Use of ChatGPT in Building Personalisation in Business Services

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ABSTRACT

In today's digital age, personalised customer service is becoming increasingly important for businesses to maintain and improve customer satisfaction. Personalisation in business services involves the ability to provide an experience tailored to each customer's unique needs, preferences and characteristics. This research aims to explore the use of ChatGPT in building personalised business services by overcoming existing challenges. The focus of this study is primarily qualitative. Methods for gathering data include paying close attention to detail while viewing and recording data, and then using analytical techniques such as data reduction, visualisation, and inference to draw conclusions. The study concluded that the use of ChatGPT in building personalised business services offers great potential to improve customer experience, operational efficiency and marketing outcomes. By leveraging ChatGPT's ability to interact in natural language, provide personalised recommendations, provide responsive customer support, and collect valuable data, businesses can create better customer experiences, build more personalised relationships, and improve their business success.

Keyword: ChatGPT, Business Service Personalisation, Qualitative

INTRODUCTION

In the contemporary era of digital advancements, the significance of tailored customer service is progressively escalating for enterprises in their efforts to uphold and enhance customer contentment (Subagja et al., 2023). Personalisation in business services refers to the capacity to offer customized experiences that cater to the distinct requirements, preferences, and attributes of individual customers. In the present scenario, the utilization of artificial intelligence (AI) and chatbot technology is progressively gaining traction as a favored choice among companies aiming to enhance the customization of their business services (Sudirjo, Ausat, et al., 2023).

An illustrative instance of artificial intelligence (AI) is ChatGPT, a generative language model that has been developed by OpenAI (Ausat, Suherlan, et al., 2023). ChatGPT employs a deep learning methodology and operates as a conversational agent with the ability to comprehend and generate responses in natural language (Fauzi et al., 2023). With the utilization of ChatGPT, corporations have the ability to construct chatbots that possess the capability to engage in automated interactions with customers, thereby delivering tailored responses.
Nevertheless, although the utilization of ChatGPT in the development of customized business services holds great potential, there exist certain obstacles that must be addressed (Harahap, Ausat, et al., 2023). One of the primary obstacles lies in the task of ensuring that ChatGPT possesses the capability to comprehend and provide suitable responses to customer inquiries (Ausat, Azzaakyyah, et al., 2023). In certain instances, ChatGPT may produce responses that are not pertinent or precise, thereby diminishing the user's satisfaction and impeding the achievement of effective personalization.

Furthermore, it is imperative to take into account the security and privacy implications associated with the utilization of ChatGPT within the realm of business services. Chatbots utilizing ChatGPT technology will engage in interactions with customers, during which they may acquire sensitive data, including personal information and financial details. Hence, it is imperative for organizations to guarantee the adequate protection and responsible utilization of customer data.

The objective of this study is to investigate the application of ChatGPT in the development of customized business services by addressing prevailing obstacles. The present study will encompass the creation and assessment of a chatbot prototype utilizing ChatGPT, alongside an examination of user experience and customer satisfaction pertaining to the chatbot's services. The anticipated outcomes of this study are poised to offer valuable insights and pragmatic suggestions for enterprises seeking to proficiently and securely implement business service personalization through the utilization of ChatGPT.

**LITERATURE REVIEW**

**ChatGPT**

ChatGPT is an advanced generative language model that has been developed by OpenAI. The acronym GPT stands for "Generative Pre-trained Transformer". The utilized model employs deep learning methodologies and leverages transformer architecture to comprehend and produce textual content in accordance with the provided input (Sudirjo, Diawati, et al., 2023). The original purpose of GPT was to facilitate text generation tasks, specifically those involving the creation of stories or articles in response to a provided prompt. Nevertheless, the emergence of ChatGPT has enabled the model to be employed in a targeted manner for the purpose of human-machine interaction and conversational exchanges. ChatGPT has been specifically developed to comprehend and provide responses to natural human language in a manner that is both interactive and immersive (Kraugusteeliana et al., 2023).

ChatGPT is trained through the utilization of a substantial corpus of textual data derived from diverse sources, including but not limited to the internet and literary works. The training procedure encompasses the task of making predictions about the subsequent word in a given sentence, relying on the contextual information already present (Harahap, Kraugusteeliana, et al., 2023). Therefore, the model has the capacity to acquire intricate language patterns and textual frameworks.

