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Customer Experience 2.0: Investigating the Effects of AI Chatbots on Satisfaction and Advocacy in Chennai Banks

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ABSTRACT

This study explores the impact of AI chatbots on customer experience, satisfaction, and advocacy in the banking sector in Chennai. Using a sample of 135 respondents, the study employs descriptive statistics, correlation analysis, and structural equation modeling to examine the relationships between key variables such as reliability, responsiveness, interactivity, usability, extrinsic and intrinsic values, customer satisfaction, and customer advocacy. The results reveal that customers generally perceive AI chatbots positively, with high scores for reliability, responsiveness, and usability, all contributing to enhanced customer satisfaction and advocacy. However, issues related to discriminant validity were identified, suggesting potential overlap in the constructs. The model fit statistics indicate a generally good fit, with areas for refinement to improve predictive accuracy. The study concludes by offering suggestions for enhancing the chatbot experience, such as improving AI complexity, ensuring better differentiation between constructs, and refining the structural model for greater accuracy.

Keywords: AI Chatbots, Customer Satisfaction, Customer Advocacy, Digital Banking, Structural Equation Modeling

INTRODUCTION

During the last ten years, the banking environment in Chennai has become highly digitalized, with technological advancement and change in consumer expectation. Chennai is one of the largest metropolitan cities of India where one would find a diverse and growing number of people with an increasing demand for faster, more efficient, and available banking services from anywhere in the city. This trend of digitalization is further accelerated through widespread take-up of smartphones and connectivity over the internet, where digital banking solutions such as mobile banking, online banking, and, relatively recently, AI-powered tools including chatbots can easily take root. Adoption of AI chatbots in the banks of Chennai fulfills critical requirements for automating the customer service since these platforms enable banks to process query volumes substantially and 24/7. In a competitive market, Chennai banks have realized that implementing AI is not only essential to enhance customer satisfaction but also

to reduce operational costs. Chatbots, which can understand and respond to the queries of users in real-time, are ideal for the tech-savvy customer base of the city and will provide a unique opportunity for banks to modernize their customer service strategies. 1.2 Challenges in the Implementation of AI Chatbots

Despite the enormous potential for adoption in customer support, several challenges apply to banks in implementing the use of AI chatbots in Chennai. Among these are

Data Privacy and Security: The sensitive information relating to finance would require AI systems to adopt very stringent security protocols. Currently, Chennai consumers are growing more sensitive to data privacy issues; therefore, banks should also establish trust with AI-driven services.

Regional Language Adaptation: Chennai is the capital of Tamil Nadu. Here, most people speak in the Tamil language. There again, banks need to cope with the challenge of regional language adaptation in Tamil for better accessibility of all citizens.

Integration with existing systems: Chennai's banks have older systems that do not support modern AI solutions. The upgrade of the system or integration of AI without causing any disruption to the existing operations is a resource-intensive task.

Training and deployment: The effective AI chatbots need significant training to understand what problems the customer might be asking for. For Chennai banks, it is critical to train the chatbot on local dialects, slang, and specific banking terminologies.

Despite these, there have been quest investments to overcome these barriers for efficiency in customer service and digitalization by banks. Such full implementations promise to enhance engagement and the whole experience for customers-a long-term success vehicle for such institutions.

1.3 Trends in AI Chatbot Adoption within Chennai's Banking Industry

There have been several trends within Chennai's banking industry as AI matures, including:

Personalised Services: The urban consumer of Chennai expects the services being offered by banks to be specifically designed for him in terms of his personal needs. Algorithms have made modern AI-enabled chatbots so sophisticated today that they can even learn from their past interactions and return a more 'tailored' response.

Some of the applications have been as follows:

Integration with Digital Payment Systems: Going forward, digital payment systems, especially UPI, will continue to get integrated with such systems to allow payments, account balancing, and other transactions directly over chatbots. Such applications would resonate well with the digital lifestyle of Chennai's urban consumers, who are almost exclusively dependent on mobile apps for daily transactions.

