

Significance of AI technology on consumer engagement

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1. Abstract

The initial goal of this line of inquiry is to get an understanding of the impact that digital technologies, including artificial intelligence (AI), have had on the level of consumer involvement that has led to rising levels of online activities and sales. This shift is more obvious when the character is engaging in activities inside the virtual environment. As a result, the second purpose of this study is to investigate whether or not having a positive experience when shopping online influences a person's decision to make a subsequent purchase. Theoretical models that further expand the theoretical discussion in consumer research may be examined using primary data gathered from consumers using primary data collected from consumers. It is possible to do research on the connection that exists between providing a pleasant user experience and encouraging repeat business. This research is unique in that it will assist to test a few important connections related to consumer engagement and analyses the underlying mechanism that leads to a rise in online sales. Another aspect that makes this study special is that it explores the underlying mechanism.

2. Introduction

As a direct consequence of the COVID-19 epidemic, changes in consumer behavior have been made in their entirety (Sayyida et al., 2021). In the midst of this epidemic, there has been a lockdown, a social distance, and travel limitations. As a consequence, people have developed new habits, and the economy has experienced substantial adjustments. A revolutionary atmosphere was formed as a result of the pandemic, in which people and businesses quickly embraced digitalization: adopting digital technology may aid in preserving social distance (Gavrila Gavrila and De Lucas Ancillo, 2021). Consumer engagement was a significant focus during the COVID-19 pandemic, thanks in large part to the internet and social media platforms (Naeem, 2021). The level of involvement that customers have with social media platforms has increased as a direct consequence of COVID-19. The term "customer engagement" refers to the procedures, tactics, and technology that are used to keep in continuous connection with customers by using as many touchpoints as is feasible (Borges, 2010). Marketers use the strategy of customer engagement in order to win the attention of consumers by providing them with information that is of value to them. The goal of marketers is to maintain their goods and services as the primary focus of the consumer's thoughts throughout the whole of the customer experience. One of the most effective channels for two-way communication between brands and consumers is social media. It is important for consumers to be able to communicate with companies through social media. Customers that are pleased with the goods and services provided will provide positive feedback on various social media platforms. It is possible for commercial enterprises to leverage negative feedback from customers posted on social media in order to improve already existing goods and services. Today, savvy advertising is the standard practice in the business world.

The digital platform that is integrated with AI may assist businesses in attracting clients (Lau, 2020). The advent of the digital revolution has increased the level of competition in the commercial world. The intelligence of businesses and their performance may both benefit from AI. It is necessary to do research in order to assess the influence that user involvement on social media may have on conversion rates. Converting customers via social media is an ongoing procedure

rather than a one-time event that takes place once. The exchange rate chosen by clients is indicative of their plans to make purchases. There is a lack of awareness about the connection between the conversion rate and the consumer's intents to make a purchase. Technology has had a significant and growing influence on our day-to-day lives. It is essential for marketing tactics that adhere to ethical standards that social media platforms be easily accessible. Both artificial intelligence (AI) and augmented reality (AR) provide businesses with potential as well as obstacles. As more consumers turn to online shopping platforms to make purchases of products and services, businesses are turning to AI to forecast consumer behavior. Artificial intelligence (AI) has been an essential part of the digital transformation process, and it has a significant influence on the decisions that consumers make (Brock and von Wangenheim, 2019). It's possible for marketers to design a communication strategy that's more efficient and individualized. There hasn't been any research done to quantify the effect that AI and digital technologies have had on consumer interaction and social media yet.

2.1. Research question

What part do AI technologies play in the engagement of users on social media platforms, and how do they affect conversions?

