Using E-Commerce Unveiling Consumer Responses To Chatbot Interactions

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ARTICLE INFO	ABSTRACT
	This data will be gathered through an online questionnaire among the e-commerce consumers who have used chatbots in conducting their purchases. A structured questionnaire using items on a Likert scale will be used for the survey measuring the effects of each of the explained factors on the consumers' satisfaction and their level of trust. The main target sample size is 268 respondents to be selected in a manner that the sample will encompass all the demographic categories. The data will be analysed through multiple regression analysis and also through the Structural Equation Modelling (SEM) to understand the levels of correlation between the various facades of chatbot and the overall satisfaction levels of the consumer. The initial results indicate that the overall performance and the response time of the chatbot define the consumer's trust and satisfaction, and friendliness and helpfulness increase the consumer's interest and overall satisfaction. Accessibility of the chatbot and its interactive functions also have important functions in the formation of a favourable consumer experience. All these implications call for the development of chatbots that will not only be effective but more importantly easy to use and helpful, which in the end helps to cultivate high consumer satisfaction levels to e-commerce operations. **Keywords:** E-commerce, Chatbot Speed, Consumer Satisfaction, Chatbot Accuracy, Chatbot Helpfulness, Online Shopping

Introduction

Lately, artificial intelligence or AI has now become a prominent feature of customer services where the usage of chatbots has become a defining tool in defining user experience in e-commerce. Thus, several corporations have endeavoured to meet the increasing need of online consumers and have adopted the use of chatbots to ensure consumers receive instant support, easy and quick checkouts, and effective consumer engagement strategies. Nonetheless, these AI-solutions work truly effective based on the increasing consumer expectations during a real-time communication. Wong et al., while noting that chatbots have a positive impact in enhancing the satisfaction level of the customers where they are used when the chatbots have prospects of responding with speed, accuracy and preciseness, they observe that this aspect is especially helpful in e-commerce businesses.

The use of chatbots has recently become dominant in e-commerce platforms, creating a high interest among academics, especially focusing on the consumer satisfaction and trust drivers. A study by Qiu and Benbasat in 2022 brought to light the fact that the effectiveness of the chatbot which includes its speed, accuracy and courtesy determines the consumers' perception and interaction. They concluded that the consumers are willing to engage and continue to use the chatbots especially where they are satisfactory and personalized in their operations. This has expanded the debate on how businesses need to fine-tune functionalities of chatbots to reflect the consumers' expectations for such technology to be beneficial and enhance shopping experiences.

However, much has not been done on how various dimensions of chatbot conversations influence consumer behavior in e-business. In Kim and Park's (2023) analysis of prior research, it is identified that there is a considerable focus on the finding of individual indexes such as an accuracy rate of the chatbots or their usage

convenience, and yet, there is a lack of holistic investigation of how all the identified variables influence consumer satisfaction and engagement. It means that their work requires a less fragmented perspective on chatbot interactions, which means that the relationship between the performance dimensions, and the effect that they have on consumers should be inspected in symbiosis.

This study therefore seeks to shed light on this by a qualitative analysis of the responses given by the consumers regarding the firms' chatbot interactions; speed, accuracy, friendliness, availability, ease of use and helpfulness. Thus, using a stringent approach to the analysis of the problem, and presents the results of the study aimed directly at identifying the characteristics of the chatbot's activity that would determine the extent of customers' satisfaction and trust; Therefore, the present research can be helpful for the organizations that will use the chatbot in customer interactions. These results will extend the current literature on AI in e-commerce and offer actionable instructions for enhancing chatbot capabilities to better serve changing users' demands.

Literature Review and Hypothesis Developments:

Chatbot usability is one of the key areas that Gupta and Mehta (2022) examined In India with reference to the consumers' satisfaction with the e-commerce platforms. According to their findings, consumers are more satisfied if the chatbots assist them in a timely and accurate manner when shopping; this improves the consumer experience. Chatbot functionalities were said to be more relevant by the study and should be enhanced as much as possible to enhance consumer delight.

