

T.R.
ISTANBUL SABAHATTIN ZAIM UNIVERSITY
GRADUATE EDUCATION INSTITUTE
DEPARTMENT OF BUSINESS ADMINISTRATION

**ARTIFICIAL INTELLIGENCE IN SOCIAL MEDIA
MARKETING: TRANSFORMING BRAND EQUITY
AND BRAND TRUST**

MA THESIS

Yomna Osama Fathy Mohamed HANAFY

Istanbul

July-2024

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This study has been approved in partial fulfillment of the requirements for MA
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DECLARATION OF SCIENTIFIC ETHICS AND ORIGINALITY

I hereby affirm that the MBA thesis entitled " Artificial Intelligence in Social Media Marketing: Transforming Brand Equity and Brand Trust" is the result of my own efforts. Throughout its development, I have strictly adhered to scientific ethics and academic guidelines. In accordance with these principles and Istanbul Sabahattin Zaim University's thesis writing regulations, I have collected and utilized all materials and data ethically. Proper citation has been provided for all direct and indirect quotations, as well as all sources referenced in both the text and bibliography.



Yomna HANAFY

Istanbul, July- 2024

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ABSTRACT

ARTIFICIAL INTELLIGENCE IN SOCIAL MEDIA MARKETING: TRANSFORMING BRAND EQUITY AND BRAND TRUST

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The current era is characterized by a significant surge in AI tools and their development, particularly on social media platforms. This trend is perceived as advantageous for companies seeking to augment their brand equity and consumer trust. The primary objective of this study is to explore the impact of AI Chatbots on brand equity and consumer trust in the realm of social media marketing. To accomplish this objective, the study constructs a theoretical framework derived from a comprehensive literature review, encompassing the role of AI Chatbots in social media marketing, brand equity, and consumer trust. A survey instrument was devised, and the opinions of 184 users of AI chatbots across various sectors in the Middle East and Turkey were solicited regarding the relationship among these components. Data collection and analysis were conducted using SPSS 27. The findings reveal a significant influence of AI Chatbots on brand equity and consumer trust. Notably, certain components of brand equity (such as brand loyalty and perceived quality) were found to be statistically significant. As a result, companies and small businesses are urged to develop strategies for integrating AI Chatbots across different social media platforms to enhance their brand equity and consumer trust from the customer's perspective.

Keywords: AI Chatbots, Social Media Marketing, Brand Equity, Consumer Trust

ÖZET

SOSYAL MEDYA PAZARLAMASINDA YAPAY ZEKA: MARKA DEĞERİNİ VE MARKA GÜVENİNİ DÖNÜŞTÜRMEK

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Mevcut dönem, özellikle sosyal medya platformlarında, yapay zekâ araçlarının ve gelişiminin önemli bir artışı ile karakterizedir. Bu eğilim, marka değeri ve tüketici güvenini artırmayı hedefleyen şirketler için avantajlı olarak algılanmaktadır. Bu çalışmanın temel amacı, sosyal medya pazarlaması alanında AI Sohbet Robotlarının marka değeri ve tüketici güvenine etkisini araştırmaktır. Bu hedefe ulaşmak için, çalışma, sosyal medya pazarlamasında, marka değeri ve tüketici güveni alanlarını içeren kapsamlı bir literatür taramasından elde edilen teorik bir çerçeve oluşturur. Bir anket enstrümanı geliştirildi ve Orta Doğu ve Türkiye'deki çeşitli sektörlerden 184 AI sohbet robotu kullanıcısının, bu bileşenler arasındaki ilişkiye ilişkin görüşleri alındı. Veri toplama ve analiz SPSS 27 kullanılarak gerçekleştirildi. Bulgular, AI Sohbet Robotlarının marka değeri ve tüketici güveni üzerinde önemli bir etkisinin olduğunu ortaya koymaktadır. Özellikle, marka sadakati ve algılanan kalite gibi bazı marka değeri bileşenlerinin istatistiksel olarak anlamlı olduğu bulunmuştur. Sonuç olarak, şirketlerin ve küçük işletmelerin, müşteri perspektifinden marka değeri ve tüketici güvenini artırmak için farklı sosyal medya platformlarına AI Sohbet Robotlarını entegre etme stratejileri geliştirmeleri önerilmektedir.

Anahtar Kelimeler: AI Sohbet Robotları, Sosyal Medya Pazarlaması, Marka Değeri, Tüketici Güveni

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LIST OF ABBREVIATIONS

AI: Artificial Intelligence

SMM: Social Media Marketing

AISSM: Artificial Intelligence Social Marketing.

BE: Brand Equity

NLP: Natural Language Processing

FAQs: frequently asked questions

TOMA: Top-Of-Mind Awareness

CBR: Customer-Brand Relationships

CHAPTER I

INTRODUCTION

In the contemporary landscape of rapidly advancing artificial intelligence (AI), the influence of AI tools on digital marketing, particularly within the domain of Social Media Marketing (SMM), is witnessing an unprecedented surge, presenting profound implications for brand equity and consumer trust. This thesis aims to conduct a thorough investigation into the transformative impact exerted by AI tools utilized in Social Media Marketing (AISMM) and its associated strategies on these critical facets within the dynamic marketing milieu.

Online virtual platforms have evolved into integral components of daily life, serving as prominent channels for interaction and communication. Platforms such as Facebook, Twitter, LinkedIn, Pinterest, Instagram, and other websites including the business websites itself witness consistent engagement from individuals across the globe. Within the marketing sphere, AI assumes a central role in driving performance and enhancing efficiency, particularly in the realm of social media. Businesses are increasingly leveraging AI technologies to optimize their presence and engagement on various online platforms. AI facilitates the continuous collection and analysis of user data pertaining to online activities. Presently, online virtual platforms serve as rich repositories of user-generated content, enabling insights into social behavior and trends through the utilization of sophisticated big-data analysis tools.

Considering these developments, this study endeavors to elucidate the multifaceted impacts of AI Chatbots as a tool on brand equity and consumer trust. this research seeks to provide valuable insights into the mechanisms through which AI-driven initiatives influence consumer perceptions and brand-related outcomes in the context of social media marketing.

Furthermore, a significant component of AI's impact on brand equity within the realm of online platforms lies in the utilization of AI chatbots. AI chatbots serve as automated conversational agents that interact with users in real-time, providing personalized assistance and guidance. These chatbots leverage natural language processing (NLP)

and machine learning algorithms to comprehend user queries and deliver relevant responses. By integrating AI chatbots into their online platform's strategies, businesses can offer seamless and efficient customer service experiences, thereby enhancing brand perception and loyalty.

Moreover, AI chatbots enable companies to gather valuable insights into customer preferences and behaviors, facilitating targeted marketing initiatives that resonate with their audience. Through proactive engagement and personalized interactions, AI chatbots contribute to building stronger relationships with customers, ultimately bolstering brand equity, and fostering long-term brand affinity.

1.1 The Research Problem

Despite the growing prevalence and potential benefits of AI chatbots in the online virtual platforms for businesses, there remains a gap in the existing literature regarding their specific impact on brand equity. While previous studies have explored the influence of AI technologies on various marketing outcomes, such as customer engagement and satisfaction, limited research has focused explicitly on the relationship between AI chatbots and brand equity within the context of online virtual platforms. Therefore, this research seeks to address this gap by investigating the extent to which AI chatbots contribute to the enhancement of brand equity in online environments. By examining the perceptions and behaviors of consumers interacting with AI chatbots on online platforms, this study aims to provide insights into the mechanisms through which these AI-driven interactions influence consumers' brand perceptions, attitudes, and ultimately, their brand-related behaviors. Through a comprehensive analysis of the interplay between AI chatbots and brand equity, this research aims to contribute to a deeper understanding of the role of AI technologies in shaping consumer-brand relationships in the digital age.

1.2 The Background of the Study

In recent years, artificial intelligence (AI) has emerged as a transformative technology, offering a wide range of managerial solutions, and enabling direct comparisons between sophisticated customer communications and traditional metrics for strategic decision-making. In the realm of AI-driven marketing, there has been a noticeable shift from depending on intuition to utilizing data-driven insights for decision-making processes. AI-driven chatbots have attracted significant attention for their potential to

transform social media marketing practices. These chatbots, powered by AI technologies, provide numerous benefits to online platforms sponsors and digital marketers. By automating message responses and delivering personalized support to customers, AI chatbots empower businesses to promptly address customer inquiries and enhance the overall customer experience, leading to a significant improvement in business-customer interactions and ultimately fostering brand loyalty and satisfaction. As Tjepkema (2018) aptly stated, "Artificial intelligence offers numerous managerial solutions, enabling direct comparisons between communications from sophisticated customers and traditional metrics for strategic decision-making." Additionally, Sadiku, Ashaolu, and Musa (2021) highlight the advantages of AI-driven chatbots for social media sponsors and digital marketers, emphasizing their role in enhancing overall customer experience and improving business-customer interactions on social media platforms.

1.3 The Purpose of the Study

The proposal of this study is to investigate the impact of AI Chatbots on brand equity and consumer trust in the realm of online platforms. With the increasing utilization of artificial intelligence tools in social media platforms, particularly Chatbots powered by AI, there is a need to understand how these technologies influence brand perceptions, consumer behaviors, and ultimately contribute to enhancing brand equity and consumer trust. By examining the interactions between consumers and AI Chatbots on different platforms, this research aims to provide insights into the mechanisms through which AI-driven initiatives shape brand perceptions and attitudes, ultimately impacting brand-related behaviors. Through a comprehensive analysis of the interplay between AI Chatbots and brand equity.

The study aims to delve into the impact of Artificial Intelligence (AI) technologies on the relationships between consumers and brands in the modern digital era. AI technologies have revolutionized the way businesses interact with consumers, personalize experiences, and analyze data to enhance marketing strategies. By investigating how AI influences consumer-brand relationships, the study seeks to uncover insights into how AI technologies shape consumer perceptions, behaviors, and interactions with brands in the digital landscape.

Specifically, the research may explore how AI-powered tools such as chatbots, recommendation systems, predictive analytics, and personalized marketing campaigns impact consumer engagement, loyalty, trust, and purchase decisions. Understanding the role of AI in shaping consumer-brand relationships can provide valuable insights for businesses looking to leverage AI technologies effectively to build stronger connections with their target audience, drive brand loyalty, and enhance overall customer experience in the digital era.

Social media has evolved beyond being just a platform for communication among individuals. Nowadays, smart companies, especially startups and small businesses, leverage social media for various purposes such as selling products, assisting customers, advertising, and more. Artificial intelligence tools play a significant role in enhancing social media strategies by enabling tasks such as text analysis, image analysis, spam detection, social insights, advertising optimization, and data gathering. The integration of AI technologies in social media marketing has opened new possibilities for businesses to engage with their audience effectively and drive brand growth.

1.4 The Limitations of the Study

The study encountered several challenges that led to limitations in its scope and findings. Firstly, the survey was distributed among a sample of AI chatbot users from Turkey, Egypt, and other nationalities. which may not have represented all demographic groups adequately. This limitation could impact the generalizability of the study's results to a broader population.

Secondly, there is a scarcity of literature specifically addressing the utilization of AI chatbots in online platforms, which may have constrained the depth of analysis and discussion on this topic. The lack of existing research in this area could have limited the author's ability to contextualize the study within a broader academic framework.

Furthermore, while the study focused on examining customers' perceptions of AI chatbots in online websites and platforms. it did not explore managerial perceptions. Understanding the perspectives of brand managers and marketers utilizing AI chatbots could have provided valuable insights into the strategic decision-making processes and challenges faced in implementing these technologies effectively.

Lastly, the author did not conduct interviews with managers of brands utilizing AI chatbots. By omitting this qualitative research approach, the study missed an opportunity to gather in-depth insights and firsthand experiences from industry professionals, which could have enriched the analysis and provided a more comprehensive understanding of the practical implications of AI chatbots in social media marketing.

1.5 The Questions of the Study

The specific questions of the study were not provided in the excerpt which the author shared. However, based on the context of the research on the impact of AI Chatbots on brand equity and consumer trust in online platforms, some potential questions that the study may have aimed to address could include:

Q1: What are the effects of AI Chatbots on consumer trust in brands in the digital marketing landscape?

Q2: In what ways do AI Chatbots enhance customer engagement and interactions on social media channels?

Q3: How do AI Chatbots contribute to personalized customer experiences and brand loyalty in social media marketing?

Q4: What are the challenges and opportunities associated with integrating AI Chatbots into social media marketing strategies for businesses?

Q5: How do consumer demographics and behaviors impact the effectiveness of AI Chatbots in shaping brand perceptions and attitudes?

Q6: What are the key factors that influence the success of AI Chatbots in driving brand equity and consumer trust in social media environments?

These questions are hypothetical and are formulated based on the general theme of the study. The actual research questions may vary depending on the specific objectives and focus of the research.

1.6 The Outline of the Study:

Chapter 1 Outlines the goals, questions, and limitations of the thesis.

Chapter 2 Encompasses the literature review, focusing on various topics such as the utilization of AI and chatbots powered by AI, social media marketing, brand equity,

Brand Trust concepts, and the relationship between all aspects addressed in this research.

Chapter 3 Details the hypotheses, methodologies, and strategies chosen for the study.

Chapter 4 Presents the findings and research procedures employed in the thesis.

Chapter 5 Comprises the conclusion, discussion, and recommendations for future studies.



CHAPTER II

LITERATURE REVIEW

2.1 Artificial Intelligence

John Haugeland (1989) posited that artificial intelligence does not originate solely from computers but has deep roots in its intellectual heritage. He distinguishes two prominent themes in science fiction concerning intelligent artifacts: the "creature characteristic" genre featuring monsters or androids created by humans resembling natural animals, and the genre of mechanical "robots" characterized by gears, flashing lights, springs, and pulleys instead of biological components, exhibiting more pronounced emotional limitations than androids.

Haugeland emphasizes that contemporary artificial intelligence is based on sophisticated programmable electronics, devoid of reliance on chemical magic or bioengineering. The primary challenge lies in profound theoretical assumptions rather than advanced technologies or specialized business practices.

Nilsson (1998) elucidates that artificial intelligence, broadly speaking, pertains to the intelligent behavior exhibited by artifacts, encompassing perception, reasoning, learning, communication, and action within complex environments. The term "artificial intelligence" evokes a mix of fascination with intelligence and apprehension due to its artificial nature, leading to associations with intelligent cyborgs and science fiction narratives.

