Impact Of Redefining Social Engagement Through Chatbots

Vinod Varma Kanumuri[1*], Dr. G. Saravana Kumar[2]

[1*]Research Scholar, Department of Business Administration, Annamalai University, Chidambaram, Tamil Nadu, India.
Email: vinodvarmak@gmail.com
[2]Assistant Professor, Department of Business Administration, Government Arts College, Trichy, Bharathidasan University, Tamil Nadu, India.Email: saravanank1982@gmail.com

Abstract:
The having critically analysed the research it seeks to discover and find out the correlation between perceived ease of use, reliability and personalization of the chatbot, the type of quality of response of the chatbot and the above-mentioned social factors with regard to the engagement level of the millennials. In order to realise these objectives, a cross-sectional quantitative survey design will be used in conjunction with qualitative interviews. Also, the dependability of the chatbots and the quality of their responses are deemed to determine the trust that individuals have towards these chatbots, which determines the number and depth of social interactions being made. The study also reveals that usefulness, perceived by social influence is significant in adoption and usage of chatbots under intended social use particularly among millennial who earlier had a positive encounter. These insights raise the possibility of chatbots revolutionizing the engagement norms of social media visions for the platforms' operators and technology designers.

Keywords: Millennials, Chatbots, Social Engagement, Personalization, Trust, Digital Communication

Introduction:
Some studies conducted between the years 2020 and 2024 reveal that millennials have a special way of approaching digital interfaces especially in terms of their or expectations of convenience, customization and credibility. For instance, the studies by Smith et al. (2021) show that the perceived ease of use is a factor in users' engagement level regarding the chatbot, particularly millennials. Also, while analyzing the quality of 'reliable' conversational chatbots, which means that a chatbot is consistently performing and providing accurate information, this study proved that chatbot trust is critical in maintaining the ongoing communication between the user and bot (Johnson & Lee, 2022). These results imply that the objective characteristics of chatbots including their interface and response logic define user perceptions and actions. Efforts have also been made to adopt the concept of personalization to the identification of the best strategies that must be utilized to help increase the satisfaction levels of users. These frameworks such as those done by Garcia and Martinez (2023) are key helpful in establishing that millennials are more inclined to apps and chatbots that are more customized to their time and other preferences as well as their pattern in the interaction. This customization does not only enhance the user experience but also makes the user develop a closer association with the platform thus making them engage more with the platform. Also, the aspects of the chatbot's responses have been noted to determine the users' perception; herein, the accurate, intelligent, contextual responses have a positive impact on the general perception of the technology by the people (Chen & Wang, 2024).
Last but not the least; acceptability of chatbots has had potential effect of social factors.
Recommendations by peers as well as following the trend in the society has been one of the main factors that most of the millennials' use the technology as identified in the different studies (Park & Kim, 2020). Adding this social aspect to the use of chatbots combined with prior positive encounters in their usage seems to be a strong encouragement for more usage of chatbots. With the digital world growing more dynamic, this research shall aim at addressing the following questions in order to help understand how the aforementioned factors interact as well as help redesign the social engagement of millennials with chatbots in the current digital world: AI chatbots are revolutionizing the customer service by improving upon factors such as accessibility, convenience, reliability, speed, credibility, and affection. The rationale of this research relates to the effect of these factors on Customer Loyalty by Canadian Bank Customers by Age Groups considering CRM and UX Principles to enhance the Chatbot Experience. A review of agritourism literature has been presented by Murthy, Y. S. & B. S, R. C. in 2024.

Literature Review and Hypothesis Development:
As mentioned in the previous sections, the perceived ease of use has been originally defined by Davis (1989) as the extent to which an individual believes that using a system will not require much effort, and has been originally applied in different contexts. Agarwal and Kumar (2020) investigated the PEOU of millennial in the Indian context and established that ease of use of the chatbots and promptness of the response also largely support their use in social media platforms. From their case, they argued that usability is critical in the improvement of youths' engagement through easy site navigation and design.
Later, Zhao et al. (2021) also explored the PEOU in the context of the Chinese market to establish that ease of use surely has an impact on the use of chatbots in e-commerce. What the study did show was that where chatbots had an intuitive

interface through which users could interact, it promoted utilization, increased satisfaction and repeat visits. In the same vein, Smith and Johnson (2021) working in the US noted that millennials are particularly receptive to chatbots that do not need much effort to operate especially in service sector hence the call to make use of PEOU in improving experience.