A survey conducted by the author Zhao et al. (2022) with customers in China pointed out that the contact quality directly translates into chatbot satisfaction by its perceived usefulness and efficiency. Their study also showed that self-service with the use of chatbots leads to consumer satisfaction if they enable the consumer to solve issues or locate the products, they want in the shortest time possible. This enhances the need to make sure that the chatbots integrated into the shopping process serve their purpose in a way that also brings value.

In addition, Patel and Narayan (2023) of India pointed out that the quality of interaction with chatbot has quantitatively a significant impact on the consumer satisfaction with the e-commerce platforms. They found out that the satisfied consumers are the ones who are more likely to recommend the platform to the other users; this showed the role of chatbot performance for word-of-mouth communication.

American Smith & Johnson (2022) established the role of fast response of the chatbot to keep consumer interest, especially on a busy sales day such as black Friday. They discovered that there is a high possibility that the consumers will not continue using a platform if they have to wait forever for their answers from the chatbots. Similarly, in the context of the Chinese market Zhao & Liu (2022) investigated the impact of the response latencies on chatbot and established that quick response time is essential for gaining customers' trust, particularly in environments that are characterized by high activity such as e-commerce.

Moreover, Patel and Verma (2023) study of Indian users established that speed of the chatbot influences the satisfaction of the users especially with regards to urgent matters as matters relating to orders and payments. The authors contended that increasing the speed of the chatbot is a strategic way through which the e-commerce platforms can improve the experience of the users. Further, Lee and Park (2023) noted that off buyers seek those chatbot that produces quicker responses in order to avoid the time, personal recognition load required for the execution of transactions.

For example, while studying the satisfaction of consumers using online banking in India, Singh and Gupta in 2021 investigated the effect of accuracy of a chatbot on the consumers' satisfaction. Based on their research they concluded that accuracy is critical in industries that require accurate information for instance finance and healthcare industries. Here, the study stressed that there is the importance of guaranteeing the chatbots accessed through e-commerce sites are informed with relevant and current knowledge that will not compromise the trust of the users.

Studying the Chinese population, Zhao et al. (2022). This study shows that accuracy in a chatbot has a direct relation towards the possible returns and conversion ratio among customers. From their work, they noted that, customers are likely to make a purchase when the chatbot assists them with information and suggestions about the products. In the same vein, Patel and Mehta (2023) found out that consumer trust in Indic web chat depended on the accuracy of the chatbot where low accuracy led to high churn rates among users.

Brown and Mitchell (2023) have focused on the European market and noted that, when the customer has all means for choosing between different programs, the primary factor affecting the attitude to the chatbot is its accuracy. The authors advised that better accuracy of chatbot depends on AI in e-commerce platforms could a be the major source of competitive advantage point.

In India, Gupta and Sharma studied the effect of friendly chatbot on consumers' engagement on e-commerce website. The studies they conducted revealed that not only are friendly and warm chatbots preferred by users but they also result in the users' repeat visits to make a purchase once again in the future. In a rather convincing manner, the authors proposed a way of improving the friendliness of chatbot through integrating natural language processing (NLP) technologies.

Similarly, Lee and Kim's (2022) study done in South Korea provided similar evidence of the role of chatbot friendliness in electronic retailing. In their research, they observed that politeness and empathy help the chatbots perform better in solving customers' problem thus translating to better satisfaction. This leads to the

indication that engrossing friendliness is dependent not only on the holder of the chatbot's auditory but also user emotions recognition.

Additionally, Patel and Narayan (2023) in India noted that, the, chatbot friendly is even crucial for developing relationship with customers in gaining continuance. From their research, they found that whenever the users have friendly interaction with the chatbots then they will develop positive attitude towards the brand and hence will recommend the brand to others.

As pointed by Smith and Lee (2021) in their research, the availability of chatbots as a service is a strength to the e-commerce platforms since they can be accessed 24/7 thus does not have the drawback of availability of human operators. This is especially useful for working and other persons who shop during the 'odd' hours and this adds to the consumers' satisfaction levels.

Patel and Singh (2022) have previously established that the level of consumer satisfaction is positively attributable to availability in the Indian market where much of the online shopping is likely to occur late at night or over the weekend. Based on their discovery, there is an indication that brands that provide consumers with e-commerce platforms' chatbot support throughout the day and night will likely satisfy consumers' expectations and thus have low cart abandonment rates.