Various definitions of artificial intelligence are discussed by Ertel (2017), reflecting diverse perspectives on the concept. John McCarthy, a pioneer in AI, initially defined artificial intelligence as the development of machines capable of behaving intelligently (McCarthy, 1955). Additionally, artificial intelligence can be described as encompassing a range of intelligent human behaviors achievable artificially by machines, systems, or networks, including perception, memory, emotion, reasoning, communication, learning, and creativity (Dayi et al., 2017).

We are currently experiencing significant transformations driven by digitalization, information and communication technology, machine learning, robotics, and artificial intelligence (AI) (Gupta et al., 2017).

The marketing environment is shifting dramatically from traditional tactics to digital ones, aided by AI and machine learning. This transformation is accompanied by a noteworthy shift in consumer behavior, as people increasingly choose the ease of internet buying over conventional in-store experiences. (Thiraviyam, 2018)

2.2 Chatbots

It is necessary to understand the notion of a robot (bot) before discussing chatbots. In its most basic form, a bot may be thought of as a program or programs that carry out a certain duty that is assigned to them (Turan, 2017). Bots are machines that carry out activities automatically under computer supervision. They are present in every part of our life nowadays. Artificial intelligence (AI) bots include the lately popular robot Hoover cleaners.

A chatbot is a type of software that is used on different messaging platforms. A bot is a program that carries out automated activities. Chatbots are designed to converse with humans, hence its main function is to facilitate human-to-human contact (Arsenijevic & Jovic, 2019). Chatbots are computer programs created to communicate via voice or text message with people. Digital assistants that learn and adapt to give ever-higher degrees of personalization as they gather and analyze data are examples of complicated chatbots, whereas basic programs that respond to straightforward questions with a single line are examples of chatbots (Oracle, n.d.). Another definition of a chatbot is a service tool powered by artificial intelligence that interacts with people through websites, mobile applications, messaging apps, or phone conversations (Bariş, 2020).

We have been interacting with chatbots for over fifty years. One may argue that Alan Turing's work from 1950 served as the impetus for the chatbot technique. Turing's inquiry, "Can machines think?" The Turing Test is a crucial step in the discussion of chatbots since it evaluates an intelligent program's capacity to pass for a human.

The 1960s saw the start of chatbot technology development. Initially, businesspeople create chatbots just for their own amusement. Joseph Weizenbaum, an MIT professor, created the first chatbot in 1966. ELIZA is a chatbot that was created to function as a psychotherapist. Its goal is to start conversations amongst people. Nevertheless, advances in machine learning, natural language processing, and artificial intelligence have not yet been made in these years. ELIZA solely provided word matching

responses as a result (Barış, 2020). ELIZA failed the Turing Test, yet its advances were revolutionary.

Kenneth Colby developed the PARRY chatbot in 1972, six years later. When he put his creation to the test on psychiatrists, just 48% of them could distinguish between a human and a PARRY. By employing a system of "emotional responses" that were set off by different weights given to spoken data, PARRY created the illusion of a paranoid individual. jabber wacky was a chatbot developed by Rollo Carpenter in 1988, towards the end of the 1980s. Its goal is to enjoy engaging in conversation and human connection. Contextual pattern matching is an artificial intelligence approach that it employed. 1992 saw Dr. Cative Labs developed the Sbaitso chatbot specifically for MS-DOS. It is among the earliest chatbots with voice activation capabilities and artificial intelligence. How come you feel this way? questions this chatbot. It is meant to resemble a psychotherapist, and a lot of the responses ask: Richard Wallace founded A.L.I.C.E. in 1995. Heuristic pattern matching was utilized by this chatbot that speaks all languages. A.L.I.C.E. mimicking an online conversation, including the subject's age and interests.

The utilization of AI-powered chatbots allows brands to manage their online presence effectively and address customer queries or messages round the clock. AI-based chatbots leverage machine learning and natural language processing to craft human-like responses to open-ended questions, ensuring prompt and accurate interactions with customers (Mühlthaler & Goutier, 2020). These chatbots offer significant advantages to digital marketers, enabling swift responses to customer inquiries and personalized support, thereby enhancing overall customer experience and business-customer interactions. (Sadiku, Ashaolu & Musa, 2021).

A chatbot is a form of artificial intelligence software designed to engage in conversations with users using natural language across various platforms such as email applications, websites, or mobile applications (Dagnon, 2018; Frankenfield, 2018). While chatbots are perceived as highly advanced tools facilitating interactions between humans and machines, technically, they represent a basic evolution of question-and-answer systems based on natural language processing (Franken field, 2018). Leveraging chatbot technology humanizes interactions between users and machines,

enhancing the overall customer experience and offering companies opportunities to streamline customer engagement processes while optimizing service costs.

For chatbots to deliver effective results, they must excel in two key tasks, with human support playing a crucial role in their development, monitoring, and optimization) Dagnon, 2018). Chatbots serve various purposes, guiding users to brands and products within instant messaging applications, enhancing website navigation, and creating personalized user experiences. They are integrated into websites to initiate interactive conversations, aid, and facilitate conversions on order or contact pages (Frankenfield, 2018).

In the realm of marketing, engaging existing internet users with the brand is as crucial as acquiring new customers. Chatbots play a vital role in this aspect by tracking and analyzing customer shopping history, enabling brands to modify digital campaigns based on collected data to enhance conversion rates. Chatbots efficiently handle customer inquiries, FAQs, and complaints, providing round-the-clock customer service and freeing up sales and customer relationship teams to focus on more critical tasks.

Despite their technological advancements, chatbots cannot replace human interactions entirely. Their primary function is to automate essential tasks and empower marketing teams to concentrate on more creative endeavors. Regular updates and maintenance are essential for chatbot success, requiring collaboration among IT developers, customer service, marketing, and sales teams to create a tool that effectively addresses customer needs (Dagnon, 2018). While chatbots serve as valuable customer support tools, they are not standalone solutions but rather versatile tools that can adapt to various scenarios and seamlessly transition to human assistance when necessary.

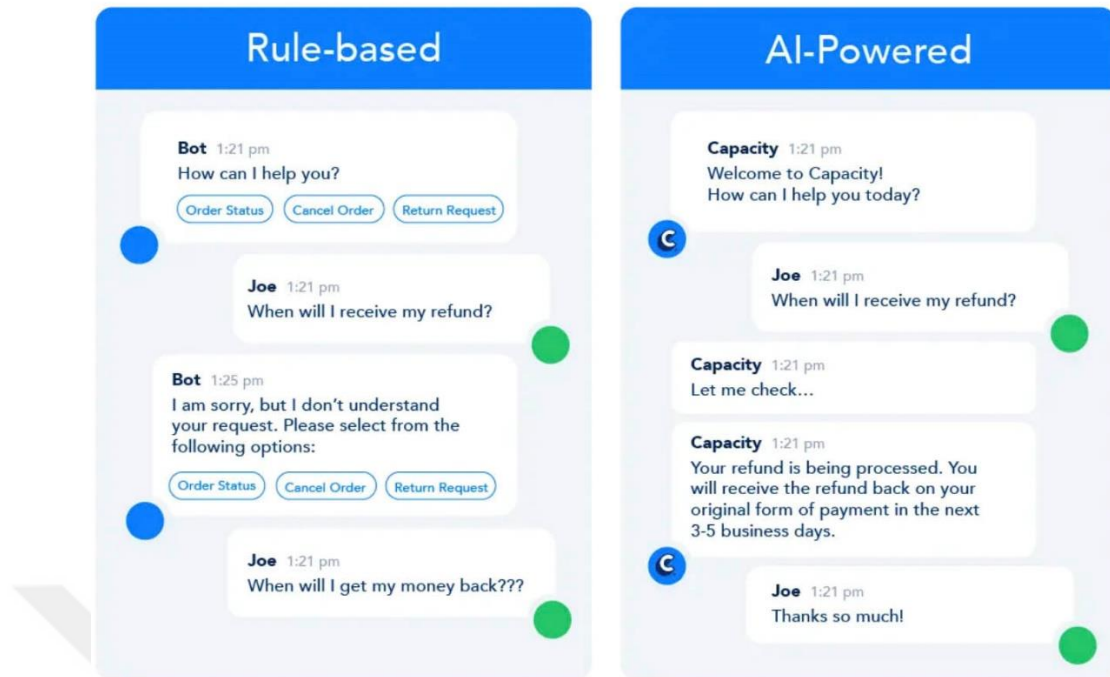


Figure 2.1: Comparison between Rule-Based and AI-Powered

Source: Capacity.com

2.2.1 Social Media Marketing

The term "Social" refers to individuals who take actions that impact society (Liu & Bakici, 2019; Todisco et al., 2021). In recent years, the rapid development of social media has been evident (Liu et al., 2020). Social media, originating from Web 2.0 technologies, provides web-based platforms where users can create and share various forms of information such as news, photos, audio, and videos through their personal accounts. Users can register on websites and social media platforms to publish their content, enabling them to share information in different formats like images and text comments. (Kaplan & Haenlein, 2010).

Distinct from other websites, social media platforms allow users to create personal profiles, join online groups, and share content with other users online (Kim, Jeong & Lee, 2010). As of 2019, approximately 45% of the global population were active social media users (Chaffey, 2019). Social media marketing has greatly altered the dynamics of organizations' marketing strategies, with the goal of promoting goods and services to a larger customer base (Weinberg, 2009). Through the utilization of social media in

marketing, companies partake in an ongoing process of actively listening, assessing, establishing connections, and enhancing their strategies (O'Brien & Terschlose, 2009).

Companies and e-commerce firms utilize different social media platforms to promote their products or services and facilitate consumers in sharing their experiences. This enables them to analyze and meet the preferences of their target audience effectively (Castronovo & Huang, 2012). Social media enables direct communication between companies and consumers, providing a cost-efficient marketing approach that enables increased consumer participation and impact (Kaplan & Haenlein, 2010). Social media surpasses international boundaries, establishing a digital norm for social communication that facilitates effortless engagement between customers and companies, regardless of time and location. (Leonardi, Huysman, & Steinfield, 2013).

Facebook, Twitter, Instagram, and other widely used social media platforms have levelled the playing field for firms, allowing businesses of any size to improve their visibility and promote their offerings (Jackson, 2018). These platforms provide distinctive characteristics and chances for brands to effectively interact with their audience. Facebook plays a crucial role as a medium for promoting companies, facilitating the exchange of information and engagement between brands and customers (Brodie et al., 2013; Simon & Tossan, 2018). Twitter, a platform for microblogging, allows users to interact, share content, and keep informed about trends (Kaplan & Haenlein, 2011). Instagram, renowned for its emphasis on amusement, enables users to distribute photographs and brief videos, offering marketers a potent means to captivate customers and establish brand recognition. (O'Brien, 2017). YouTube is a video platform that allows users to publish and view videos on a wide range of topics. This makes it a powerful tool for creating and engaging with content (Jackson, 2018).

Companies that adeptly employ social media marketing strategies can bolster their brand visibility, achieve their objectives, and establish themselves as the favored option for consumers (Eismann, Heinonen & Nguyen, 2016). Companies may successfully spread their content and increase brand visibility by utilizing social media platforms, video sharing platforms, podcasts, and other virtual channels. Additional investigation is required to examine the influence of social media marketing

endeavours in the coffee shop sector on brand equity and purchasing intention (Kim & Ko, 2010).

As social media increasingly permeates everyday lives. Social media functions as an expansive platform that enables both individuals and organizations to distribute content and ideas, utilizing its marketing capabilities and cultivating relationships. This platform facilitates robust relationships between customers and organizations, enabling the introduction, promotion, and advertisement of goods or services to customers. Furthermore, users could interact with and scrutinize feedback from fellow customers regarding products, so enriching their overall consumer experience. Moreover, organizations can acquire valuable information about client preferences and requirements by closely observing their activities, comments, and interactions on social media platforms. This enables the organizations to create customized marketing plans that are informed by data and insights. Instagram, Facebook, YouTube, Twitter, LinkedIn, Pinterest, and Snapchat are popular global platforms that offer brands ample possibilities to promote their products and services. With the increasing number of social media platforms, the significance of social media marketing for businesses has also escalated. Saravanakumar and Suganthalakshmi (2012) discuss how social media marketing allows brands to efficiently utilize social media technologies and platforms to create, produce, and exchange solutions that provide value to stakeholders. Tauten (2020) also emphasizes the importance of social media marketing. It enables effective contact with clients, enhances brand value, and fosters favourable perceptions of brands and their products (Saravanakumar & Suganthalakshmi, 2012).

2.2.2 AI in Social Media Marketing

Artificial intelligence provides numerous managerial solutions by facilitating direct comparisons between communications from intelligent customers and traditional measures, so aiding in strategic decision-making. In the realm of AI-driven marketing, the emphasis has transitioned from making educated guesses about a user's readiness for a conversation or a purchase to depending on data to deliver accurate responses (Tjepkema, 2018) AI in marketing expands the potential by performing extensive analyses on a broad scale, utilizing data from inactive internet users to provide enhanced offers and solutions (Tjepkema, 2018). Businesses and marketers worldwide

are working to understand the functions, benefits, and accomplishments of artificial intelligence in the modern landscape (Albert, 2019)

Furthermore, social media marketing strategies enhanced by artificial intelligence have demonstrated potential in enhancing audience segmentation and capturing online audience behaviors. The incorporation of artificial intelligence (AI) into marketing activities improves the efficiency of business management and overall performance, as emphasized in recent research (BASARI, 2020). Social artificial intelligence, the combination of social media marketing and artificial intelligence, enables organizations to distinguish themselves, forge deeper consumer relationships, and improve profitability (Sadiku, Ashaolu & Musa, 2021).

The use of artificial intelligence (AI) in marketing involves the implementation of AI systems that can process, analyze, and understand large data sets in a manner like human abilities. Although they are relatively new, these AI applications have already had a substantial influence on the marketing plans and campaigns employed by organizations. AI offers a wide range of management solutions that allow for direct comparisons between enhanced customer interactions and traditional measures. This helps in making strategic decisions based on accurate information. Within the domain of AI-powered marketing, the attention moves away from guessing whether users are prepared to engage or make a purchase. Instead, it centers on data-driven insights that provide conclusive answers in real-time. This approach offers a thorough comprehension of consumer sentiments and perceptions, which is further enhanced by the widespread use of social media platforms.

