primary data were collected from an online questionnaire developed for Jawwal subscribers. In this study, a set of the survey questionnaire was sent out to Jawwal subscribers to get the data of this study. Only respondents who were Jawwar subscribers were sent the questionnaires. The participants are living in Gaza and they were all informed about the purpose of the survey. As the participants live in Gaza, an online survey questionnaire was created using Google form to make the data collection easier and to reach the respondent easily. The survey was distributed using online channels like Facebook, WhatsApp, Instagram and Telegram as this platform helps in reaching people to the channel that are frequently used.

3.7 Measurement and Instruments

With the exception of demographic factors, all other variables included in this study were measured using multiple items drawn from previous research. However, phrasings of the items were modified to suit the sample and local setting.

A set of questionnaire with 40 self-reported items divided into four parts was created for this study. Firstly, Section A consists of five questions on general demographics. Second, section B has 8 questions that assess the digital marketing of Jawwal company. Section C has 13 items that assess customer relationship management and Section D has 15 items that assess service quality. Section E is for brand equity with four items. All the instruments were measured using a 5-point Likert scale ranging from 1 to 5, which corresponds to the words "1=strongly disagree" to "5=strongly agree," Each component of the questionnaire has a clear and concise explanation to assist prospective responders in filling out the form. Table 3.2 below demonstrates the items used to measure digital marketing, customer relationship management, service quality and brand equity and the sources where the instruments were adapted.

Table 3.2 Variable Measurements

Variables	Items	Source
Digital Marketing	<p>I find digital marketing at Jawwal company helps me while shopping online.</p> <p>I find quality information at Jawwal company via digital marketing</p> <p>Jawwal company facilitates 24/7 service.</p> <p>Digital marketing at Jawwal company provides greater engagement with products.</p> <p>Jawwal company provides the resources to implement its digital marketing plans efficiently and effectively</p> <p>Jawwal company has modern technology equipment to serve customers.</p> <p>Jawwal company follows the progress of the implementation of its digital marketing plans and adjustments necessary for its success</p> <p>I can recognize brands for Jawwal company that appear on digital media among other competing brands.</p>	Pandey, Nayal & Rathore (2020)

Customer
Relationship
Management

Employees at Jawwal are eager to assist me as a client in a timely way, such as via engagement and touchpoints.

Jawwal company offers communication channels for consumers to communicate with.

Jawwal company personnel make every effort to comprehend my wants by accumulating a large amount of data about me.

This Jawwal company's personnel are eager to deliver timely service.

Jawwal company is willing to make changes to its goods and services in response to my comments.

Jawwal company uses technology and a new service firm that I am involved with.

Jawwal company is dedicated to making changes to meet the demands of its consumers.

Customers may get product and service recommendations from Jawwal company.

Jawwal company has loyalty or retention programs put in place.

Jawwal company has the appropriate software to assist consumers.

At every touchpoint, Jawwal company has sufficient information about its clients.

The Jawwal firm keeps a large client database.

Through the use of computer technology, the workers of this Jawwal company can form connections.

Jawwal company services are accompanied by aesthetically attractive materials.

Jawwal company personnel are well-dressed and look to be tidy.

Jawwal company modern equipment availability.

Jawwal company keeps records that are free of errors.

Jawwal company is a corporation that delivers on its promises.

The Jawwal company firm provides service from the very beginning.

Salam and El Montaser,
(2021)

Jaswal
(2016)

Service Quality	<p>Jawwal employees can inform you precisely when services will be performed. Jawwal staff is always prepared to provide a service.</p> <p>Jawwal workers are never too preoccupied to react to queries.</p> <p>Dealing with Jawwal gives me a sense of security.</p> <p>Jawwal personnel was people I could trust.</p> <p>Jawwal workers are well-versed in their field.</p> <p>Jawwal employees have a kind and caring approach toward me.</p> <p>Jawwal has hours of operation that are convenient for all customers.</p> <p>Jawwal employees have the best interests of its clients at heart.</p> <p>Even if another Telecommunication offers the same services, it makes sense to use them regularly.</p>	Astuti and Cahyadi (2007)
Brand Equity	<p>If other companies offer the same services as Jawwal, I will still choose Jawwal as my preference</p> <p>It seems to be more prudent to use the services of this rather than any other Telecommunication provider.</p>	

3.8 Operationalization of Variables

Table 3.3 Definition of Key Terms

Terms	Definition
Brand Equity	Brand equity can be measured in a variety of ways, but Astuti and Cahyadi (2007) define it as the set of human characteristics associated and behaviors owned by the brand's customer base, members of the distribution channel, and the company.
Digital Marketing	Digital marketing is a broad word that refers to focused, measurable, and collaborative marketing operations (Pandey, Nayal & Rathore 2020).

Customer relationship management	Customer Relationship Management (CRM) is a management tool that establishes, develops, maintains, and optimizes the customer-company connection (Salam, & El Montaser, 2021).
Service Quality	The outcome of an evaluation process, where the consumer compares his expectations with the service he has received (Jaswal, 2016).

3.9 Pre-Test and Pilot Study

Pre-testing was conducted to detect any problems that might occur in the actual data collection process. Two lecturers were involved in the test, and some modifications were made to the items. All comments and suggestions from the participants had been taken into consideration to improve the questionnaire before the pilot study took place.

A pilot study was carried out using a convenience sample of 30 participants who were familiar with the Jawwal company. Additionally, the pilot study sought to determine the questionnaire items' validity and reliability. Cronbach's alpha was used to determine the scales' internal consistency. Due to the fact that reliability values ranging from 0.70 to 0.90 are generally considered adequate for study purposes (Huang, 2012; Nunnally, 1978; Maina et al., 2015), the scale can be considered highly reliable. The Cronbach's alpha values for each measure used in the pilot study are shown in the Table 3.4.

Table 3.4 Results of Pilot Study

Items	No. of items	Cronbach's Alpha
Digital Marketing	8	0.919

Customer relationship management	13	0.981
Service Quality	15	0.954
Brand Equity	4	0.817

3.10 Data Analysis

SPSS software version 22.0 was used to analyse the data. Specific statistical techniques employed for such purpose are discussed below. Reliability analyses were carried out first to ensure the goodness of measures. Next, descriptive statistics to describe the characteristic of the respondents and the variables. Then, correlational analysis to describe the relationship between variables was performed, followed by regression analyses to test the three (3) hypotheses.

In determining the internal consistency of the items, Cronbach's alpha is recommended and widely used (Sekaran & Bougie, 2019). A reliability analysis is performed on the scale to determine the applicability of the instrument. In general, the closer the reliability coefficient gets to 1.0, the better it would be. Sekaran (2010) noted that reliability less than .60 is considered to be poor, those in the .70 range is acceptable, and those over .80 are good. However, for the purpose of the present study, a minimum reliability value of .50 was set, which is the threshold recommended by Nunnally (1978). In the early stages of research, as in the case in this study, Nunnally (1978) further suggested that reliabilities of .50 to .60 are indicative of instrument reliability (Wright, Pearce, & Busbin, 1997). The minimum of .50 is consistent with other researchers such as Chee and Peng (1996), Nicholson and Goh (1983), and Wright et al. (1997).

Fundamentally, descriptive statistics (mean values and standard deviations) were employed to summarize the raw data obtained to allow comparisons between units (Trochim & Donnelly, 2017), and to acquire a feel for the data. In short, the purpose of descriptive analysis is to present the raw data into a form that will make them easy to understand and interpret.