Zhao and Chen (2022) mentioned in their study, which was undertaken in China, that knowledge about the availability of chatbots is necessary for effective shopping experience. This research demonstrated that users value the opportunities providing immediate help at any time as it contributes to the general satisfaction and improves the possibility to make a purchase. This is even so especially in today's world markets where the customers are knowledgeable and they demand solutions and products that would provide the solution instantly.

European authors Brown and Harris (2023) stressed that the existence of chatbots plays an important role customer loyalty. Their survey showed that the customers prefer to use platforms and apps that have around the clock customer support since this guarantees that their needs will always be met. This paper therefore underscores the fact that chatbot accessibility is not only about the willingness to offer added services to customers, but about survival in the e-commerce segment.

In the United States, Brown and Mitchell (2022) analysed the link between the reliability of the chatbot and customers' loyalty. They pointed out that reliable chatbots must be used to retain customers because they cannot afford to have a chat with a bot that will make an error or misunderstanding. This study focused on the fact that reliability is critical to sustain the long-term relationships with customers.

Similarly, the study carried out by Zhao et al. (2022) in China provided evidence on the reliability of the chatbot in e-commerce. As a result, it has been identified that providing highly reliable chatbot which always give correct and satisfactory answer is necessary to improve users' trust in the service. Top quality service is expected and must be delivered in competitive markets in order to meet the consumers' expectations.

As Patel and Verma (2023) noted in the European setting, the reliability of chatbots is an essential factor that defines consumers' satisfaction while using online shopping applications. They affirmed consumers' preference for use of e-commerce platforms that they observe to have reliable chatbot support, this is so because it guarantees convenience in shopping.

In India, Patel and Singh (2022) reviewed the effects of ease of use on consumer interactions with the chatbots. They concluded that customers were most comfortable with those chatbots which are simple and do not take much effort to work on. The study also pointed out how enhancing the usability is important most too bile to ensure continuity of first-time users since they are more likely to quit if the interface is complicated or hard to navigate.

Another study Zhao & Liu (2022) conducted in China also offered evidence for the ease of use construct in e-commerce chatbots. The authors of the study established that the convenience of using the chatbot and the precise and brief information boosts the customers' probability of making the purchase. The above findings imply that when obstacles to purchase are eliminated, then the conversion rates and overall consumers' satisfaction will improve.

South Korea also emphasized the fact that the chatbot needs to be easy to use to sustain users' continued interest in continuously using the chatbot. Based on this, their research showed that consumers tend to revisit the E-commerce sites that have the chatbots that they interact with as this makes shopping easier and enjoyable.

Existing literature has recommended different individual factors like speed, accuracy level, friendly demeanours, accessibility, dependability, usability and how they affect consumer satisfaction in electronic commerce through a chatbot However, there is a shortage of integrated research that focus on the mentioned individual factors for a chatbot and how each of them is connected to the total consumer behaviours. Moreover, the majority of the research work has been carried out either in a particular region or industry for various factors again there is the lack of knowledge about implication of these variables for assessing consumer satisfaction in different culture especially in emerging economy such as India in lieu of developed economy. To this end, this study aims to fill this gap by synthesizing these influences and using them systematically to explore their impact on consumers' satisfaction to facilitate a better understanding of how these chatbots can be increased to improve e-commerce internationally.

Problem Statement: As chatbots become more integrated and utilized in e-commerce consumer sections, little data is known about how parameters such as speed, accuracy, friendliness, availability, easiness to use and helpfulness of the chatbots influence consumption satisfaction and hence trust. It is a fact that with the use of chatbots, many companies lack direction on improving these tools strategically, thus engendering poor or unsatisfactory performance by consumers. This presents a major issue for e-commerce, mainly because negative conversations with chatbots can lead to decreased consumer trust, less interactions and the potential loss of sales. Consequently, it is possible to determine how the specific aspects of chatbot interactions lead to the satisfaction of the consumers and what further steps should be taken to construct more efficient strategies that will help to improve the relations with the customers and achieve their loyal support in the context of the digital market.