The use of AI in engagement marketing that is customized for each individual client is a possibility. In order to interact with customers on social media platforms, businesses are looking for new insights from their business intelligence efforts. In this age of increasing digitalization, the traditional market place has been replaced by the market space. The actions of customers across digital channels are likewise being tracked and analyzed by marketers. Customers spend between 5 and 6 hours every day on social networking platforms, on average. In order to track how customers behave inside digital environments, marketers need access to AI technologies (Sima et al., 2020). Applications of AI make it possible for marketers to fully know and investigate the behavior of customers while also delivering individualized customer databases. The cost of digital advertising is on the rise, despite the fact that its effectiveness is deteriorating. Instead of inundating all users of social media platforms with digital adverts, marketers can keep records of

their customers' purchase patterns and monitor their customers' shopping behaviors. The use of artificial intelligence (AI) by advertisers to identify prospective clients among social media users paves the way for more tailored advertising. Personalizing the engagement that marketers have with customers through digital and social media is essential if businesses want to encourage strong consumer involvement. A machine learning model may be used to construct the data-driven consumer interaction that is desperately needed in today's business world. This data-driven customer involvement that doesn't cost much money has the potential to increase conversion rates. The Internet of Things, which is outfitted with digital technology and artificial intelligence, is causing a shift in the purchasing patterns and goals of consumers as a consequence. In today's digital world, marketers attempt to achieve maximum sales volume by focusing their attention on customers through digital and social media channels. The capacity of people to make judgments is increased by AI-enabled technologies, which are disrupting businesses and generating new, inventive business models at the same time. The ever-increasing need for information and data is the primary impetus behind the increased usage of digital and AI technologies (Adepoju, 2020). Marketers are presented with significant potential by the rapid development of AI technology, which may be utilized to improve customers' intents to repurchase products via engagement with the brand in question. As a result of this, a research is required to evaluate the impact that AI and digital technology have on the level of pleasure attained during online engagement and purchasing, in addition to the creation of subsequent repurchase intentions.

2.2. Research question

What kind of an effect does conversion have on the level of satisfaction received, and how does that level of satisfaction affect the decision to repurchase?

3. Literature review

The majority of companies interact with consumers via the use of AI and other digital technologies. The utilization of social media platforms that are armed with AIs is used in the process of converting site visitors into paying consumers (Bag et al., 2021). Artificial intelligence relies on a machine learning model that is fed by large amounts of data. Artificial intelligence helps to foresee

and provide customers with lifelong value. Some of the most widely used AI strategies now include search engine optimization, Google Analytics, and Adwords. Google Analytics is used in order to evaluate how effective the material is. It evaluates the usefulness of websites based on the content of those websites, maintains a record of the information that users are reading and sharing, and provides extensive information on the individuals who make use of websites. It offers helpful information that may be used to aid in the development of an effective plan. Interpreting and analyzing the outcomes of their websites may be done with the help of Google Analytics by marketers. Google Adwords is an online advertising platform that is managed by Google (Teixeira, 2010). It is helpful in the process of developing advertising on the web that are aimed at a big audience. Adwords is built on top of a foundation of keywords. Researching potential keywords and placing bids are both critical aspects of using Google Adwords. A pay-per-click advertising campaign is another way to refer to this endeavor. Another important strategy for internet marketing is search engine optimization, which helps to increase website rankings, as well as the quality and amount of visitors that websites get on a regular basis. Marketers exploited backlinks to generate traffic on websites. Artificial intelligence has the potential to speed up the digital transition by improving disruptive innovation.

3.1. Customer engagement on social media websites

Social media engagement refers to the sharing, likes, and comments made by the general public in reaction to particular online commercial operations conducted by corporations in online social media (Lange, 2007). The three most widely used social media sites now are Facebook, Instagram, and Twitter. These websites are often visited by the majority of internet users. Users may post comments and evaluations in reaction to specific pieces of content on each of these sites in their own unique way. Analytic tools may be used to monitor this data for insights that can be utilized to guide business decisions. In the business world, customer engagement is a term used to define the relationship between a company's customers and their behavior toward that company. Enterprises are always interacting with their customers. Customer engagement is essential to any company's marketing strategy since its primary purpose is to encourage customers to make