Correlation analysis was used to describe the strength and linear relationship between two variables (Pallant, 2018). In this regard, Pearson correlation was used to describe the strength and direction of the relationship between two variables. In this study, the relationship between relationship commitment and trust as well as between antecedent factors (mediate and non-mediated power) and relationship commitment were examined using this analysis. A positive correlation indicates that as one variable increases, so does the other. A negative correlation indicates that as one variable increases, the other decreases. A perfect correlation of 1, or -1 indicates that the value of one variable can be determined exactly by knowing the value of the other variable. On the other hand, a correlation of 0 indicates no relationship between the two variables.

Multiple regression was utilised to examine the prediction ability of a set of independent variable on one dependent variable (Pallant, 2018). Multiple regression is a more sophisticated extension of correlation and is used to explore the predictive ability of a set of independent variables on one dependent variable (Pallant, 2018). According to Sekaran and Bougie (2017), a multiple regression analysis is able to reveal how much variance in the dependent variable is clarified when hypothesized to concurrently influence the dependent variable.

3.11 Chapter Summary

This chapter detailed out the methodological aspect of this study. It detailed the data gathering process and strategy, as well as the reason for the study design. In addition, population and sampling were discussed, as well as the analyses used.



CHAPTER FOUR

ANALYSIS AND FINDINGS

4.1 Introduction

This chapter discusses the analysis of data and the output generated by the statistical software tool SPSS version 22. The analysis comprises descriptive statistics such as a respondents' profile, a descriptive and inferential of the construct, a correlation analysis, regression analysis and summary of the hypotheses results. The chapter concluded with a synopsis of the chapter.

4.2 Response Rate

Table 4.1 summarizes the outcomes of the researcher's data collection exercise in the Gaza Strip, which yielded an acceptable response rate of 58.2%, with 150 of 258 questionnaires distributed to respondents returned. 42.8% of returned surveys were useable, indicating that the survey received a satisfactory response rate (Sekaran, 2003).

Table 4.1 Response Rate

Response	Frequency
Number of Questionnaires Distributed	258
Number of Questionnaires Returned	150
Respond rate	58.2%

4.3 Screening of Data and Preliminary Analysis

Data screening should be the first step toward ensuring that analysis of the data is carried out properly. The term data screening refers to the process of processing and entering usable surveys into the SPSS database after they have been received. As a result of this technique, a missing value analysis was conducted (Hair et al., 2010; Tabachnick & Fidell, 2007).

4.4 Analyses of Missing Values

The replacement of missing values is critical in data analysis since existing algorithms are unable to operate on data sets that contain missing values. (Schumacker & Lomax, 2004). The questionnaire was distributed on google form and all the questions required, the respondent must to question to move another question. As a result, no missing values were detected when the data was run through SPSS using the frequency tool.

4.5 Normality Test

It has been established that excessively skewed or kurtotic data results in the generation of bootstrap sample standard error estimates (Chernick, 2008). Due to the non-normal nature of the data, the statistical significance of the path coefficients is overstated (Ringle, Sarstedt, & Straub, 2012). Due to the aforementioned, the normality test on the data was conducted using a graphical technique (Tabachnick&Fidell, 2007). As a result, a histogram and normal probability plot were examined to ensure that the normality assumptions were maintained.

4.6 Multicollinearity Test

Multicollinearity is defined by Sekaran and Bougie (2010) as a circumstance for which there is a high correlation between numerous independent variables in a particular multiple regression model. Multicollinearity has the following definition: Correlation between

independent variables that are high or perfect affects both the estimation of regression coefficients and the statistically significant tests performed on these estimated coefficients (Hair, et al., 2006). Additionally, it amplifies overall standard errors of coefficients, rendering them statistically insignificant, as previously indicated (Tabachnick&Fidell, 2007). The variance inflated factor (VIF) and tolerance value are two ways of determining whether a data set is multicollinear. VIF values larger than 10 and a tolerance value less than 0.10, as defined by Hair et al. (2010), detect the presence of a multicollinearity problem in a given model. The model does not exhibit multicollinearity, as all VIF values were less than 10 and all tolerance values were more than 0.10.

Table 4.2 Multicollinearity Test

Variables	Tolerance	VIF
Digital Marketing	.437	2.286
Customer relationship management	.369	2.709
Service quality	.383	2.612

4.7 Descriptive Statistics of Respondents Profile

This section contains biographical information on the respondents. Table 4.3 summarises the demographic characteristics of respondents in this survey. The respondents' biographical information includes information on their job duties, education level, gender, age, and years of work experience.

Table 4.3 Gender of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	74	49.3	49.3	49.3
Valid Female	76	50.7	50.7	100.0
Total	150	100.0	100.0	

According to the descriptive analysis, 76 (50.7 percent) of respondents were female, while the remaining 74 respondents (49.3 percent) were male.

Table 4.4 Age of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18-20	28	18.7	18.7	18.7
Valid 20-22	47	31.3	31.3	50.0
Valid 23 above	75	50.0	50.0	100.0
Total	150	100.0	100.0	

As illustrated in Table 4.4, 28 respondents (18.7%) are between the ages of 18 and 20, 47 respondents (31.3%) are between ages of 20 and 22, and 75 (50.0%) were aged 23 and older.

Table 4.5 Academic Qualification of the Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Diploma	22	14.7	14.7	14.7
Bachelor's	109	72.7	72.7	87.3
Master's	19	12.7	12.7	100.0
Total	150	100.0	100.0	

The respondents held 22 diplomas (14.7 percent), 109 undergraduate degrees (72.7 percent), as well as 19 postgraduates (12.7 percent). This indicates that the study population was well educated and had extensive relevant work experience, which contributes to the questionnaire replies' logic and validity.

Table 4.6 Place of Residence of the Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Gaza	64	42.7	42.7	42.7
Northern Gaza	33	22.0	22.0	64.7
Central Governorate	26	17.3	17.3	82.0
Khan Younis	15	10.0	10.0	92.0
Rafah	12	8.0	8.0	100.0
Total	150	100.0	100.0	

Table 4.6 shows the largest number of respondents were in the Gaza strip 64 respondents (42.7%), 33 respondents Northern Gaza (22%), 26 respondents (17.3%) in Central Governorate, 15 respondents (10%) Khan Younis, and 12 respondent (8%) in Rafah.

4.8 Descriptive Analysis of the Constructs

Descriptive statistics of the variables of the study are shown in Table 4.7. With the exception of the respondent's profile, the scale measurements used was a five-point Likert scale. For ease of interpretation, the five point Likert-scale was categorized into equal sized ranges/categories of low, moderate and high. The scores of less than 2.33 [4/3 + lowest value (1)] was considered low; scores of 3.67 [highest value (5) – 4/3] high, and those in between moderate.

The mean of digital marketing is 3.33, with a low value of 1.36 and a high value of 4.55, and a standard deviation of .72174. The mean for CRM is 3.37; the standard deviation is .88308, ranging from 1.00 to 5.00; and the standard error is 0.88. Mean for service quality is 3.44 and standard deviation of 0.95. Finally, brand equity has a mean of 3.26 and a standard deviation of 0.90, with a minimum value of 1.00 and a high value of 5.00.