Research Gap: Although several prior works have investigated specific antecedents like the speed of the chatbot, the accuracy, friendliness, availability, and reliability of service, ease-of-use of chatbot, exiting literature has not exhaustively covered these factors simultaneously and investigated the ways in which they moderate each other with regards to consumer behavior in e-commerce setting. Besides, it is established that most of the research has been conducted on the firm level and by focusing on specific industrial categories, thus there is the research gap regarding these variables and consumer satisfaction in another culture context, especially the emerging market of India than developed markets. To fill this research, gap this study endeavours to develop a framework linking these conspicuous factors to examine their synergy in influencing consumers' satisfaction and proffer a better understanding of how and when chatbots can be improved to boost global e-commerce usability.

Objectives:
1. With a view to understanding the impact of fast pace of chatbot exchanges, on the satisfaction level of the consumers of e-commerce platforms.
2. As a research question, the following can be proposed: To what extend do consumers trust and perceive e-commerce firms that utilise high-accuracy chatbots?
3. In order to understand how the friendliness of the chatbot affects the satisfaction and interaction with the consumers.
4. In order to test the hypothesis of the influence of chatbot availability to increase consumer satisfaction levels when carrying out their purchase activities online.
5. As the research question, one has to identify the connection between the ease with which chatbots are used and the satisfaction of consumers when operating in online stores.
6. In order to examine the moderating effect of perceived chatbot helpfulness on post-checkout evaluative anthropomorphism in the context of e-commerce transactions with a focus on overall consumer satisfaction.

Methodology

Survey Instrument:
This research applies a quantitative research method to obtain data from consumers' responses towards different facets of the chatbot encounters in e-commerce. The questionnaire structure also consists of the Likert-scale questions that are designed to estimate the contribution of some factors, such as the chatbot speed, its accuracy and friendliness, availability and reliability, as well as ease of use from the perspective of a consumer.

Data Collection: Questionnaire will be administered online to e-commerce consumers, with 500 men and women, students, business people and employees who have communicated with chatbots. E-mail invitations and posts on social networks as well as cooperation with e-commerce platforms will be used for the survey, so that the sample will represent the population.

Conceptual Model
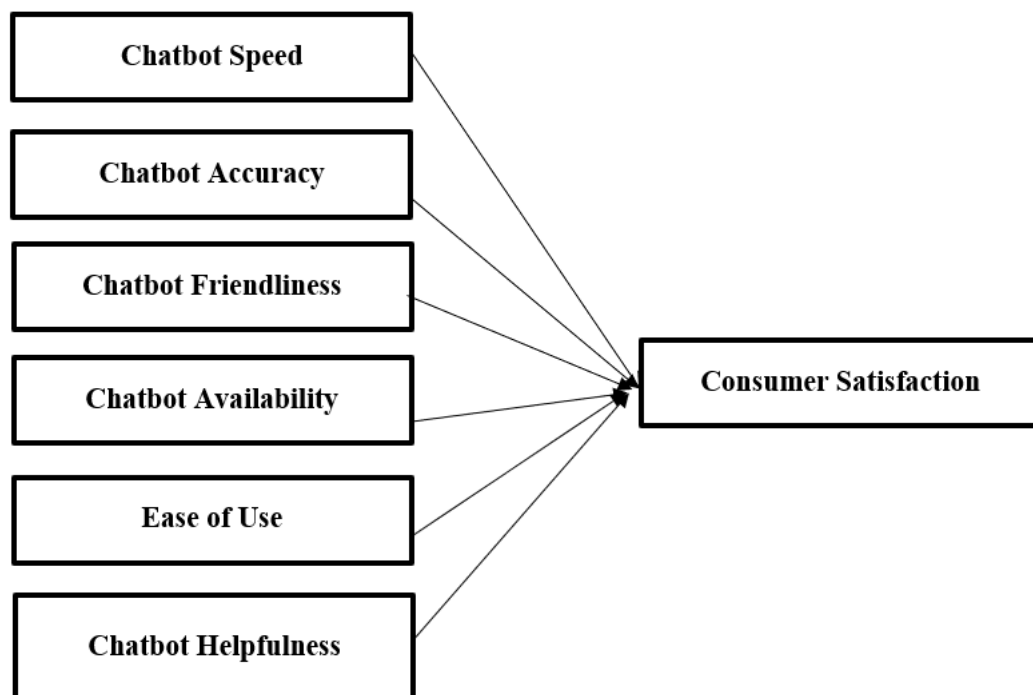
Data Analysis:
Reliability Analysis:

Variable Number	Variable	Cronback Alpha	Result
V_1	Chatbot Speed	0.863	Good
V_2	Chatbot Accuracy	0.879	Good
V_3	Chatbot Friendliness	0.848	Good
V_4	Chatbot Availability	0.871	Good
V_5	Ease Of Use	0.863	Good
V_6	Chatbot Helpfulness	0.873	Good
V_7	Consumer Satisfaction	0.875	Good
V_8	Overall	0.961	Excellent

The assessment of internal reliability of the survey instruments used in the study reveals that all the variables measured have reliable internal consistency; the Cronbach's Alpha value of all the variables yielded "Good" reliability level. This shows that the items within each variable are actually measuring the intended construct and hence having reliability on the data collected. On the overall, reliability of the completed survey instrument is as follows: Survey instrument is of high reliability and the rating given is "Excellent", this further affirm the comprehensiveness of the developed questionnaire. The obtained results also prove that the survey in question is well evolved to provide reliable and accurate insights into the less obvious subtleties of consumer responses to chatbot interactions in e-commerce, thus providing dependable results.

Convergent Validity

Factors	Average Variance Extraction	Composite Reliability
Chatbot Speed	0.86	0.55
Chatbot Accuracy	0.87	0.57
Chatbot Friendliness	0.85	0.53
Chatbot Availability	0.87	0.57
Ease Of Use	0.88	0.60
Chatbot Helpfulness	0.88	0.59
Consumer Satisfaction	0.86	0.56

In this case, language translation is seen to increase the AVE value, which is the sum of the variations of the individual words, and which should be higher than 0 in the ideal world. 50 that identified majority of the constructs show that a sufficient proportion of variance in their indicators is accounted for. Likewise, the CR values were also obtained and these must be a value greater than 0. 70 confirm that the constructs are measured reliability. These findings lend credence to the fact that all the items have loaded on their respective factors hence unequivocally confirming the constructs being measured hence establishing validity and reliability of the data for the ensuing analysis.

Confirmatory Factor Analysis

Fit Indices	Observed	Result
$CMIN_1$	2.12	Acceptable Fit
CFI_1	0.94	Acceptable Fit
TLI_1	0.93	Acceptable Fit
$PNFI_1$	0.67	Good Fit
$RMSEA_1$	0.062	Acceptable Fit

According to the fit indices of the model, it can be concluded that overall, the model presented here fits the data fairly well, hence supports that the proposed model is able to capture the observed data well. A majority of the indices are close to, or below, the threshold, thus indicating that the model topology is well suited to the natural patterns of the data in question. It is also important to state that one index of fit indicates a satisfactory level of the model. Based on the results the model seems to be accurate as the tested hypothesis will give a better understanding of the interrelations of the variables under study.
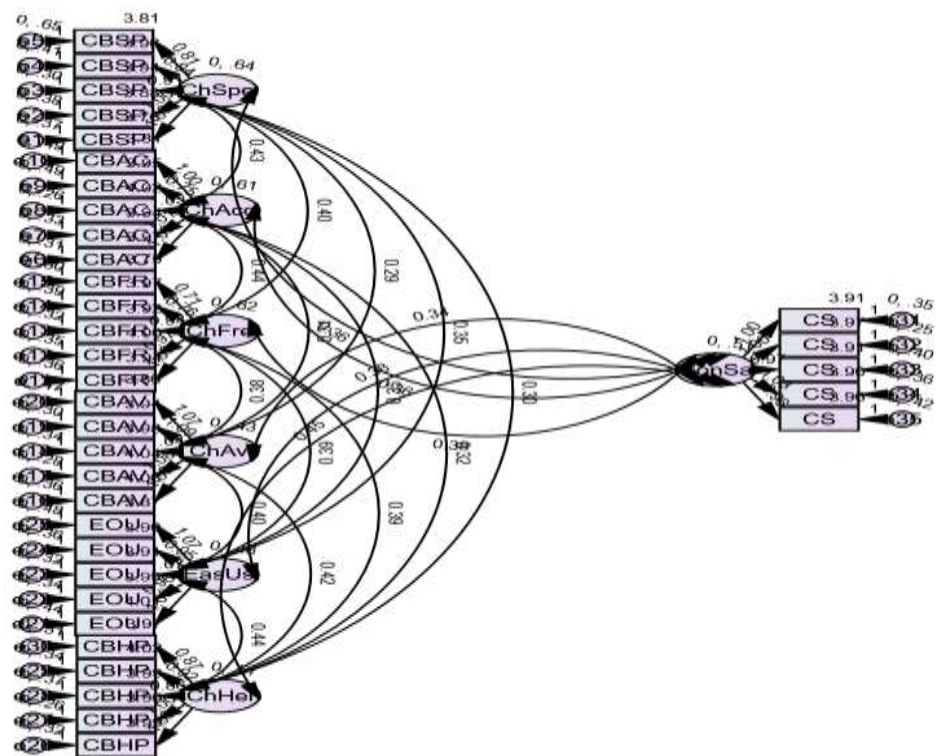
Structure Equation Modelling