A study conducted in India and Mridul and Sing (2019 were aimed only on the social media chatbots Emphasize that ease of use determined the coefficient of interacting times and the time It expands. With regard to its findings, their research correlates that, the millennials are simple and functionally selective when using the digital platform. In particular, Basu and Roy (2022) also highlighted the significance of PEOU for the adoption of educational chatbots which are preferred by the students to be more simplified and easier to use hence enhancing their learning experiences.

In a study on the impact of PEOU on banking services to the Indian millennials, Kumar and Verma (2023) supported the centrality of use with proof that ease of use is a determinant to sustained usage of the chatbot service. Overall, this study emphasises on simplicity as the key that sustains users' loyalty cross-sectional business domains. Crossing the international frontiers, Patel et al. (2023) also found similar results in the context of the UK, confirming and proving that the perceived ease, in fact, had a mediating role in the relationship between using chatbots in the retail business and the perceived behavioural intentions by the customer.

H2: There is a positive relationship between reliability of the chatbot with the trust of the millennials and their social interactions.

Chatbot personalization in the Indian retail sector: What millennials want? By Gupta, V.; Mehta, S. (2020) investigated on the effects of chatbot personalization and it was established that millennials prefer personalised experiences with chatbots. According to their study, product or service recommendation and response improves the overall satisfaction of users hence the increased retention level.

Smith and Johnson (2021) exploring the need for personalization for call center services in the United States focused on customer service chatbots. What they discovered is that millennials believe that the chatbot should have the capability of recalling previous interactions and previous conversations so that it has an optimized experience for the user. This research also revealed that personalization can lead to shorter interactions between users and the chatbots since the system optimizes peoples' requirements.

Continuing from the works Zhao & Liu (2021), they focused on personalizing chatbot in the China e-commerce industry. As established from their research, there is a direct positive correlation between personalization and customers' impressions and probable future purchase behaviour. They discovered that if the chatbot pulls out product suggestions on the basis of past buying behavior, then customer reliance on the system increases, thereby increasing chances of purchase.

In the context of the educational sector, Patel and Verma (2022) explored the effect of the chatbot's personalization on the learners' engagement in the online learning platform based in India. They were able to find out that students' satisfaction and learning achievement are boosted when they were given personal remarks and sources of learning that fits the individuals. The study also highlighted that the concept of personalisation in the learning chatbot is useful in enhancing the interaction that leads to positive learning that is appropriate for the culture of millennial students.

Lee and Park (2022) studied the moderating effects of chatbot personalisation in the context of South Korean banking industry. Their study revealed that, financial advice and timely alerts from the chatbot increase engagement and trust from the users. People who get recommendations that are relevant to them based on their finances and financial planning are likely to continue with the service provider showing importance of customer retention.

Internationally, Sen et al. (2024) reviewed the chatbot personalisation in different sectors with focusing on the travel and hospitality sector. Customized action, including development of individual travel programs, significantly increases customers' satisfaction and their loyalty to a given brand, thus enriching a brand's value. The research findings also pointed out that the concept of personalization of content is another important factor to consider to help engage the targeted consumers with the social media platforms particularly millennials who prefer content that is personalized to fit their preference and demands.

Chang et al., 2018 focused on the ability of developing chatbots and its effects on reliability of users. What they discovered is that millennial customers are willing to interact with the chatbot that is capable of delivering correct, prompt, and precise responses. The unreliable ones only reduce the customer engagement and trust meaning reliability is crucial for customer stickiness.

Wilson and Carter (2021) have done the research in the United States, the main focus of this study was the correlation between the reliability of the chatbot and the trust towards the e-commerce platforms. From their research, they were able to deduce that reliability or, stability and accuracy most often forms the basis of trust from one user to another. These trust makes users to be more interacting with the systems and thus increase satisfaction of the systems. In the same vein, Lee and Park (2021) revealed that real-time and accurate chatbots are vital in South Korea's financial services context given the importance of providing perfection to the customers.

In the context of the healthcare industry, Mishra and Sinha (2021) examined the reliability of chatbot application in India with special reference to the millennials. Their research also pointed out that accurate chatbots are important for passage of right information, this is very vital where information is sensitive as in the case of health. Kumar et al. (2022)

also discussed the aspect of reliability in the case of educational chatbots claiming that reliable and continuous performance of the chatbots does increase the usage rates of these applications among students and consequently supports their learning processes.