24/7 and Multi-Channel Support: The customer base in Chennai, based on the demographics is divided. Some prefer mobile apps, while others go to websites, and in some instances to traditional call centers. These chatbots are all programmed to work on various channels whereby consistent support is rendered regardless of the targeted platform. This 24/7 access satisfies the customers who demand timely service delivery, especially among the younger generation who believe that convenience is paramount.

1.4 Impact of Chennai Urban Population on AI Support to Customers

The scale and diversity of the consuming population of Chennai would play a different role in orchestrating adoption and functionality of AI-driven customer support. The city has a young professional, middle-aged working masses, and tech-savvy student population that are abreast of digital platforms. This profile of consumers drives the demand for efficient, quick response, and satisfactory customer channels that solve problems without bank visits.

The younger generation in Chennai is more promising to AI solutions, such as chatbots, since they find the technologies more convenient and faster. However, middle-aged and aged consumers may scrutinize the tools more and prefer a human-like interaction that AI chatbots are today becoming more capable of. This disparity in expectation makes the difference between consumer needs for banks in Chennai. They need to allow for versatility, user-friendliness, and adaptation across a huge range of user preferences.

Such a disparate economy representing small business owners, salaried professionals, and entrepreneurs requires AI-powered customer support that can address a wide range of financial concerns, right from simple account inquiries to more complex loan or investment advice. Scalable solutions are provided to the banks such that they can hold an extensive range of requests while promoting increased customer satisfaction through a responsive, accessible customer service option.

Digital transformation of banking sector in Chennai: This discussion on AI and its applicability for the bank

industry highlights the impact of AI in fast-paced, high-rise, and more urbanized and populated cities, such as Chennai.

The use of AI chatbots in further banks going to change customer satisfaction, operational efficiency, and market competitiveness drastically in the banking sector. While challenges are there in data security, language adaptability, and integration with legacy systems, continuing to evolve in AI, this evolution promises that the banking experience for Chennai's multivarious and dynamic consumer will be reshaped.

2. LITERATURE REVIEW

Adoption of AI Chatbots in Global Banking Arena

AI chatbots have been widely embraced in the banking sector as they enable instant, convenient, and personalized customer service at one's behest. Traditional banking models, hitherto described some time back as something like literal physical interfaces, are increasingly becoming digital-first systems where chatbots have emerged to be the frontline agents that can perform a number of their customer needs and services ranging from inquiries about balances to fraud alerts, according to Ameen et al. (2021), Dale (2016). Global banking leaders have taken up the adoption of chatbots for cost reduction, increased engagement, and meeting expectations for round-the-clock availability by their customers, according to McLean & Wilson (2016). In addition, tech giants, such as Microsoft and Facebook, have given significant impetus to the capacities of chatbots and thus made them popularly adopted by all industries (Skjuve et al., 2019).

AI Chatbot Adoption in Chennai's Banking Sector

Banking customers in Chennai are looking for service from banks in the fast-changing times of rapid urbanization and changing consumer preferences. The vast majority of the customers present in Chennai are digitally savvy and look at getting efficient service at a time of their preference. To assist this population, banks in Chennai have identified the need and made AI chatbots an integral part of their digital strategy, in order to provide seamless, responsive, and personalized interactions. However, with numerous difficulties that Chicago faces, adoption of the chatbot is not easy. Considering the regional population is represented by linguistic backgrounds and varied levels of digital literacy, banks will have to take local content into consideration. Overcoming these issues can make the chatbot a proper means of contacting Chennai's diversity in customers.

AI Chatbots to Improve Customer Experience

Customer experience has become one of the cornerstones of competitive advantage in banking. It is observed that positive experiences have a direct relation with increased customer satisfaction and loyalty (Verhoef et al., 2009). The values governing CX in banking are both intrinsic and extrinsic. While efficiency and ease of use are extrinsic values, enjoyment and a sense of control are intrinsic values (Mathwick et al., 2001). AI chatbots enhance the CX by providing real-time responses and reducing wait times and creating the same consistent service experience. This is very crucial in Chennai, as urban customers often seek digital solutions to save time in most cases.

For banks, AI chatbots are an effective means for delivering CX at scale with a level of immediacy and accessibility that cannot be achieved by human agents. In such perfectly designed chatbots, aligned to customer needs, there will be the contribution of both extrinsic values (practical) and intrinsic values (emotional satisfaction). This would make the dual enhancement of CX to increase satisfaction and foster customer advocacy, wherein satisfied customers would be more likely to recommend and defend the brand (Anderson & Srinivasan, 2003).