The utilization of artificial intelligence in marketing goes beyond enhancing digital advertising to embrace comprehensive data analysis on a vast magnitude. This technology facilitates the retrieval and utilization of concealed user data from online activities, such as keyword searches and social media profiles, to improve personalized products and solutions. Through the utilization of AI solutions, marketers acquire deep understanding of internet users and potential consumers, enabling them to offer tailored messages at the appropriate time to the specific audience, considering individual interactions and preferences. Moreover, AI enables brands to actively communicate with users in real-time, thereby influencing their buying choices and

facilitating strategic monitoring of social networks and other digital platforms to boost brand visibility and engagement.

Artificial intelligence is the ultimate manifestation of advanced marketing, presenting vast prospects for advancement in the industry. Adopting this technology progress in marketing tactics allows for new and exceptional opportunities and improvements in customer interaction and customized communication. By utilizing artificial intelligence (AI), marketers can effectively traverse the ever-changing digital marketing environment, using data-driven insights to make strategic decisions and create meaningful engagements with consumers on different online platforms.

2.3 Brand Equity

According to Aaker (1992), brand awareness is strongly linked to the recognition of a brand's label and symbol, showing a strong connection with high brand equity. The elevation of brand equity has a direct influence on how the brand's label is perceived and recognized (Kamakura & Russell, 1993). Brand equity is sometimes defined as the extent to which consumers favor a particular brand and the additional value it offers. Winters (1991) and Chaudhuri (1995) are cited sources.

Some notable models of brand equity include:

Keller's Brand Equity Model, as outlined by Keller (2008), emphasizes the significance of brand equity in advertising. It examines both industry-related factors and the consumer's viewpoint. Keller's 2013 model presents a six-stage process. It begins by creating a connection between the brand and the consumer's awareness. Then, it focuses on improving the product's appearance and functionality to meet consumer needs. The process concludes by fostering positive consumer perceptions and emotions towards the brand, ultimately increasing the brand's significance through enhanced trust and engagement.

Kapferer's Brand Asset to Brand Equity Model, proposed by Kapferer (2005), classifies brand equity into three dimensions: brand assets, brand power, and brand worth. This model establishes connections between these elements to enhance brand equity.

The Feldwick Brand Equity Model, as established by Feldwick (1996), encompasses three dimensions: the brand's intrinsic value as an asset, the intensity of customer-brand associations, and consumer perceptions of the brand.

The Brand Equity Model developed by Aaker is generally acknowledged and categorizes brand equity into five distinct dimensions: perceived quality, brand awareness, brand loyalty, brand association, and other exclusive brand assets. This approach highlights that improving these components results in a rise in brand equity (Aaker, 1991).

Brand equity can be assessed from both a financial and consumer standpoint. Several studies examine the financial dimension of brand equity, whereas other priorities the perspective of the consumer (Simon & Sullivan, 1993; Aaker, 1991; Keller, 1993). Prior studies have examined brand equity in different scenarios, emphasizing its influence on consumer loyalty and the significance of matching brand equity with consumer requirements to attract and retain customers (Hanaysha, Abdullah & Abd Ghani, 2013).

Positive brand equity provides brands with several advantages, such as greater profit margins and enhanced client preferences. This research will further analyze the famed Aaker model, which is well regarded among scholars.

The study of brand equity has garnered considerable attention, with scholars emphasizing that brands are among a company's most important resources. Higher levels of brand equity are associated with greater consumer preferences and intents to purchase (Cobb-Walgren et al., 1995), as well as higher returns on stocks (Aaker and Jacobson, 1994). Furthermore, a robust brand equity provides benefits such as enabling successful expansions, resistance to competitive forces, and creating obstacles for competitors to enter the market. Farquhar, 1989.

The notion of Brand Equity (BE) has gained growing importance, especially in comprehending the influence of marketing endeavors' publication by Reynolds and Phillips (2005). Entertainment influences customer behavior towards brands and improves communication between buyers and brands, promoting good connections. The study conducted by Netemeyer et al. in 2004. Small firms frequently employ social media (SM) to augment consumer awareness, foster relationships, cultivate loyalty, communicate information, and minimize marketing expenses. The publication

of Ahmad, Ahmad, & Bakar in 2018. Social media activities have multiple objectives, such as monitoring, offering information before making a purchase, exchanging knowledge, and motivating consumers. (Muntinga, Moorman, & Smit 2011).

Research conducted by Kljucanin, Shahbazi, and Pourjanekikhani (2012) suggests that social media (SM) plays a role in raising brand recognition by enabling greater consumer engagement, providing social support, promoting social commerce, and delivering value to customers, ultimately motivating them.

Visual content is highly effective in increasing user engagement on social media platforms. Companies that employ visual branding strategies experience significant financial gains (Perkins, 2014). Social media (SM) also helps improve a brand's reputation, which means that companies need to always come up with plans to keep their position in the market (Pozin, 2014). Social media platforms provide brands with the chance to advertise their products and change client views, ultimately resulting in enhanced brand loyalty through direct interactions between companies and consumers (Mata & Quesada, 2014). Social media (SM) is an important instrument for promoting and strengthening brand loyalty by enabling interactions with consumers (Pozin, 2014).

According to a survey by Loops Solutions (2014), there were a total of 1.7 million online interactions with brands, and almost 85% of consumers followed more than 15 companies on social media. This widespread phenomenon has resulted in significant consequences for E-Businesses, requiring them to distinguish themselves from competing companies. Cook (2014) highlighted the difficulty of establishing a substantial and self-sustaining presence on social media that generates internet traffic, particularly in a context where unpleasant experiences are magnified by outspoken supporters (Bambauer & Mangold, 2010). Therefore, there is an ongoing question about the degree to which social media marketing contributes to the brand value of online enterprises.

The study that provided by Lee (2014), is crucial in defining the conceptual framework for the organization being studied when examining the influence of social media marketing on brand equity. According to Lee (2014), in a social media context, 'Exposure' is the main factor that drives Customer Engagement, Fan Loyalty, and Influence, ultimately leading to an improvement in brand equity.

Effective promotional content can engage the online target audience, motivating them to share it with their friends (Lipsman et al., 2012).

Customer engagement is the active involvement of customers in the process of co-creating the brand online, which includes activities such as enjoying and sharing social media material (Laroche et al., 2013). Companies utilize their fan base to obtain significant social insights through crowdsourcing (Lee, 2014). Brand loyalty signifies the highest level of connection between a firm and its customers (Keller, 2008).

Erdogmus and Cicek (2012) validate that when businesses successfully build a robust presence in the customer's psyche, they cultivate trust and become essential, leading to increased customer-based brand equity. Social media influence involves actively involving potential customers through dedicated followers, resulting in heightened consumer buying decisions. Devoted enthusiasts possess the capacity to entice their friends to support the company (Algesheimer et al., 2005), spreading favorable electronic word-of-mouth for individuals who depend on reviews when making purchasing choices (Garcia et al., 2012).

Hence, it is imperative for organizations to discern the most influential customers within their online community who possess the ability to advocate for and strengthen the brand, thereby fostering a robust relationship with them (Keitzmann, 2011).

2.3.1 AI and Brand Equity

Brand equity is one of the results of brand building. Brand equity (BE) plays a significant role in determining the financial value of a brand. Brand equity (BE) is a quantifiable measure that can have either a positive or negative impact on a brand's value (Aaker, 1995). Higher brand equity generates greater purchase intentions and has the potential to influence good word of mouth (Cobb-Walgren et al., 1995). Currently, there is no universally agreed-upon agreement regarding the various aspects of brand equity. Aaker (1991) discusses the importance of brand awareness, associations, loyalty, perceived quality, and other exclusive assets. Srivastava & Shocker (1991) explore the concepts of brand value and brand strength. Keller's groundbreaking research in 1993 on consumer-based brand equity revolutionized our understanding of brand equity and dispelled any lingering uncertainty surrounding the concept. Therefore, this study examines the dimensions of brand equity proposed by Keller (1993) and investigates the influence of artificial intelligence (AI) on these

dimensions. That is, the factors that influence an individual's understanding, connections, opinions, emotional connection, and actions.

Positive equity occurs when brand awareness transforms into brand salience. Brand salience refers to the level of customer awareness regarding a brand in various purchasing scenarios, and it is not solely dependent on top-of-mind awareness (TOMA). Brand salience occurs when brand promotion effectively targets the intended buyer. Artificial intelligence effectively resolves this issue by enabling the brand to accurately target its desired clients. Companies such as Acquisio, Cognitiv, Trapica, and Quarizmi are utilizing artificial intelligence (AI) to enhance brand marketing and optimise advertisements.

Connections: Associations refer to the distinctive characteristics, advantages, and principles of a brand that set it apart from competitors and establish a connection with clients. A recommendation system comprehends the characteristics, advantages, and principles of customers and suggests their inclination to make a buy (Hahsler & Michael, 2018). Recommender systems can operate using different methods, such as popularity-based recommendations (where the most popular items are suggested), collaborative filtering (which uses user activity to make recommendations), content-based filtering (which considers the descriptions of items that the user has rated), and hybrid approaches that combine any combination of the algorithms (Aggarwal, 2016). For example, recommendation systems utilize client characteristics and brand associations to display advertisements, movies, and other content.

Appendix and tasks: Technology is altering the extent to which organizations engage and form connections with customers (Kim et al., 2009). Previously, organizations have communicated with customers using automated responses and notifications. I have enhanced the customer interaction by implementing automated services, intelligent content curation, and predictive analytics using artificial intelligence (AI). This enables the organization to cultivate relationships with the appropriate consumers to maximize client lifetime value and foster loyalty.

The potential and consequences of Artificial Intelligence (AI) on brand management have been explored through meta-synthesis. The meta-synthesis of the research has redefined the parameters of brand identity and restructured the concept of brand equity.

However, there is still a significant amount of excitement about Artificial Intelligence (AI) and its influence on brand management.

As study investigated the impact of artificial intelligence (AI) on brand identity, brand marketing, and brand equity, the author found that the influence of AI on these aspects was analyzed based on the works of Aaker (1995) and Keller (1993). Therefore, future studies can investigate the influence of artificial intelligence on brand identification and equity using different models.

2.3.2 Chatbots and Brand Equity

The introduction of digitalization has changed the way customers and brands interact, resulting in a shift in communication expectations and aspirations. Customers' expectations of organizations in the communication process have increased because of digitalization's rapid and result-oriented approach.

Currently, the use of chatbots as supplemental support has become critical, but they have not totally replaced traditional customer service personnel who focus on human interaction.

Drift's 2020 State of Conversational Marketing Report reveals a significant 92 percent rise in the adoption of chatbots as a means of brand communication compared to 2019. During the year 2020, a significant proportion of clients, specifically 24.9 percent, opted to utilize chatbot technology as a means of interacting with enterprises. The rate for 2019 is merely 13 percent. It becomes evident that chatbots are experiencing the most rapid growth as a brand communication channel (Startup Bonsai, 2022).

Many consumers, specifically more than 82 percent, emphasize the importance of receiving a prompt response when interacting with brands. Managing the influx of requests, which can reach hundreds or even thousands per day, poses a significant challenge for brands that lack technological support. Chatbots are positioned as the primary tool for brands to deal with the fast pace of the digital world. Chat robots enable prompt responses to consumer inquiries, regardless of their nature, ensuring that every customer receives an immediate response (Drift as referenced in Blue, 2021).

Chatbots can respond quickly to questions and troubleshoot problems because to intent understanding. As a result, a chatbot becomes a technical representation of individuals, bringing technology closer to humanity.

Using the data at its disposal, the chatbot can respond to a variety of questions, advertise goods, services, and events, collect leads, schedule meetings, and obtain valuable client feedback. When it comes to assisting businesses with social media activities, robots used in marketing strategy may be useful in providing insights on how to analyze and interpret specific information or scenarios. Chatbots and robots can be used to connect with clients, update social media accounts, and identify and upload content that is appropriate for each site.

The goals of the brand will influence how chatbots are deployed. Data-driven chatbots have the potential to influence consumer purchasing decisions and improve brand reputation (Barış, 2020). According to a HubSpot research, 47% of respondents would consider utilizing a chatbot to make purchases (An, 2016).

According to Drift's 2020 State of Conversational Marketing Report, chatbot adoption in brand communication grew by 92% between 2019 and 2020. This industry has well-known brand applications. For example, Vodafone's chatbot Tobi uses the NLP system to satisfy consumers' shopping demands while also providing detailed solutions to questions about Vodafone services. This is made feasible by integrating the İste Gelsin shopping application inside the app. In contrast, rule-based chatbots featured on Alpinist Outdoor and numerous other websites appear to be limited to specific tasks.

The distinction between rule-based and data-driven chatbots affects process management as well. Rule-based chatbots save the time necessary for basic communication activities, but if they are badly developed or employ outdated technology, they may frustrate clients. Chatbots that are supported by artificial intelligence and are data-driven can directly influence client purchasing decisions via the machine learning process. (Figure 1).

This impact also benefits the brand's image. Chatbots can distinguish a company from its competitors by saving customers time and increasing practicality. It is more authentic, friendly, and pleasurable than other programs used in marketing. Furthermore, advanced (data-driven) chatbots anticipate client preferences and can

propose products and services based on previous encounters. Barış (2020) found that promoting the brand leads to increased sales.

Drift's 2020 State of Conversational Marketing research showed a remarkable 92% increase in the use of chatbots for brand communication compared to 2019.

In 2020, 24.9% of buyers used chatbots to connect with businesses, up from 13% the previous year. (Figure 2).