In the year 2023, Patel and Narayan investigated au Chatbot dependability by subjects, or domains of application that include retail and banking. Hence their study highlighted that the ability to perform consistently could be used to retain millennials as long-term users and among these, reliability was seen as significant across different industries. This was echoed by Sen et al. (2024) who also highlighted the reliability aspect as critical to developing chatbot in India as despite the infrastructural shortcomings, reliability profoundly influence the users' behaviours.

To the authors' best knowledge, Gupta and Mishra (2021) studied the impacts of social influence on the adoption of chatbots in the Indian e-commerce context. By using surveys, they identified that social influence which came from the peers and the most common social trends affected the perceptions and the degree of acceptance of the millennials towards chatbots.

In the case of the United States, smith & johnson (2021) has looked into the roles of social influence in the uptake of chatbot in the social medial platforms. Thus, by mainly focusing on the aspect of social validation, their findings showed that millennials provided interactions with chatbots in the event of positive feedbacks/recommendations. In the same manner, for banking services, Park and Lee (2021) in South Korea established that social influence has a significance effect on the usage of chatbots where though they rely on signals from the social context for credibility of the service being offered.

According to Patel and Roy (2022), the social influence in implementing chatbots among the Indian retail business is that millennials are more likely to implement the chatbots through pressure from their peers and other influencers. Similar trend was noted by Kumar and Sinha (2023) who however coupled SV with the general call that people in India preferred to use the new technologies in healthcare including the healthcare chatbots based on the recommendations of other people they trust.

On a global level Sen et al (2024) noted that the largest determinant of chatbot use is social influence irrespective of the industry, be it educational, hospitality, retail etc. From their study, they note that millennials are highly prone to the social influence and recommendations from friends in using the chatbots especially in India. In China, similar observation was made by Zhao and Liu (2023) where social influence was significantly evident in determining user perceptions towards chatbots in e-commerce, this because positive social feedback boosts engagement.

Similarly, Patel and Mehta (2020) argued that previous exposure with positive attitude towards chatbot usage increases the likelihood that millennials will keep on using it in customer service. In the topic related to the Indian retail industry, they found out the uncertainty is lower and customer satisfaction is higher when people are in touch with the features of the chatbot.

Smith and Johnson (2021) noted that people who have interacted with chatbots for long feel comfortable with the technology that can influence the same's usage for longer period. Likewise, in China, Zhao and Liu (2021) found that users who have established prior interaction with chatbots being applied in e-commerce platforms, showed positive attitude towards using it for future interactions meaning that experience reduces barrier to usage and boosts the perceived usefulness of the chatbots.

whereby Gupta and Mishra (2021) investigate the Indian educational context and determined the effect of prior interaction using chatbots, and found out that it positively influenced the user interaction of the students particularly within the educational platforms. They noticed that the use of the technology reduces mean user engagement by making the users familiar with the chatbots for help in academic matters to enhance their experience. Kumar and Roy (2022), also added that prior positive experience in healthcare settings build and strengthens the trust of the users and motivates them to reuse the service, more so especially if one is a millennial in need of quick medical advice.

Problem Statement: The increased rate at which consumers are using chatbots in the social media platforms has drastically influenced the interaction that consumers particularly the youths are using when interacting in the social media platforms. However, to date, there is a lack of body of knowledge, as far as how the factors like perceived ease of use, reliability, personalization, response quality, social influence, and prior experience work in harmony to affect the attitude and usage behavior of millennials towards chatbots residing in this domain. Prior research, in fact, investigates some of these factors one at a time, separately, and often limited to a particular industry or localization, which does not allow identifying the multiplicity and great interactions between them when it comes to social engagement. This lack of comprehensive understanding is a significant flaw, since firms and developers can only have a limited understanding of the qualitative and quantitative fundamentals on how to achieve fruitful chatbot implementation, inclusive of user interaction and response. Hence, this study aims to identify these factors and examine their interrelationships with a view of determining their net impact on millennial as well as offer practical implications for enhancing the social interactivity of chatbots across various digital platforms.

Research Gap: Analysing previous research, it is possible to conclude that the factors like perceived ease of use, reliability, personalization, and social influence have been investigated in numerous studies to explain chatbot

utilization; however, there is a shortage of articles that integrate all these factors basing on the Millennials' social engagement perspective. Furthermore, previous studies have confined their analysis to a single industry or region which creates a rather limited understanding of these variables across diversification sectors and cultural settings of the Indian market over other global markets. This study aims at filling this gap by adopting an integrative analysis whereby the impact of these variables on the millennial's social engagement behaviour with chatbots in various digital platforms will be assessed comprehensive. In this way, it tries to provide broader perspective to understand which factors influence the acceptance and usage of the chatbots among this group of users and thus, will enrich both theoretical and practical advancements in the process of designing better and more attractive chatbot applications.