unanticipated purchases (Dutot, 2013). A firm's degree of customer participation may have a positive impact on its overall performance if the aims of the company and its customers are aligned. To put it another way, "customer engagement" refers to the consumer's emotional state as a result of the co-creative and interactive experience that they have with companies on social media. Thanks to social media, customers are now able to get information more easily. Businesses are able to get further insight into the likes and dislikes of their customers by reading reviews posted on social media platforms (Greenberg, 2010). The process of value generation has been completely revolutionized as a result of digital transformation. Customers are more likely to connect with businesses if the relationship between them is founded on trust and personal bonding, and they engage with businesses in a number of different ways. As a direct consequence of this, companies are developing individualized engagement strategies. Both the firm's performance and its worth are significantly improved as a result of the use of sponsored search and online display. Measurable values may be derived from the social participation of the people. Interaction with one's peers is one factor that adds to the meaningful flow of knowledge. The social media platforms provide a channel via which companies may interact with the general public. Customers may be engaged in new and inventive ways via the use of digitalization. The value that may be co-created via digital platforms is increased through the use of social media and digitalization platforms. Buyers and sellers may now communicate with one another in a digital world because to the proliferation of digital technology. The ability of businesses to connect with their consumers are significantly improved by digital technology. Engaging customers via social media is a difficult endeavor to undertake. It is necessary to have a comprehensive awareness of the target audiences, material of a high quality, and a strategy that has been well considered. In order for marketers to reach people on social media platforms, they need to first identify the audience they are trying to attract. It is crucial to reply to customers as quickly as possible on social media, since this creates a positive image in the eyes of customers and should be done in addition to monitoring customer activity on social media. It is essential for organizations to have continuous communication with the people that support them. The repurposing of content and the determination of the types of material that are most appealing to customers are both made easier with the assistance of sentiment analysis.

3.2. Conversion rate

The success of an internet marketing campaign may be evaluated based on the conversion rate (Busca and Bertrandias, 2020). It is the proportion of visitors who complete the desired action as a percentage of the total number of people that see the digital advertising or website. It is helpful for estimating the return on an investment made in digital advertising. Key performance indicators may be used to evaluate how successful a digital advertising was. Indicating that the internet advertising campaign is inefficient and has to be modified is the fact that it has a poor conversion rate. Increasing income is the major objective of digital and social media marketing (Akar and Topçu, 2011). It is essential for the conversion rates to make use of relevant keywords, and the selection of such keywords within the content helps to lower the bounce rate. Simply increasing the amount of traffic that is sent toward an organization's website is not helpful if that traffic does not result in conversions (Shamim, 2016). It is impossible to convert clients instantly, thus it is necessary to use the appropriate strategies in order to motivate and convert them. As a result, businesses are required to first engage their consumers and then work to convert those customers using strategies that are appropriate for digital marketing. Engaging customers in a way that is both effective and efficient is very necessary in order to raise the conversion rate on social media platforms.

3.3. Satisfying experience

The amount of consistency in the interaction between consumers and companies is directly proportional to the degree to which customers' needs are met (Hellier et al., 2003). The ever-increasing sophistication of available technologies has led to a rise in the expectations of consumers. Companies want their clients to feel involved in the digital experience they provide for them by catering to their requirements and satisfying their wants in order to meet their objectives (Bharwani and Jauhari, 2013). Digital and internet marketing costs less money but is more difficult to execute than more conventional forms of advertising and promotion. Feedback might also be sent via the usage of social networking. People make both positive and negative comments about products and services on various social media platforms (Shamim, 2022). These

remarks are seen by a large number of people, and they have a substantial influence on the business that is responsible for the items and services in question. The provision of customer assistance also contributes to the achievement of the customers' desired outcomes. A successful customer experience allows an organization to keep existing consumers and to encourage existing customers to make more purchases; this, in turn, leads to a rise in the conversion rate (Sharma, 2016). Negative feedback also enables businesses to identify areas in which they are deficient, which assists in the development of new business strategies.

3.4. Repurchasing intention

The likelihood of a consumer making a repeat purchase is increased when they are happy with their experience. Customer retention is very important for maintaining relationships with already-existing clients and convincing them to make more purchases (Arthur Middleton Hughes, 2003). Customers who have a favorable experience with a company are more likely to submit positive remarks on social media sites, which in turn influences the online community. Customers that shop online are a very fruitful target audience for social media buzz marketing. It is considerably more cost effective to keep consumers that you already have than it is to get new ones. As a consequence of this, businesses are making a concentrated effort to attract their loyal consumers by offering them with additional services. This is due to the influence that AI technologies have had and will continue to have on online sales. In the social media market, it is essential to work toward increasing the customer's intention to repurchase. As a consequence, the overall cost of digital advertising is reduced, while at the same time an increase in return on investment is produced.

