



The Digital Duo: Exploring The Impact of AI Chatbots and Digital Marketing Strategies on Consumer Purchase Intentions in Pakistan’s E-Commerce Sector

Hammad Zafar¹, Fakhre Alam Siddiqui² & Midhat Arif^{3*}

¹Karachi University Business School, Email: Hammad.zafar@uok.edu.pk

²Karachi University Business School, Email: Fakhrealam@uok.edu.pk

³Karachi University Business School, Email: midhatarif04@gmail.com

ARTICLE INFO

Article History:

Received: December 22, 2024
Revised: January 15, 2025
Accepted: January 17, 2025
Available January 19, 2025
Online:

Keywords:

AI chatbots, Digital marketing,
Purchase intention, E-commerce

Corresponding Author:

Midhat Arif

Email:

midhatarif04@gmail.com



ABSTRACT

The rise of e-commerce in Pakistan has stimulated businesses. It has turned to new tools like AI chatbots and digital marketing strategies for increasing consumer participation and stimulating purchasing intent. The aim of this study is to inspect the purchase intention of consumers in the e-commerce sector of Pakistan. On the other hand, the impact of the factors of AI chatbot i.e. responsiveness, usability, perceived trust, responsiveness is explained. Satisfaction illustrates the mediating role of the customer. In the study, data were gathered from 254 respondents through an online survey. Data was analyzed for assessing structural relationships within the model by utilizing SmartPLS 4. The results of the study show that AI chatbots significantly influence purchase intentions of consume with perceived trust, responsiveness, and usability being the most influential factors. Among the strategies of digital marketing, social media is considered the most effective channel for nurturing purchase intent followed by content marketing. On the contrary, marketing through emails did not show a significant impact. Customer satisfaction mediates the relationship between the factors of AI chatbot and strategies of digital marketing with purchase intent. Particularly, through perceived trust and response to AI chatbots and social media for content marketing and digital strategies, however, usage and email marketing did not show any mediation effects. This research provides effective insights for e-commerce businesses in Pakistan. It sheds light on the essentialism of leveraging AI chatbot capabilities and tailored digital marketing approaches for increase customer satisfaction and ultimately purchase intent. As the sector of e-commerce continues to expand, businesses need to focus on such critical areas to remain competitive and meet evolving demands of consumers.

Introduction

In the world of technological evolution, digital counterparts have transformed the landscape of marketing. AI and digital marketing have dramatically changed purchase intent of consumer and their engagement. Ecommerce is considered fast growing sectors. It has embraced AI and utilizes the digital market for strengthening the customer journey in different aspects. The aim of study is to examine vital role of AI chatbots and the strategies of digital marketing in shaping purchasing intentions of customers in the thriving market of e-commerce in Pakistan (Luo, 2022). Before inspecting and analyzing the AI's role, chatbots and the strategies of digital marketing in e-commerce sector of Pakistan. It is vital for understanding the present state of the sector of e-commerce in the country. Growing e-commerce market in the country, prevalence of internet and the utilization of smartphones has increased rapidly (Hasan & Rizvi, 2022). Platforms of online have gained popularity by offering different products and services for accessibility of customers among the population that understands technology (Ali et al., 2021) because new businesses are growing rapidly in Pakistan. So, they are looking for new ways that are innovative and creative to meet expectations of customer and compete in industry of e-commerce.

Understanding customer behavior and predicting current trends is a vital part of AI applications in the industry of e-commerce. It has a notable role in carving out customer preferences (Pallathadka et al., 2023). AI algorithms analyze browsing and purchase history of consumers for understanding their personal requirements (Rashid et al., 2022). Camphor Integrating Chatbots with AI is fast becoming the growing application (Van E., 2019). Chatbots and other AI-powered virtual assistants take customer service to the next level by responding quick question, recommend relevant products, resolve issues, and guide customers through their purchases (Fonseka, et al., 2022). Ecommerce platforms i.e. Daraz, Amazon, and Shopify are using chatbots for increase overall user satisfaction by providing assistance. Digital marketing has changed a lot from past 20 years and has evolved with expanding digital world. Marketing through digital platforms include different activities i.e. email marketing. Affiliate Marketing Social media marketing content marketing and search engine optimization (SEO). As noted by Chaffey & Ellis-Chadwick (2019), integrating AI into digital marketing strategies has improved marketing performance and an organization's ability for engaging with buyers to promote participation in targeted manner. As a result, it affects purchase intention of buyers.

In accordance with Engel et al., (1995) buying intentions is defined as propensity of buying specific good and services. Generally, as stated by Hajli (2015), several variables are impacted the purchase intentions of consumers such as individual preferences, trust and perceived risk. AI incorporation into strategies of marketing through digital platforms and providing facilities like improving customization, offering real-time information, recommendation and optimizing the customer experiences might impact these variables which ultimately influence consumers desire to purchase. As E-commerce businesses are growing in Pakistan, consumer purchasing behavior has changed. Artificial intelligence gives computers the potential to think, accomplish tasks better than a human which include image recognition, voice recognition, videos and responding queries quickly. For marketers incorporating AI helps them to achieve their business goals and target the customer base more efficiently. AI chatbots are replacing human virtual assistants. AI chatbots proactively recommend products and services deal with the customer's queries, offer customization which ultimately leads to the satisfaction of customer s. Tu et al., (2013) observed that satisfaction among customers is defined as the attitude and intentions for repurchasing the particular services or products which contribute to company's future growth and increase organization's revenues. Fornell C (1992) also stated that customer satisfaction is the customer

experience which evaluation is held on the basis of total buying and the utilization experience of provided services.

AI chatbots have five factors which influence the consumers and give satisfaction which eventually leads to purchase intentions. These factors include responsiveness of chatbots, usability, perceived trust, accessibility and empathy. The aim of the study is to explain complex link between AI chatbots, digital marketing strategies, satisfaction among consumers and consumer purchase intentions. For marketers, it also provides insights to use best practices by using AI-driven techniques to grow their business and to target the customers in a more efficient way.

Following are the research questions:

1. How and what influence does AI chatbots has on the customer's purchase intentions?
2. How Digital marketing strategies influence the buying intentions of consumers?
3. How customer satisfaction plays a vital role as a mediator between AI chatbots, strategies of digital marketing and customer purchase or buying intentions?

Problem Statement

In the past few years, the Pakistan's industry of e-commerce has seen a growing move towards AI and digital marketing, driven by global trends and technological advancements. Even though e-commerce businesses in Pakistan are gradually utilizing AI tools like AI chatbots and strategies of digital marketing, there lack of knowledge still present on role of such changes on intentions of buyers to purchase and also chatbot adoption for consumer satisfaction. Current literature sheds light in a variety of contexts but there is still a lack of study and understanding towards AI chatbots and the strategies of marketing through digital platforms in E-commerce industry of the country. This work aims to offer thorough grasp of the complexities which are associated with using AI chatbots and digital marketing techniques for improving the intentions to purchase. The study will examine the underlying mechanism which has influence on the customers and leads to satisfaction within the particular contexts of Pakistan's e-commerce industry.

This problem statement establishes the framework for research that attempts to gather deep understandings of effects of AI chatbots and digital marketing tactics on consumer behavior in industry of e-commerce in Pakistan.

Gap Analysis

This research addresses the gap that there is no study conducted on role of AI chatbots and digital marketing strategies in e-commerce industry of Pakistan; only few researchers have looked into the role of AI in E-commerce, brand image and consumer engagement. However, there is not enough research in Pakistan as compared to researches conducted internationally. This study gives notable information and insights into the effectiveness and efficiencies of digital marketing techniques and role of AI chatbots which influenced the intentions of Pakistani customer for purchasing. While the satisfaction of customer is vital driver in consumer behavior, the role of the satisfaction of customer as a mediator is still underexplored in Pakistani e-commerce market. This study gap is significant because different AI chatbots factors and digital marketing strategies affect the consumer attitudes and purchase intentions depending on the industry.