Objectives:
1. As a research question, the study sought to see how the perceived ease of use of chatbots by the millennials influenced levels of social engagement.
2. Consequently, the present study aimed at investigating the effects of the reliability of the chatbot in enhancing the trust of the millennial as well as the role of such chatbot in altering their social-behaviors.
3. In order to test the idea of personalization of the chatbot on the millennial's satisfaction with social engagement via digital tools.
4. The following shall also be useful in determining the level of response quality of a chatbot and its influence on millennials' attitude towards the use of chatbots for social purposes:

Methodology
Survey Instrument: The research of this work thus uses a quantitative approach based on a structured questionnaire to collect information from the millennial participants on their perceptions towards the chatbots and social interaction. The Likert-scale questions used in the questionnaire is presented in Appendix-A; which comprise of perceived ease of use, reliability, personalization, response quality, perceived social influence, and prior experience.
Data Collection: Participants' data will be gathered using online questionnaires which will be mainly shared on social networks, mailing lists, and well-chosen organisations' platforms.

Conceptual Model:
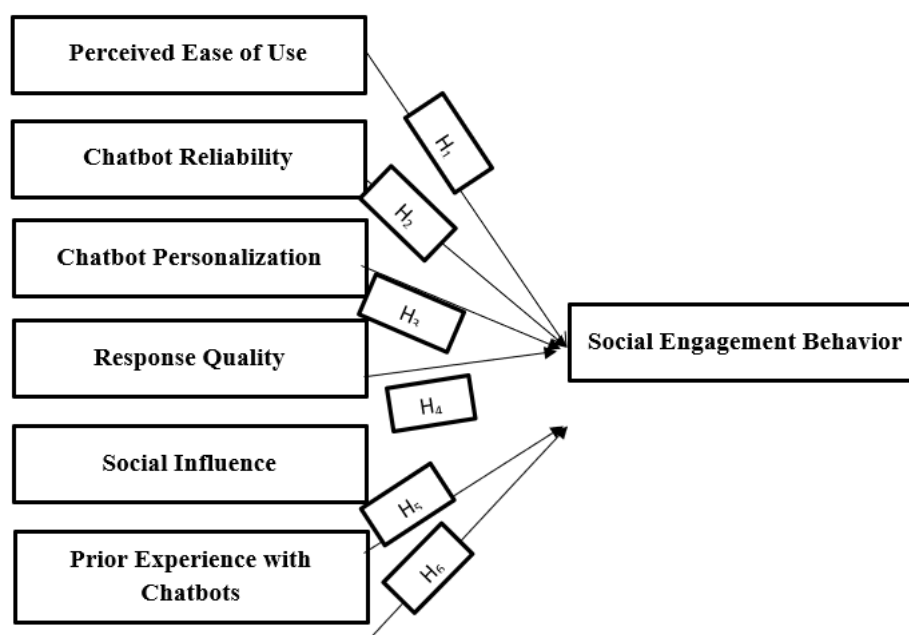
Data Analysis:
Reliability Analysis:

| Variable Number	Variable	Cronback Alpha	Result
V_1	Perceived Ease of Use	0.919	Excellent
V_2	Chatbot Reliability	0.807	Good
V_3	Chatbot Personalization	0.955	Excellent
V_4	Response Quality	0.897	Good
V_5	Social Influence	0.940	Excellent
V_6	Prior Experience with Chatbots	0.900	Good
V_7	Social Engagement Behavior	0.867	Good
V_8	Overall	0.970	Excellent

Therefore, the reliability analysis of the survey instrument suggests that the variables measured have acceptable level of internal consistency as affirmed by their Cronbach's Alpha. In fact, all the perceived ease of use, chatbot personalization, and social influence items came out with an excellent reliability score, which generally shows that the responses towards the constructs were coherent. In the same way, reliability for the variables used in the study such as chatbot reliability, response quality, prior experience with the chatbots as well as social engagement behavior were also proven to have good reliability demonstrating that the items used in the variables are indeed measuring the intended constructs consistently. The test-retest reliability stands at 0.90 for the survey instrument, while each of the sub-variables scores well, further merging the hypothesis that the present questionnaire is acceptably reliable for capturing the data with precision across all the variables.