Major Dimensions of Chatbot Service Quality in Banking Sector of Chennai

Chatbot service quality research recognized four primary dimensions that lead to CX: reliability, responsiveness, interactivity, and usability. In the context of Chennai's banking sector, these dimensions take on more salient characters because the user base is diversified consisting of customers that have varied tastes and expectations.

1. Reliability

Reliability in the chatbot services of banking is referring to how the bot must give the right information and responses to the users with a proper degree of consistency. The banking sector thrives based on these very things. In Chennai, the customer hopes that the chatbot would give him all the details that would form a base for the customer's financial activity. Herein lies an expectation from the customer regarding the exchange of trustful and correct responses through the chatbot at all times.

Reliability has been shown to be a trigger for positive extrinsic and intrinsic values of CX since it satisfies functional needs as well as lends confidence to customers (Chung & Park, 2019). A customer who dials the bank's number to ensure that it is the date on which they should pay the loan installment and is confirmed on the date

grows trust with the service. The values of intrinsic values of CX are further affected by reliability: Customers feel at ease making inquiries because it is reliable.

In Chennai, for a customer who would be using chatbots in more than one language, it is important to observe consistency in reliability across languages. Earlier literature had already established that reliability in chatbot responses directly correlates with higher adoption rates (Sensuse et al., 2019); hence, its consideration is fundamental in measuring customer satisfaction and loyalty.

2. Responsiveness

Responsiveness: Ability of the chatbots to respond fast and efficiently to customer questions. Such responsiveness is a needful requirement of a smart user in a busy city like Chennai, where the accustomed speed of services leads customers to expect fast responses. Normally, the urban users consider saving time, especially when it relates to routine banking functions that are ideally suited for operation through chatbots (Roy et al., 2018).

The wait times decrease with the responsive chatbots. The customers can, therefore, complete transactions and gain information immediately. Such a fast interaction meets extrinsic values as it offers functional benefits; however, it also enhances intrinsic values by ensuring that it is smooth and stress-free (Meerschman & Verkeyn, 2019). For example, if a chatbot promptly gives information regarding the last transactions, the customer is likely to be satisfied and engaged.

Customer service quality research indicates that responsiveness enhances CX and subsequently increases perceived convenience, a very important customer characteristic for regular users of digital services (Parasuraman et al., 1988). Although in Chennai demand for digital efficiency is significant, high responsiveness relates to customer loyalty and advocacy.

3. Interactivity

Interactivity is related to the extent that the chatbot can make the user speak and communicate with it in a typical human way; this dimension adds on to the CX, making it more personalized. Therefore, in case of Chennai, where major population will be demanding human interaction, interactivity will add much value to the perception of customers toward the chatbot.

Interactive chatbots experience can be beyond simple question-answer exchanges to respond in ways that recognize user inputs and engage in contextual dialogue. Intrinsic values of CX support this as it enhances the sense of enjoyment and engagement (Cho et al., 2019). Customers who perceive a chatbot as interactive and conversationally capable are likely to trust a chatbot and enjoy using them (Neuhofer et al., 2015).

The interactivity of the banking chatbots for Chennai can be complemented by additionally including regional language capabilities and handling the dialects prevalent in the region to possibly affect comfort and levels of satisfaction. Interactional chatbots, as stated by Go and Sundar, ensure enhanced CX since they can offer more personal responses while providing appropriate and meaningful experiences for interaction (2019).

4. Usability

Usability is the ease with which users can navigate and interact with the chatbot system. It would be important in this case of Chennai, where the population's digital literacy varies throughout the city. Simple and intuitive interfaces for chatbots support usage and lead to customer satisfaction among less knowledgeable users of digital banking technologies.

High usability will mean that it is easy for the customers to complete their tasks. This is always positive toward both extrinsic and intrinsic values of CX. Ease of navigation in chatbots allows independence in completing tasks among customers, which fosters pride in self-sufficiency as well as independence (Petre et al., 2006). Easy-to-use interfaces, according to usability studies, reduce instances of frustration in a customer, hence making chatbots more attractive to vast numbers (Ren et al., 2019).