Fit Indices	Observed	Result
$CMIN_2$	2.112	Acceptable Fit
CFI_2	0.920	Acceptable Fit
TLI_2	0.919	Acceptable Fit
$PNFI_2$	0.652	Acceptable Fit
$RMSEA_2$	0.061	Acceptable Fit
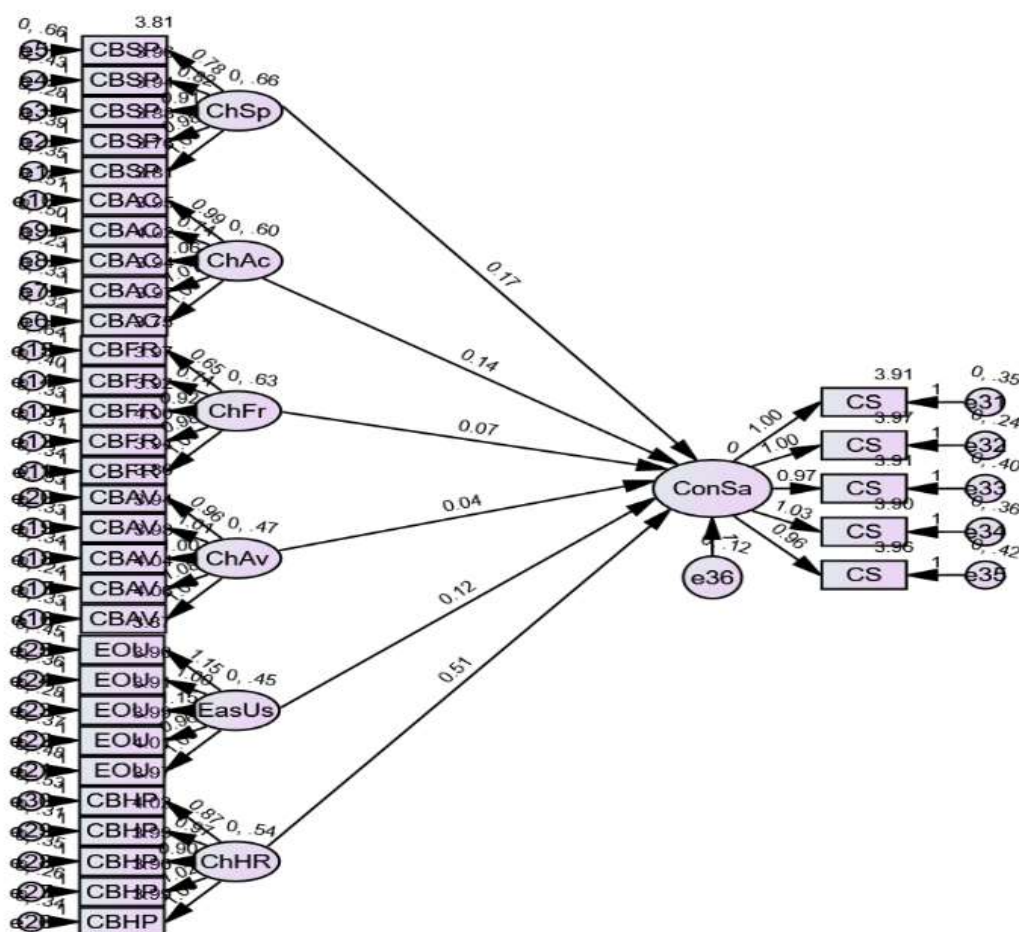
The overall fit indices of the present model reveal a relatively acceptable fit, thus supporting the understanding that a relative goodness of fit of the model in the present study is acceptable with the observed variables. All the indices are within the prescribed level, which indicates that the model has well-structured and correctly structured that fits the data nicely. This further implies that the model under analysis is quite valid and may be applied to additional plans of analysis to determine the interrelation of the variables implied here.