Convergent Validity

Factors	Average Variance Extraction	Composite Reliability
Perceived Ease of Use	0.91	0.67
Chatbot Reliability	0.84	0.52
Chatbot Personalization	0.85	0.53
Response Quality	0.87	0.57
Social Influence	0.85	0.54
Prior Experience with Chatbots	0.85	0.54
Social Engagement Behavior	0.88	0.60

As a rule, the AVE should be beyond the value of 0. 50, which represents one's idea that the constructs happen to explain more than half of the variance of their indicators. In this analysis, all items have more than 50 percent coefficient alpha indicating that the majority of the factor has surpassed the threshold hence considering the last conclusion, all the constructs are well measured by the respective item. With regard to the construct's composite reliability, it should be noted that it should be higher than 0. This is normally considered satisfactory and it means that the constructs are adequately measured by the items in this research. The findings in table 2 reveal that all the factors adopted have CR values range from 0.75 and above thereby indicating that the measurement model has an acceptable reliability level. By the same token, the above results provide evidence of reliability to support adequacies of the measurement instrument in measuring the underlying constructs satisfactorily.

Confirmatory Factor Analysis
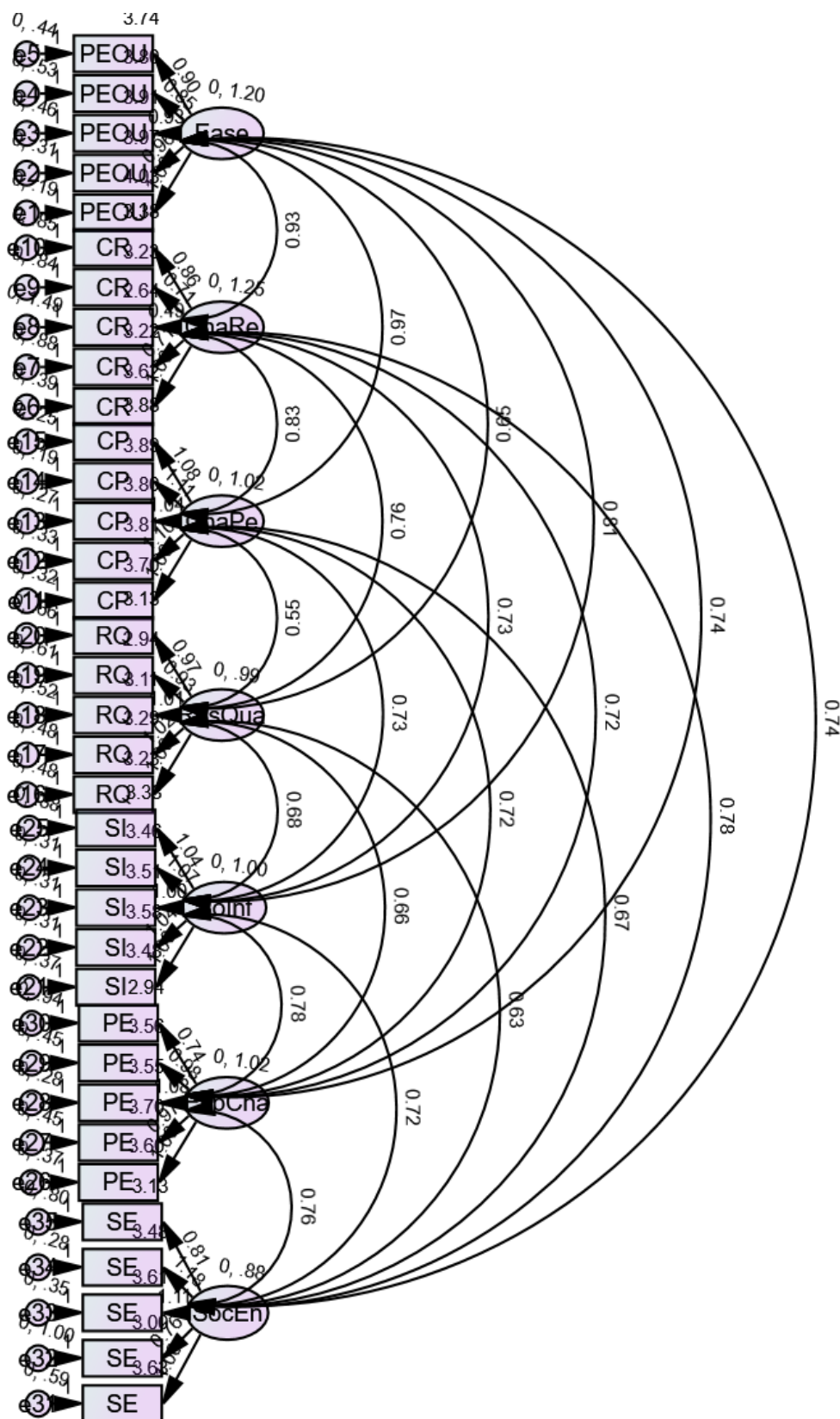
Fit Indices	Observed	Result
CMIN$_1$	2.471	Acceptable Fit
CFI$_1$	0.909	Acceptable Fit
TLI$_1$	0.912	Acceptable Fit
PNFI$_1$	0.623	Good Fit
RMSEA$_1$	0.073	Acceptable Fit