Literature Review

Artificial Intelligence (AI)

One of the new technologies in the computer science field is AI. It has changed the business world. According to Haenlein & Kaplan (2019) Artificial intelligence can be said as an “capability of the machine’s for interpreting the data and to learn from the data and in order to attain such goals, objectives and tasks through adjustable adaptations”.AI has often been used in efforts to develop AI systems with cognitive abilities such as reasoning, producing insightful results, interpreting information and learning through experience (Copeland, 2007). This smart machine has the capability of thinking and acting like a real human. A wide range of exceptional opportunities is provided by artificial intelligence. As stated by (Chien et al., 2020, Kumar et al., 2023), AI can be considered as one the remarkable and most updated technological advancement that can change manual labor with its most higher intellectual levels and also mental levels in different fields. In accordance with Glikson & Woolley, (2020) AI is considered as emerging technologies and is designed to mimic the intelligence of human and engage with its environment. As stated by Sadeq et al., (2023) AI is now applied across nearly every field. It has become very significant tools in the sector of digital marketing, banking, healthcare and many more. To put AI in a nutshell, it is a machine that can mimic human intelligence, performing and handling tasks like reasoning, hassle-solving, language comprehension and taking decisions. Artificial intelligence relies on the algorithm, models and various techniques which make the computer capable of performing these complex tasks.

AI Chatbots and Customer Satisfaction

With digitalization growing at an unprecedented pace, the number of online consumers is expanding rapidly. More people are turning to e-commerce for their shopping needs, drawn by the convenience and variety it offers. This surge in e-consumers has created challenges but also notable opportunities for different businesses, as they strive to fulfill increasing demands for faster, more personalized and ideal experiences. As more individuals engage in online shopping, companies are finding it essential to enhance their digital presence and adapt their strategies for catering to this growing, varied audience. One of the fastest-growing implementations of AI is the integration of Chatbots in the industry of E-commerce. According to Oktavia, & Arifin, (2024) In this specific industry Chatbots refers to an application of artificial intelligence which enhances the shopping experiences by assisting the customers at various stages of the purchasing process journey. Chatbots utilize artificial intelligence for offering different services like personalization, handling pre-purchase queries, product recommendation, image recognition, speech recognition and guide users to all product categories, providing them tailored shopping experiences. These chatbots deliver 24/7 assistance, freeing human representatives for more complex tasks while enhancing user’s experience.

In the e-commerce industry of Pakistan, AI adoption has significantly impacted customer satisfaction and purchase intentions. According to Muhammad, et al., (2023), many platforms of e-commerce in Pakistan such as Daraz, Amazon and Shopify employ chatbots to interact with customers, provide immediate assistance and enhance overall customer satisfaction. This improvement in customer experience naturally leads to an increase in purchase intentions. The term Customer satisfaction is referring as “how efficiently a business fulfills customer’s demands and customer’s requirements” capturing their overall exposure with offered services. Higher rate of satisfaction among customer is often linked to enhanced loyalty of customer, repeated purchases,

and the growth of business's revenue. When it comes to AI chatbots, satisfaction is typically measured by how efficiently these bots respond to customer questions, their ability of providing proper engagement across channels consistently, and the level of personalization they offer (Kappi, & Marlina, 2023). AI chatbots have five factors which influence the consumers and give satisfaction which eventually leads to purchase intentions. These factors include responsiveness of chatbots, usability, perceived trust, accessibility and empathy. Together, these factors not only enhance customer satisfaction but also encourage repeat interactions and positive purchase intentions in Pakistan's e-commerce sector Vu, et al., (2022).

Digital Marketing

Every moment, the world is becoming more digitalized, globalized and interconnected. The fast development of social media is paralleling the expansion of internet, creating new avenues for connection and communication across the globe (Gkikas & Theodoridis, 2019). According to Putri, (2021), digital Marketing is defined as "any business practices, procedures or marketing initiatives which utilize digital technology to drive customer engagement, retention and satisfaction". Digital media and digital data, which include emails, web and the wireless platform regulates every aspect of marketing through digital platforms (Chaffey & Ellis-Chadwick, 2019).

According to Dara (2016), Digital marketing has a vital role in expanding the reach of consumer perceptions and shaping their decisions of purchasing. Business industry of this era has heavy dependency on advancements of technology. So, it can be practically difficult to overlook the essentialism of marketing through digital platforms which can have impact on entire image and reputation of a company. So, it can also an impact the company's sales (Vaibhava, 2019). The market of E-commerce in Pakistan is transforming daily life of people making it more convenient and more innovative (Ashraf, Iqbal, 2023). Digital Marketing allows brands to reach consumers more effectively through targeted advertising, customer engagements and personalized campaigns.

According to Imtiaz, et al., (2019). Pakistan has a population of around 220 million people. It has roughly 30 million users of internet. A significant portion of internet users in Pakistan are active on social media platforms. This growing internet usage is driving a major shift in marketing dynamics, fueling the rise of digital marketing (Imtiaz et al., 2019). With the reach of internet, users now have access to products from anywhere globally (Ko et al., 2004). Digital marketing keeps customers informed about the latest trends, underscoring its role in connecting consumers with brands. A brand's digital presence and ease of access significantly influence consumer purchasing decisions, often leading to higher levels of customer satisfaction (Chen & Lin, 2019).

Digital Marketing Strategies

Digital marketing comprises of various essential strategies such as marketing through social media, Content Marketing, Affiliate Marketing, Marketing through Emails and Native Advertising, Pay Per Click (PPC) and Search Engine Optimization (SEO).

Consumer Purchase Intention

Soebagyo (2014) observed that intention of purchasing reflects consumer behavior towards specific products or services, expressed as a willingness or ability to buy. As stated by Ajzen, (1991) Intentions is an indicator of the willingness of individuals to get engaged in certain behavior. In e-commerce, online purchase intention means the wish of consumer to make purchase intention via online platforms. Pavlou (2003) suggests that the intention to buy is an accurate

gauge of consumer behavior, prompting businesses to examine consumer intentions as a basis for shaping effective marketing strategies. Alba et al., (1997) states that platforms of e-commerce enables consumers to simplify their decision- making by offering a wide selection, tools for filtering information reliability and options for comparing products and services.

Role of AI Chatbots and Digital Marketing strategies on Purchase Intention

AI chatbots and digital marketing strategies have huge influence on purchasing intentions of customers through improvement in the interaction of consumer, providing a tailored experience and increase convenience in decision making among consumers. In accordance with Brandtzaeg & Folstad, (2017), AI chatbots provide customer support for all 24 hours and significantly handle inquiries of customers quickly This promotes positive perceptions about the brand. Plus, improving the process of purchase process can be helpful for chatbots to improve user satisfaction and drive the intent of purchase. Digital marketing strategies i.e. personalized content and targeted advertising increase purchase intent. De Keyser et al. (2015) observed that personalized advertising on the basis of consumer data, interests, and history of browsing provides recommended relevant services to buyers so it can strengthen their purchase intentions. Marketing through social media also has a crucial role in promoting awareness of brand and engagement of customer and considered as two powerful predictors of purchasing power. In accordance to Ansari & Mela (2003), email marketing and advertising through social media build on such interactions by strengthening brand recall and maintaining the interest of consumers over time. This shows that purchase intent of consumers has increased. AI chatbots can be helpful for brands to align personalized user interactions and effective techniques of digital marketing with the expectations and demands of consumer. This makes them more likely to make online purchase. Such tools can significantly increase customer satisfaction. It also increases consumers' brand loyalty. This has contributed to sustainable development in and development of Pakistan's e-commerce sector.