4. Model formulation

When assessing a customer's interaction with their surrounding environment, the stimulus-organism-response paradigm, often known as the S-O-R model, is frequently used. The S-O-R hypothesis postulates that external stimuli have a cognitive and psychological influence on the mind of a person, which then causes the individual to have a corresponding physiological reaction. This theory may also be used in the field of marketing to assess the level of consumer satisfaction and the likelihood of future purchases. Customers are shifting their attention from one market to

another as a direct consequence of the rise of digitalization. The use of AI technology by businesses as a catalyst to engage consumers on digital platforms is becoming more common. Artificial intelligence (AI) technologies are required for marketers to monitor the purchase intents of customers on digital platforms. The increasing prevalence of the application of AI contributes to the enhancement of the organization's capabilities. The advent of AI has presented new prospects for marketing professionals. In this day and age of the digital revolution, companies are increasingly turning to AI technology to keep track of their customers' movements across various online platforms. Artificial intelligence (AI) technologies are being used on social media platforms by businesses in order to engage clients and enhance conversion rates. The cognitive dissonance of customers was triggered by AI, which resulted in an increase in conversion rates. According to the S-O-R model, active participation from customers on social media platforms functions as an organism that boosts conversion rates. Engaging customers is essential for swaying consumer opinion and encouraging them to behave in a manner that is beneficial to a business's bottom line. Marketers are able to collect consumer feedback via the use of client involvement through social media, which also assists the company in determining the degree of customer happiness. A greater degree of customer satisfaction helps firms enhance the likelihood that existing customers will make further purchases. According to the SOR model, the reaction of the consumers is comprised of their repurchase intentions. The reasoning offered above serves as the basis for the development of the theoretical model, which is further shown in **Figure 1**.