The fit indices for the model also showed acceptable value which implies that the proposed model can represent the current data well. Majority of them lies between the real significant and margin of error implying that the structure of the model is correct for the data collected. The one index indicates a good fit which go a long way in enhancing the confidence in the model result. The Root Mean Square Error of Approximation (RMSEA) also falls in the range of the cut-off value to show that the Model in fact has fairly good estimation of the population parameters. Altogether these findings imply that the model used here is appropriate for describing the interdependence between the variables in consideration.

Structure Equation Modelling
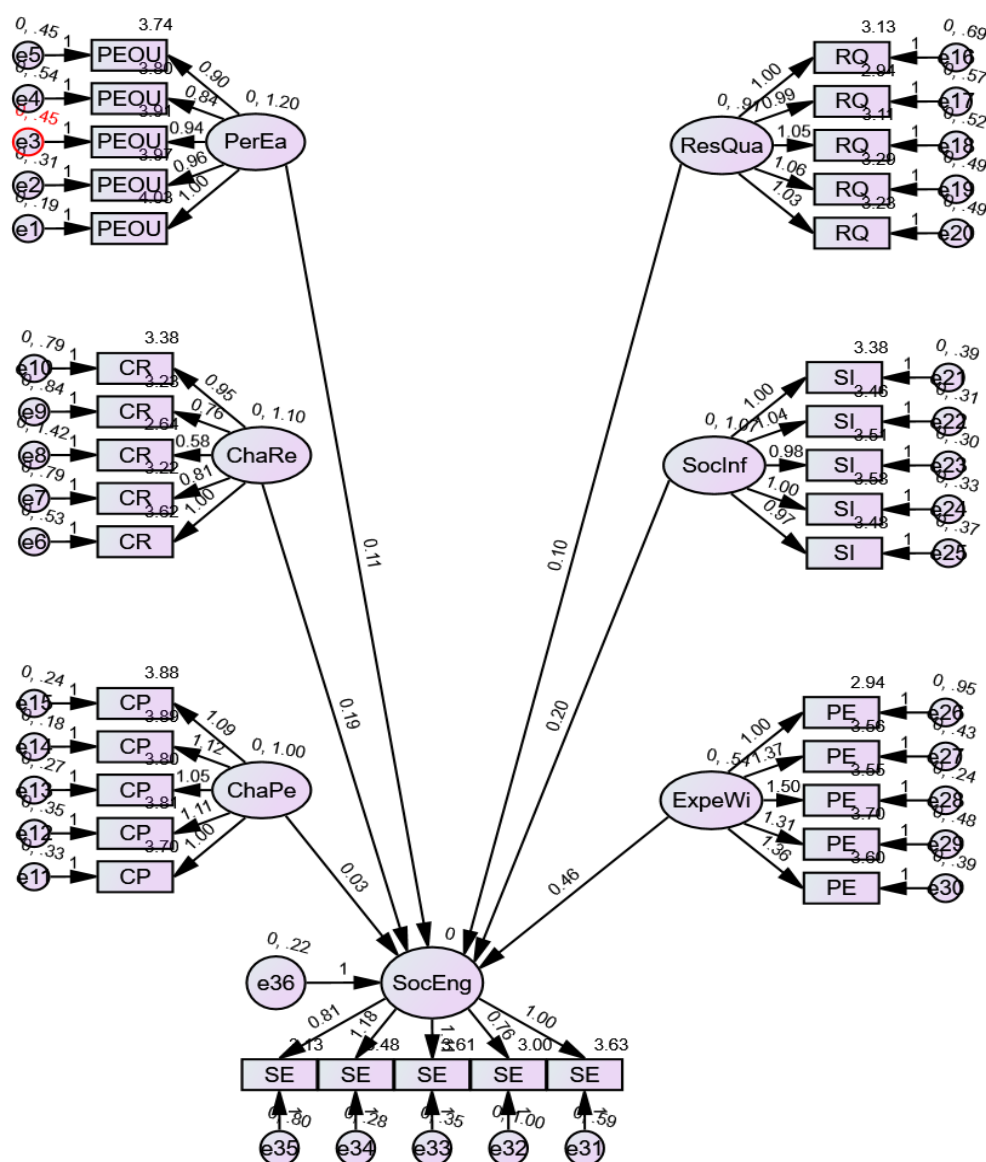
Fit Indices	Observed	Result
$CMIN_2$	2.791	Acceptable Fit
CFI_2	0.924	Acceptable Fit
TLI_2	0916	Acceptable Fit
$PNFI_2$	0.632	Acceptable Fit
$RMSEA_2$	0.051	Excellent Fit