Chatbots are the fastest-growing brand communication channel

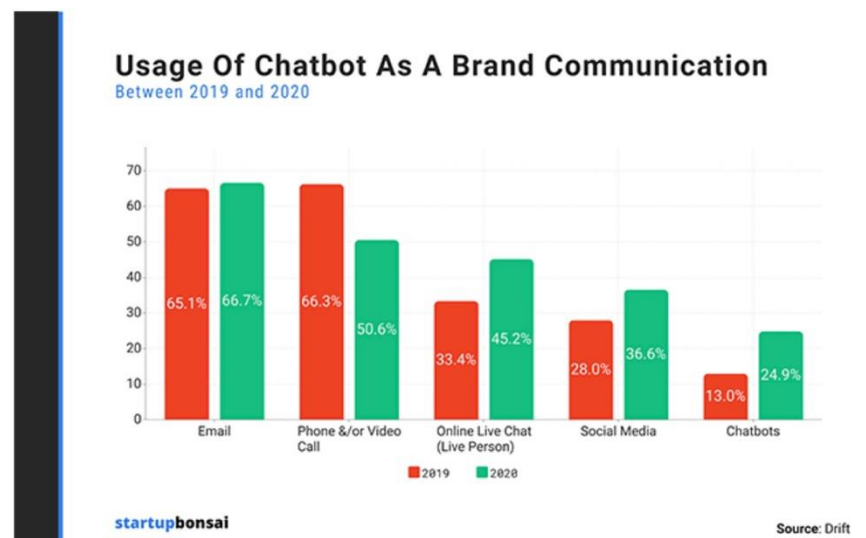


Figure 2.2: Chatbots Are the Fastest-Growing Brand Communication Channel

Source:DRIFT.com,2020

2.4 Brand Trust

Establishing acquire loyalty and attitudinal loyalty is crucial for brands to gain market share and command higher prices. This can be achieved through building brand trust and brand affect (Chaudhuri, A., & Holbrook, M,2001). The faith placed in the whole food system acts as a mediator between the trust in a specific brand and the confidence of consumers, which ultimately promotes loyalty towards the brand. (Lassoed & Hobbs, 2015).

The relationship between brand communication, competency, and consumer loyalty is mediated by affective and cognitive trust in corporate brands. Additionally, peer influence favorably moderates these interactions (Ozdemir, S., Zhang, S., Gupta, S., & Bebek, G, 2020).

Brand trust is a more reliable indicator of client dedication and loyalty compared to overall satisfaction, especially in instances when customers are highly engaged. The citation is from a study conducted by Delgado-Ballester and Munuera-Alemán in 2001. Brand trust in the food sector is heavily influenced by brand credibility, reputation, and the perceived trustworthiness and competency of the food system. Risk communication tactics also contribute to this trust. (Ngo, H., Liu, R., Moritaka, M., & Fukuda, S, 2020). The impact of brand effect on brand trust is substantial, leading to consequences for brand loyalty and perceived brand risk. This underscores the need of implementing trust-building methods (Song, Y., Hur, W., & Kim, M., 2012).

Perceived product quality, brand image, and customer happiness are key factors that contribute positively to consumer loyalty in terms of brand trust. The citation for the source is Rudzewicz, A., & Strychalska-Rudzewicz, A., 2021)

The establishment of brand trust is dependent on perceived product quality and effective communication, as both elements play a crucial role in influencing customer purchasing behavior. The characteristics of brand personality, such as Sincerity, Ruggedness, Excitement, Sophistication, and Competence, have different impacts on brand trust and brand affect, which are crucial for fostering brand loyalty (Alekan, J., 2020).

The examination of online commercial relationships is progressively centering on trust and the notion of the brand. By incorporating research on trust from several disciplines such as accounting, sociology, psychology, and biology, we can gain significant insights about the application of trust in online business transactions, both in specific and broader settings. This analysis specifically examines the models that have the potential to be utilized within the framework of Internet business relationship theory, despite the existence of numerous other models. The argument is further elaborated to examine the concept of the brand as a replacement for trust, and hence as a reliable signal of a distinct set of ideas. (Jevons and Gabbott, 2000).

The study conducted by Delgado and Luis (2005) concluded that brand trust plays a vital role in comprehending brand equity. This finding further reinforces the idea that brand equity is a market-driven asset that relies on relationships. Therefore, the existing body of knowledge on the resource-based view of organizations has the potential to improve the understanding of branding literature by incorporating it. To leverage brand equity as a market-based asset, companies must create brand trust, which in turn provides them with substantial competitive and economic advantages.

2.4.1 AI and Brand Trust

AI influences brand trust by moderating the interaction between AI anthropomorphic assistants and consumers, hence improving consumer-brand interactions in the retail sector by lowering product usage obstacles and psychological distances. (Vimi, Jham; Gunjan, Malhotra; Nidhi, Sehgal, 2023).

AI components such as Perceived Ease of Use and Trust influence brand loyalty, which increases trust. However, experience has no substantial impact on brand loyalty in India's online buying. (Kassa & Ayalew, 2023)

AI has a huge impact on brand trust by enabling intelligent virtual assistants to improve user experience, efficiency, and data privacy compliance, ultimately impacting trust in brands that provide AI-based services. (Babu, Kumar, Ajay, Vikram, Singh, Parul, & Agarwal, 2021).

AI in fully autonomous driving systems has a beneficial impact on drivers' first trust. Different automotive brands and trust levels influence early trust in Level 5 ADS. (Zixin, Cui; Nianzhi, Tu; Makoto, Ito, 2023).

AI can improve customer service and personalization, but there is a risk of losing brand identity and consumer trust if ethical considerations are not considered. (Carolina Agersborg., Isabella Månsson., Emelie Roth., 2020).

Artificial intelligence influences brand trust by assigning AI archetypes to build a familiar personality, instilling trust in consumers through recognizable features incorporated in product design. (Gulnara, Z., Karimova, Amir, & Shir Khanbeik, 2019).

AI influencers can have a good impact on brand trust, but there are risks associated with possible violation. Their selection as endorsers must be carefully considered to retain brand credibility. (Veronica L., Thomas, Kendra, & Fowler, 2021).

AI influences brand trust by making consumers believe that ads are objectively created. Positive objectivity increases trust in AI advertisements, whereas negative objectivity causes unease and lowers trust. (Linwan, Wu, Taylor, Jing, Wen, 2021).

According to the study, AI has a substantial impact on brand recognition for social enterprises, resulting in greater brand trust through improved consumer awareness and recognition. (Sharjana, Alam, Shaily; Nazmun, Nahar, Emma, 2021).

2.4.2 AI Chatbots and Brand Trust

AI chatbots, particularly female ones, have a substantial impact on brand trust via social presence and error forgiveness, creating positive consumer responses in the digital domain. (Diana, Cezara, Toader., Grațîela, Boca., Rita, Toader., Mara, Macelaru., Cezar, Toader., Diana, Ighian., Adrian, T., G., M., Rădulescu, 2019).

According to the survey, chatbots play an important role in increasing brand trust by improving virtual interactions with customers. (S., Nykolyshyn, Natalia, Khymytsia, 2022).

Chatbots can have a detrimental influence on brand trust, resulting in lower user self-disclosure in financial services, highlighting the importance of organisations addressing privacy concerns to develop trust. (James, Lappeman; Siddeeqah, Marlie; Tamryn, Johnson & Sloane, Poggenpoel, 2022).

According to the research, brand trust increases users' trust in chatbots. It has a tremendous impact on how people perceive and engage with customer support chatbots. (Jiayin, Qi, Bernard, Rougier, 2022).

According to the research findings, a chatbot's personality increases brand trust by providing a human-like connection, highlighting corporate values, and encouraging a pleasant user experience. (Natalia Palomino-Navarro, F & Teresa Arbaiza, 2022).

A chatbot's personality influences consumer perception towards a brand by instilling trust and closeness through social dynamics, social roles, and physical appearance. (Annaguly, Redzhepovich, Deryaev, 2023).

Personalizing chatbots with fundamental consumer attributes such as gender promotes trust and improves the perceived proximity between the customer and the brand, hence increasing brand trust. (Christian, Hildebrand, Anouk & Bergner, 2019).

Chatbots can have an impact on brand trust for customer service because factors such as the chatbot host's brand, as well as the chatbot's quality and look, influence user trust. (Asbjorn, Folstad, Cecilie, Bertinussen, Nordheim, Cato, Alexander, & Bjørkli, 2018).

Chatbots can influence brand trust through social media presence, gender biases, and error handling. Female chatbots that engage in social behaviors likely to have a beneficial influence on consumer responses and forgiving for faults. (Diana, Cezara, Toader, Grația, Boca, Rita, Toader, Mara, Macelaru, Cezar, Toader, Diana, Ighian, Adrian, T., G., M., Rădulescu, 2019).

Enhancing chatbot humanization might reduce confidence owing to apprehension, influencing buying and adoption decisions. Avatar familiarity mitigates the uncanny valley effect on trust. (Stephen, Wonchul, Song & Mincheol, Shin, 2022).

AI chatbots influence consumers' trust through characteristics such as personalization, media richness, and previous usage experience, resulting in good brand trust. (Fan, Min; Zou, Fang; Yucan, He & Jiang, Xuan, 2021).

The interaction between a chatbot and a customer promotes brand advocacy rather than brand trust. Functional anthropomorphic interactions influence brand advocacy via customer brand experiences as an intermediary. (Yang, Liu; Xiaolong, Li & Zheng, Xiang, 2022).

Chatbots have a huge impact on customer trust, which in turn influences brand trust. Messenger chatbots improve interaction, positively influencing consumer attitudes and behavior intentions in conversational commerce marketing. (Reena, Apurva, Natalia, and Dedyukhina, 2022).

They are most likely correct - at least in the present. Chatbots' ability to understand client requirements will improve as AI technology progresses. The offered information is obtained from the responses collected from a survey done by Userlike.com. Nonetheless, it is worth noting that most respondents stated a readiness to interact with a chatbot initially if it can transfer them to a human agent. (Figure 2.3)

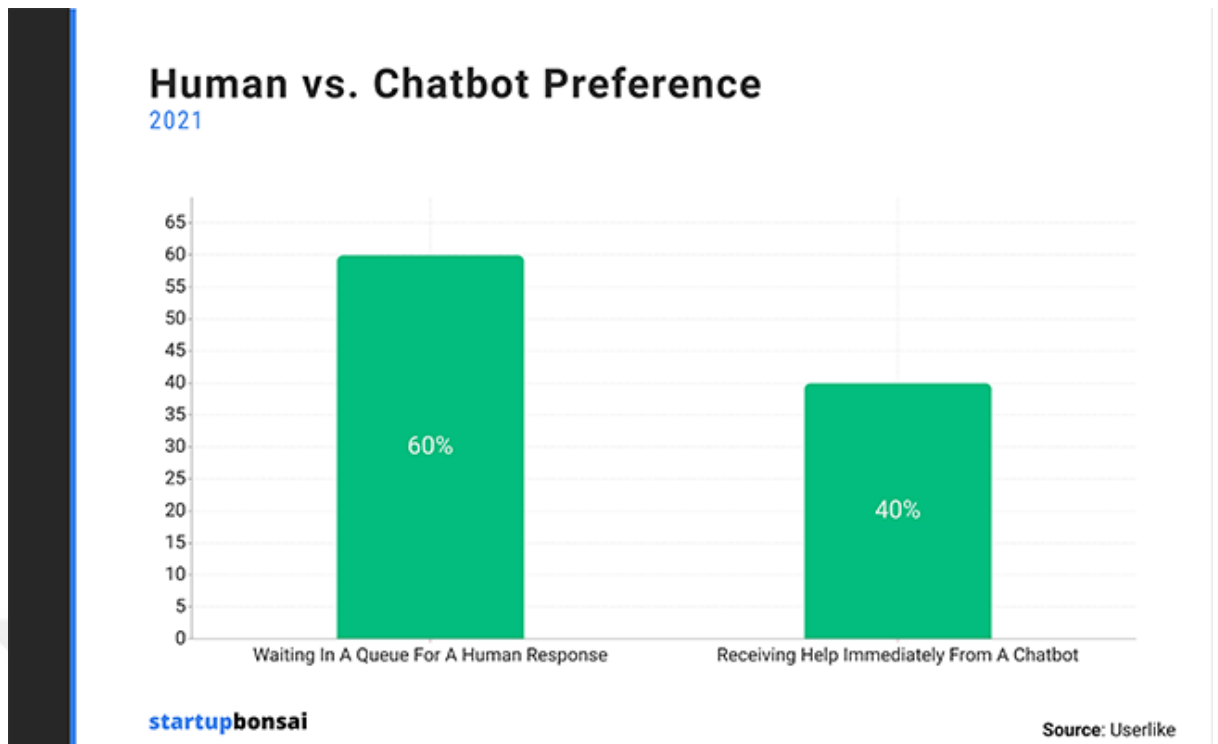


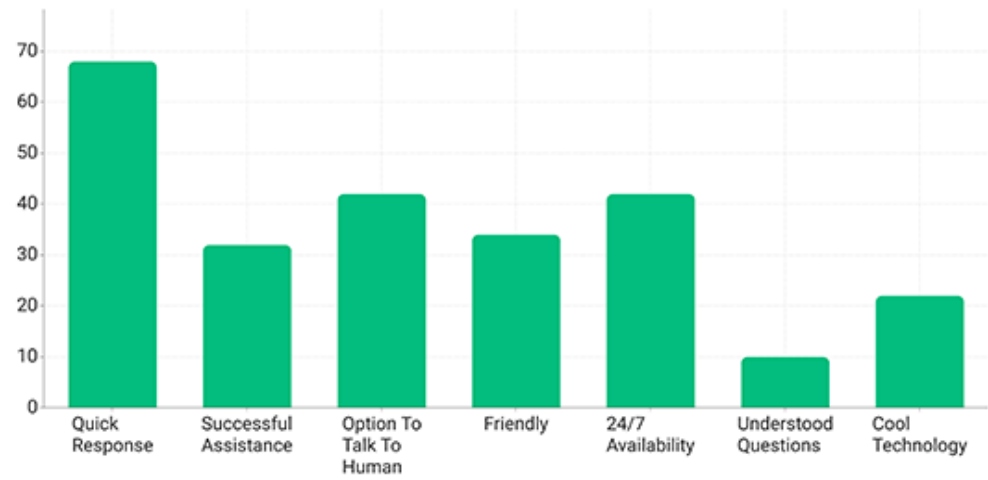
Figure 2.3: Humans VS Chatbot Preference

Source: Business Insider,2021

Respondents in a Userlike.com poll rated the chatbot's prompt response as the most positive aspect of their interactions. Respondents also appreciated the bot's capacity to connect them with a human representative and provide support outside of usual business hours.