Table 4.7: Descriptive Statistics of Variables

Mean	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic
Digital Marketing	1.36	4.55	3.3333	.72174
CRM	1.00	5.00	3.3756	.88355
Service quality	1.00	5.00	3.4444	.95356
Brand Equity	1.00	5.00	3.2617	.90131
Valid N (listwise)	150			

4.9 Analysis of Correlation

Correlation analysis is used to describe the strength and linear relationship between two variables (Pallant, 2018). In this regard, Pearson correlation analysis was conducted for the assessment and clarification of the relationship strengths among the study variables. Table 4.8 shows the result. The computation of the Pearson correlation coefficients was performed to obtain an understanding of the relationship between all the variables in the study. The values of the correlation coefficients (r) indicate the strength of the relationship between variables. Table 4.8 shows that the overall correlation values were below .5, indicating weak associations between variables.

Table 4.8 Pearson Correlations of Study Variables

		BRAND EQUITY	MEAN_SERQUAL	MEAN_CR M	MEAN_DIGITAL MARKETING
BRAND_EQUITY	Pearson Correlation	1	.840**	.692**	.599**
	Sig. (2-tailed)		<.001	<.001	<.001
	N	150	150	150	150
MEAN_SERQUAL	Pearson Correlation	.840**	1	.293**	.484**
	Sig. (2-tailed)	<.001		<.001	<.001
	N	150	150	150	150
MEAN_CRM	Pearson Correlation	.692**	.293**	1	.487**
	Sig. (2-tailed)	<.001	<.001		<.001
	N	150	150	150	150
MEAN_DIGITAL_ MARKETING	Pearson Correlation	.599**	.484**	.487**	1
	Sig. (2-tailed)	<.001	<.001	<.001	
	N	150	150	150	150

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

Note: * $p < .05$; ** $p < .01$

4.10 Hypotheses Testing

In order to answer the research questions, which address the relationship between digital marketing, CRM, service quality on brand equity, regression analyses were conducted. When multiple regression analysis satisfies all of the multivariate conditions for the parametric technique, most notably the normality test, it is deemed competent for hypothesis testing. Multiple regression is often used to generate the data for hypothesis testing. This is performed by examining the cumulative effects of digital marketing, customer relationship management, and service quality, on brand equity.

4.10.1 Analysis of Multiple Regression

Multiple regression analysis is utilized to determine the relationship between the analyzed independent factors (digital marketing, CRM, service quality), and the investigated dependent variable (brand equity). Multiple regression can be used to determine the degree of correlation between independent and dependent variables (Sekaran & Bougie, 2013), as well as to determine the impact of independent variables on dependent variable (Sekaran & Bougie, 2013). When independent variables are regressed against dependent variables, the magnitude of the regression coefficient for each independent variable implies that an increase in one unit of each independent variable influences the dependent variable, as implied by the preceding phrase.

In order to answer the research question 1 to 3, regression analysis was undertaken simultaneously on the digital marketing, CRM, service quality and brand equity. From the first run of the regression analysis, the outliers were examined. The casewise diagnostics

indicate that observations number 83, 116 and 124 were outliers and therefore filtered out in the next regression run.

Table 4.9 provides evidence of the influence of digital marketing, CRM, service quality on brand equity. The F-statistic ($F=118.217$, $p<.001$) indicates that the relationship between independent and dependent variables is significant. The R^2 obtained indicates that three independent variables (digital marketing, CRM, service quality) account for 70.8 percent of the variation in brand equity. Of all the variables included in the regression equation, all the three independent variables emerged as significant predictors of brand equity. These are digital marketing, CRM and service quality. As being hypothesized, digital marketing, CRM and service quality are found to have a positive influence on brand equity. Based on the results, hypotheses H1, H2 and H3 are supported.

To investigate which independent variables that have the most influence on brand equity, we used the beta values. Of the three significant variables, based on the size of their beta, the predictor variables exercising the most influence on brand equity was, digital marketing ($\beta=.330$), followed by service quality ($\beta=.235$), and CRM ($\beta=.146$).

Table 4.9 Summary of Multiple Regression Analysis for Factors Influencing Brand Equity

Independent Variable	B	SE B	β
Service quality	.858	.086	.235**
Digital marketing	.037	.081	.330**
CRM	.957	.079	.146**

Note: $R^2=.708$; $F=118.217$; Sig. F= .00; ** $p<.001$

B=Unstandardized Coefficient; SE B=Standard error of coefficient; β =Beta coefficient

For the regression of independent variables on brand equity, the tolerance values, the variance inflation factor (VIF) and the condition index for all the independent variables are examined to detect multicollinearity. The VIF should be close to 1.00 to indicate little or no multicollinearity (Hartline et al., 2018). Hair et al. (2017) suggest a cutoff value of 10.00 as an acceptable VIF. From the tolerance and VIF values shown in the output indicates no multicollinearity effect among independent variables on dependent variables.

Table 4.10 Summary of the Hypotheses

No.	Hypotheses	Decision
H1	Digital marketing is positively influence brand equity	Supported
H2	CRM is positively influences brand equity	Supported
H3	Service quality is positively influences brand equity	Supported

4.11 Chapter Summary

In summary, this chapter discusses data analysis and the outputs that are generated by using SPSS version 22 software. The current study examined the hypotheses using regression analysis. Each of the three hypotheses was evaluated for its significance. The next chapter describes in detail the study's findings, the research implications of the findings, the study's limitations, and the practical implications of the findings.

CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.1 Introduction

This chapter recapitulates the findings, followed by a discussion of all the findings. Both the theoretical and managerial implications together with limitations are also discussed and this chapter ends with suggestions for future research.

5.2 Recapitulation of the Study Findings

Based on Theory of Customer-Based Brand Equity (CBBE), this study investigates the influences of digital marketing, CRM and service quality and its relationship with brand equity. Specifically, the first objective of this study is to examine the influence of digital marketing on brand equity. The second objective is to examine the influence of CRM on brand equity. The third objective is to the influence of service quality on brand equity.

Revisiting the study's objectives, this study was undertaken to seek answers to several research questions RQ1: What is the relationship between digital marketing practices and brand equity? RQ2: What is the relationship between customer relationship management and brand equity? and RQ3: What is the relationship between service quality and brand equity?

As noted in Chapter 3, data were gathered from Jawwal company subscribers in Palestine. Two hundred and fifty-eight questionnaires were distributed online and one hundred and fifty questionnaires were returned, representing 58.62% participation. The internal consistency of the measures was then tested by computing the reliability coefficient. Finally, the data were analyzed using regression analyses to test the hypotheses of the study.

The .05 level of significance was used as the critical level for decision making regarding the hypotheses.

The findings indicated that all the three independent variables have positive influence on brand equity, thus all the three hypotheses were supported. Despite the positive relationships, the explanatory power of digital marketing, CRM and service quality to predict brand equity is high, indicating that these three variables are important in predicting the brand equity.

5.3 Discussion

The following section discusses in further detail regarding the influences of digital marketing, CRM and service quality on brand equity.

5.3.1 The Influence of Digital Marketing on Brand Equity

The first hypothesis establishes that digital marketing improves brand equity. The findings of this study corroborate those of Soininen (2015) and Ratana (2018). This probably because the majority of clients have recognized the Jawwal company's advantages, and as a result, they feel satisfied each time they utilize the Jawwal company's services. This demonstrates that Jawwal is easily identifiable by the general people. Jawwal already has strong brand equity. A successful business model that is aligned with customer requirements soon brings telecommunications to the public's attention.