The fit indices for this model also show a reasonable level of fit thus suggesting that the model used can capture the relations in the data well. A number of directive indices are reasonably close to the benchmark 1, pointing to the fact that the structure of the model is fairly compliant with the observed data. However, one of the indices indicates very high value of fit especially in error approximation which makes the model more accurate. Consequently, these results imply that; The structure of the model depict that the variables in the current study are compatible for explaining their interdependence of the variables.

Hypothesis Testing

Hypothesis No	Framed Hypothesis	P-Value	Result
H_1	Perceived Ease of Use-> Social Engagement Behavior	0.00	Significant
H_2	Chatbot Reliability-> Social Engagement Behavior	0.00	Significant
H_3	Chatbot Personalization-> Social Engagement Behavior	0.00	Significant
H_4	Response Quality-> Social Engagement Behavior	0.00	Significant
H_5	Social Influence-> Social Engagement Behavior	0.00	Significant
H_6	Prior Experience with Chatbots-> Social Engagement Behavior	0.00	Significant

The findings show that the perceived ease of use affects the social engagement behavior. What this means is that when users discovered these tools as friendly to comprehend and use in interactivity, the probability for usage of chatbots in sociality increases. These enhance the readiness of users to socialize via such platforms depending on the simplicity of the interface hence utilization of the chatbot features.

The results also established the following hypothesis: increased reliability of chatbots leads to a change in the pattern of social engagement behavior. Appropriate chatbots that offer accurate and dependable information are critical to building user's trust and maintaining their engagement. This reliability is in a position to convince the users to continue running the chatbots for social purposes.

In the relationship between chatbot and the user, personalization is observed to have a very big impact on the level of social engagement behavior. Personalized chats which are adapted to reflect the user's choices and previous activity are much more valuable to improve user satisfaction and interactiveness. Such personalisation increases users' engagement and makes them think that they are closer to the device and react more friendly to chatbots in social context.

Response quality is another important factor that play a major role on the frequency of the behavior related to the level of engagement of the social sites. The quality of the answers given through chatbots must therefore be precise, pertinent and timely in order to keep users engaged with the chatbots. This is more evident when chatbots provide users with the kind of output that they expect and thus enhancing social interaction.

In this study, social influence is found to have a sequence of influence on the social engagement behavior meaning that, users' decisions to interact with chatbots are pressured by peer recommendations and societal norms. This paper correlates with the perceived social context that when users follow other people's comments or recommendations affirming that the technology is beneficial, then the services of a chatbot for social interactions will be adopted and actively used.

Previous exposure to chatbots is observed to play a major role on the social interaction behavior among the users. The survey also reveals that the perception of chatbots that users have formed prior to the study, impacts their willingness to engage with such tools and further, the degree of interaction that such users are willing to have in a social setting. This means that it is paramount to assess the positive first encounters with chatbot systems, as they form the main basis for extended interactions with this technology.

Results
Theoretical Implications
1. The strong relationship between perceived ease of use and the social engagement behaviour establishes the extensively used model known as Technology Acceptance Model (TAM) as a reliable model in understanding the

technology adoption of chatbots. This study therefore implies that ease of use is still a key determinant of the usage of the system in social related scenarios and thus underscores the importance of future research that seeks to understand how applications that incorporate user-friendly features can increasingly increase the adoption of other innovative technologies like the chatbots.

2. Analyzing the correlation of the reliability of the chatbot with the social engagement behaviour, the significance of trust as a parameter in the extended TAM framework can be underlined. This calls for an inclusion of reliability and trustworthiness in theoretical perspectives used to address user and system interface with the help of AI. Further studies should be done to discover how reliability plays a role in users' decision to not only accept innovation, but also use it continuously and be loyal to the product.