Methodology

Research Hypotheses

In the sector of e-commerce, different of AI chatbots factors and digital marketing strategies can shape the experience of consumer and driving purchase decisions. This study narrows down its focus to highlight the three most prevalent AI chatbots factors and three most widely implemented digital marketing strategies. This study identifies three key factors for AI chatbots factors responsiveness, usability and perceived trust citing research by Vu et al., (2022). These factors are essential for user interactions with chatbots. Additionally, the study highlights three digital marketing strategies: Content Marketing, Social Media, Email Marketing as outlined by Forbes (2014). The study illustrates the mediating role of satisfaction of customer in linking with AI chatbot factors and digital marketing strategies to purchase intentions.

Content Marketing

Content marketing can be considered as a way of engaging clients or buyers without direct sales efforts (Poradová, Monika, 2020). Studies demonstrate that quality content, such as blog posts, videos, and product guides, builds brand trust, educates consumers, and influences purchase decisions. According to a study Hollebeek, et al., (2019) revealed that 70% of clients give preference to learning about brand through internet instead of ads, which shows the demand for valuable, informative content in e-commerce. Additionally, content marketing boosts search engine rankings, which can directly enhance website traffic and sales. According to Forbes (2024),

businesses with active content marketing strategies see conversion rates six times higher than those without, underscoring its critical role in e-commerce success. Thus, the proposed hypothesis regarding the role of content marketing is:

H₁: Content Marketing has a positive effect on Customer satisfaction within the E-commerce industry.

Email Marketing

Email marketing is a powerful tool in e-commerce, driving customer engagement, retention, and conversion rates. According to the research of Nobile, et al., (2023) highlights that personalized email strategies significantly enhance customer loyalty, with better conversion rates than generic emails. Porch Group Media (2022) found that 80% of consumers are more likely to purchase based on a marketing email, especially when personalized with product recommendations. Email can be considered as a powerful channel that allows marketers to significantly engage consumers by personalizing content and giving them offers closely aligned with individual requirements. This customization can be helpful in improving the perception of consumer of a business. It can promote loyalty and recognition of brand (Samantaray & Pradhan, 2020). This research confirms that email marketing remains a notable component in making sure sustainable ecommerce success. That is why, the proposed hypotheses regarding the impact of email marketing are:

H₂: Email marketing has a significant and positive effect on the satisfaction of customer in the industry of e-commerce.

Social Media

Social media is considered as a vital part of the e-commerce industry by driving participation of consumer, creating brand awareness, and influencing decisions regarding purchasing. Yadav & Rahman, (2017) research observed that platforms of social media are powerful tools for promoting brands and interacting directly with customers. It provides a more personal and relatable connection between brands and consumers. According to Miah, et al., (2022) Platforms like Instagram, Facebook, and Twitter allow companies to showcase products, gather consumer feedback, and utilize targeted advertising, significantly impacting consumer purchase intentions. Social media's interactive features, such as comments, reviews, and likes, create social proof that positively affects consumer trust and purchase behavior. Chandra, et al., (2022) research has found that analytics of social media can be helpful for e-commerce companies to gain significant insights into the behavior of consumers by create a personal marketing strategy. By analyzing data, trends and preferences can be monitored by businesses, streamline the marketing efforts for targeting the right audience with customized messages. This data-driven approach can be helpful in maximizing reach and effectiveness. This makes social media a cost-effective way for acquiring and retaining customers. So, the proposed hypothesis regarding the role of social media includes.

H₃: There is a positive effect of social media on customer satisfaction in the industry of e-commerce.

Perceived Trust

AI chatbots are important in building trust in the sector of e-commerce. Adam et al., (2020) research has highlighted that chatbots promote trust among customers by providing personalized and immediate support. This increases satisfaction among consumers and promotes greater engagement. When such chatbots adopt human-like qualities i.e. showing empathy and

maintaining a natural conversational style, consumers may view such chatbots as more trustworthy. Also, ensuring transparency and security of data in chatbot interactions is vital for cultivating trust. Trust of consumers results in consumers tend to respond more positively when they feel confident in protecting their privacy (Siau & Wang, 2018), so the trustworthiness of an AI chatbot has a crucial important role in purchasing decisions of buyers. It also promotes long-term loyalty in ecommerce

H4: Perceived trust has a significantly positive effect on the satisfaction of customers within the industry of e-commerce

Responsiveness

AI chatbots improve e-commerce by providing fast and personalized customer service. They can handle multiple questions, immediate respond and adaptation to the needs of the user and it Improves customer satisfaction and engagement. A research by Brandtzaeg, et al., (2017) demonstrates that AI chatbots positively influence the decisions of purchasing by responding quickly to the inquiries of customer. This promotes trust and comfort. AI-driven chatbots improve customer retention by offering timely assistance and tailored recommendations (Ortakci, et al., 2024). Moreover, Responsiveness refers to delivering prompt and easily accessible services to customers, ensuring a smooth and convenient experience. Chen, et al., (2021). Thus, the proposed hypothesis regarding the role of AI factor responsiveness is as follows:

H5: Responsiveness has a positive effect on Customer satisfaction within the E-commerce industry.

Usability

Usability refers to the quality or characteristic that measures how simple and effective a human-computer interface is in helping users achieve a specific objective with ease, efficiency, and satisfaction (Petre et al., 2006). Usability metrics, as noted by Finstad (2010), highlight key aspects that contribute to an effortless user experience. Additionally, a 2019 survey by Userlike revealed that customers tend to view businesses that use chatbots on their e-commerce platforms as forward-thinking and innovative rather than cost-cutting. This perception stems from chatbots' abilities to start conversations and showcase product or service features interactively (Joyce and Kirakowski, 2015). By offering trustworthy information, chatbots can make customers feel as though the interaction is tailored to their needs, highlighting that credibility is crucial in fulfilling customer expectations without introducing new challenges (Prentice et al., 2019). Thus, the proposed hypothesis regarding the role of AI factor usability is as follows:

H6: Usability has a positive effect on Customer Satisfaction within the E-commerce industry.

Customer Satisfaction

Customer satisfaction has significant role in influencing the intention of purchase in e-commerce. Research shows that satisfaction can be acting as a mediator and also as a direct driver of purchase decisions. Elements i.e. the website's quality, easiness in utilization, and reliable products significantly enhance customer satisfaction levels According to Saleem, et al., (2022) study revealed that higher satisfaction levels due to better website quality and order convenience positively impact purchase and repurchase intentions. Additionally, the availability of qualitative information and convenient return policies further enhance satisfaction among customer and drive loyalty in digital environments of shopping. Another study sheds lights on the essentialism of trust

and satisfaction in e-commerce platforms, showing that there are more chances of satisfied and loyal customers to engage in purchases repeatedly due to positive prior experiences Savastano, et al., (2024).

H₇: Customer Satisfaction within the industry of E-commerce has a positive effect on the intention of purchase.

H_{8(a-f)}: Customer Satisfaction within the E-commerce industry as a mediating factor:

H_{8a}: Customer Satisfaction mediates the link between Content Marketing and purchase intention of buyers.

H_{8b}: Customer Satisfaction mediates the relationship between E-mail Marketing and purchase intention of purchasers.

H_{8c}: Customer Satisfaction mediates the relationship between Social Media and purchase intention of customers.

H_{8d}: Customer Satisfaction mediates the relationship between Perceived Trust and purchase intention of consumers

H_{8e}: Customer Satisfaction mediates the relationship between Responsiveness and purchase intention buyers.

Measures

This paper employed scales adapted from prior research, which had been tested in various contexts. These scales were adjusted for aligning with the particular requirements of study and for validating the proposed theoretical model. Questionnaire consisted of two primary sections. The 1st section collected demographic information about the participants, which include their age, gender, education, income, and occupation. The next section required respondents for assessing different aspects of effect of AI chatbots and strategies of digital marketing. Responses were recorded on a 5-point Likert scale, ranging from "strongly disagree" to "strongly agree." This section comprised 30 questions divided into the following categories: content marketing (3 questions), social media marketing (4 questions), email marketing (3 questions), and factors related to AI chatbots. The chatbot-related factors included responsiveness (4 questions), usability (4 questions), perceived trust (4 questions), customer satisfaction (4 questions), and purchase intention (4 questions). After the questionnaire was drafted, it was reviewed by two experienced MBA marketing lecturers for expert feedback. Subsequently, a pilot study involving 30 key individuals in the sector of e-commerce was conducted for evaluating clarity and relevance of the questions. On the basis of their feedback, several adjustments were done for eliminating ambiguities and enhance the questionnaire's overall quality and effectiveness.