5.3.2 The Influence of Customer Relationship Management on Brand Equity

CRM is a major influencer of brand equity development in the literature (Shriedeh, 2019; Busen, 2018). In this study, it was found that CRM has a considerable impact on brand equity. This demonstrates that correct focus on CRM activities such as knowledge

management, customer participation, long-term relationships, and technology-based CRM result in an increase in brand equity in terms of integrating brand loyalty and awareness.

5.3.3 The Influence of Service Quality on Brand Equity

Service quality is a crucial precursor of brand equity by several researchers (Shriedeh, 2019). Much empirical research has strongly urged that the influence of service quality on brand equity development (Lubis, et al., 2020). This study found that service quality has a positive influence on brand equity. In conclusion, this study confirms the hypothesis that service quality has a significant impact on brand equity and reaffirms the widespread belief that service quality is critical in the development of strong brand equity from the perspective of a mobile communication service provider (Parasuraman et al., 1988; Zeithaml et al., 1996). This indicates that, As a result, it is critical for service providers to consider quality assurance, particularly in the context of mobile communications service providers.

5.4 Contributions of the Research

This research and the findings that have surfaced carries with it significant theoretical, and provide managerial implications. These contributions and implications are discussed further below. The current study examined the effects of digital marketing, customer relationship management, and service quality on brand equity development. This study's findings have resulted in several theoretical and managerial advancements. The subsequent sections discuss these contributions and their implications, as well as the study's limitations and directions for future research.

5.4.1 Theoretical Implications

From the theoretical perspective, the contribution of this research lies in identifying multiple ways through which digital marketing, CRM and service impact on brand equity particularly in the context of mobile communication industry involving stiff competition in nature.

The present research contributes to the literature by investigating the roles of digital marketing, CRM and service quality within the context of mobile communication industry. It gives an indication how organization can improve brand equity through the improvement in digital marketing, CRM and service quality. This study helps to build theory concerning brand equity and provide some insights toward development of brand equity in the mobile communication industry.

5.4.2 Practical Implications

Beside theoretical contributions of this study, several managerial implications are advanced from the results of this study. This study provides a few key implications on how managers in particular Jawwar company and telco companies in general can manage brand equity in an effective way.

To improve brand equity, a mobile communications service provider should continuously give a high-quality service that completely fulfills customers' requirements and wishes and aims to develop a unique experience with the brand. Prioritizing tangibility, dependability, responsiveness, assurance, and empathy in customer experience activities will improve service quality and, as a result, will help the entire brand equity thrive. Customers may profit from the results, which will help to improve the mobile communications services.

Similarly, the CRM and digital marketing practices need to continuously be upgraded to cater for customers' demand and improving the brand awareness.

5.5 Limitations and Future Research

As with any study, this one has limitations, some of which are related to the conceptual framework and may pave the way for additional research opportunities. To increase its generalizability, future research should examine this conceptual framework across industries (e.g., manufacturing), from a variety of perspectives (e.g., consumers), and across countries (e.g. developed countries).

From a methodological standpoint, data in this study were obtained from Jawwar company's subscribers in the selected areas. It would be useful to obtain a broader sample of customers and perhaps even subscribers from other telco companies in future studies. This would minimize any potential bias in the data resulting from the level of the informants.

In addition, exploring moderators reflecting brand equity will have improve the explanatory power of the independent variables; as it has already been indicated in the literature that impact of the independent variables on brand equity vary across different context. Furthermore, if one were to include control variables; the overall R^2 may improve significantly.

5.6 Conclusion

With the high R^2 obtained, findings of the study suggest that digital marketing, CRM and service quality have positive influence on brand equity. The finding gives academicians and managers a much stronger basis than intuition and anecdotes for recommending the

wisdom of developing and enhancing the brand equity approach. These findings provide additional evidence to the growing body of knowledge concerning the importance of adopting digital marketing, CRM and service quality approach.



REFERENCES

- Aaker. (1991). Capitalizing on the value of a brand name. New York: The free press. 2. Aaker, & David A. (1991). Managing brand equity: Capitalizing on the value of a brand name. New York: Free Press.
- Al-Hanawi, M. K., Angawi, K., Alshareef, N., Qattan, A., Helmy, H. Z., Abudawood, Y., & Alsharqi, O. (2020). Knowledge, attitude and practice toward COVID-19 among the public in the Kingdom of Saudi Arabia: a cross-sectional study. *Frontiers in public health*, 8, 217.
- Almerhag, I. A., & Alkabashi, O. A. (2019). Changing Classroom-Based Course Material to Online Course.
- Anaam, E. A., Bakar, K. A. A., Satar, N. S. M., & Kamrul, M. (2021). Critical success factors for electronic customer relationship management success adoption: Telecommunication companies case study.
- Andridge, R., & Valliant, R. (2021). Inference from probability and nonprobability samples. *Handbook of Computational Social Science, Volume 2: Data Science, Statistical Modelling, and Machine Learning Methods*.
- Ansari, S., Ansari, G., Ghori, M. U., & Kazi, A. G. (2019). Impact of brand awareness and social media content marketing on consumer purchase decision. *Journal of Public Value and Administrative Insight*, 2(2), 5-10.
- Atmowardoyo, H. (2018). Research methods in TEFL studies: Descriptive research, case study, error analysis, and R & D. *Journal of Language Teaching and Research*, 9(1), 197-204.

- Bahar, N., Wahab, S. N., & Rahman, M. (2020). Impact of knowledge management capability on supply chain management and organizational practices in logistics industry. *VINE Journal of Information and Knowledge Management Systems*.
- Bernarto, I., Berlianto, M. P., Palupi, Y. F. C., Meilani, M., Masman, R. R., & Suryawan, I. N. (2020). The influence of brand awareness, brand image, and brand trust on brand loyalty. *Jurnal Manajemen*.
- Brzakovic, A., Brzakovic, T., Karabasevic, D., & Popovic, G. (2021). Empirical Analysis of the Influence of Digital Marketing Elements on Service Quality Variables in the Small- and Medium-Sized Enterprises Sector in the Republic of Serbia. *Sustainability*, 13(18), 10264.
- Brzakovic, A., Brzakovic, T., Karabasevic, D., & Popovic, G. (2021). Empirical Analysis of the Influence of Digital Marketing Elements on Service Quality Variables in the Small- and Medium-Sized Enterprises Sector in the Republic of Serbia. *Sustainability*, 13(18), 10264.
- Budiati, S. H. (2017). Digital Branding. Retrieved January 6, 2018, from <http://jtanzilco.com/blog/detail/619/slug/digital-branding>
- Buttle, F., & Maklan, S. (2019). Customer relationship management: Concepts and
- Cai, R., & Chi, C. G. Q. (2021). Pictures vs. reality: Roles of disconfirmation magnitude, disconfirmation sensitivity, and branding. *International Journal of Hospitality Management*, 98, 103040.