Usability is very much associated with the perception of modernity and innovation. In Chennai, where banks compete to come forward to focus on customers, well-designed usable chatbots can help the bank improve its image. According to Finstad (2010), usability in chatbots not only improves CX but also captures brand loyalty.

Impact of Chatbot-Driven Customer Experience on Satisfaction and Advocacy

This will be further augmented by reliable, responsive, interactive, and usable chatbots as part of the overall customer experience. It is evident that worldwide, digitally aligned customer expectations are on the rise, and banks offering better CX are expected to have higher customer satisfaction rates in Chennai. The different studies indicate that customer satisfaction acts as an activator of customer advocacy wherein happy customers not only

revisit the brand but also refer it to others (Anderson & Srinivasan, 2003).

Extrinsic values such as convenience and speed, on the other hand, are intrinsically valued by customers as pleasure and engagement. Thus, the successful and efficient chatbots in terms of these values ensure customer satisfaction, eventual advocacy, which is critical within a competitive market such as Chennai's. According to Gentile et al. (2007), an advocate customer will not only defend the brand but also perform favorable word-of-mouth and loyalty. Thus, Chennai banks can develop long-term customer loyalty and brand growth through the optimization of the quality dimensions of chatbots.

3. RESEARCH DESIGN AND OBJECTIVES

This study aims to explore the impact of AI chatbots on customer experience, satisfaction, and advocacy within Chennai's banking sector. The objectives are designed to reflect Chennai's local context, where urbanization, diverse linguistic backgrounds, and varying levels of digital literacy influence how customers interact with chatbot technology.

1. To examine the effect of AI chatbot quality dimensions—reliability, responsiveness,
2. To analyze the influence of extrinsic values (e.g., efficiency, time savings) and intrinsic values (e.g., pleasure, engagement) of chatbot-enabled customer experience on overall customer satisfaction in Chennai.
3. To assess the relationship between customer satisfaction with chatbot interactions and customer advocacy behaviors (e.g., recommendations, positive word-of-mouth) in Chennai's banking industry.

Study Sector: The Banking Industry in Chennai

The banking sector in Chennai has increasingly adopted AI-powered chatbots to improve customer service and provide seamless, 24/7 support. Major banks in the region, including Indian Bank, Canara Bank, State Bank of India (SBI), HDFC Bank, ICICI Bank, and Axis Bank, are using AI chatbots to handle customer inquiries, assist with transactions, and recommend products. These banks operate in a competitive environment where customer experience is essential for differentiation, and chatbots play a pivotal role in meeting customer expectations for efficiency and accessibility.

Data Collection

To examine the effects of AI chatbots on customer experience, data will be collected through an online survey targeting customers who have interacted with chatbot services from major banks in Chennai. The survey will collect responses on chatbot service quality dimensions—reliability, responsiveness, interactivity, and usability—and assess their impact on customer satisfaction and advocacy.

Sample Size and Demographic Considerations

The sample size for this study is 135 respondents, chosen to ensure a manageable yet representative sample of Chennai's banking customers. Key demographic considerations include:

1. Age Groups: Covering a broad age range to capture diverse experiences, from younger digital-native customers to older individuals who may be less familiar with chatbot technology.

2. Education Levels: Including participants with varying educational backgrounds, reflecting different levels of comfort with digital banking.

3. Employment Sectors: Encompassing respondents from private and public sectors, as well as students, to capture a variety of expectations and experiences with chatbots.

4. Language Preferences: Addressing Chennai's linguistic diversity by considering respondents who may prefer interactions in Tamil, English, or both.

The targeted sample of 135 respondents provides insights into local customer preferences and experiences, contributing valuable data to assess the effectiveness of AI chatbots in enhancing customer satisfaction and loyalty in Chennai's banking sector.

DATA ANALYSIS AND INTERPRETATION

The statistical analysis has been divided into three steps: first, the descriptive statistics of all the variables were calculated using SPSS software V.23; second, the constructs validity was assessed using a confirmatory factor analysis (CFA), and the Cronbach's alpha coefficient was used to assess the reliability of the constructs; third, to achieve the objectives of the study, structural equation modeling was done, using AMOS software V.23.