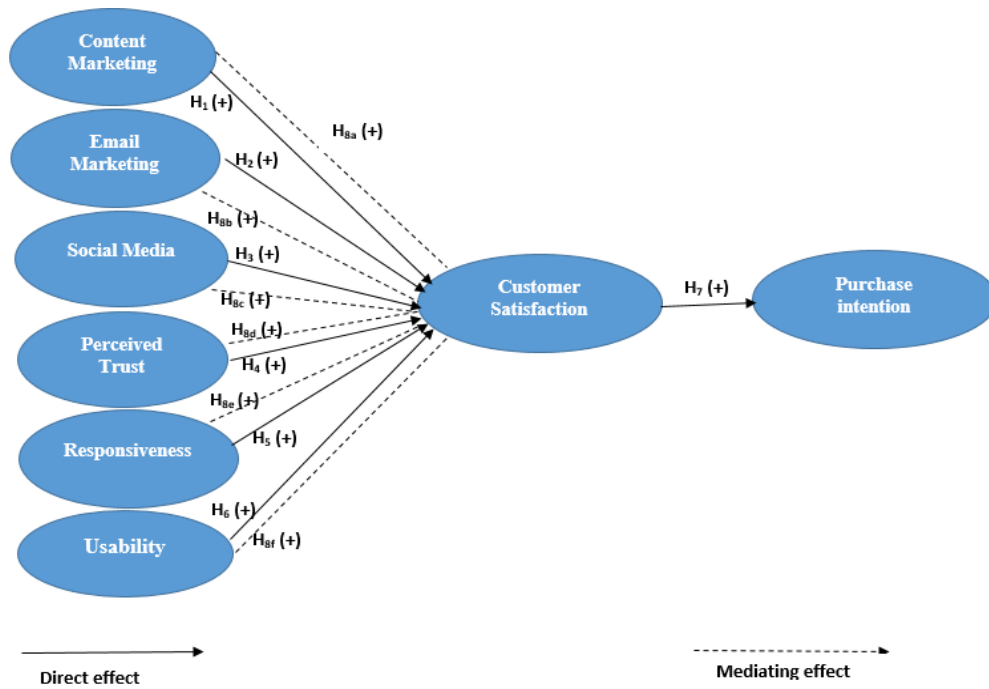


Figure 1: Proposed Research Model

Data Collection for the Research

There was an online conduction of surveys. Data were gathered in mid-September 2024. Participants primarily consisted of people intending to purchase through the apps and websites of e-commerce in e-commerce sector of Pakistan. The survey was particularly aimed at people involved in decision of purchasing in Pakistani e-commerce. The majority of respondents were between the ages of 18 and 27, providing valuable insights into the impact of AI chatbots. and strategies of digital marketing. A total of 254 responses were received that met criteria for a completed questionnaire. By providing proper and relevant information, partial least squares structural equation modeling (PLS-SEM) was utilized for analyze the data. This method is considered as most appropriate for the purposes of this study, in accordance with to Ringle et al. PLS-SEM was performed by utilizing a test version of the software for assessing the reliability of the measurement and parameter estimation of the model. The analysis was performed in two steps i.e. measurement model estimation and structural evaluation of model (Hair et al., 2010). Such steps ensure a robust and proper evaluation of the underlying theoretical framework, proposal and applications.

Results

Demographic Statistics of Participants

A total of 254 valid observations were accessed and the demographic details are shown in Table 1, with a male majority of 69.7% (177 respondents) compared to 30.3% females (77 respondents). The dominant age group was 18–27 years, comprising 90.2% (229 respondents), followed by 7.9% (20 respondents) aged 27–37, and less than 2% in older age brackets. Most of the participants held a bachelor’s degree (74.8%, 190 respondents), while 13.8% had a high school education, 10.6% a master’s degree, and 0.8% fell into the "Other" category. By occupation, 39.4% were employed, 38.2% unemployed, 10.6% in business, 7.9% self-employed, and 3.9% in other roles.

income distribution revealed that 40.2% earning between 50,000–100,000 PKR, 24% between 100,000–150,000 PKR, 10.6% between 150,000–200,000 PKR, and 25.2% earning above 200,000 PKR. This diverse demographic provides a comprehensive overview of consumers and decision-makers in Pakistan's e-commerce sector.

Table 1: Demographic profile analysis

| Items | Classification | Frequency | Percentage (%) |
|----------------------|---------------------|-----------|----------------|
| Age | 18-27 | 229 | 90.2% |
| | 27-37 | 20 | 7.9% |
| | 37-47 | 2 | 0.8% |
| | 47 & above | 3 | 1.2% |
| Gender | Male | 177 | 69.7% |
| | Female | 77 | 30.3% |
| Qualification | High School | 36 | 13.8% |
| | Bachelor's degree | 190 | 74.8% |
| | Master's degree | 27 | 10.6% |
| | Others | 2 | 0.8% |
| Occupation | Employed | 100 | 39.4% |
| | Self-employed | 20 | 7.9% |
| | Business | 27 | 10.6% |
| | Unemployed | 97 | 38.2% |
| | Other | 10 | 3.9% |
| Family Income | 50,000-100,000 PKR | 102 | 40.2% |
| | 100,000-150,000 PKR | 61 | 24.0% |
| | 150,000-200,000 PKR | 27 | 10.6% |
| | 200,000 & above PKR | 64 | 25.2% |

| Table 2 | | | | | | |
|---|---|----------------|----------|-------|-------|-------|
| Research construct | Items | Outer Loadings | α | Rho A | C.R | AVE |
| Content marketing (Update from Hays et al., 2013) | CM1. Due to advertising of content, there can be much information | 0.704 | 0.705 | 0.716 | 0.790 | 0.557 |
| | CM2. In content advertisement, it often links to other channels i.e. YouTube, Facebook. | 0.725 | | | | |
| | CM3. I became aware of the brand due to Advertising content | 0.806 | | | | |
| Social media (Update from | SM1. This product can bring required knowledge as it is a | 0.705 | 0.740 | 0.743 | 0.837 | 0.563 |

| | | | | | | |
|--|--|-------|-------|-------|-------|-------|
| Alalwan, 2018) | good productreference | | | | | |
| | SM2. Information can be provided on time | 0.773 | | | | |
| | SM3. New information can be updated effectively | 0.776 | | | | |
| | SM4. Provide product information I need quickly | 0.744 | | | | |
| Email marketing (Update from Jenkins, 2008) | EM1. I often receive product introduction emails sent in detailed content with my own name | 0.754 | 0.777 | 0.794 | 0.871 | 0.693 |
| | EM2. I am interested and I want to learn more about the information of products after reading the mail | 0.870 | | | | |
| | EM3. Contacting buyers via email is common forme. | 0.868 | | | | |
| Usability (Updated from Chen, et al., 2021) | (U1) Learning the navigation through websites of E-Commerce is simple with chatbot assistance | 0.786 | 0.811 | 0.820 | 0.875 | 0.638 |
| | (U2) With Chatbot, websites of E-Commerce become easy and effortless to use | 0.810 | | | | |
| | (U3) A complete solution of my issues is provided by Chatbot | 0.842 | | | | |
| | (U4) The Chatbot has the ability of solving problems | 0.754 | | | | |
| Responsiveness (Updated from Chen, et al., 2021) | (R1) The replies of Chatbot are quick | 0.812 | 0.818 | 0.823 | 0.879 | 0.645 |
| | (R2) Getting in contact with Chatbot is easy | 0.835 | | | | |
| | (R3) The Chatbot is always available when I need | 0.824 | | | | |
| | (R4) The Chatbot provides credible advice | 0.739 | | | | |
| Perceived Trust (Updated from Vu ., et al 2022) | (PT1) I feel that information provided by the Chatbots is honest and authentic | 0.788 | 0.828 | 0.831 | 0.886 | 0.661 |
| | (PT2) I feel that Chatbots have clarity of services provided and reliable opinions. | 0.824 | | | | |
| | (PT3) I feel Chatbots in E- | 0.861 | | | | |