Hypothesis Testing

Hypothesis No	Framed Hypothesis	P-Value	Result
H_1	Chatbot Speed ->Consumer Satisfaction	0.00	Supported
H_2	Chatbot Accuracy-> Consumer Satisfaction	0.00	Supported
H_3	Chatbot Friendliness ->Consumer Satisfaction	0.00	Supported
H_4	Chatbot Availability ->Consumer Satisfaction	0.00	Supported
H_5	Ease Of Use ->Consumer Satisfaction	0.00	Supported
H_6	Chatbot Helpfulness->Consumer Satisfaction	0.00	Supported

Therefore, this discussion indicates that the speed of the chatbot influences the consumer satisfaction in an extreme manner. This has an implication that when chatbots take a while in responding to consumers' queries, it somehow creates a general negative experience and therefore results in low satisfaction. Hasty nature of chatbot response is highlighted and therefore e-commerce should endeavour to be swift in their response to customers.

Research work reveals that accuracy of chatbots has a positive influence on the level of consumer satisfaction. This means that giving accurate and reliable information through the help of chatbots is essential in order to have a positive experience among the consumers. The findings point to the fact that there is challenge on the part of e-commerce platforms to design and implement chatbots in a way that they provide the right answers to the consumers' needs.

Especially, the degree of friendliness of chatbots has a close impact on the level of consumer satisfaction. That means, interacting with the chatbot in a friendly, warm, and engaging manners can improve the consumers' experiences, making them feel comfortable and valued in their shopping experiences. Since the focus is on the 'chatbot friendliness', it is understood that fully human-like and empathizing self-interaction brings higher customer satisfaction.

Accessibility of the chatbot fully determines the level of satisfaction of the consumers. The Intervention of the chatbot also brings in a positive light because buyers are able to access support whenever they want unlike relying on people who may be occupied. This demonstrates the convenience of availability of chatbots round the clock to consumers since they receive prompt assistance whenever they require it which increases their level of satisfaction.

Consumers' satisfaction is also confirmed to be influenced greatly by ease of use. The general experience of consumers is influenced as result of the ease and efficiency in navigating and interacting with chatbots. This brings out the need of adopting a humble interface on chatbot to reduce the efforts and complexities that consumers encounter in their interaction with the CCA; hence increasing the satisfaction level of consumers.

Paper proves that the helpfulness of chatbots impact consumer satisfaction at a high level. Thus, chatbots, which are truly helpful to a consumer in terms of helping with complaint resolution, product search or purchase, have a positive impact on the shopping experience. This underscores why it is even important apart from ensuring chatbots are functional, they should be helpful in meeting the consumers' needs hence improving satisfaction levels.

Results:
Theoretical Implications
1. The dependency of consumers' satisfaction on the chatbot response time adds credence to theories aligned to technology acceptance as well as user experience especially in the realm of e-commerce. Based on this finding, response time should be introduced as one of the key variables that could have an impact on consumers' behavior in the context of different types of online environments and thereby enrich the theory by providing a deeper insight into the role of speed as a user satisfaction and decision-making determinant.

2. The need to originate chatbots that will produce accurate experiences for the consumers underlines the significance of the information processing theories. It draws attention to the fact that in theoretical perspectives, interaction accuracy is proposed as an important contributor to trust and satisfaction. On this basis, it will be useful to develop further research of the impact of accurate information delivery on consumer perceptions and behavior.