Descriptive Statistics

The demographic characteristics of the sample are presented in Table 2. The sample consists of 51.9% males and 48.1% females, indicating a nearly balanced gender representation. Most respondents, 94%, are within the 21–40

age range, with only 6% over the age of 40. This age distribution aligns with the profile of digital banking users, who tend to be younger and more accustomed to technology-based services.

In terms of educational background, 38.5% of respondents are graduates, reflecting a well-educated sample familiar with digital tools like AI chatbots. The employment distribution shows that 48.4% work in the private sector, while 31.3% are employed in the public sector. This mix provides insights into chatbot usage across diverse professional backgrounds, essential for understanding varied customer expectations and satisfaction levels within Chennai's banking sector.

Descriptive statistics

Variable	Mean	Median	SD	Range	Min.	Max.
Reliability	3.9950	4.0000	.86187	4.00	1.00	5.00
Responsiveness	3.9950	4.0000	.85373	3.67	1.33	5.00
Interactivity	3.9960	4.0000	.85354	3.33	1.67	5.00
Usability	3.9970	4.0000	.84739	3.56	1.44	5.00
Extrinsic values	3.9930	4.0000	.85020	3.33	1.67	5.00
Intrinsic values	3.9950	4.0000	.84825	3.33	1.67	5.00
Customer satisfaction	3.9866	4.0000	.85330	3.25	1.75	5.00
Customer advocacy	3.9960	4.0000	.84649	3.33	1.67	5.00

The descriptive statistics for the key variables show that respondents generally have positive views about the chatbot services. For reliability, the average score is 3.9950, indicating that most users believe the chatbots provide accurate and consistent responses, with only minor variation in opinions. Similarly, responsiveness has a mean of 3.9950, showing that customers perceive the chatbots to be quick in their responses, although there is some variation in this perception. Interactivity and usability both have high average scores of 3.9960 and 3.9970, respectively, suggesting that users generally find the chatbots engaging and easy to use. The average scores for extrinsic values and intrinsic values are also high (3.9930 and 3.9950), meaning customers feel both practical benefits and enjoyment from using the chatbots. Finally, customer satisfaction and customer advocacy both have mean scores of 3.9866 and 3.9960, respectively, indicating that users are generally satisfied with the chatbot service and are likely to recommend it to others, with only slight variations in their responses.

Correlation matrix and the discriminant validity

Construct	1	2	3	4	5	6	7	8
Reliability	1	0.989**	0.978**	0.988**	0.987**	0.984**	0.979**	0.975**
Responsiveness	0.989**	1	0.982**	0.994**	0.992**	0.986**	0.988**	0.984**
Interactivity	0.978**	0.982**	1	0.986**	0.984**	0.985**	0.982**	0.975**
Usability	0.988**	0.994**	0.986**	1	0.997**	0.993**	0.990**	0.990**
Extrinsic Values	0.987**	0.992**	0.984**	0.997**	1	0.990**	0.992**	0.988**
Intrinsic values	0.984**	0.986**	0.985**	0.993**	0.990**	1	0.992**	0.983**
Customer satisfaction	0.979**	0.988**	0.982**	0.990**	0.992**	0.992**	1	0.984**
Customer advocacy	0.975**	0.984**	0.975**	0.990**	0.988**	0.983**	0.984**	1

The correlation matrix illustrates the relationship among the constructs of interest in this study. In general, as viewed intuitively, it seems that all pairs of variables are positively correlated to a high degree.

The Reliability construct correlates high with all other variables, especially with Responsiveness (0.989), Usability (0.988) and Interactivity (0.978). This shows that customers who perceive the chatbot as reliable also establish that it is responsive, usable, and interactive. On the same note, Responsiveness has strong positive correlation with Usability (0.994) and Interactivity (0.982), indicating users' tendency to say that the chatbot is responsive and thus easy to use and interactive.

Many of the constructs encountered by the variables of Extrinsic Values and Intrinsic Values correlate well with other variables, in particular with Usability (0.997) and Customer Satisfaction (0.992), which indicates that users who find value in the extrinsic or practical benefits and intrinsic delight of the chatbot value its usability and satisfaction significantly.