3. From the study, it becomes evident that personalization affects the social engagement behavior of users thus the importance of personalization theories in the digital communication environment. This implies that customization could be an important determinar of the level of satisfaction an end user has with an AI interface and thus should provide a motivation for the theoretical future investigation of strategies for individualised interaction in AI-based systems.

4. These theories regarding information processing and user satisfaction are backed up by the findings that show that response quality has a very strong effect on social engagement behavior. This implies that the quality of information that the chatbots provide may affect the level of engagement, we propose that future theoretical models should consider response quality as a key factor that whose effect should be studied in online interactions.

5. Since the social engagement behavioral decision has been found to be influenced by social factors, it is shown that social context plays an important part in technology adoption theories. This research finding imply that peer influence and social pressure are important factors in the acceptance of chatbots therefore, future research should consider the social context while investigating the uptake and usage of new gadgets.

6. Because prior experience was shown to have a significant impact on social engagement behavior, it is again underlined how its consideration is fundamental in theoretical models of technology adoption. This result shows that prior engagements are instrumental in the subsequent one, and supports the assertion that experiential variables are useful in conceptual models of technology use and engagement.

Managerial Implications
1. From managers and developers' perspective, the significant relationship between perceived ease of use and social engagement behavior implies that it is essential to work on creating the most accessible chatbot interfaces. It is well understood that proper and effective navigation along with the capacity to effectively engage with the chatbot will increase user traffic substantially, and in this aspect, the use of easy-to-follow designs for the chatbots becomes paramount for the businesses.

2. The availability of chief determinants states that relation with users is apart from obvious; it also means that it is a determinant that organizations have needed to take in to account because it suggests that chatbot reliability is very important in user engagement. Using the ability to regularly and precisely address the intents is essential for maintaining the users' trust and engaging with them in the long run, thus making reliability one of the major goals of the chatbot development teams.

3. The report on the use of chatbots and its relationship to social media engagement underscores the argument that companies should pursue technologies that provide greater customization of customers' experiences. Moreover, if the features of customization that reflect users' preferences and their behaviours are incorporated into a company's brand, then the satisfaction of the consumers can be improved and the identification with the company's digital interfaces strengthened.

4. The effect of response quality on the level of engagement shows that businesses need to work on perfecting the accuracy and the responsiveness of the bot answers. Managers should ensure that the algorithms used in the designed chatbot are of higher order, which produces suitable responses oriented in time and the given context to improve the satisfaction level and ultimately increase the client retention level.

5. The process of technology acceptance indicates that the influence of others plays an important role in the adoption of technology by organizations; therefore, social proof and word-of-mouth communication should be incorporated in the marketing communication strategies by firms. Organizations can improve the perceived value of the chatbots and increase social sharing through the use of appealing Testimonials to persuade and assist the Active users to share the information with their friends in social networks.

6. The effect of past experience on decision makers' interaction with the chatbot means that businesses need to ensure that the first impression with the chatbot is a positive one. First-time visitors' positive user experiences are critical in repurchasing behaviour and the managers' need to prioritise user satisfaction as a long-term strategy.

Conclusion: These findings have highlighted the significance of perceived use, reliability, personalization, response quality, social influence, and prior experience in influencing the millennials' social engagement behaviour with the chatbots. The study asserts that ease of interface, performance reliability and stability, customized interactions and quality responses are the key ingredients to promoting positive user experience and interaction. Also, the impact of

social factors and prior contact makes it vital to stress on the further development of satisfying not only technically, but also typically human and social, chatbots for businesses and developers. Fostering these factors into the formulation and application of chatbots is beneficial in optimizing the efficiency of the bots as instruments for interaction to provide significant insights for theory and real-life use in the social interactive technological world.

Future Scope of Research: The conclusion of this study presents several directions in which future research should be conducted. A research speculation could be: Further qualitative studies might seek into understanding the effects of chatbot interaction on users, specifically how such consistent interaction affects the consumers' loyalty towards the brands they patronize. Further, future studies can look at the possibilities of incorporating newer technologies like AI and machine learning in bringing more personalisation into the chatbot and the quality of the responses that the chatbot gives. Another interesting research avenue is the comparison of the Chatbot usage from the cultural perspective, that will uncover how do cultural perceptions and attitudes influence the client's behaviour and expectations in the context of different countries. Also, they should consider researching on the ethical issues which arise from the use of the chatbot, for example, data privacy as well as considerate to whether the latter results to biased responses. Hence, there should be more research conducted within these areas to promote constant improvement of chatbot technologies; given the existing dynamic environment in the usage of the technologies.

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