- Chatterjee, S., Rana, N. P., Tamilmani, K., & Sharma, A. (2021). The effect of AI-based CRM on organization performance and competitive advantage: An empirical analysis in the B2B context. *Industrial Marketing Management*, 97, 205-219.
- Chen, C. F., & Tseng, W. S. (2010). Exploring customer-based airline brand equity: Evidence from Taiwan. *Transportation journal*, 49(1), 24-34.
- Clark, L. A., & Watson, D. (2019). Constructing validity: New developments in creating objective measuring instruments. *Psychological assessment*, 31(12), 1412.
- Clifford, T., & Blyth, C. (2019). A pilot study comparing the prevalence of orthorexia nervosa in regular students and those in University sports teams. *Eating and Weight Disorders- Studies on Anorexia, Bulimia and Obesity*, 24(3), 473-480.
- Cohen, J., & Kupferschmidt, K. (2020). Countries test tactics in 'war' against COVID-19.
- Dabbous, A., & Barakat, K. A. (2020). Bridging the online offline gap: Assessing the impact of brands' social network content quality on brand awareness and purchase intention. *Journal of Retailing and Consumer Services*, 53, 101966.
- Dennis, A. (2020, January). Boosting Immigration: Harnessing Global Talent to Increase US Competitiveness, Innovation, and Prosperity. In *Committee for Economic Development of The Conference Board*. Committee for Economic Development of The Conference Board. 1530 Wilson Boulevard Suite 400, Arlington, VA.
- Desai, V. (2019). Digital marketing: A review. *International Journal of Trend in Scientific Research and Development*, 5(5), 196-200.

- Dewi, L. G. P. S., Oei, S. J., & Siagian, H. (2020). *The Effect of Brand Ambassador, Brand Image, and Brand Awareness on Purchase Decision of Pantene Shampoo in Surabaya, Indonesia* (Doctoral dissertation, EDP Sciences).
- Dharmawan, F., & Hendrayati, H. (2019). Customer-based Brand Equity in Digital Age: A Conceptual Approach. *KnE Social Sciences*, 986-1007.
- Dumitriu, D., Militaru, G., Deselnicu, D. C., Niculescu, A., & Popescu, M. A. M. (2019). A perspective over modern SMEs: Managing brand equity, growth and sustainability through digital marketing tools and techniques. *Sustainability*, 11(7), 2111.
- El Talla, S. A., Al Shobaki, M. J., & Abu-Naser, S. S. (2019). The Reality of Marketing Services in Palestine Cellular Communications Company (Jawwal). *International Journal of Academic Multidisciplinary Research (IJAMR)*, 3(10).
- Everhart, J. S., Harris, K., Chafitz, A., Kirven, J. C., Abouljoud, M., Schiele, S., ... & Flanigan, D. C. (2020). Psychological assessment tools utilized in sports injury treatment outcomes research: a review. *Journal of Sports Science & Medicine*, 19(2), 408.
- Gajewska, T., Zimon, D., Kaczor, G., & Madzik, P. (2019). The impact of the level of customer satisfaction on the quality of e-commerce services. *International Journal of Productivity and Performance Management*.
- Gamage, T. C., Gnanapala, A., & Ashill, N. J. (2021). Understanding social customer relationship management adoption: qualitative insights. *Journal of Strategic Marketing*, 1-25.
- Gupta, S., Tanenbaum, T. J., & Tanenbaum, K. (2019, March). Shiva's Rangoli: Tangible Storytelling through Diegetic Interfaces in Ambient Environments. In *Proceedings of the*

Thirteenth International Conference on Tangible, Embedded, and Embodied Interaction (pp. 65-75).

Hadi, N. U., Aslam, N. and Gulzar, A., (2019). Sustainable Service Quality and Customer Loyalty: The Role of Customer Satisfaction and Switching Costs in the Pakistan Cellphone Industry. *Sustainability*, 11(8), 2408. MDPI AG.

Hajar, M. A., Ibrahim, D. N., Darun, M. R., & Al-Sharafi, M. A. (2020). Value innovation activities in the wireless telecommunications service sector: A case study of the Malaysian market. *Journal of Global Business Insights*, 5(1), 57-72.

Hamad, M. A., & Al Madhoun, M. (2020). The Effects of Consumer-Brand Relationships on Word of Mouth, through Social Media Platform.

Han, S. H., Chen, C. H. S., & Lee, T. J. (2021). The interaction between individual cultural values and the cognitive and social processes of global restaurant brand equity. *International Journal of Hospitality Management*, 94, 102847.

Han, Y., Li, J., Cao, X., & Jin, R. (2020). Structural equation modeling approach to studying the relationships among safety investment, construction employees' safety cognition, and behavioral performance. *Journal of construction engineering and management*, 146(7), 04020065.

Hanaysha, J. R., & Al-Shaikh, M. E. (2021). An examination of customer relationship management dimensions and employee-based brand equity: A study on ride-hailing industry in Saudi Arabia. *Research in Transportation Business & Management*, 100719.

Haron, R., Subar, N. A., & Ibrahim, K. (2020). Service quality of Islamic banks: satisfaction, loyalty and the mediating role of trust. *Islamic Economic Studies*.

- Heller, J., Chylinski, M., de Ruyter, K., Keeling, D. I., Hilken, T., & Mahr, D. (2021). Tangible service automation: Decomposing the technology-enabled engagement process (TEEP) for augmented reality. *Journal of Service Research*, 24(1), 84-103.
- Hidayat, T., Mahardiko, R., & Alaydrus, M. (2020). Mobile cellular technology forecast for the Indonesian telecommunications industry. *Journal of Telecommunications and the Digital Economy*, 8(1), 37-48.
- Holliman, G.; Rowley, J. Business to business digital content marketing: Marketers' perceptions of best practice. *J. Res. Interact. Mark.* **2014**, 8, 269–293.
- Islam, T., Islam, R., Pitafi, A. H., Xiaobei, L., Rehmani, M., Irfan, M., & Mubarak, M. S. (2021). The impact of corporate social responsibility on customer loyalty: The mediating role of corporate reputation, customer satisfaction, and trust. *Sustainable Production and Consumption*, 25, 123-135.
- Jain, R. (2017). Basic branding concepts: brand identity, brand image and brand equity. *International Journal of Sales & Marketing Management Research and Development (IJSMMRD) Vol, 7*, 1-8.
- Jaswal, A. R. (2016). Measurement of Service Quality Perception and Customer Satisfaction: A Review through SERVQUAL Framework.
- Khatab, J. J., Esmaeel, E. S., & Othman, B. (2019). Dimensions of service marketing mix and its effects on customer satisfaction: a case study of international Kurdistan Bankin Erbil City-Iraq. *TEST Engineering & Management*, 4846, 4846-4855.
- Lelis, C. (2021). Smart Brands and Identities: building friendly bridges between Design and Smartness. *Interaction Design & Architecture (s) Journal (IxD&A)*, 47.