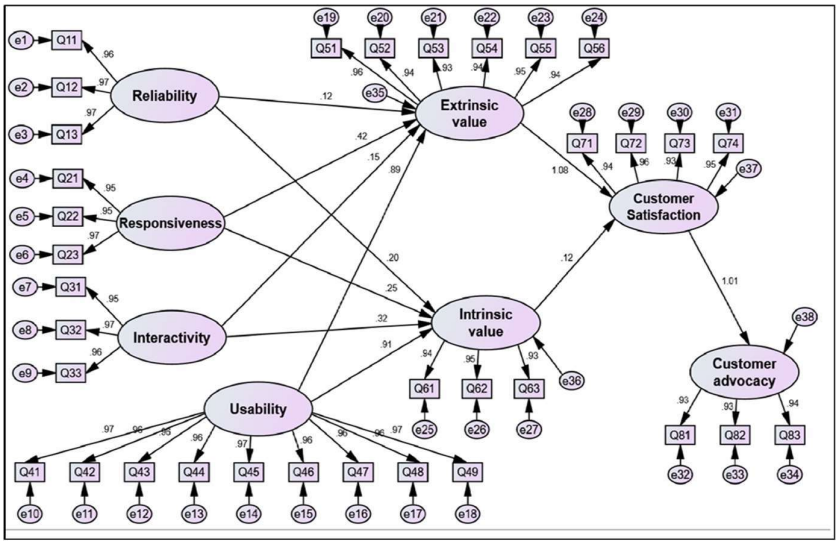
The strongest correlation would be between Usability and Extrinsic Values (0.997), which suggests that usability is at the core of what drives both extrinsic benefits and user satisfaction. It therefore implies that very usable chatbots can help in the enhancement of extrinsic and intrinsic values substantially that contributes extensively to the overall customer satisfaction.

The relationships between Customer Satisfaction and Customer Advocacy (0.984) indicate that satisfied customers are likely to recommend or advocate for the chatbot. Generally, high correlations across variables reflect high interconnectivity among the attributes of the chatbot: reliability, responsiveness, usability, interactivity, and values; together and in isolation, these enhance customer satisfaction and advocacy.

Discriminant Validity

However, these high correlations also raise issues with the discriminant validity of the constructs. In other words, they check if the constructs are indeed distinct from one another. In the given case, since all the relations are above 0.975, it may indicate that these two constructs are highly interconnected, though such tests like Average Variance Extracted and Fornell-Larcker Criterion would then be necessary to be certain whether each construct was distinct. High correlations, though strong indicators of relationships between constructs, may be a sign that some constructs overlap at the conceptual level.

Structural Model



Standardized regression coefficients of the proposed model

Model fit statistics of the Structural model

Index	Fit value	Cut-off value
Normed χ^2 (χ^2/df)	1.990	<3.00
Goodness of Fit Index (GFI)	.873	>0.90
Adjusted goodness of fit index (AGFI)	.852	>0.90
Normed Fit Index (NFI)	.871	>0.90
Comparative Fit Index (CFI)	.887	>0.90
Root Mean Square Error of Approximation (RMSEA)	.025	< 0.09
Root mean square residual (RMR)	.028	< 0.09

The model fit statistics for the structural model indicate a generally acceptable fit, with some areas that could be improved. The Normed χ^2 (χ^2/df) value of 1.990 is well below the threshold of 3.00, suggesting a good fit between the model and the data. The Goodness of Fit Index (GFI) value of 0.873 is slightly below the ideal cut-off of 0.90, indicating that the overall model fit is acceptable but could benefit from improvement. Similarly, the Adjusted Goodness of Fit Index (AGFI) of 0.852 and the Normed Fit Index (NFI) of 0.871 are both below the 0.90 threshold, pointing to a moderate fit, with potential for further refinement.