| | | | | | | |
|--|---|-------|-------|-------|-------|-------|
| | Commerce services are trustworthy | | | | | |
| | (PT4) Chatbots have the vital expertise capability of providing the service that i required | 0.775 | | | | |
| Customer Satisfaction (Updated from Vu ., et al 2022) | (CS1) I am glad with utilizing Chatbot | 0.844 | 0.889 | 0.890 | 0.923 | 0.751 |
| | (CS2) I am satisfied with the pre-purchase experience of using Chatbot (e.g product search, quality of information on products or services, product comparison) | 0.853 | | | | |
| | (CS3) with my Chatbot experience, I feel satisfied | 0.897 | | | | |
| | (CS4) the recommendation is that others I should use the Chatbot | 0.871 | | | | |
| Purchase Intention (Updated from Khandelwal ., et al 2024) | (PI1) I give preference for buying the products recommended by the AI by using histories of search | 0.786 | 0.803 | 0.877 | 0.879 | 0.709 |
| | (PI2) while browsing the products I plan to purchase online | 0.842 | | | | |
| | (PI3) I tend to buy products in the future endorsed by influencers on social media. | 0.894 | | | | |
| | (PI4)The product's quality plays a vital role in shaping my decision to make a purchase. | 0.677 | | | | |

Table 3. Fornell-Larcker criterion

| Research Constructs | CM | CS | EM | PI | PT | R | SM | U |
|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 1:Content Marketing | 0.747 | | | | | | | |
| 2:Customer Satisfaction | 0.339 | 0.866 | | | | | | |
| 3:Email Marketing | 0.353 | 0.324 | 0.832 | | | | | |
| 4:Purchase Intention | 0.116 | 0.191 | 0.152 | 0.842 | | | | |
| 5:Perceived Trust | 0.317 | 0.683 | 0.446 | 0.251 | 0.813 | | | |
| 6:Responsiveness | 0.271 | 0.696 | 0.315 | 0.174 | 0.591 | 0.803 | | |
| 7:Social Media | 0.551 | 0.420 | 0.382 | 0.218 | 0.447 | 0.428 | 0.750 | |
| 8:Usability | 0.367 | 0.580 | 0.563 | 0.236 | 0.572 | 0.539 | 0.519 | 0.799 |

Table 4. Heterotrait-Monotrait Ratio (HTMT)

| Research Constructs | CM | CS | EM | PI | PT | R | SM | U |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|---|
| 1:Content Marketing | | | | | | | | |
| 2:Customer Satisfaction | 0.455 | | | | | | | |
| 3:Email Marketing | 0.542 | 0.386 | | | | | | |
| 4:Purchase Intention | 0.162 | 0.213 | 0.187 | | | | | |
| 5:Perceived Trust | 0.440 | 0.793 | 0.545 | 0.299 | | | | |
| 6:Responsiveness | 0.380 | 0.794 | 0.380 | 0.199 | 0.697 | | | |
| 7:Social Media | 0.833 | 0.516 | 0.500 | 0.263 | 0.571 | 0.543 | | |
| 8:Usability | 0.539 | 0.676 | 0.702 | 0.269 | 0.688 | 0.642 | 0.667 | |

Model Assessment

The testing of the conceptual model was carried out in two phases using PLS- SEM analysis. The first phase focused on assessing the measurement model while the second phase examined the structural model.

Measurement Model (Outer Model)

The Measurement and Structural components of the model were simultaneously estimated by using Partial Least Square (PLS) path modeling. Compared to conventional covariance-based methods, PLS, a component based structural equation modeling (SEM) tool, has a number of advantages. According to current market studies its use has grown in popularity. The variance - based approach known as PLS is especially good at handling issues like inclusions of categorical variables, moderating effect and difference between formative and reflective measures. Furthermore, PLS can handle complicated models without encountering identification issues Maximizing the explained variance, R2 values in each, dependent variable is the main objective of PLS. For the assessment of internal consistency reliability Cronbach’s alpha, composite reliability, and RhoA coefficient are the coefficient applied. Outer loading of the manifest variables or observed variables and Average Variance Extracted (AVE) was examined through convergent validity. The scale is considered acceptable when the Average variance extracted value exceeds 0.5

and the outer loading value is greater than 0.7. To assess the significance of data, a Bootstrap procedure with 5,000 resamples was performed.

Table 2 shows the reliability of the construct is supported, as indicated by Cronbach's Alpha values between 0.7-0.8, composite reliability ranges between 0.8-0.9 and rhoA coefficients is >0.5 consistent with the criteria set. The PI4 variable, with an outer loading of 0.688 (below the recommended threshold 0.7) was removed from the model based on the convergent validity assessment. Therefore, after removing both the variables the study has met the criteria with satisfactory AVE and outer loading values for all the indicators. Three indexes are used to evaluate the discriminant validity which include Cross loadings coefficient, Fornell-Larker criterion, and Heterotrait-Monotrait Ratio of Correlations (HTMT). According to Table 3, the Fornell-Larker criterion confirms discriminant validity, as the square root of each construct's AVE is greater than its correlations with other constructs. Furthermore, Table 4, shows HTMT values below 0.9, reinforcing discriminant validity.

Structural Model (Inner Model)

Direct Impact of Variables

To assess the multicollinearity between the independent variables, the Variance inflation factor (VIF) was applied. All variables showed Variance inflation (VIF) ranging from 1.17 to 2.91, which falls well within the recommended threshold range of 3.3 or below. This indicates no issues with multicollinearity or common method bias. As shown in Table 5 and Figure 2, with over 95% confidence level, the relationships represented by H₁, H₃, H₄, H₅, H₆, and H₇ are statistically significant in the theoretical model. The other relationship which is H₂, does not reach the 95% significance level. The benchmarks for R² value are of 0.19, 0.33, and 0.67, representing weak, moderate, and strong levels, respectively. Based on the results presented in Table 5 and Figure 2, the variable Customer Satisfaction has an R² value of 0.625, which means that the independent variables in the model explain 62.5% of the variance in CS. It indicates a strong explanatory power. Similarly, the variable Purchase Intention has an R² value of 0.367, which means that the independent variables in the model explain 36.7% of the variance in PI reflecting moderate level of explanatory power.