Drift's state of marketing research cited chatbots' 24/7 reactivity as its key advantage. Fortunately, unlike humans, robots do not need sleep. (figure 2.4)

Positive Aspects Of Using A Chatbot 2021



startupbonsai

Source: Userlike

Figure 2.4: Positive Aspects OF Using a Chatbot

Source: Userlike.com,2021

CHAPTER III

RESEARCH METHODOLOGY

3.1 Hypothesis Development Process

Some studies have shown that brand equity and brand trust are affected by AI chatbots usage on the business platforms which could be a website or any other social media platforms,

Artificial intelligence offers a plethora of managerial solutions, enabling direct comparisons between communications from sophisticated customers and traditional metrics for strategic decision-making. In AI-driven marketing, the focus has shifted from guessing whether a user is ready for a discussion or a purchase to relying on data to provide precise answers (Tjepkema, 2018). The applications of AI in marketing extend the possibilities by conducting in-depth analyses on a large scale, leveraging data from latent internet users to deliver improved offers and solutions (Tjepkema, 2018). Businesses and marketers globally are striving to comprehend the roles, advantages, and achievements of AI in the contemporary landscape (Albert, 2019). The potential and consequences of Artificial Intelligence (AI) on brand management have been explored through meta-synthesis. The meta-synthesis of the research has redefined the parameters of brand identity and restructured the concept of brand equity. However, there is still a significant amount of excitement about Artificial Intelligence (AI) and its influence on brand management. This study investigated the impact of artificial intelligence (AI) on brand identity, brand marketing, and brand equity. The influence of AI on these aspects was analyzed based on the works of Aaker (1995) and Keller (1993). Therefore, future studies can investigate the influence of artificial intelligence on brand identification and equity using different models, the following hypothesis were developed.

H1: The integration of AI chatbots in digital marketing initiatives has a beneficial impact on brand equity.

H2: AI chatbots have a favorable impact on consumer trust in digital marketing interactions.

H3: There is a positive correlation between the perceived intelligence of AI chatbots and consumer trust.

H4: The ability of AI chatbots to customize and personalize interactions has a favorable effect on consumer confidence in digital marketing.

H5: The level of transparency exhibited by AI chatbots in disclosing their AI nature has an impact on customer trust in the field of digital marketing.

3.2 Research Design

This pertains to the methodology employed by the researcher for collecting and analyzing data to address the study's inquiries and assumptions. A quantitative approach was adopted to examine the impact of AI chatbots on Brand Equity (BE) and (BT) as perceived by customers in the Middle East and Turkey. The data analysis encompassed validity and reliability tests, along with multiple regression analyses.

3.3 Population and Sampling

This research was conducted among individuals who utilize AI chatbots, specifically focusing on customers who have engaged with chatbots online across various brands. An online questionnaire hosted on Google Forms was disseminated to respondents through various channels including WhatsApp, Instagram, Facebook, LinkedIn, and within campus premises. The questionnaire was available in both Turkish and English languages. The researcher aimed to reach participants with diverse demographic profiles to ensure representation across various segments.

3.4 Data Collection

The data were collected by distributing an online questionnaire (Google Form). The contributors had to evaluate the rank of each measure on the scales (1 bottommost, 5 uppermost). Then researcher gathered data from online questionnaires among March and April 2024. A total 184 respondents have answered, and data were used in the research analysis.

3.5 Questionnaire Design

The survey included four different sections of questions; in the first section, demographic characteristics which include some questions asking for sexual category,

oldness, relationship condition, education level, monthly income, Nationality, and the residence country. In the second section, the study conducted 34 from on (Pillai vd., 2020) (Kasilingam, 2020) (Lu vd., 2019) (Gursoy vd., 2019) (Talwar vd., 2020) tests to investigate the effectiveness of AI chatbots in shopping and the level of trust users have in utilizing chatbots for shopping and online payments. The third section measured brand equity which includes the (loyalty of clients to a specific brand, items or services' quality, awareness of clients toward a brand, and finally the association related to a brand) in 7 requests for information were adopted from (Seo & Park, 2018) & (Yoo, Donthu & Lee, 2000). In the last section, measuring Brand Trust using 8 questions adopted from (Karman,2021).



CHAPTER IV

DATA ANALYSIS

4.1 Descriptive Analysis

This section presents a descriptive analysis of the demographic characteristics and the socioeconomic characteristics of the respondents. The survey includes multiple questions covering the demographic characteristics such as: nationality, gender, age, educational level, marital status, and other variables. Moreover, the survey covers the socioeconomic characteristics through asking the respondents about their monthly income and employment status.

The respondents were asked about their nationality, and the results declares that 37.5% of the respondents are Egyptian, while around three tenths are Turkish. Additionally, around one third of the respondents have other nationalities as Syrian, Palestinian, Tunisian, in addition to some other nationalities.

Table 4.1: Distribution of Respondents according to Nationality

Nationality	Frequency	Percentage
Egyptian	69	37.5%
Turkish	53	28.8%
Others	62	33.7%
Total	184	100%

Source: Calculated from the Data by the Author

Respondents were also asked about their gender, and the below pie chart reveals that the percentage of female respondents exceeds the percentage of male respondents as 101 of the 184 who filled the questionnaire reported that they are females, while only 83 respondents reported that they are males.

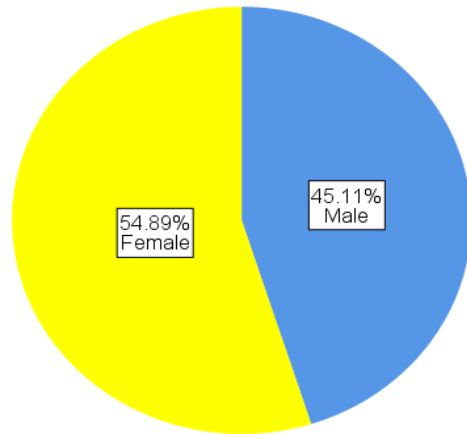


Figure 4.1: Distribution of Respondents according to Gender

Source: Calculated from the Data by the Author

The following figure presents the distribution of the questionnaire respondents by age. It can be detected from the following chart that more than half of the respondents are aged 25-34 years, while almost four tenths are aged 15-24 years, and less than 10% of the respondents are 35 or older.

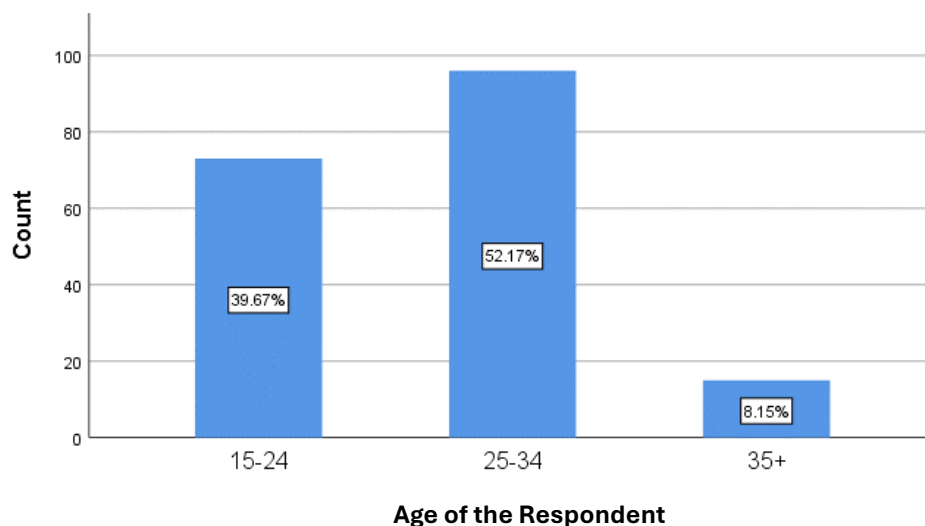


Figure 4.2: Distribution of Respondents according to Age

Source: Calculated from the Data by the Author

Respondents have been classified into three categories according to their educational level, and the results presented in table (4-2) show that the educational level of more than 60% of the respondents is the bachelor's degree, while around one fourth of the respondents reported that their educational level is post- bachelor's degree (Masters and PHD).

Table 4.2 Distribution of Respondents according to Educational Level

Educational Level	Frequency	Percentage
Below bachelor's degree	25	13.6%
Bachelor's degree	115	62.5%
Post bachelor's studies	44	23.9%
Total	184	100%

Source: Calculated from the Data by the Author

Moreover, around 80% of the respondents reported that they are single, while nearly 20% reported that they are married, and the results are presented in table (4-3).

Table 4.2: Distribution of Respondents according to Marital Status

Marital Status	Frequency	Percentage
Single	146	79.3%
Married	36	19.6%
Others	2	1.1%
Total	184	100%

Source: Calculated from the Data by the Author

After presenting the demographic characteristics of the respondents, the socioeconomic characteristics, namely: the monthly income and the employment status are presented in the following table.

Table 4.3: Socioeconomic Characteristics of Respondents

Characteristic	Categories	Frequency	Percentage
Monthly Income	Up to \$500	96	52.2%
	\$500 to \$1000	45	24.5%
	\$1000+	43	23.4%
Employment Status	Student	85	46.2%
	Employee	63	34.2%
	Employer	20	10.9%
	Self-employed	6	3.3%
	Unemployed	10	5.4%

Source: Calculated from the Data by the Author

Results show that the monthly income of more than half of the respondents is less than \$500 per month, while the percentage of the respondents whose monthly income is between \$500-\$1000, and those whose income is above \$1000 are very similar to each other.

In addition, around one third of the respondents reported that they are employees, while 46% reported that they are still students, and they are not currently working.

4.2 Artificial Intelligence, Brand Equity and Brand Trust

After presenting the demographic and socioeconomic characteristics of the respondents, the subsequent step is to have insights on different dimensions of Artificial Intelligence, in addition to brand equity and brand trust.

1. Artificial Intelligence

The survey included thirty-one questions covering six different groups of AI which are: perceived usefulness of AI, perceived fun with AI, perceived ease of use of AI, perceived emotions and behaviors using AI, perceived trust in using AI, and perceived intelligence of AI. The distribution of respondents' opinion across the six AI groups is presented in table (4-4).

Table 4.4: Distribution of Respondents' opinion across AI Subgroups

AI Groups	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Usefulness	4.9%	17.9%	16.3%	50.5%	10.3%	100%
Fun	7.1%	17.4%	31%	38.6%	6%	100%
Ease of Use	3.8%	10.9%	10.9%	60.3%	14.1%	100%
Emotions and Behaviors	23.9%	32.6%	21.2%	20.7%	1.6%	100%
Trust	12%	29.9%	16.3%	39.1%	2.7%	100%
Intelligence	2.7%	19.6%	22.3%	51.6%	3.8%	100%

Source: Calculated from the Data by the Author

To assess the usefulness of artificial intelligence chatbots in shopping, five questions were included in the questionnaire covering multiple aspects of effectiveness as: saving time, increasing performance, faster shopping, increasing effectiveness and conduct shopping transactions quickly using chatbots. The answers of the respondents declared that almost half of the respondents agreed that using chatbots in shopping were useful, and nearly one tenth of the respondent strongly agreed that chatbots were useful. On the other side, less than one fourth of the respondents reported that they didn't find using chatbots in shopping useful.

Moreover, three questions were added to the questionnaire to assess whether respondents found using artificial intelligence chatbots in shopping enjoyable and they

had fun while shopping using chatbots. The results of the survey declare that nearly one third of the respondent were neutral about having fun while using chatbots in shopping, while the responses of nearly 45% of respondents varied between the agreement and the strong agreement on the enjoy and fun they had while shopping using chatbots.

To assess the ease of use of AI chatbots in shopping, five questions were included in the questionnaire, and they concentrated on the ease of use of chatbots, without the need of intensified mental effort or expert assistance. The results of the questionnaire reveal that almost three fourths of the respondents reported that they either agree or strongly agree on the ease of use of AI chatbots in shopping.

The researcher intended to assess the respondents' opinion about whether they think AI shopping chatbots are conscious, have their own thoughts and emotions or not. Hence, four questions were included in the questionnaire to assess this dimension. The results presented in table (4-4) reveal surprisingly that around one fifth of the respondents think AI shopping chatbots are conscious and have their own thoughts and emotions, while more than half of the respondents didn't agree about the conscious of AI shopping chatbots.

The security of personal information and payment are very important aspects that may encourage or discourage the individual to use AI shopping chatbots. To assess the opinion of the respondents whether they feel trust and secured while using AI chatbots in shopping, six questions were included in the questionnaire, and the answers of each respondent in the six questions have been merged to reflect the trust in using AI chatbots in shopping. The results of the survey suggest that around four tenth of the respondent stated that they trust using AI chatbots and they know that their personal information is confidential, and their payment information are secured, while the opinion of 42% of the respondents ranged between the strong disagreement and the disagreement in the trust of chatbots.

Furthermore, four questions were included in the questionnaire to assess the intelligence, competence, and accuracy of using AI chatbots in shopping. Around one fifth of the respondents reported that they are neutral, while more than half of the respondents agreed on the intelligence, competence, and accuracy of AL chatbots.

2. Brand Equity and Brand Awareness

To assess the awareness of the respondents using AI chatbots in shopping, many questions were included in the questionnaire. Respondents were asked about their awareness of the brand they are using AI chatbots with, in addition to their awareness of the characteristics and the logo of the brand.

Table 4.5 Distribution of Respondents' opinion regarding Brand Awareness Indicators

Brand Awareness	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Aware of the brand itself	2.7%	6%	33.7%	44.6%	13%	100%
Aware of the characteristics of the brand	2.2%	7.6%	31%	51.1%	8.2%	100%
Aware of the logo of the brand	1.6%	3.8%	20.7%	50%	23.9%	100%

Source: Calculated from the Data by the Author

Results presented in table (4-5) shows that 45% of the respondents agreed that they are aware of the brand they are using AI shopping chatbots with, while one third of the respondents were neutral. Moreover, nearly 60% of respondents declared that they are aware of the characteristics of the brand they are shopping from it using AI chatbots, while only one tenth of the respondents reported their unawareness of the characteristics of the brand, they are using AI shopping chatbots with. Additionally, three fourths of the respondents stated that they are aware of the logo of the brand they are using AI chatbots with.