The Comparative Fit Index (CFI) of 0.887 is also below the 0.90 cut-off, suggesting the fit is reasonable but could be improved for a better comparison of the model to a baseline model. On the positive side, the Root Mean Square Error of Approximation (RMSEA) value of 0.025 is well below the cut-off of 0.09, indicating an excellent fit, with the model's approximation error being very low. Similarly, the Root Mean Square Residual (RMR) value of 0.028, also below the threshold of 0.09, further supports that the model has a very good fit, with minimal residual errors between the observed and predicted data.

Overall, while the model demonstrates a good fit, the indices for GFI, AGFI, NFI, and CFI suggest there is room for improvement in the model's fit, and some refinements could enhance the model's performance. However, the RMSEA and RMR values show that the model is generally strong and well-approximated.

FINDINGS AND RECOMMENDATIONS

There is a general positive perception of AI chatbots by the customers of the banking sector in Chennai. In the sample, there is nearly a balanced distribution of gender, which mainly tends toward young, educated users; 94% of users fall within the 21–40 age range. This age group probably propels the high satisfaction and engagement of customers with the use of AI chatbots in digital banking. Respondents also exhibit a positive attitude toward the reliability, responsiveness, and usability of the chatbots, given the rather high mean scores 3.9950, 3.9950, and 3.9970 respectively. These findings have demonstrated how customer accuracy, quick responses, and ease of use by the chatbots improve their overall customers' satisfaction. Furthermore, based on how the correlations emerge between the constructs of reliability, responsiveness, and usability, there exists a positive influence on one attribute from the perceived quality such that it contributes more amazingly to customer satisfaction and advocacy. The high scores for the aspects of extrinsic and intrinsic values imply that the use of the chatbot brought both practical benefits and enjoyment on the part of the customer, thus furthering customer satisfaction and likelihood to recommend the service.

However, despite all the good news from this study, there are areas that need attention. The high correlations over 0.975 concerning discriminant validity highlighted between the constructs suggest that some of the attributes of the chatbot conceptualize over. This would mean having some conceptual overlap issues, which makes it tricky to distinguish several influencing factors on the perceptions of a customer. Beside that, though the fit of the model is sufficiently good according to statistical values obtained, markers of GFI, AGFI, and CFI values increase below ideal threshold, thus signifying that more refinement is necessitated by the model for increasing its ability to predict performance and practicality.

RECOMMENDATIONS:

Keeping this problem in mind, banks can insist on increasing the AI chatbot's capability to handle complexity. Although they are adept at performing routine transactions, their suitability for answering more complex queries can also be enhanced by the addition of sophisticated AI algorithms or by facilitating easy handover to human agents when a transaction exceeds the limits of a machine's capabilities. The discriminant validity between constructs like reliability and usability can be much more evident by using more differentiated conceptual definitions and measurement instruments. Additional investments in security and privacy would be able to address residual risk concerns surrounding the handling of sensitive financial information, thereby enhancing confidence and usage of chatbot services. On an improvement of model basis, better fit statistics-the GFI, AGFI, and CFI indexes-would be useful in order to achieve a better fit between the data and the model as well as enhance the overall accuracy of prediction. These refinements may further improve the customer experience and can increase customer satisfaction and advocacy for banking AI chatbots through continuous feedback loops and user-driven improvements.

CONCLUSION

It is concluded that AI chatbots in banking are very well appreciated in Chennai with high user satisfaction in key attributes such as reliability, responsiveness, interactivity, and usability. There was also a positive correlation between the attributes where an improvement in one area such as usability significantly enhanced others and hence, offered a positive customer experience. Moreover, the extrinsic and intrinsic values that customers obtain through the chatbot services increase even more the level of satisfaction and the chances of customer advocacy.

Areas for improvement in the study were, however identified to mainly be on discriminant validity, as several constructs showed a very high intercorrelation that may indicate an overlap between some customers' perceptions of the relevant chatbot attributes. Another opportunity to further fine-tune the structural model to make predictions seem more compatible with data was yet to be discovered. After all, AI chatbots are playing a very crucial role in the shaping of the customer experience in the banking sector, and continued technological developments, security, and model precision are truly essential for even better delivery and satisfaction of these benefits to users. By filling these gaps and leveraging the positive feedback alone, banks are able to improve the chatbot experience, build greater trust among their customers, and get them as advocates toward the future success of digital banking services.

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