Table 5. Hypotheses testing results

| Examined Relationships | Coefficient | t-value | p-value | Supported hypothesis |
|--|-------------|---------|---------|----------------------|
| H ₁ : Content Marketing-> Customer Satisfaction | 0.215 | 2.946 | 0.003 | Support |
| H ₂ : Email Marketing->Customer Satisfaction | -0.094 | 1.529 | 0.126 | Reject |
| H ₃ : Social Media -> Customer Satisfaction | 0.347 | 4.974 | 0.001 | Support |
| H ₄ : Perceived Trust -> Customer Satisfaction | 0.365 | 5.557 | 0.000 | Support |
| H ₅ : Responsiveness -> Customer Satisfaction | 0.393 | 6.032 | 0.000 | Support |
| H ₆ : Usability -> Customer Satisfaction | 0.192 | 2.489 | 0.013 | Support |
| H ₇ : Customer Satisfaction -> | 0.191 | 3.238 | 0.001 | Support |

| | | | | |
|--|--|--|--|--|
| Purchase Intention | | | | |
| R ² Customer Satisfaction = 0.625 | | | | |
| R ² Purchase Intention = 0.367 | | | | |

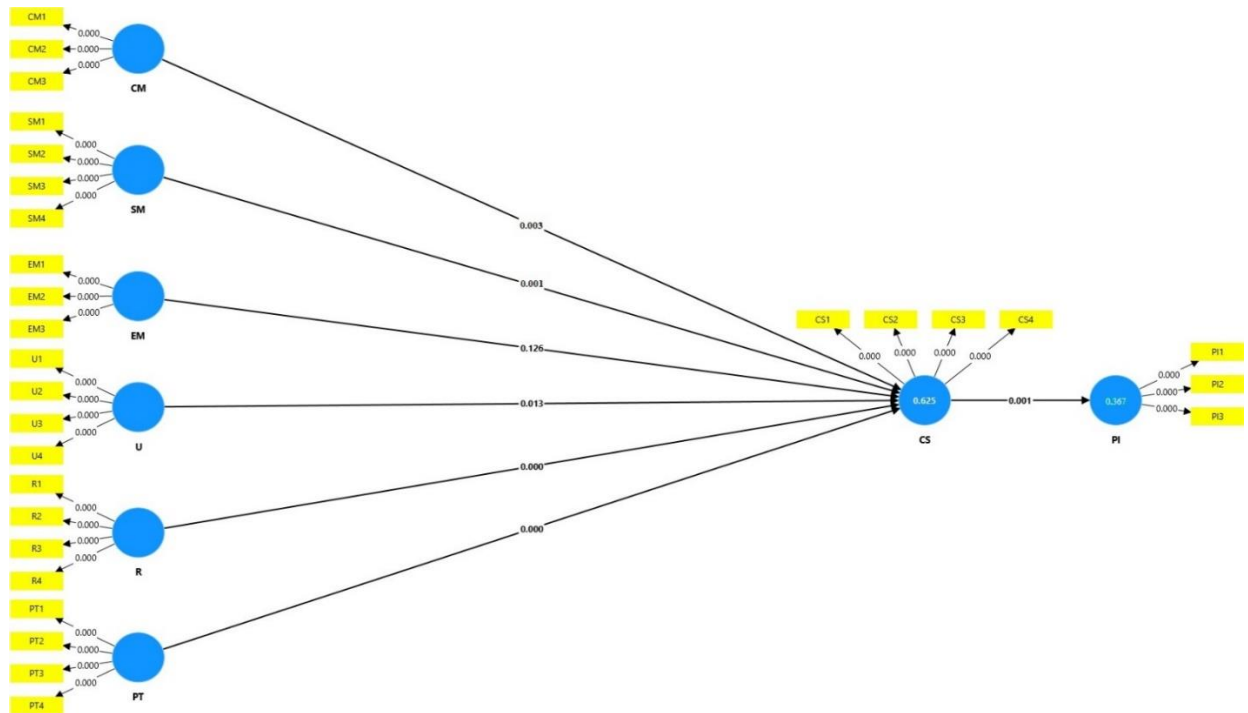


Figure 2: PLS-SEM Analysis Results of the Theoretical Model

Mediating Effects

The objective of the work is to evaluate the vital role of satisfaction of customer in relationship between three forms of digital Marketing I.e., Content Marketing, Email Marketing, Social Media and three AI chatbot factors: Perceived Trust, Responsiveness and Usability on Purchase intentions in the industry of e-commerce.

| Examined Relationships | Coefficient | t-value | p-value | Supported hypothesis |
|--|-------------|---------|---------|----------------------|
| Content Marketing -> Customer Satisfaction -> Purchase Intention | 0.087 | 2.766 | 0.006 | Support |
| Email Marketing -> Customer Satisfaction -> Purchase Intention | -0.018 | 1.295 | 0.195 | Reject |
| Social Media -> Customer Satisfaction -> Purchase Intention | 0.151 | 3.442 | 0.001 | Support |
| Perceived Trust -> Customer Satisfaction -> Purchase Intention | 0.070 | 2.768 | 0.006 | Support |

| | | | | | |
|--|----------|-------|-------|-------|---------|
| Responsiveness -> Customer Satisfaction -> Intention | Purchase | 0.075 | 2.790 | 0.005 | Support |
| Usability -> Customer Satisfaction -> Intention | Purchase | 0.037 | 1.793 | 0.073 | Reject |

Discussion

The paper intended the evaluation of the role of AI chatbots and Digital Marketing strategies on purchase intentions of consumers within Pakistan’s e-commerce industry, there is particular focus on the satisfaction among customer as a mediator. Investigation highlighted the significance of specific digital marketing strategies: Content marketing, Email marketing and Social media while also examining key features of AI chatbots namely: Responsiveness, Usability and Perceived trust. Six of the seven hypotheses were supported. This is consistent with the results of previous studies and provides notable insights into the adoption of AI and digital marketing strategies in developing e-commerce sector of Pakistan. Three forms of digital marketing have been studied. They believe that content marketing and social media will have good effect on the satisfaction of customers. This is supported by hypotheses H1 & H3, which is consistent with the observations and results of previous research. Well-structured engaging content can efficiently attract and retain the attention of customers. This will increase satisfaction among customers. Customers who gain satisfaction from interacting with content are more likely to have positive brand engagement. Social media actions include product ratings, joining brand profiles and commenting on the posts of brand.

This supports the idea that engaging content helps create a positive brand image that resonates with buyers, encouraging them to participate in brand communities and share positive and satisfying experiences. Email marketing however, did not show a positive impact on customer satisfaction, aligning with previous study Sabbagh, Foued. (2021) Email marketing failed to satisfy customers because of overly generic, irrelevant and lack of personalization of messages leading to distrust and disinterest. This study also examines three AI chatbots factors: Responsiveness, Usability and Perceived Trust. Hypotheses H₄, H₅ & H₆ received support, affirming the positive effect of AI chatbots factors on satisfaction of customer, corroborating prior literature on the positive impact of AI chatbots on customer satisfaction. As noted in previous studies of Deng, Guangkuan. (2022), responsive chatbots provides quick answers to customer queries while usability ensures ease of navigation and accessibility for the customer. Perceived trust is essential for overcoming customer’s skepticism which leads to customer satisfaction and repeat visits in e-commerce platforms. Furthermore, Customer satisfaction emerged as a strong predictor of purchase intentions, as supported by hypothesis H₇. Aligned with a prior study by Bueno S, Gallego MD (2021) satisfied consumers are more inclined to making purchase, influenced by a positive experience that strengthens their connection to brands on the platforms of e-commerce.

Lastly, the paper also discovered the vital role of satisfaction among customer. However, four out of six mediation hypotheses are considered to have mediating effects. Hypotheses 8a and 8c demonstrated that content marketing, along with social media positively influenced customer satisfaction, which served as a mediator, enhancing purchase intentions. However, on email marketing (Hypothesis 8b), did not support the mediating role of customer satisfaction in enhancing purchase intentions, reflecting findings that email marketing often lacks the personalized engagement needed to significantly boost customer satisfaction. In addition,

regarding AI chatbots factors, hypotheses 8d and 8e, related to responsiveness and perceived trust supported the mediating role of customer satisfaction fostering purchase intentions. These findings align with past studies by Anees and Rao (2022), hypothesis 8f related to usability, did not support the mediation effect, this was attributed to customers was finding it difficult to utilize the chatbot while searching the sites for retailing. It is time-consuming effort for receiving assistance or their problems resolving.