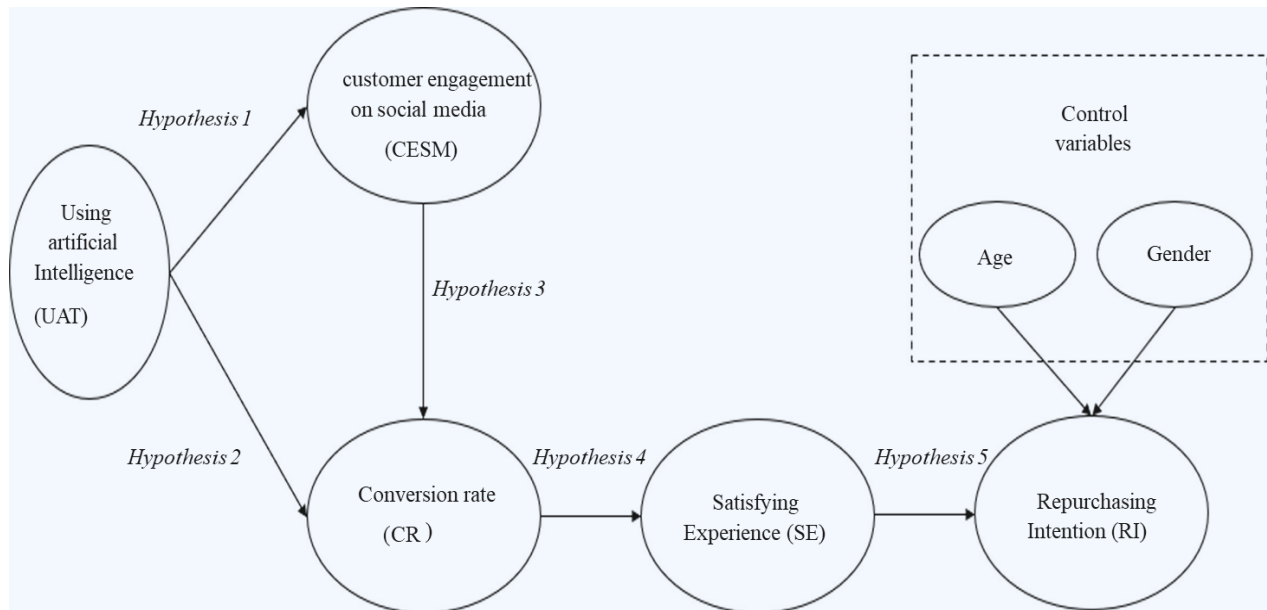


Figure 1 Theoretical model

5. Hypothesis formulation

AI revolutions have changed consumer behavior. Emerging AI technologies customize clients' social media experiences. Social networking networks change retail cultures to meet client expectations. AI technology for social media marketing may impact and forecast user behavior and give a wide spectrum of data that help engage people. AI transforms marketing. AI subconsciously collects and analyzes data. AI enhances a company's social media engagement. Using social media might improve an organization's dynamic information processing and social media dexterity. Engaging consumers on social media offers vital corporate intelligence. Social media connects companies and consumers, yet marketers are unhappy with social media's excessive information. Marketers need AI to evaluate data properly, decreasing the techno-stress of social media salespeople. Social media marketers are more efficient with an automated data-mining solution. AI knowledge improves sales management efficiency. Marketers engage people on social media and analyze data using AI.

There is a favorable correlation between the deployment of AI technology and the level of user interaction on social media networks (Hypothesis 1).

AI on social media attracts and converts clients. Social media alters digital business. AI-supported social media campaigns may boost community interactions and conversion rates. Social networking sites provide interaction, conversion, and feedback, speeding up information exchange. Social media marketing engages consumers. Digital marketing is impacted by responsiveness and conversion. Social media conversations impact consumers' purchases. Consumer involvement with social media display ads is responsive. Database marketing drives AI data interpretation. AI may help explore the cultural and sociological ramifications of social media websites and analyze huge data. Internet shopping has transformed customers' purchasing tastes, and people frequent shopping websites for several reasons. Marketers should design customers' online behavior to forecast future purchases. Digitalization is crucial for 21st-century businesses. Companies customize social media marketing for a customer category. Digital transformation is vital for understanding social media buyers' behavior. AI helps digital marketers improve social media conversions.

The use of artificial intelligence technology has a good correlation with conversion (Hypothesis 2).

Social media have revolutionized virtual communication. Socialization theory affects social media users' buying inclinations. Social media socialization AI's role in online commerce affects newcomers' attitudes and conversion rates. Marketers must build a social media promotional plan that engage people for lengthy durations to get a favorable return. Social media connects buyers and vendors. Social networking platforms empower people, and technology lets customers filter messages and compare items. Social media users exchange firm-beneficial knowledge, photographs, and promotions. Social media advances boost corporate value. Social media sharing boosts digital sales.

There is a correlation between the level of user involvement on social media platforms and conversion rates (Hypothesis 3).

Any company values client feedback. Customers buy virtually using technology. Social media is integrating real and virtual items in the digital domain. Social media marketers must engage

consumers and provide a distinctive experience. Companies rely on value-added offerings to improve digital consumer experiences. Virtual technologies affect client satisfaction. Privacy is important for consumers who choose to buy items and services online, and social media helps integrate customers' experiences. Marketers must grasp how digital technologies affect consumers. Positive comments influence other users' cognitive processes, boosting online influence. In the digital world, various client categories anticipate distinct engagement strategies. Social media analytics help marketers categorize customers. The result of these statistics shows marketers' ability to influence customers and boost conversion rate using social media platforms, which impacts customer happiness. Companies must understand consumer attitude about digital media to boost sales.

The rate of conversion has a positive correlation with one's level of satisfaction (Hypothesis 4).

Online shopping can quickly become confusing. Businesses must offer high-quality goods and services to retain and grow customers. Timely delivery also affects customer satisfaction and repurchase intent. Marketers should improve the digital platform's intrinsic attributes to increase repurchase intentions. Customer satisfaction increases loyalty and trust, but not always repurchase intentions. Online shopping changes consumers' buying habits. High-quality virtual space increases customer satisfaction. Hedonic and utilitarian values positively affect repurchase intentions. Happy customers will recommend you and buy from you again.