- Liébana-Cabanillas, F., Japutra, A., Molinillo, S., Singh, N., & Sinha, N. (2020). Assessment of mobile technology use in the emerging market: Analyzing intention to use m-payment services in India. *Telecommunications Policy*, 44(9), 102009.
- Lis, M., Szczepańska-Woszczyzna, K., (2015, May). Managing customer relations: The use of CRM system by services company. In Proceedings of the 11th international conference on strategic management and its support by information systems
- Manthiou, A., Hickman, E., & Klaus, P. (2020). Beyond good and bad: challenging the suggested role of emotions in customer experience (CX) research. *Journal of Retailing and Consumer Services*, 57, 102218.
- Maryunani, S. R. (2019). *The Making of a Creative City: Bandung and Its Creative Industries Ecosystem* (Doctoral dissertation, Goldsmiths, University of London).
- Mehdikhani, R., & Valmohammadi, C. (2021). The effects of green brand equity on green word of mouth: the mediating roles of three green factors. *Journal of Business & Industrial Marketing*.
- Melovic, B., Rondovic, B., Mitrovic-Veljkovic, S., Ocovaj, S. B., & Dabic, M. (2020). Electronic Customer Relationship Management Assimilation in Southeastern European Companies—Cluster Analysis. *IEEE Transactions on Engineering Management*.
- Othman, B. A., Harun, A., De Almeida, N. M., & Sadq, Z. M. (2020). The effects on customer satisfaction and customer loyalty by integrating marketing communication and after sale service into the traditional marketing mix model of Umrah travel services in Malaysia. *Journal of islamic marketing*.

- Othman, B., Harun, A., Rashid, W., & Ali, R. (2019). The impact of Umrah service quality on customer satisfaction towards Umrah travel agents in Malaysia. *Management Science Letters*, 9(11), 1763-1772.
- Pakurár, M., Haddad, H., Nagy, J., Popp, J., & Oláh, J. (2019). The service quality dimensions that affect customer satisfaction in the Jordanian banking sector. *Sustainability*, 11(4), 1113.
- Pakurár, M., Haddad, H., Nagy, J., Popp, J., & Oláh, J. (2019). The service quality dimensions that affect customer satisfaction in the Jordanian banking sector. *Sustainability*, 11(4), 1113.
- Pandey, N., Nayal, P., & Rathore, A. S. (2020). Digital marketing for B2B organizations: structured literature review and future research directions. *Journal of Business & Industrial Marketing*.
- Parmar, Y., & Mann, B. J. S. (2021). Exploring the relationship between celebrity worship and brand equity: The mediating role of self-brand connection. *Journal of Creative Communications*, 16(1), 61-80.
- Plantin, J. C., & Punathambekar, A. (2019). Digital media infrastructures: pipes, platforms, and politics. *Media, culture & society*, 41(2), 163-174.
- Poturak, M., & Softic, S. (2019). Influence of social media content on consumer purchase intention: Mediation effect of brand equity. *Eurasian Journal of Business and Economics*, 12(23), 17-43.
- Pozza, I.D., Goetz, O. and Sahut, J.M. (2018), "Implementation effects in the relationship between CRM and its performance", *Journal of Business Research*, Vol. 89, pp. 391-403.

- Rafiki, A., Hidayat, S. E., & Razzaq, D. A. A. (2019). CRM and organizational performance. *International Journal of Organizational Analysis*.
- Rahimi, R. Gunlu, E. (2016., Implementing customer relationship management (CRM) in hotel industry from organisational culture perspective. *International Journal of Contemporary Hospitality Management*.
- Ramesh, K. (2013). Role of customer relationship management in indian banking system”, *International Journal of Applied Services Marketing Perspectives*, Vol. 2 No. 4, pp. 645-650.
- Ratana, M. (2018). Pengaruh Social Media Marketing Terhadap Ekuitas Merek. *Jurnal Studi Komunikasi dan Media*, 22(1), 13-28.
- Salah, O. H., Yusof, Z. M., & Mohamed, H. (2021). The determinant factors for the adoption of CRM in the Palestinian SMEs: The moderating effect of firm size. *PloS one*, 16(3), e0243355.
- Sashi, C. M. (2021). Digital communication, value co-creation and customer engagement in business networks: a conceptual matrix and propositions. *European Journal of Marketing*.
- Saura, J. R. (2021). Using data sciences in digital marketing: Framework, methods, and performance metrics. *Journal of Innovation & Knowledge*, 6(2), 92-102.
- Sehar, R., Ashraf, S., & Azam, F. (2019). The influence of social media’s marketing efforts on brand equity and consumer response. *IUP Journal of Marketing Management*, 18(2), 30-53.
- Shetty, M. S., & Jain, A. K. (2019). *Concrete Technology (Theory and Practice)*, 8e. S. Chand Publishing.

- Soliman, H. S. (2011). Customer relationship management and its relationship to marketing performance. *International journal of business and social science*, 2(10).
- Song, H., Wang, J., & Han, H. (2019). Effect of image, satisfaction, trust, love, and respect on loyalty formation for name-brand coffee shops. *International Journal of Hospitality Management*, 79, 50-59.
- Sundararaj, V., & Rejeesh, M. R. (2021). A detailed behavioral analysis on consumer and customer changing behavior with respect to social networking sites. *Journal of Retailing and Consumer Services*, 58, 102190.
- Taques, F. H., López, M. G., Basso, L. F., & Areal, N. (2021). Indicators used to measure service innovation and manufacturing innovation. *Journal of Innovation & Knowledge*, 6(1), 11-26. Technologies (4th ed.). Routledge
- Tešić, D. (2020). Measuring dimensions of service quality. *Strategic Management-International Journal of Strategic Management and Decision Support Systems in Strategic Management*, 25(1).
- Tian, J. and Wang, S. (2017), "Signaling service quality via website e-CRM features: more gains for smaller and lesser-known hotels", *Journal of Hospitality & Tourism Research*, Vol. 41 No. 2, pp. 211-245.
- Tran, T. P., Mai, E. S., & Taylor, E. C. (2021). Enhancing brand equity of branded mobile apps via
- Van der Walddt, G. (2020). Constructing conceptual frameworks in social science research. *TD: The Journal for Transdisciplinary Research in Southern Africa*, 16(1), 1-9.

- Vannucci, V., & Pantano, E. (2019). Digital or human touchpoints? Insights from consumer-facing in-store services. *Information Technology & People*.
- Verma, P. (2021). The effect of brand engagement and brand love upon overall brand equity and purchase intention: A moderated–mediated model. *Journal of Promotion Management*, 27(1), 103-132.
- Vieider, F. M., Martinsson, P., Nam, P. K., & Truong, N. (2019). Risk preferences and development revisited. *Theory and Decision*, 86(1), 1-21.
- Wang, J., Tao, J., & Chu, M. (2020). Behind the label: Chinese consumers' trust in food certification and the effect of perceived quality on purchase intention. *Food Control*, 108, 106825.
- Weaver, L., Beebe, T. J., & Rockwood, T. (2019). The impact of survey mode on the response rate in a survey of the factors that influence Minnesota physicians' disclosure practices. *BMC medical research methodology*, 19(1), 1-7.
- Yaghtin, S., Safarzadeh, H., & Zand, M. K. (2020). Planning a goal-oriented B2B content marketing strategy. *Marketing Intelligence & Planning*.

Appendix A



**Graduate School of Business
University Utara Malaysia
QUESTIONNAIRE**

Dear Respondent,

ACADEMIC REASERCH QUESTIONNAIRE

I am Ahmed A. M. Aish a master student in university Utara Malaysia, currently conducting on study titled “**The Relationship between digital marketing, customer relationship management and service quality on brand equity**”, I appreciate if you would assist me by providing objective and sincere answers to all the questions as there is no right or wrong answers. All information provided will be treated as private and confidential. It will be solely be used for academic purposes.

Email ID: ahmed.aish1998@gmail.com

Mobile N0: 0173038150

Thanks,

Ahmed

SECTION A: DEMOGRAPHIC

Instruction: Please tick (√) in the relevant boxes.