Conclusion

In the sector of e-commerce, the rising prominence of chatbots of AI and digital marketing strategies has drawn the significant attention from both researchers and marketers. So, the study was aimed of expanding the present understanding of the notable aspects of AI chatbots factors and strategies of digital marketing, with satisfaction among customers as a mediator on purchase intentions according to proposed research model. This study suggests that content marketing and social media is considered as effective techniques for influencing customer satisfaction, email marketing has shown a limited effect on satisfaction and highlights the need for more personalized and value-added email content. Additionally, AI chatbots that are responsive and foster perceived trust significantly enhance customer satisfaction which in turn impacts purchase intentions. However, in this study, no significant relationship was found between AI chatbot usability and satisfaction among customers, or between email marketing driven customer satisfaction and purchase intention. Researches in the future should be exploring complex dynamics of AI Chatbots features and digital marketing strategies and explore additional variables for significantly gaining broad understanding of their effect on intentions of purchase in the sector of e-commerce.

Practical Implications

These results shed light on several practical implications for e-commerce platforms with the aim of improving customer satisfaction and foster intentions of purchase. Firstly, business of E-commerce must be focusing on and invest in content marketing strategies to engage their target audience. Moreover, this is essential making sure the relevancy of content to the audience such as blogs, videos and other informative guides which tailored customer's interest and needs. Businesses should maintain an active social media platforms presence, allowing them for connecting with customers, addressing their concerns, requirements and building stronger trust. Secondly, regarding AI chatbots, e-commerce businesses should prioritize responsiveness and perceived trust, as research shows that these two factors of AI chatbots have direct impact on the relationship between customer satisfaction and intentions to purchase. E-commerce platforms should design their chatbots for providing accurate responses on time to customer queries. By highlighting such areas, customer satisfaction can be enhanced and businesses can foster stronger purchase intentions.

Limitations

The study has shown the impact of AI chatbots and the factors of digital marketing on customer satisfaction and intention to purchase, there are several limitations that should be acknowledged and considered for researches in future. A notable limitation of geographical approach of this study, the scale of e-commerce businesses in Karachi, Pakistan has been surveyed. Therefore, the data are generalized only not fully represent the other regions. Another limitation is the selection of AI chatbots factors and digital marketing strategies which were limited in scope. It cannot be taken wrong that many AI chatbots features digital marketing platforms are challenging the

sustained effectiveness of the strategies examined in this study. Thus, it is difficult to make universal claims about the applicability of these strategies across industries. Future research could address these limitations by exploring additional digital marketing strategies and incorporating a wider variety of chatbot features. Nevertheless, cultural and generational differences should also be considered as key variables in designing and evaluating new methods. These aspects could offer valuable insights and can be considered as a potential direction for expanding future research.

References

1. Adam, M., Wessel, M., & Benlian, A. (2020). AI-based chatbots in customer service and their effects on user compliance. **Electronic Markets**, 30(2), 427-445 <http://dx.doi.org/10.1007/s12525-020-00414-7>
2. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
3. Alaka Samantaray , Bibhuti B Pradhan. (2020). IMPORTANCE OF E-MAIL MARKETING. *PalArch's Journal of Archaeology of Egypt / Egyptology*, 17(6), 5219 - 5227. Retrieved from <https://archives.palarch.nl/index.php/jae/article/view/1787>
4. Ali, S., Khalid, N., Javed, H. M. U., & Islam, D. Md. Z. (2021). Consumer Adoption of Online Food Delivery Ordering (OFDO) Services in Pakistan: The Impact of the COVID-19 Pandemic Situation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 10. <https://doi.org/10.3390/joitmc7010010>
5. Anderson, Rolph & Swaminathan, Srinivasan. (2011). Customer Satisfaction and Loyalty in E-Markets: A PLS Path Modeling Approach. *Journal of Marketing Theory and Practice*. 19. 221-234. 10.2307/23033539. <http://dx.doi.org/10.2307/23033539>
6. Anees, Rao. (2022). Mediating Role of Customer Satisfaction between Website Quality, Perceived Convenience and Online Purchase Intention. *Journal of Entrepreneurship and Business Innovation*. 9. 19. <http://dx.doi.org/10.5296/jebi.v9i1.19639>
7. Ashraf, S., Iqbal, M.Z. (2023). The Impact of E-Commerce on Consumer Online Purchase Intention: An Evidence from Pakistani Consumers. In: Ramadani, V., Alserhan, B.A., Dana, L.P., Zeqiri, J., Terzi, H., Bayirli, M. (eds) *Research on Islamic Business Concepts. GIMAC 2021. Springer Proceedings in Business and Economics*. Springer, Cham. https://doi.org/10.1007/978-3-031-18663-9_12
8. Brandtzaeg, P.B. and Folstad, A. (2017) Why People Use Chatbots. 2017 International Conference on Internet Science, Thessaloniki, 22-24 November 2017, 377-392. https://doi.org/10.1007/978-3-319-70284-1_30
9. Bueno S, Gallego MD(2021) eWOM in C2C Platforms: Combining IAM and Customer Satisfaction to Examine the Impact on Purchase Intention. *Journal of Theoretical and Applied Electronic Commerce Research*. 2021; 16(5):1612-1630. <https://doi.org/10.3390/jtaer16050091>
10. Chandra, S., Verma, S., Lim, W. M., Kumar, S., & Donthu, N. (2022). Personalization in personalized marketing: Trends and ways forward. *Psychology & Marketing*, 39(8), 1529-1562 <https://doi.org/10.1002/mar.21670>
11. [Chen, J.-S.](#), [Le, T.-T.](#) and [Florence, D.](#) (2021), "Usability and responsiveness of artificial intelligence chatbot on online customer experience in e-retailing", *International Journal of Retail & Distribution Management*, Vol. 49 No. 11, pp. 1512-1531. <https://doi.org/10.1108/IJRDM-08-2020-0312>
12. Chien, C.-F., Dauzère-Pérès, S., Tim Huh, W., Young J. J., Morrison, J.R. (2020). Artificial intelligence in manufacturing and logistics systems: algorithms, applications,

- and case studies, *International Journal of Production Research*, Vol.58, Issue 9, pp. 2730–2733 <https://www.tandfonline.com/doi/full/10.1080/00207543.2020.1752488>
13. Copeland, B. & Proudfoot, Diane. (2007). *Artificial Intelligence*. 10.1016/B978-044451540-7/50032-3. https://www.researchgate.net/publication/285498153_Artificial_Intelligence
 14. Dara, S. (2016). Effectiveness of digital marketing strategies. *International Journal for Innovative Research in Multidisciplinary Field*, 2(12), 290–293. <https://doi.org/10.1109/ELTICOM47379.2019.8943885>
 15. Deng, Guangkuan. (2022). Enhancing customer satisfaction with chatbots: The influence of communication styles and consumer attachment anxiety. *Frontiers in Psychology*. 13. <http://dx.doi.org/10.3389/fpsyg.2022.902782>
 16. Fonseka, K., Jaharadak, A. A., & Raman, M. (2022). Impact of E-commerce adoption on business performance of SMEs in SriLanka; moderating role of artificial Intelligence. *International Journal of Social Economics*, 49(10), 1518–1531. <https://doi.org/10.1108/IJSE-12-2021-0752>
 17. Goic, M., Rojas, A., & Saavedra, I. (2021). The effectiveness of triggered email marketing in addressing browse abandonments. *Journal of Interactive Marketing*, 55, 118–145. <https://doi.org/10.1016/j.intmar.2021.02.002>
 18. Hair, J.F., Sarstedt, M., Ringle, C.M. and Mena, J.A. (2012) An Assessment of the Use of Partial Least Squares Structural Equation Modeling in Marketing Research. *Journal of the Academy of Marketing Science*, 40, 414-433. <https://doi.org/10.1007/s11747-011-0261-6>
 19. Hasan, I., & Rizvi, S. (2022). AI-Driven Fraud Detection and Mitigation in e-Commerce Transactions(pp. 403–414). https://doi.org/10.1007/978-981-16-6289-8_34
 20. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
 21. Joyce, Mary & Kirakowski, Jurek. (2015). Measuring Attitudes Towards the Internet: The General Internet Attitude Scale. *International Journal of Human-Computer Interaction*. 31. <http://dx.doi.org/10.1080/10447318.2015.1064657>
 22. Kappi, C. M. K., & Marlina, L. (2023). The Effect of Chatbot Services on Online Shop Customer Satisfaction: The Effect of Chatbot Services on Online Shop Customer Satisfaction. *Brilliance: Research of Artificial Intelligence*, 3(2), 252-261. <https://doi.org/10.47709/brilliance.v3i2.3133>
 23. Karjaluoto, H., & Leinonen, H. (2009). Advertisers'perceptions of search engine marketing. *International Journal of Internet Marketing and Advertising*, 5(1/2), 95–112. <https://doi.org/10.1504/IJIMA.2009.021952>
 24. Khandelwal, Aditi & Yadav, Ratisha & Chaturvedi, Ankita & Kumar, A.V.. (2024). Examining the Impact of AI and Digital Marketing on Consumer Purchase Intention <http://dx.doi.org/10.4018/979-8-3693-2363-2.ch012>
 25. Lin, H. F. (2007). The Impact of Website Quality Dimensions on Customer Satisfaction in the B2C E-commerce Context. *Total Quality Management & Business Excellence*, 18(4), 363–378. <https://doi.org/10.1080/14783360701231302>
 26. Luo, N. (2022). Innovation of E-Commerce Development Model under the Background of Artificial Intelligence and Wireless Communication. *Wireless Communications and Mobile Computing*, 2022, 1–7. <https://doi.org/10.1155/2022/8572911>