Respondents were then asked about whether they have positive impression and if they think the brand is customer centered or not, and the responses are represented in the following two pie charts.

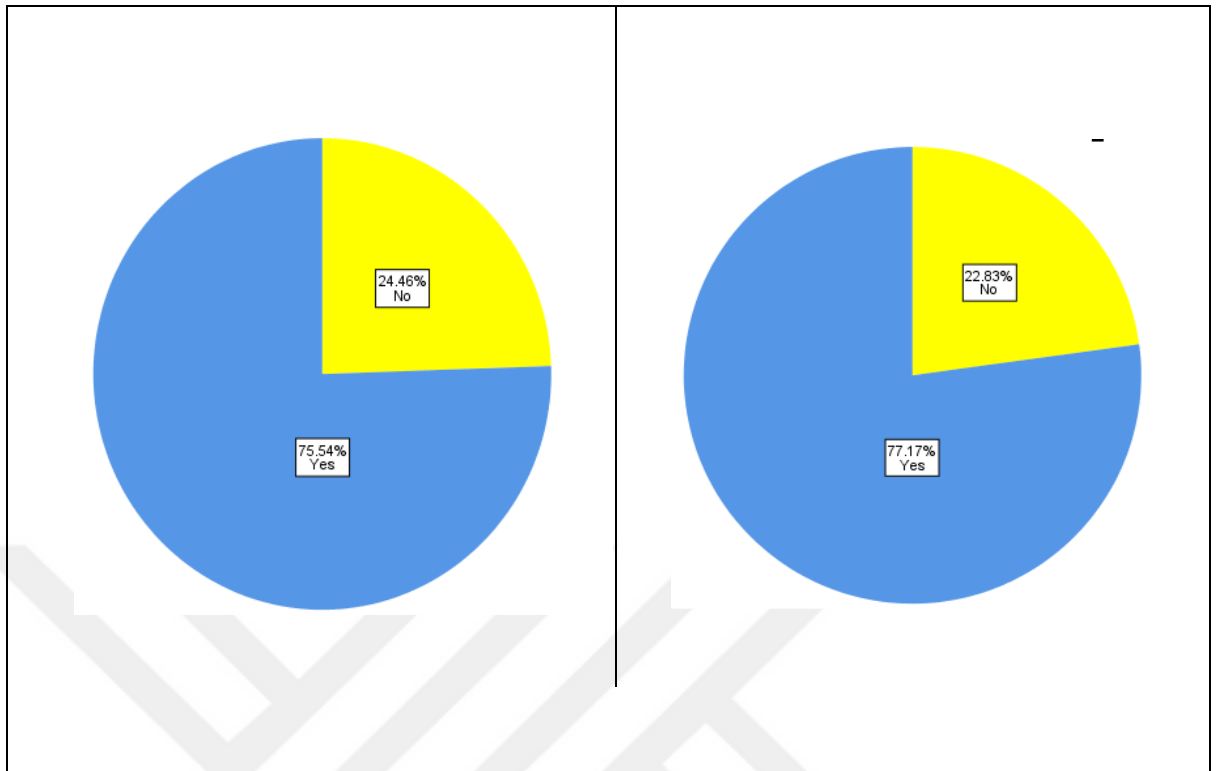


Figure 4.3: Positive Impression Regarding the Brand

Figure 4.4 The Brand is Customer Centered

Source: Calculated from the Data by the Author

The above pie charts suggest that the percentages of the respondents who think they have a positive impression regarding the brand and the brand is customer centered are very similar to each other, as 76% of the respondents reported that they have a positive impression regarding the brand, while 77% of the respondents reported that they think the brand is customer centered.

3. Customer Trust

To assess the trust of the respondents in the brand they are using AI chatbots in shopping from it, many questions were included in the questionnaire. Respondents were asked about their trust in the brand generally, and their trust that this brand will always satisfy them and make any effort to satisfy their customers.

Table 4.6: Distribution of Respondents' opinion regarding Customer Trust Indicators

Customer Trust	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
The brand meets customer's expectations	3.8%	6%	28.3%	52.2%	9.8%	100%
Customers are confident of the brand	5.3%	9.5%	8.1%	65.6%	11.5%	100%
The brand guarantees customer's satisfaction	5.3%	16.7%	12.1%	56.8%	9.1%	100%

Source: Calculated from the Data by the Author

It is prominent from the above table that more than 60% of the respondents reported that the brand they are using AI chatbots in shopping from meet their expectations. Moreover, around three fourths of the respondents declared that they are confident in the brand they are using AI shopping chatbots with. Also, more than 65% of the respondents stated that the brand they are dealing with guarantees customer satisfaction.

4.3 Correlation Analysis

After presenting the descriptive of demographic and socioeconomic characteristics, and different groups of artificial intelligence and the brand awareness and the customer trust variables have been presented, the following step is to assess the correlation between all these different variables. Hence, the correlation between demographic and socioeconomic characteristics with brand awareness and customer trust are presented. Then the correlation between different groups of AI are also presented in this section. Results of the spearman correlation coefficient reveal that there is a moderate correlation between the age of the respondent and each of brand awareness and customer trust with spearman correlation coefficients of .306** and .314**

respectively. While education is weakly correlated to brand awareness with correlation coefficient equal to .214**, and the correlation between education and customer trust is insignificant.

Moreover, the correlation between monthly income of the respondent and each of brand awareness and customer trust is insignificant. In addition, the employment status is weakly correlated with brand awareness and customer trust, with correlation coefficients equal to .207** and .225* respectively.

It is apparent from results presented in table (4-7) that artificial intelligence shopping chatbot is moderately correlated to brand awareness with correlation coefficient of .333**, while the correlation between AI chatbot and customer trust is strong with correlation coefficient equal to .633**.

Table 4.7 Correlation between Age, Education, Monthly Income, Employment Status, Artificial Intelligence, Brand Awareness, and Customer Trust

Variable	Age	Education	Monthly Income	Employment Status	Artificial Intelligence	Brand Awareness	Customer Trust
Age	1.000	.326**	.384**	.542**	.183*	.306**	.314**
Education	.326* *	1.000	.113	.163*	.124	.214**	.216
Monthly Income	.384* *	.113	1.000	.468**	.019	.121	.181
Employment Status	.542* *	.163*	.468**	1.000	.051	.207**	.225*
Artificial Intelligence	.183*	.124	.019	.051	1.000	.333**	.680**
Brand Awareness	.306* *	.214**	.121	.207**	.333**	1.000	.633**
Customer Trust	.314* *	.216	.181	.225*	.680**	.633**	1.000

Source: Calculated from the Data by the Author

**Correlation is significant at the 0.01 level, *Correlation is significant at the 0.05 level Following that, the correlation between AI groups has been assessed and results are presented in table (4-8). Results of the spearman correlation coefficient reveal that there is weak to moderate association between different groups of AI chatbots.

The Usefulness dimension of AI chatbot is moderately correlated with each of fun and each of use with correlation coefficients equal to .555** and .544** respectively. While the correlation between Usefulness and each of trust and intelligence is weak with correlation coefficients equal to .369** and .479** respectively.

The ease-of-use dimension of AI chatbot is correlated with each of usefulness, fun, trust, and intelligence with correlation coefficients equal to .555**, .491**, .374** and .523** respectively.

Table 4.8: Dual Correlation between Artificial Intelligence Groups

Variable	Usefulness	Fun	Ease of Use	Emotions and Behaviors	Trust	Intelligence
Usefulness	1	.555**	.544**	.150*	.369**	.479**
Fun	.555**	1	.491**	.243**	.374**	.523**
Ease of Use	.544**	.491**	1	.106	.199**	.490**
Emotions and Behaviors	.150*	.243**	.106	1	.323**	.225**
Trust	.369**	.374**	.199**	.323**	1	.349**
Intelligence	.479**	.523**	.490**	.225**	.349**	1

**Correlation is significant at the 0.01 level, *Correlation is significant at the 0.05 level.

Source: Calculated from the Data by the Author

4.3 Survey Reliability and Validity

In this section the reliability and the validity of the survey has been examined. Survey reliability has been assessed using Cronbach's Alpha, while the validity of the survey has been assessed using R squared and adjusted R squared of the fitted regression models.

1. Survey Reliability

Cronbach's alpha is a commonly used measure to assess the internal consistency and reliability of the survey. It indicates the extent to which the items in the survey are correlated with each other, reflecting how reliably the items measure the same underlying construct. Cronbach's alpha assesses reliability by examining the level of shared variance or covariance among the items within a measurement instrument in relation to the overall variance. The concept is that in a reliable instrument, there should be a significant amount of covariance among the items compared to the total variance.

The result of Cronbach's alpha ranges between 0 and 1. If the result is more than 0.7 then the level of reliability is acceptable, while if the result is less than 0.7 then the level of reliability is not high and not accepted.

Table 4.9: Reliability Statistic (Cronbach's alpha)

Survey	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
AI	0.930	0.932	31
Brand Equity	0.810	0.839	8
Customer Trust	0.953	0.954	8

Source: Calculated from the Data by the Author

Cronbach's alpha values for the three surveys exceed 0.7. The Cronbach's alpha is the highest for customer trust survey as its value is equal to 0.953, while it's the lowest for brand equity survey with value 0.810. These values indicate an exceptionally high level of internal consistency reliability for the scale.

A Cronbach's alpha values of 0.930 and 0.953 are considered excellent and indicates a strong level of correlation among the items in the surveys. The very slight decrease when using standardized items suggests that the high reliability remains even after adjusting for differences in the measurement scales or units of the items.

The first survey that was conducted to assess the customer's experience with AI chatbots consist of 31 items, while the second and the third one which were used to assess brand equity and customer trust each consist of 8 items.

High Cronbach's alpha values imply that the items are highly correlated with each other, supporting the scale's ability to accurately measure the underlying construct it is designed to assess. Overall, these results indicate a robust and reliable measurement instrument.

2. Survey Validity

The validity of the survey has been assessed using the R squared and adjusted R squared of the fitted regression models that are presented later in this chapter. After the linear regression models have been fitted using questionnaire variables as predictors, assessing the overall fit of the model, and checking for significant coefficients are crucial steps in evaluating the validity of the model and its alignment with theoretical expectations.

- R-squared, which is a measure of how well the regression model explains the variability of the dependent variable that ranges from 0 to 1 have been calculated for all fitted regression models. Higher R squared values indicate better model fit, the highest value for R squared in all fitted regression models were found to be 0.53.
- Adjusted R-squared: Adjusted R-squared addresses the issue of overfitting by penalizing the inclusion of unnecessary predictors in the model. It adjusts for the number of predictors and provides a more accurate measure of model fit, especially in models with multiple predictors. The highest value of the adjusted R squared was found to be equal to 0.432 indicating that a substantial portion of the variability in the dependent variable is accounted for by the predictors in the model. However, it also implies that there is still a significant amount of unexplained variability that the model does not capture, signaling that the predictive power of the model is moderate.

4.4 ANOVA for Artificial Intelligence (AI), Brand Awareness and Customer Trust

Analysis of variance (ANOVA) is a statistical technique that allows for the comparison of the means of two or more groups, to determine if there are statistically significant differences between the groups.

In this study, the respondents' experience with Artificial Intelligence, brand awareness and customer trust are compared across different categories of gender, monthly income, and employment status.

1. Artificial Intelligence (AI)

In this section the respondents' experience with Artificial Intelligence is compared across gender to determine if there is a difference in AI experience among males and females. Also, the respondents' experience with Artificial Intelligence is compared across the three categories of monthly income (less than \$100- \$100 to \$500- \$1000+), to inspect if there is difference in AI experience across different income categories. Furthermore, the respondents' experience with Artificial Intelligence is compared across different employment status categories (whether the respondent is a student, employee, employer, self-employed or unemployed), to determine whether there is a difference or is no difference across employment categories.

2. Artificial Intelligence across Gender

To analyze the respondent's experience with Artificial Intelligence (AI) across gender, an ANOVA was conducted. The study aimed to determine if there were statistically significant differences in AI between male and female respondents.

Table 4.10 ANOVA of AI across Gender of the respondents

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Treatments	11.644	1	11.644	.581	.447
Error	3649.465	182	20.052		
Total	3661.109	183			

Source: Calculated from the Data by the Author

The results of the ANOVA suggest that there is no significant difference between the males' and females' experience with Artificial Intelligence, with P-value= 0.447.

3. Artificial Intelligence across Monthly Income

To analyze the respondent's experience with Artificial Intelligence (AI) across different categories of monthly income, an ANOVA was conducted. The study aimed to determine if there were statistically significant differences in AI between respondents whose monthly salary is below \$500, \$500 to \$1000 or \$1000+.

Table 4.11 ANOVA of AI across Monthly Income of the respondents

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Treatments	3.926	2	1.963	.097	.907
Error	3657.182	181	20.205		
Total	3661.109	183			

Source: Calculated from the Data by the Author

The results of the ANOVA suggest that there is no significant difference between the respondents' experience with Artificial Intelligence across the different income categories, with P-value= 0.907. Therefore, based on this analysis, there is no strong

evidence to conclude that there are significant differences in AI experience across different monthly income groups among the respondents.

4. Artificial Intelligence across Employment Status

To analyze the respondent’s experience with Artificial Intelligence (AI) across different categories of employment status, an ANOVA was conducted. The study aimed to determine if there were statistically significant differences in AI between respondents who are students, employees, employers, self-employed or unemployed.

Table 4.12 ANOVA of AI across Employment Status of the respondents

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Treatments	139.208	4	34.802	1.769	.137
Error	3521.901	179	19.675		
Total	3661.109	183			

Source: Calculated from the Data by the Author

The results of the ANOVA suggest that there is no significant difference between the respondents’ experience with Artificial Intelligence across different categories of employment status, with P-value= 0.137. Therefore, based on this analysis, there is no strong evidence to conclude that there are significant differences in AI experience across different employment status groups among the respondents.

It can be concluded that the experience of respondent with AI doesn’t differ across the gender or the monthly income or the employment status of the respondent.

5. Brand Equity and Brand awareness

In this section Brand Equity and Awareness is compared across gender to determine if there is a difference in Brand Equity and Awareness among males and females. Also, the Brand Equity and Awareness is compared across the three categories of monthly income (less than \$100- \$100 to \$500- \$1000+), to inspect if there is difference in Brand Equity and Awareness across different income categories. Furthermore, the Brand Equity and Awareness is compared across different employment status

categories (whether the respondent is a student, employee, employer, self-employed or unemployed), to determine whether there is a difference or is no difference across employment categories.