1. Gender: Male Female

2. Age:

18 to 20 21-22 23 above

3. Level of academic qualification:

Diploma Bachelor's Degree Master degree

4. Place of Residence

Gaza Central Governorate Khan Younis Rafah

Northern Gaza

SECTION B: DIGITAL MARKETING

Instructions:

For each statement, circle the number on the scale that corresponds to your level of agreement.

1= Strongly Disagree (SD), 2= Disagree (D), 3= Neutral (N), 4= Agree (A), 5= Strongly Agree (SA).

Items	Digital marketing	SD	D	N	A	SA
1	I find digital marketing at Jawwal company help me while shopping online.	1	2	3	4	5
2	I find quality information at Jawwal company via digital marketing	1	2	3	4	5
3	Jawwal company facilitates 24/7 service	1	2	3	4	5
4	Digital marketing at Jawwal company provides greater engagement with product.	1	2	3	4	5
5	Jawwal company provides the resources to implement its digital marketing plans efficiently and effectively	1	2	3	4	5
6	Jawwal company has modern technology equipment to serve customers.	1	2	3	4	5

7	Jawwal company follows the progress of the implementation of its digital marketing plans and adjustments necessary for its success	1	2	3	4	5
8	I can recognize brand for Jawwal company that appear on digital media among other competing brands.	1	2	3	4	5

SECTION C: CUSTOMER RELATIONSHIP MANAGEMENT

Instructions:

For each statement, circle the number on the scale that corresponds to your level of agreement.

1= Strongly Disagree (SD), 2= Disagree (D), 3= Neutral (N), 4= Agree (A), 5= Strongly Agree (SA).

Item	Customer Relationship Management	SD	D	N	A	SA
1	Employees at Jawwal are eager to assist me as a client in a timely way, such as via engagement and touchpoints.	1	2	3	4	5
2	Jawwal company offers communication channels for consumers to communicate with.	1	2	3	4	5
3	Jawwal company personnel make every effort to comprehend my wants by accumulating a large amount of data about me.	1	2	3	4	5
4	This company's personnel are eager to deliver timely service.	1	2	3	4	5
5	Jawwal is willing to make changes to its goods and services in response to my comments.	1	2	3	4	5
6	Jawwal is a technology and new service firm that I am involved with.	1	2	3	4	5
7	Jawwal is dedicated to making changes to meet the demands of its consumers.	1	2	3	4	5
8	Customers may get product and service recommendations from Jawwal company.	1	2	3	4	5
9	Jawwal has loyalty or retention programmes in place.	1	2	3	4	5
10	Jawwal has the appropriate software to assist consumers.	1	2	3	4	5
11	At every touchpoint, Jawwal company corporation has sufficient information about its clients.	1	2	3	4	5
12	The Jawwal firm keeps a large client database.	1	2	3	4	5
13	Through the use of computer technology, the workers of this Jawwal company are able to form connections.	1	2	3	4	5

SECTION D: SERVICE QUALITY

Instructions: For each statement, circle the number on the scale that corresponds to your level of agreement.

1= Strongly Disagree (SD), 2= Disagree (D), 3= Neutral (N), 4= Agree (A), 5= Strongly Agree (SA).

Items	Service Quality	SD	D	N	A	SA
1	Jawwal company services are accompanied with aesthetically attractive materials.	1	2	3	4	5
2	Jawwal company personnel are well-dressed and look to be tidy.	1	2	3	4	5
3	Jawwal company modern equipment availability.	1	2	3	4	5
4	Jawwal company keeps records that are free of errors.	1	2	3	4	5
5	Jawwal company is a corporation that delivers on its promises.	1	2	3	4	5
6	The Jawwal company firm provides service from the very beginning.	1	2	3	4	5
7	Jawwal employees can inform you precisely when services will be performed.	1	2	3	4	5
8	Jawwal staff are always prepared to provide a hand.	1	2	3	4	5
9	Jawwal workers are never too preoccupied to react to queries.	1	2	3	4	5
10	Dealing with Jawwal gives me a sense of security.	1	2	3	4	5
11	Jawwal personnel were people I could trust.	1	2	3	4	5
12	Jawwal workers are well-versed in their field.	1	2	3	4	5
13	Jawwal employees have a kind and caring approach toward me.	1	2	3	4	5
14	Jawwal has hours of operation that are convenient for all customers.	1	2	3	4	5
15	Jawwal employees have the best interests of its clients at heart.	1	2	3	4	5

SECTION E: BRAND EQUITY

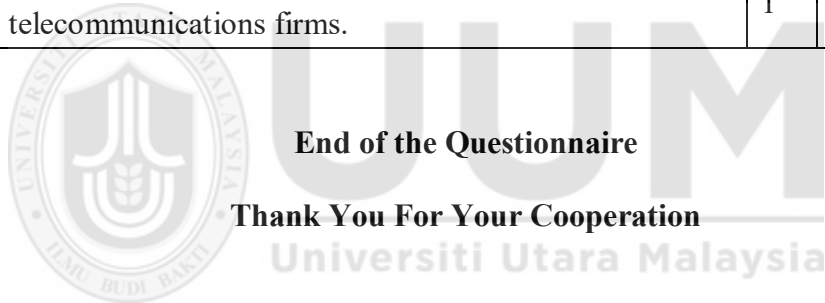
Instructions: For each statement, circle the number on the scale that corresponds to your level of agreement:

1= Strongly Disagree (SD), 2= Disagree (D), 3= Neutral (N), 4= Agree (A),
5= Strongly Agree (SA).

Items	Overall Brand Equity	SD	D	N	A	SA
1	Even if another telecommunication offers the same services, it makes sense to use Jawwal service on a regular basis.	1	2	3	4	5
2	If other company offer the same services as Jawwal, I will still chose Jawwal as my preference	1	2	3	4	5
3	It seems to be more prudent to use the services of Jawwal company rather than any other Telecommunication provider.	1	2	3	4	5
4	Jawwal company is more advanced than other telecommunications firms.	1	2	3	4	5

End of the Questionnaire

Thank You For Your Cooperation



Appendix B

SECTION B: Digital marketing

Instructions: For each statement, circle the number on the scale that corresponds to your level of agreement.

1= Strongly Disagree (SD), 2= Disagree (D), 3= Neutral (N), 4= Agree (A), 5= Strongly Agree (SA).

Items	Digital marketing	SD	D	N	A	SA
1	أجد للتسويق الرقمي في شركة جواليس اعني يثنىء لتسوق عبر الإنترنت	1	2	3	4	5
2	أجد مخطومات علياة لاجود في شركة جوال عبر للتسويق الرقمي	1	2	3	4	5
3	شركة جوال تسهل للتسوق لحي مدار الساعة طوال أيام اللابوع	1	2	3	4	5
4	يفر للتسويق الرقمي في شركة جوال شركة ألبر مع لبتج	1	2	3	4	5
5	توفر شركة جوال ل موارد لالزم لتسيذ خ ططه التسويق الرقمي كفاءة	1	2	3	4	5
6	تتملك شركة جوال معدانت وتهيئة حيث تل خدمه ل عملاء	1	2	3	4	5
7	تتبل عشرة شركة جوال سري وتسيذ خ ططه التسويق الرقمي ولك عيالات لالزمة	1	2	3	4	5
8	يمثلني لك عرف لحي ل عملاء لتجاري لشركة جوال تظمر لحي لوسائط	1	2	3	4	5

SECTION C: Customer Relationship Management

Instructions: For each statement, circle the number on the scale that corresponds to your level of agreement.