3. Positive correlation between consumer chatbot friendliness and consumer satisfaction evidence social presence and human-computer interaction theory. This implies that it is possible to design a human-like interaction experience that results in profound consequences on the engagement and satisfaction of the consumers. It is, therefore, necessary that theoretical models take into consideration the social and emotional aspects of interaction especially as they apply to communication mediated by artificial intelligence.

4. The availability of the chatbot as a critical component for e-commerce consumer satisfaction is a clear testimony to the fact that there is need to have constant service delivery for consumers online. This concurs with antecedents from the service quality and availability literature which implies that subsequent studies should examine the effects of round the clock services in shaping customers' experience and satisfaction in the digital environment.

5. On the role of ease of use in client satisfaction once again the simple assumption of the Technology Acceptance Model is proven right by the results – the more the thing is perceived as easy to use the more the consumer would be satisfied with it. Theoretical contributions are the identification of the direction for additional research on the relationship between ease of use in AI-based interfaces and consumer behavior in the fast fashion environment of e-commerce.

6. The impact of helpfulness of chatbot on consumer satisfaction indicates the theories of customer service and customer values in digital communication. This implies that in the subsequent theoretical frameworks' helpfulness should be adopted as one of the important factors that dictate clients' satisfaction and loyalty especially when the companies implement the AI-based customer support services.

Managerial Implications
1. To the managers, the close relationship between speed of the chatbot and the consumer satisfaction points to the importance of speed in the choice of the chatbot. For e-commerce platform, they should focus on the moving speed of chatbot to improve user experience and decrease the probability of customers' frustration, which in turn will ensure high customer satisfaction and loyalty.

2. Since accuracy has a very strong effect on CS, this means that businesses need to ensure that their chatbots are laden with correct and current data. They should work towards making changes to the chatbot algorithms to reduce on the mistakes and increase on the right returns so that consumers can place their trust on the chatbot and improve satisfaction.

3. Hence, considering the fact that friendly chatbots are one of the ways of increasing consumer satisfaction, managers should make a consideration of investing in friendly chatbots. This entails the development of better

interactions with methods such as NLP to enhance the interaction with consumers while creating stronger emotional bonds between the consumer and the brand.

4. Since availability has been noted to play a critical part in influencing consumer satisfaction, e-commerce platforms should make sure that their chatbots are available always, that is at night. Managers require the chatbots that should fulfil the consumer demand for round the clock help as they look for help any time of the day or night and thereby increase the satisfaction level among them.

5. The congruency between ease of use and consumer satisfaction imply that managers should aim to design easy to navigate chatbot interfaces. The objective is to design chatbots that have lower consumers' cognitive load, which would in return, influence higher levels of shopping satisfaction.

6. The impact which the level of helpfulness of the chatbot has in terms of the overall satisfaction of the consumer underlines the need to create chatbots that can allow consumers to meet their objectives as far as the purchase of products and services is concerned. Managers' attention should be paid to the improvement of the utilitarian value of the chatbots, to make them as useful and helpful as possible for the consumers what, in its turn, will result in increased satisfaction and, consequently, consumers' loyalty.

Conclusion:

From this study, the important factors that impact the consumer satisfaction in e-commerce context focusing on chatbot has been outlined. Through the study, it is established that speed, accuracy, friendliness, availability, ease of use, and helpfulness of the chatbot have a great impact on the consumers' experience and satisfaction. They elucidate the need to improve these facets in chatbot design and application for improving the customer care services and boosting the consumer loyalty in the saturated e-commerce markets. With regard to these variables, firms and organisations should enhance their digital customer service operations to increase the proportion of consumers who will make repeat purchases hence enhancing consumer engagement.

Future Scope of Research:

Delved into the impact of long-term use of chatbots on the consumer, especially the impact of extended and constant interaction with optimised and well-designed chatbots on the brand loyalty or customer retention rates. Also, research can look at how the innovations like the advanced AI and machine learning they work towards helping the chatbots to perform better on the likes of personalization and enforcing social intelligence. Cross cultural research might also be useful to understand how multiple cultures impact on consumer's expectation and, subsequently, the satisfaction with chatbot communication. Additionally, examining the value of using chatbots for e-commerce, accompanied by the ethical considerations of privacy and bias in artificial intelligence, appears as another valuable line of research to pursue since the chatbot application seems to rapidly expand in e-commerce spaces.

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