6. Brand Equity and Awareness across Gender

To analyze Brand Equity and Awareness across gender, an ANOVA was conducted. The study aimed to determine if there were statistically significant differences in Brand Equity and Awareness between male and female respondents.

Table 4.13: ANOVA of Brand Equity and Awareness across Gender of the respondents

Source of Variation	Sum Squares	df	Mean Square	F	Sig.
Treatments	.169	1	.169	.013	.909
Error	2326.434	182	12.783		
Total	2326.603	183			

Source: Calculated from the Data by the Author

The results of the ANOVA suggest that there is no significant difference in brand equity and awareness between the male and female respondents, with P-value=0.909.

7. Brand Equity and Awareness across Monthly Income

To analyze Brand Equity and Awareness across different categories of monthly income, an ANOVA was conducted. The study aimed to determine if there were statistically significant differences in Brand Equity and Awareness between respondents whose monthly salary is below \$500, or \$500 to \$1000 or \$1000+.

The results of the ANOVA presented in table (4-14) suggest that there is no significant difference between the brand equity and awareness across the different income categories, with P-value= 0.147. Therefore, based on this analysis, there is no strong evidence to conclude that there are significant differences in brand equity and awareness across different monthly income groups among the respondents.

Table 4.14: ANOVA of Brand Equity and Awareness across Monthly Income of the respondents

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Treatments	48.706	2	24.353	1.935	.147
Error	2277.897	181	12.585		
Total	2326.603	183			

Source: Calculated from the Data by the Author

8. Brand Equity and Awareness across Employment Status

To analyze Brand Equity and Awareness across different categories of employment status, an ANOVA was conducted. The study aimed to determine if there were statistically significant differences in Brand Equity and Awareness among respondents who are students, employees, employers, self-employed or unemployed.

Table 4.15: ANOVA of Brand Equity and Awareness across Employment Status of the respondents

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Treatments	364.546	4	91.136	8.314	.000
Error	1962.058	179	10.961		
Total	2326.603	183			

Source: Calculated from the Data by the Author

The results of the ANOVA suggest that there is a significant difference in Brand Equity and Awareness across different categories of employment status, with P-value= 0.000. Therefore, based on this analysis, there is strong evidence to conclude that there are significant differences in Brand Equity and Awareness across different employment status groups among the respondents.

It can be concluded that brand equity and awareness doesn't significantly differ across the gender and the monthly income of the respondent. On the contrary, brand equity and awareness significantly differs across the employment sector of the respondent.

9. Customer Trust

In this section customer trust is compared across gender to determine if there is a difference in customer trust among males and females. Also, customer trust is compared across the three categories of monthly income (less than \$100- \$100 to \$500- \$1000+), to inspect if there is difference in customer trust across different income categories. Furthermore, customer trust is compared across different employment status categories (whether the respondent is a student, employee, employer, self-employed or unemployed), to determine whether there is a difference or is no difference across employment categories.

10. Customer Trust across Gender

To analyze customer trust across gender, an ANOVA was conducted. The study aimed to determine if there were statistically significant differences in customer trust between male and female respondents.

Table 4.16: ANOVA of Customer Trust across Gender of the respondents

Source of Variation	Sum Squares	df	Mean Square	F	Sig.
Treatments	39.296	1	39.296	.672	.415
Error	4678.228	80	58.478		
Total	4717.524	81			

Source: Calculated from the Data by the Author

The results of the ANOVA suggest that there is no significant difference in customer trust between the male and female respondents, with P-value=0.415.

1. Customer Trust across Monthly Income

To analyze customer trust across different categories of monthly income, an ANOVA was conducted. The study aimed to determine if there were statistically significant differences in customer trust between respondents whose monthly salary is below \$500, or \$500 to \$1000 or \$1000+.

Table 4.17: ANOVA of Customer Trust across Monthly Income of the respondents

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Treatments	135.740	2	67.870	1.170	.316
Error	4581.784	79	57.997		
Total	4717.524	81			

Source: Calculated from the Data by the Author

The results of the ANOVA presented in table (4-17) suggest that there is no significant difference in customer trust across the different income categories, with P-value= 0.316. Therefore, based on this analysis, there is no strong evidence to conclude that there are significant differences in customer trust across different monthly income groups among the respondents.

2. Customer Trust across Employment Status

To analyze customer trust across different categories of employment status, an ANOVA was conducted. The study aimed to determine if there were statistically significant differences in customer trust among respondents who are students, employees, employers, self-employed or unemployed.

Table 4.18: ANOVA of Customer Trust across Employment Status of the respondents

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Treatments	399.084	4	99.771	1.779	.142
Error	4318.441	77	56.084		
Total	4717.524	81			

Source: Calculated from the Data by the Author

In summary, the ANOVA results suggest that employment status does not have a significant effect on Customer Trust at the chosen significance level ($p = 0.142$). Therefore, based on this analysis, there is no strong evidence to conclude that there are significant differences in Customer Trust across different employment status groups among the respondents.

It can be concluded that customer trust doesn't significantly differ across the gender and the monthly income of the respondent. Moreover, customer trust doesn't significantly differ across the employment sector of the respondent.

4.5 Regression Analysis

Two regression models will be fitted to assess the impact of demographic characteristics (Nationality, gender, age, and educational level), socioeconomic characteristics (employment status and monthly income), and AI on brand equity and awareness in on regression equation and inspect the impact of all previously mentioned predictors on customer trust in another regression equation.

Before fitting the two regression equation predictors was inspected, and many dummy variables have been created as all the demographic and socioeconomic predictors are categorical variables with more than two categories, except for the gender of the respondent.

Moreover, the Durbin-Watson test statistic will be calculated with each fitted regression equation to ensure that the independent error assumption is met. The value of Durbin-Watson test statistic ranges between zero and four, the closer the value of the test statistic to two (ranges between one and three), the stronger the evidence that the assumption is met.

4.5.1 Predictors of Brand Equity and Awareness

A regression equation has been fitted to inspect the impact of demographic characteristics, socioeconomic characteristics and AI on brand equity and awareness. Results presented in table (4-19) suggest that the independent error assumption is met as the value of the Durbin Watson test ranges between 1 and 3. Additionally, 37.1% of the variability in Brand equity and Awareness can be explained by demographic and socioeconomic characteristics and AI.

Table 4.19: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.609	.371	.315	2.95045	1.381

Source: Calculated from the Data by the Author

To assess the impact of AI on brand equity and awareness, it has been included in this regression model as one variable, that is named AI grouped. This variable has been created by merging the responses of each respondent across the six groups of AI which has been mentioned previously in this chapter, namely: usefulness, fun, ease of use, emotions and behaviors, trust, and intelligence groups.

Results presented in table (4-20) suggest that marital status of the respondent have a significant impact of brand equity and awareness on 10% significance level. Additionally, the respondent's experience with AI shopping chatbots have a significant impact on brand equity and awareness, on the 5% significance level.

It is prominent in the below table that different groups of respondent's experience with AI chatbots are categorized in one variable reflecting the impact of AI chatbots on brand equity and awareness. So, another model will be fitted including the different groups used to assess respondent's experience with AI chatbots to specify which groups specifically have significant impact on brand equity and awareness.

Table 4.20: Predictors of Brand Equity and Awareness (AI grouped)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	17.038	2.601		6.551	.000
Nationality of Egyptian	-.413	.558	-.056	-.740	.460
Nationality of Turkish	-.865	.622	-.110	-1.391	.166
Age (15-24)	-1.305	1.029	-.180	-1.269	.206
Age (25-34)	-.812	.868	-.114	-.936	.351
Education: Below Bachelor	-.879	.803	-.085	-1.094	.276
Education: Bachelor	-.663	.564	-.090	-1.177	.241
Marital Status: Single	3.754	2.241	.427	1.675	.096
Marital Status: Married	4.030	2.302	.450	1.750	.082
Monthly Income up to \$500	-.023	.668	-.003	-.034	.973
Monthly Income (\$500-\$1000)	.451	.669	.055	.674	.501
Employment Status: Student	-1.152	1.085	-.162	-1.062	.290
Employment Status: Employed	-.324	1.081	-.043	-.299	.765
Employment Status: self-employed	.382	1.179	.033	.324	.746
Employment Status: employer	-5.302	1.649	-.265	-3.214	.002
AI Grouped	.289	.052	.363	5.516	.000

Source: Calculated from the Data by the Author

The stepwise method has been used in fitting this regression equation, as almost all demographic and socioeconomic characteristics don't have a significant impact on brand equity and awareness. The forward stepwise method has been used as one of the six groups of AI predictors was entered in the regression model every time, if this variable has a significant impact, then another group is added with the previous one. While if the group doesn't have a significant impact on brand equity, then it's excluded from the model and another group is included to inspect its impact, and the process continues till the impacts of all AI's groups are inspected, and the results of the model are presented in table (4-21)

Table 4.21: Predictors of Brand Equity and Awareness (Various groups of AI)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	17.709	.297		59.527	.000
AI Perceived Usefulness	.530	.282	.157	1.878	.062
AI Perceived Ease of Use	1.052	.291	.286	3.618	.000
AI Perceived Trust	.438	.226	.139	1.941	.054

Source: Calculated from the Data by the Author

Of the six AI groups, Perceived Usefulness, Perceived Ease of Use and Perceived Trust were found to have a significant impact on brand equity and awareness.

1. Predictors of Customer Trust

A regression equation has been fitted to inspect the impact of demographic characteristics, socioeconomic characteristics, and AI on Customer trust. Results presented in table (4-22) suggest that the independent error assumption is met as the

value of the Durbin Watson test ranges between 1 and 3. Additionally, 53% of the variability in Customer trust can be explained by demographic and socioeconomic characteristics and AI.

Table 4.22: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.728	.530	.432	5.75226	2.049

Source: Calculated from the Data by the Author

To assess the impact of AI on customer trust, it has been included in this regression model as one variable, that is named AI grouped. This variable has been created by merging the responses of each respondent across the six groups of AI which has been mentioned previously in this chapter, namely: usefulness, fun, ease of use, emotions and behaviors, trust, and intelligence groups.

Results presented in table (4-23) suggest that the Turkish nationality, the employer category of employment status and the AI have a significant impact on customer trust, while the impact of all other variables is statistically insignificant.

Table 4.23: Predictors of Customer Trust (AI grouped)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	28.547	5.977		4.776	.000
Nationality of Egyptian	-3.160	2.445	-.182	-1.293	.201
Nationality of Turkish	-4.640	2.206	-.301	-2.104	.039
Age (15-24)	2.386	3.450	.157	.692	.492

Age (25-34)	.666	3.241	.043	.206	.838
Education: Below Bachelor	-.233	2.582	-.011	-.090	.928
Education Bachelor	1.697	2.102	.106	.808	.422
Marital Status: Married	2.429	2.490	.100	.976	.333
Monthly Income up to \$500	-1.846	2.045	-.122	-.903	.370
Monthly Income (\$500-\$1000)	.503	2.053	.027	.245	.807
Employment Status: Student	.111	4.397	.007	.025	.980
Employment Status: Employed	-.518	4.541	-.032	-.114	.909
Employment Status: self-employed	-.482	4.815	-.018	-.100	.921
Employment Status: employer	-15.929	7.369	-.231	-2.162	.034
AI Grouped	.875	.142	.633	6.159	.000

Source: Calculated from the Data by the Author

It is prominent in the above table that different groups of respondent's experience with AI chatbots are categorized in one variable reflecting the impact of AI chatbots on customer trust. So, another model will be fitted including the different groups used to assess respondent's experience with AI chatbots to specify which groups specifically have significant impact on customer trust.

The stepwise method has been used in fitting this regression equation, as almost all demographic and socioeconomic characteristics don't have a significant impact on customer trust. The forward stepwise has been used as one group of AI predictors was entered in the regression model every time, if this variable has a significant impact, then another group is added with the previous one. While if the group doesn't have a

significant impact on brand equity, then it's excluded from the model and another group is included to inspect its impact, and the process continues till the impacts of all AI's groups are inspected, and the results of the model are presented in table (4-24)

Table 4.24: Predictors of Customer Trust (Various groups of AI)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	27.223	.776		35.077	.000
AI Perceived Usefulness	-.128	.776	-.019	-.165	.041
AI Perceived Emotions Behavior	1.040	.555	.173	1.874	.065
AI Perceived Intelligence	4.304	.896	.591	4.804	.000

Source: Calculated from the Data by the Author

Of the six AI groups, Perceived Usefulness, Perceived emotions and behaviors and Perceived intelligence were found to have a significant impact on brand equity and awareness.

CHAPTER V

CONCLUSION

5.1 Discussion

The aim of this study was to examine the effect of using AI chatbots on brand equity and consumer Trust among Different users in Egypt and Turkey.

The applications of AI in marketing extend the possibilities by conducting in-depth analyses on a large scale, leveraging data from latent internet users to deliver improved offers and solutions (Tjepkema, 2018). Businesses and marketers globally are striving to comprehend the roles, advantages, and achievements of AI in the contemporary landscape (Albert, 2019).

- It is prominent from the above table that more than 60% of the respondents reported that the brand they are using AI chatbots in shopping from meet their expectations. Moreover, around three fourths of the respondents declared that they are confident in the brand they are using AI shopping chatbots with. Also, more than 65% of the respondents stated that the brand they are dealing with guarantees customer satisfaction. (Table 4.6)
- Results of the spearman correlation coefficient reveal that there is a moderate correlation between the age of the respondent and each of brand awareness and customer trust with spearman correlation coefficients of .306** and .314** respectively. While education is weakly correlated to brand awareness with correlation coefficient equal to .214**, and the correlation between education and customer trust is insignificant.
- Moreover, the correlation between monthly income of the respondent and each of brand awareness and customer trust is insignificant. In addition, the employment status is weakly correlated with brand awareness and customer trust, with correlation coefficients equal to .207** and .225* respectively.
- It is apparent from results presented in (Table 4.7) that artificial intelligence shopping chatbot is moderately correlated to brand awareness with correlation

coefficient of .333**, while the correlation between AI chatbot and customer trust is strong with correlation coefficient equal to .633**.