1= Strongly Disagree (SD), 2= Disagree (D), 3= Neutral (N), 4= Agree (A), 5= Strongly Agree (SA).

Item	Customer Relationship Management	SD	D	N	A	SA
1	يتوق الموظفون في جوال الى من اعندي ك عيالي لوقت ل فلبس ، نمل	1	2	3	4	5
2	تقدم شركة جوال قنونات تنص الل من تله لتي ل لتواصل مع عم	1	2	3	4	5
3	يذل موظفون شركة جوال قصارى جدم مفهم ريغيتي من خال لت جحي كهيبة	1	2	3	4	5
4	يتوق الموظفون شركة جوال الى تقويم ل خدمتي لوقت ل فلبس	1	2	3	4	5
5	. جوال لحي لبت عدد اإل جرات وحيارات لحي ل عملاء وخدمته لبت جمل تي لحي لتي	1	2	3	4	5
6	. جوال هي شركة تكلن لوجيا وخدمتات جيبة لتتري لفيها	1	2	3	4	5
7	. جوال مكروسه إل جرات وحيارات لتلحيبة لتطبات لمن تله لتي	1	2	3	4	5

8	يمكن للعمالء الحصول على توصيات لمنتجات والخدمات من شركة جوال	1	2	3	4	5
9	لدى جوالبرامج ولاء أو برنامج	1	2	3	4	5
10	جوال الذي لها البرامج لخدمة العملاء لم يتلقوا	1	2	3	4	5
11	في كل وقت تتصل بالمتكشركة جوال مخدمات ليلية عن عملها	1	2	3	4	5
12	تتبع شركة جوال الحق اعدت لخدمة عملاء	1	2	3	4	5
13	من خلال مخدماتك لوجيا للبيوت مخدمات عمال الشركة جوال هذه تتبع مخدمات	1	2	3	4	5

SECTION D: Service Quality

Instructions: For each statement, circle the number on the scale that corresponds to your level of agreement.

1= Strongly Disagree (SD), 2= Disagree (D), 3= Neutral (N), 4= Agree (A), 5= Strongly Agree (SA).

Items	Service Quality	SD	D	N	A	SA
1	خدمات شركة جوال مصحوب مواد جيدة من الناحية الجارية	1	2	3	4	5
2	موظفو شركة جوال ممتدنون ملبس جيدة يبدو انهم يتوبون	1	2	3	4	5
3	تتوفر أجزاء مودم شركة جوال	1	2	3	4	5
4	تتبع شركة جوال ملبس جالات خلية من الخطاء	1	2	3	4	5
5	شركة جوال هي شركة تفسي وعودها	1	2	3	4	5
6	تتبع مخدمات جوال لخدمة من الليلية	1	2	3	4	5
7	يمكن لموظفي جوال اعال مكب ق بموعدتق مخدمات	1	2	3	4	5
8	موظفو جوال نائم في ملبس عدالتق مخدمات	1	2	3	4	5
9	العمل عمل جوال بلد بالرد في التفتسارات	1	2	3	4	5
10	التعامل مع جوال في ملبس عورب ال م ان	1	2	3	4	5
11	ان موظفو جوال ملبس ل ملبس ل ملبس	1	2	3	4	5
12	موظفون جوال في درية ملبس ملبس	1	2	3	4	5
13	موظفو جوال ملبس ملبس ملبس	1	2	3	4	5
14	لدى جوال ملبس ملبس ملبس	1	2	3	4	5
15	موظفو جوال ملبس ملبس ملبس	1	2	3	4	5

SECTION E: Overall Brand Equity

Instructions: For each statement, circle the number on the scale that corresponds to your level of agreement.

1= Strongly Disagree (SD), 2= Disagree (D), 3= Neutral (N), 4= Agree (A),
5= Strongly Agree (SA).

Items	Overall Brand Equity	SD	D	N	A	SA
1	ضى إلكنتنصلالت أكرىتنففس لخدمات فمن للناطقى للتخدام لجى لاس يتنظم	1	2	3	4	5
2	إلكنت فالك عالمتجارية أكرىالتتظف عنشركة جوالباأشركل من اللكال فعبودو من اللبصلشراء هذهلالمة للتجارية	1	2	3	4	5
3	عبودو ل ه من لخدم للتخدام خدماتشركة جوالبال من أى مزودنصلالت أكر	1	2	3	4	5
4	شركة جوال لشركتقدم منشركات التصلالت أكرى	1	2	3	4	5

This is the end of the questionnaire

Thank you for your cooperation



UUM
Universiti Utara Malaysia

Appendix C: Statistical Output

Frequencies for All Variables

		BRAND EQUITY	MEAN_SERQUAL	MEAN CRM	MEAN_DIGITAL_MARKETING
N	Valid	150	150	150	150
	Missing	0	0	0	0
Mean		3.2617	3.3460	3.4156	3.3333
Std. Deviation		.90131	.81412	.88355	.72174

Correlations Analysis

		BRAND EQUITY	MEAN_SERQUAL	MEAN CRM	MEAN_DIGITAL_MARKETING
BRAND EQUITY	Pearson Correlation	1	.840**	.692**	.599**
	Sig. (2-tailed)		<.001	<.001	<.001
	N	150	150	150	150
MEAN_SERQUAL	Pearson Correlation	.840**	1	.793**	.684**
	Sig. (2-tailed)	<.001		<.001	<.001
	N	150	150	150	150
MEAN CRM	Pearson Correlation	.692**	.793**	1	.687**
	Sig. (2-tailed)	<.001	<.001		<.001
	N	150	150	150	150
MEAN_DIGITAL_MARKETING	Pearson Correlation	.599**	.684**	.687**	1
	Sig. (2-tailed)	<.001	<.001	<.001	
	N	150	150	150	150

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

Regression Analysis

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	MEAN_CRM, MEAN_DIGITAL_MARKETING, MEAN_SERQUAL ^b	.	Enter

a. Dependent Variable: BRAND_EQUITY

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.842 ^a	.708	.702	.49170

a. Predictors: (Constant), MEAN_CRM, MEAN_DIGITAL_MARKETING, MEAN_SERQUAL

b. Dependent Variable: BRAND_EQUITY

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	85.744	3	28.581	118.217	<.001 ^b
	Residual	35.298	146	.242		
	Total	121.042	149			

a. Dependent Variable: BRAND_EQUITY

b. Predictors: (Constant), MEAN_CRM, MEAN_DIGITAL_MARKETING, MEAN_SERQUAL

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.069	.198		.350	.727
	MEAN_SERQUAL	.858	.086	.235	.527	<.001
	MEAN_DIGITAL_MARKETING	.037	.081	.330	.462	.004
	MEAN_CRM	.057	.079	.146	.725	<.001

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.0359	4.8176	3.2617	.75859	150
Residual	-1.69514	1.29335	.00000	.48672	150
Std. Predicted Value	-2.934	2.051	.000	1.000	150
Std. Residual	-3.447	2.630	.000	.990	150

a. Dependent Variable: BRAND_EQUITY

a. Dependent Variable: BRAND_EQUITY

Charts