27. Luo, X., Tong, S., Fang, Z., & Qu, Z. (2019). Frontiers: Machines vs. humans: The impact of artificial intelligence chatbot disclosure on customer purchases. **Marketing Science**, 38(6), 937-947 <http://dx.doi.org/10.1287/mksc.2019.1192>
28. Majeed, M., Asare, C., Fatawu, A., & Abubakari, A. (2022). An analysis of the effects of customer satisfaction and engagement on social media on repurchase intention in the hospitality industry. *Cogent Business & Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2028331>
29. Manvi & Sharma, Ashok & Varshney, Deepika & Dagur, Arti. (2018). To analyze Consumer Satisfaction level in Digital Content Marketing with Emphasis on Shopping Websites. *International Journal of Engineering & Technology*. <http://dx.doi.org/10.14419/ijet.v7i3.12.16444>
30. Miah, Md Rukon & Hossain, Afzal & Shikder, Rony & Saha, Tama & Neger, Meher. (2022). Evaluating the impact of social media on online shopping behavior during COVID-19 pandemic: A Bangladeshi consumers' perspectives ☆. *Heliyon*. 8. <http://dx.doi.org/10.1016/j.heliyon.2022.e10600>
31. Muhammad, J., Kazi, A. K., & Munir, S. (2023). Artificial Intelligence and E-Commerce: An Empirical Investigation of Daraz Pakistan. *Pakistan Languages and Humanities Review*, 7(4), 694–702. [https://doi.org/10.47205/plhr.2023\(7-IV\)60](https://doi.org/10.47205/plhr.2023(7-IV)60)
32. Nobile, Tekila & Cantoni, Lorenzo. (2023). Personalisation (In)effectiveness in email marketing. *Digital Business*. 3. 100058. 10.1016/j.digbus.2023.100058. <http://dx.doi.org/10.1016/j.digbus.2023.100058>
33. Ortakci, Yasin & Seker, Huseyin. (2024). Optimizing customer retention: An AI-driven personalized pricing approach. *Computers & Industrial Engineering*. 188. <https://doi.org/10.1016/j.cie.2024.109920>
34. Pallathadka, H., Ramirez-Asis, E. H., Loli-Poma, T. P., Kaliyaperumal, K., Ventayen, R. J. M., & Naved, M. (2023). Applications of artificial Intelligence in business management, e-commerce and finance. *Materials Today: Proceedings*, 80, 2610–2613. <https://doi.org/10.1016/j.matpr.2021.06.419>
35. Petre, M., Minocha, S., & Roberts, D. (2006). Usability beyond the website: An empirically-grounded e-commerce evaluation instrument for the total customer experience. *Behaviour & Information Technology*, 25(2), 189–203. <https://doi.org/10.1080/01449290500331198>
36. Poradová, Monika. (2020). Content marketing strategy and its impact on customers under the global market conditions. *SHS Web of Conferences*. 74. 01027. <http://dx.doi.org/10.1051/shsconf/20207401027>
37. Prentice, Catherine & Han, Xiaoyun & Hua, Lian-Lian & Hu, Lin. (2019). The influence of identity-driven customer engagement on purchase intention. *Journal of Retailing and Consumer Services*. 47. 339-347. <http://dx.doi.org/10.1016/j.jretconser.2018.12.014>
38. Putri, D. (2021). Digital Marketing Strategy to Increase Brand Awareness and Customer Purchase Intention (Case Study: Ailesh Green Consulting). *European Journal of Business Management and Research*, 6, 87-93. <https://doi.org/10.24018/ejbmr.2021.6.5.1063>
39. Rashid, R. M., Pitafi, A. H., Qureshi, M. A., & Sharma, A. (2022). Role of Social Commerce Constructs and Social Presence as Moderator on Consumers' Buying Intentions During COVID-19. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.772028>
40. Saleem, U., Yi, S., Bilal, M., Topor, D. I., & Căpușeanu, S. (2022). The impact of website quality on customer satisfaction and eWOM in online purchase intention: The

- moderating role of gender in risk-taking. *Frontiers in psychology*, 13, 945707. <https://doi.org/10.3389/fpsyg.2022.945707>
41. Salisbury, W.D., Pearson, R.A., Pearson, A.W. and Miller, D.W. (2001) Perceived Security and World Wide Web Purchase Intention. *Industrial Management & Data Systems*, 101, 165-177. <https://doi.org/10.1108/0263557011039007>
 42. Silbert Jose, S. V. (2021). Impact of COVID-19 pandemic on content marketing strategies: Transforming higher education, work and life. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(13), 2417–2427. <https://turcomat.org/index.php/turkbilmat/article/view/8933>
 43. Slotegraaf, R. J., & Dickson, P. R. (2004). The paradox of a marketing planning capability. *Journal of the Academy of Marketing Science*, 32(4), 371-385. <https://doi.org/10.1177/0092070304265217>
 44. TR, Cut & Yunus, Mukhlis & Chan, Syafruddin. (2022). The Effect of Content Marketing and Social Media Influencer on Customer Satisfaction and Their Impact On Online Repurchase Intention During The Covid-19 Pandemic. *International Journal of Scientific and Management Research*. 05. <http://dx.doi.org/10.37502/IJSMR.2022.5614>
 45. Tu, Y. T., & . H. C. C. (2013). An Empirical Study of Corporate Brand Image, Customer Perceived Value and Satisfaction on Loyalty in Shoe Industry. *Journal of Economics and Behavioral Studies*, 5(7), 469–483. <https://doi.org/10.22610/jebis.v5i7.421>
 46. Van den Broeck, E., Zarouali, B., & Poels, K. (2019). Chatbot advertising effectiveness: When does the message get through? *Computers in Human Behavior*, 98, 150–157. <https://doi.org/10.1016/j.chb.2019.04.009>
 47. Wang, W. Y., Pauleen, D. J., & Zhang, T. (2016). How social media applications affect B2B communication and improve business performance in SMEs. *Industrial Marketing Management*, 54, 4–14. <https://doi.org/10.1016/j.indmarman.2015.12.004>
 48. Yadav, Mayank & Rahman, Zillur. (2017). Measuring Consumer Perception of Social Media Marketing Activities in E-Commerce Industry: Scale Development & Validation. *Telematics and Informatics*. 34. <http://dx.doi.org/10.1016/j.tele.2017.06.001>