- The results of the ANOVA suggest that there is no significant difference between the males' and females' experience with Artificial Intelligence, with P-value= 0.447.
- The results of the ANOVA suggest that there is no significant difference between the respondents' experience with Artificial Intelligence across the different income categories, with P-value= 0.907. Therefore, based on this analysis, there is no strong evidence to conclude that there are significant differences in AI experience across different monthly income groups among the respondents.
- The results of the ANOVA suggest that there is no significant difference between the respondents' experience with Artificial Intelligence across different categories of employment status, with P-value= 0.137. Therefore, based on this analysis, there is no strong evidence to conclude that there are significant differences in AI experience across different employment status groups among the respondents.
- It can be concluded that the experience of respondent with AI doesn't differ across the gender or the monthly income or the employment status of the respondent.
- The results of the ANOVA suggest that there is no significant difference in brand equity and awareness between the male and female respondents, with P-value=0.909.
- The results of the ANOVA presented in table (4-14) suggest that there is no significant difference between the brand equity and awareness across the different income categories, with P-value= 0.147. Therefore, based on this analysis, there is no strong evidence to conclude that there are significant differences in brand equity and awareness across different monthly income groups among the respondents.
- The results of the ANOVA suggest that there is a significant difference in Brand Equity and Awareness across different categories of employment status,

with P-value= 0.000. Therefore, based on this analysis, there is strong evidence to conclude that there are significant differences in Brand Equity and Awareness across different employment status groups among the respondents.

- It can be concluded that brand equity and awareness doesn't significantly differ across the gender and the monthly income of the respondent. On the contrary, brand equity and awareness significantly differs across the employment sector of the respondent.
- The results of the ANOVA suggest that there is no significant difference in customer trust between the male and female respondents, with P-value=0.415.
- The results of the ANOVA presented in table (4-17) suggest that there is no significant difference in customer trust across the different income categories, with P-value= 0.316. Therefore, based on this analysis, there is no strong evidence to conclude that there are significant differences in customer trust across different monthly income groups among the respondents.
- In summary, the ANOVA results suggest that employment status does not have a significant effect on Customer Trust at the chosen significance level ($p = 0.142$). Therefore, based on this analysis, there is no strong evidence to conclude that there are significant differences in Customer Trust across different employment status groups among the respondents.
- It can be concluded that customer trust doesn't significantly differ across the gender and the monthly income of the respondent. Moreover, customer trust doesn't significantly differ across the employment sector of the respondent.

5.2 Conclusion

The research reveals that most respondents were pleased with firms that deployed AI chatbots for shopping, with more than 60% saying that their expectations were met. Furthermore, about three-quarters of respondents were confident in companies that used AI chatbots for purchasing. This suggests that AI chatbots are often positively appreciated by customers throughout the purchasing experience.

Thus, there were modest connections between respondent age and brand

awareness/customer trust, indicating that younger respondents may have greater brand knowledge and trust. Additionally, AI shopping chatbots shown moderate to significant relationships with brand recognition and consumer trust.

The use of artificial intelligence (AI) chatbots in customer support has become an important aspect in determining brand equity and awareness. The research has focused on how AI chatbots affect consumer perceptions, emotional states, and behavioural intents, which are crucial for understanding their impact on brand relationships.

Utilitarian, hedonic, technical, and social gratifications from chatbot use are related with higher user satisfaction, which increases loyalty and desire to continue using chatbot services. However, perceived privacy threats might reduce user happiness.

AI chatbots boost brand equity and awareness by increasing consumer trust, contentment, and buy intent. Quality interactions and information offered by chatbots, as well as their perceived utility, are critical in building consumer confidence, particularly among those who are familiar with the product. Gratifications generated from chatbot conversations improve customer pleasure and loyalty, but privacy issues can diminish these gains. Effective chatbot marketing tactics that provide personalised and engaging experiences may improve the customer-brand connection, resulting in favourable consumer responses.

5.3 Recommendations for Future Research

The author recommends investigating different dimensions by taking into consideration the business owner perspectives -as mentioned on the limitations of the study- that the author could not have the chance of making interviews with some business owner to observe and conduct the reason behind taking the AI Chatbots as a communication tool on their online platforms.

The author recommends expanding the study by including other AI tools and taking into consideration gender biases of the chatbots' voices. Chatbots can influence brand trust through social media presence, gender biases, and error handling. Female chatbots that engage in social behaviors likely to have a beneficial influence on consumer responses and forgiving for faults. (Diana, Cezara, Toader, Grațîela, Boca, Rita, Toader, Mara, Măcelaru, Cezar, Toader, Diana, Ighian, Adrian, T., G., M., Rădulescu, 2019).

Furthermore, Chatbot marketing could be discussed as prioritise engagement, knowledge, accessibility, entertainment, and customisation increase communication quality with chatbot agents, indirectly enhancing customer-brand relationships (CBR) and reaction. CBR moderate the link between communication quality and consumer reaction.



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APPENDICES

Appendix 1. Proposal Letter for Participation in Survey (English)

Dear Participant,

My name is Yomna Hanafy, an MBA student at Istanbul Sabahattin Zaim University, currently conducting research for my thesis.

This study, titled "Enhancing Brand Equity and Consumer Trust in Social Media Marketing: The Role of AI Chatbots" examines the emerging role and influence of AI chatbots on customer trust and brand equity.

Purpose:

The purpose of this survey is to gather valuable insights from individuals who have interacted with businesses utilizing AI chatbot systems. By sharing your experiences, you will contribute significantly to understanding the impact of these systems on various aspects of brand equity, including brand loyalty, brand community, brand attachment, and brand engagement.

Confidentiality:

Your participation is entirely voluntary and anonymous. All responses will be treated with strict confidentiality and used solely for academic research purposes. You have the right to withdraw from the survey at any time without consequence.

Time Commitment:

The survey is estimated to take approximately 5 minutes to complete. However, feel free to take your time and provide thoughtful responses, as they are crucial for a comprehensive analysis.

I sincerely appreciate your time and valuable contribution to this academic research. Your participation will play a vital role in advancing our understanding of the complex interactions between AI chatbot systems and brand equity from a customer perspective.

If you need more information about the research, you can reach the researcher at the email address

Sincerely,

Yomna Hanafy

MBA Candidate, IZU

Demographic questions

What's your nationality?

*

3.

What is your country of residence?

*

4. Gender:

- Female
- Male

5.Marital Status:

- Single
- Married
- Other:

6. Age:

- 15-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65-74
- 75 and above

7.Monthly Income:

- 100 dollar and below
- 100-dollar -300 dollar
- 300-dollar -500 dollar
- 500 dollar - 800 dollar
- 800 dollar - 1000 dollar
- 1000 dollar and above

8.Education Level:

- Primary School
- Middle School
- High School
- associate degree
- Bachelor's Degree

Master's Degree

Doctorate

9.Occupation:

Student

Private Sector Employee

Public Sector Employee

Employer

Retired

Unemployed

Other:

Artificial Intelligence

Considering your experience with Artificial Intelligence chatbots, please answer the following statements:

10. Your experience with shopping using chatbots:

Less than 1 year

1-3 years

4-6 years

7-9 years

10 years and above

11. Average time spent using chatbots during shopping:

Less than 15 minutes

15-30 minutes

31-45 minutes

46-60 minutes

More than 60 minutes

12. Have you ever had an experience of product or service exchange through Artificial Intelligence Chatbots (Bot, Chatbot, Robot)?

- Yes
- No

13. Shopping with chatbots helps me save time

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

14. Using chatbots enhances my performance in shopping.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

15. Using chatbots helps me shop faster.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

16. Using chatbots increases my effectiveness in shopping.

- Strongly Disagree
- Disagree
- Neutral

- Agree
- Strongly Agree

17. Using chatbots enables me to conduct shopping transactions quickly.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

18. Shopping with chatbots is fun.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

19. Using chatbots for shopping is enjoyable.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

20. I enjoy using chatbots for shopping.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

21. Shopping with chatbots does not require much mental effort.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

22. I can shop using chatbots without expert assistance.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

23. Learning to use chatbots for shopping is easy for me.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

24. Generally, I find it easy to use chatbots for shopping.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

25. Learning to use chatbots is easy.

- Strongly Disagree

- Disagree
- Neutral
- Agree
- Strongly Agree

26. Artificial Intelligence tools like chatbots used for shopping have their own minds/thoughts.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

27.

Artificial Intelligence tools like chatbots used for shopping are conscious.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

28. Artificial Intelligence tools like chatbots used for shopping have emotions.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

29. Chatbots, like artificial intelligence tools, have their own free will.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

30. I believe that payments made through chatbots will be processed securely.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

31. I believe my personal information will be kept confidential when using chatbots.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

32. trust the security measures taken for chatbots.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

33. My personal privacy is well protected in chatbots.

- Strongly Disagree
- Disagree

- Neutral
- Agree
- Strongly Agree

34. I am not worried about providing my credit card information to chatbots.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

35. Chatbots are as secure as any e-commerce or mobile commerce website.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

36. I am concerned about sharing financial information while shopping with chatbots.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

37. I am very careful about the privacy and security measures of the site I use for shopping.

- Strongly Disagree
- Disagree
- Neutral

- Agree
- Strongly Agree

38. Chatbots used for shopping do not provide me with enough benefits.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

39. The advantages provided by chatbots used for shopping are useless to me.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

40. I believe chatbots used for shopping are competent.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

41. I think chatbots used for shopping are knowledgeable/intelligent.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

42. Chatbots used for shopping provide necessary information.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

43. Chatbots used for shopping provide accurate information.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Brand Equity and Brand Awareness

Considering your experience with Artificial Intelligence chatbots, please answer the following statements:

44. Which brand have you had experience using a chatbot with?

- Retail (e.g., Amazon, Boyner, BIM, Walmart, Amazon, Alibaba Group, Carrefour, IKEA, H&M, Zara)
- Technology (e.g., Apple, Google, OpenAI/ChatGPT)
- Finance (e.g., Wells Fargo, Morgan Stanley, HSBC, Barclays, American Express, Visa)
- Hospitality (Hotels e.g., Marriott, Sheraton, Hilton, Airbnb)
- Healthcare (e.g., Pfizer, Johnson & Johnson, Novartis, Merck & Co, GlaxoSmithKline, Roche)
- Transportation (e.g., Toyota, BMW, Tesla, Airbus, Boeing, Ford, Volkswagen, Honda, General Motors (GM), Mercedes-Benz)
- Entertainment (e.g., Netflix, Spotify, Amazon Prime Video)

- Food and Beverage (e.g., Starbucks, EspressoLab, Domino's, Pappajohn's)
- Education (e.g., Coursera, Udemy, Khan Academy)
- Telecom (e.g., Vodafone, We, Orange, Zain, Turkcell)
- Other:

45. Please, mention the brand name.

*

46. Are you always aware of this brand?

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

47. Are you aware of the characteristics of this brand?

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

48. Can you always remember the logo of this brand?

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

49. Do you feel that this brand is a leader in the industry?

- Strongly Disagree

- Disagree
- Neutral
- Agree
- Strongly Agree

50. Do you have an impressive (positive) memory regarding this brand?

- Yes
- No

51. From your experience with this brand, do you agree that the brand is customer-centered?

- Yes
- No

Customer Trust

Considering your experience with the brand you mentioned before, please answer the following statements:

52. This brand meets my expectations.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

53. I feel confident in this brand

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

54. This brand never disappoints me.

- Strongly disagree
- Disagree
- Netural
- Agree
- Strongly agree

55. This brand guarantees satisfaction.

- Strongly disagree
- Disagree
- Netural
- Agree
- Strongly agree

56.

This brand would be honest and sincere in addressing my concerns.

- Strongly disagree
- Disagree
- Netural
- Agree
- Strongly agree

57. I could rely on this brand to solve a problem with their product or service.

- Strongly disagree
- Disagree
- Netural
- Agree
- Strongly agree

58. This brand would make any effort to satisfy me.

- Strongly disagree
- Disagree
- Netural
- Agree
- Strongly agree

59. This brand would compensate me in some way for a problem with their product or service.

- Strongly disagree
- Disagree
- Netural
- Agree
- Strongly agree

Appendix 2. Proposal Letter for Participation in Survey (Turkish)

sayın Katılımcı,

Adım Yomna Hanafy, İstanbul Sabahattin Zaim Üniversitesi'nde MBA öğrencisiyim ve şu anda tezim için araştırma yapıyorum.

Bu çalışma, "Sosyal Medya Pazarlamasında Marka Değerini ve Tüketici Güvenini Artırma: AI Chatbot'ların Rolü" başlığını taşımakta ve AI chatbot'ların müşteri güveni ve marka değeri üzerindeki yeni rolünü ve etkisini inceliyor.

Amaç:

Bu anketin amacı, AI chatbot sistemlerini kullanan işletmelerle etkileşimde bulunan bireylerden değerli içgörüler toplamaktır. Deneyimlerinizi paylaşarak, marka sadakati, marka topluluğu, marka bağlılığı ve marka etkileşimi gibi marka değeriyle ilgili çeşitli yönlerde bu sistemlerin etkisini anlamamıza önemli ölçüde katkıda bulunacaksınız.

Gizlilik:

Katılımınız tamamen gönüllü ve anonimdir. Tüm yanıtlar katı gizlilikle işlenecek ve sadece akademik araştırma amasayın Katılımcı,

çları için kullanılacaktır. Anketten herhangi bir zaman çekinmeden çekilebilme hakkınız bulunmaktadır.

Zaman Yatırımı:

Anketin tamamlanması yaklaşık 5 dakika sürecektir. Ancak, kapsamlı bir analiz için düşünceli yanıtlar sağlamak için zamanınızı alabilirsiniz.

Bu akademik araştırmaya olan değerli katkınız ve zamanınız için içtenlikle teşekkür ederim. Katılımınız, müşteri perspektifinden AI chatbot sistemleri ile marka değeri arasındaki karmaşık etkileşimleri anlamamıza önemli bir rol oynayacaktır.

Araştırma hakkında daha fazla bilgiye ihtiyacınız varsa, araştırmacıya adresinden ulaşabilirsiniz.

Saygılarımla,

Yomna Hanafy

MBA Adayı, İZÜ