There is a positive correlation between having a pleasant experience while shopping online and the intention to make a subsequent purchase (Hypothesis 5).

6. Methodology

In the course of this research, we will first carry out a statistical survey, then proceed to do structural equation modeling (SEM). Using this methodology, the researcher will be able to validate both the suggested model and the study hypothesis.

6.1. The process of operationalizing constructions

For the survey, a Likert scale with five points is available for usage. The following are some of the topics that will be covered in the survey:

- Metrics pertaining to the deployment of AI technologies
- Metrics pertaining to user interaction on social media websites
- Metrics pertaining to the conversion process
- Metrics pertaining to the measurement of a fulfilling experience
- Metrics pertaining to the measurement of repurchase intent

6.2. Strategy

Researchers may choose between two different types of SEM methods: covariance-based SEM (also known as CB-SEM), and variance-based partial least squares (PLS-SEM). CB-SEM is based on the common factor model, while PLS-SEM is founded on the composite model. This is one of the most significant distinctions that can be made between the two methodologies. WarpPLS, a piece of software that is based on PLS-SEM, may be used to execute the data analysis. The goal of PLS-SEM in terms of statistics is to maximize the amount of variation in the dependent variable that can be accounted for by other factors.

7. Expected outcomes

This research is predicated on the premise that digital disruption has a substantial influence, not only on the social behavior of people, but also on the social behavior of companies. Understanding the social shifts that take place in the behavior of customers in today's digitally disruptive world is very difficult due to the complexity of these shifts. The findings of this research indicate that using AI has a considerable beneficial influence on conversion rates as well as users' engagement levels on social media platforms. Customers are transitioning themselves from a conventional environment into a digital one that is powered by artificial intelligence in this age of digitalization. In this research, artificial intelligence will be evaluated based on its potential influence on the rate at which customers convert on social media sites. In addition, since it engages consumers, AI has an effect on customers' impulsive purchasing. The study will assist to determine whether or not

there is a possibility of increasing the conversion rate by engaging customers on social media. One of the most significant channels that may assist businesses in increasing their total number of sales is social media. AI-equipped social media significantly enter people' life. The integration of chatbots and virtual agents, both of which are backed by AI, with social media not only improves the customer experience but also has the potential to have an effect on the social aspects of consumers. Customers increasingly prefer to acquire things while preserving social isolation as a result of the COVID-19 epidemic, which caused consumers to shift their purchasing behavior.

8. Conclusion

The purpose of this study was to provide answers to two significant research issues. With the aid of this research, we will be able to determine whether or not there is a correlation between AI and the level of interaction that people have on social media. Consumers' social patterns and behaviors have been altered as a result of the COVID-19 epidemic; as a result, customers are becoming more reliant on digital platforms to acquire goods and services. Engaging consumers on social media is the primary emphasis in order to achieve the primary goal of increasing the conversion rate. Customers are not only more likely to make impulsive purchases when AI is used, but it also increases customer engagement. The use of social media in marketing is an efficient use of resources. The rise in emphasis placed on artificial intelligence (AI) and social media has resulted in an increase in the amount of purchases made via e-commerce. The conversion leads to an increase in the average amount of loyalty shown by customers. Customers who were happy with the products or services purchased from the firm are likely to do so again in the future. The level of pleasure experienced by customers is used as a proxy for their propensity to make more purchases. This increases the likelihood that they will buy from us again. People are becoming more and more reliant on digital and social media when it comes to making judgments on purchases. To succeed in persuading customers to make more purchases, satisfying their needs is essential. Artificial intelligence is an essential component of the digitization process because of its ability to handle enormous volumes of data and immediately segment consumers, which enables firms to tailor their marketing to individual customers. Artificial intelligence and other digital

technologies have taken on a pivotal role in the process of engaging clients. It is necessary to do research in order to evaluate the implications of using AI to engage consumers.

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