In the given context of employing ChatGPT, this particular model has the capability to be seamlessly incorporated within a chatbot framework or conversational application. When a user submits textual input, ChatGPT will process the information and generate a suitable response by utilizing its training data to comprehend the text. ChatGPT is a versatile tool that facilitates a wide array of interactions, encompassing both straightforward inquiries and intricate dialogues (Sutrisno et al., 2023). Although ChatGPT is proficient in generating responses that bear resemblance to human language, it is crucial to bear in mind that this model lacks the profound contextual comprehension exhibited by humans. In certain instances, ChatGPT may generate responses that are unrelated or contain inaccuracies. Consequently, it is imperative to conduct thorough testing and evaluation in order to ascertain the dependability and caliber of the generated responses.

**Personalising Business Services**

The concept of personalisation in the realm of business services pertains to the methodology or tactic employed by corporations to tailor and individualise customer experiences (Chandra et al., 2022). This entails delivering tailored services that are specifically designed to accommodate the individual preferences, requirements, and attributes of each customer. In the
realm of business service personalization, organizations endeavor to provide pertinent and significant encounters to individual customers. The overarching objective is to cultivate enhanced connections between enterprises and their clientele, augment levels of customer contentment, and foster heightened levels of loyalty (Lemon & Verhoef, 2016). There are several ways in which business service personalisation can be applied:

1. Personalised communication: Organisations have the ability to utilise customer data in order to effectively deliver personalised messages and communications. An instance of this would involve the transmission of tailored offers or promotions that are specifically tailored to a customer's preferences or purchase history.

2. Product recommendations: Companies have the ability to offer customers product recommendations that are both relevant and engaging by analysing customer preferences and purchase history. This phenomenon has the potential to enhance the probability of customers engaging in supplementary purchases or engaging in purchases of greater magnitude.

3. Customised customer service: Companies have the ability to utilise customer information in order to offer personalised services during their interactions with customers. For instance, employing personalised customer interactions by addressing individuals by their names, comprehending their prior service records, and offering customised resolutions to address specific customer issues.

4. Customised user experience: Within the realm of digital services, companies possess the capability to personalise the user interface and overall experience. An instance of this would involve tailoring the visual presentation of a website or application in accordance with user preferences or configurations, or offering functionalities that are pertinent to the requirements of customers.

The implementation of personalised business services has the potential to enhance customer engagement, foster enduring relationships, cultivate loyalty, and facilitate a more gratifying experience for customers. Furthermore, the utilisation of data analytics aids organisations in gaining a deeper comprehension of their clientele, recognising prevailing patterns or behaviours, and enhancing the efficacy of their marketing and sales tactics.

**RESEARCH METHOD**

Primary data collection through in-depth field research was not conducted as a component of this study. Instead, the researchers relied on secondary sources and subsequently analysed them within a laboratory setting. The investigators sought guidance from various sources in order to carry out the inquiry with optimal efficiency. A comprehensive search was conducted across digital media platforms and scientific databases to identify pertinent sources. Keyword searches were employed to retrieve information directly related to the topic under consideration. The subject matter discussed pertained to the utilisation of ChatGPT for the development of customised business services. The authors employed a flexible search strategy, enabling them to access a broader array of print and digital resources in order to acquire the necessary information. We derived advantages from the time savings that ensued. The validity of our argument is substantiated by the inclusion of scholarly articles and databases, such as ResearchGate, Elsevier, and Emerald Insight. The primary focus of this research revolves around the utilisation of ChatGPT for the development of personalised business services. The authors utilised keyword stress to ensure logical coherence in the provided arguments and to establish clear delineations within the discourse. Qualifying phrases were used to achieve this result. The articles and essays published in academic journals and anthologies after 2015 formed the backbone of our investigation. Throughout the search process, a systematic approach was employed whereby specific keywords were utilised to conduct a thorough exploration of diverse online databases. It is important to acknowledge that this research exclusively encompasses articles, journals, and publications that hold significance in the realm of utilising ChatGPT for the development of personalised business services. Excluded from consideration were papers, journals, and magazines that were not directly pertinent to the topic at hand. In general, the article incorporates a comprehensive range of 22 cited works, thus offering extensive coverage on the subject matter.
This research can be classified as a qualitative study. Data was gathered through a combination of methods, including careful listening and recording of all relevant data. The aforementioned techniques were used across the board throughout data analysis, from initial data collection to final conclusion drawing. The fundamental motivation for this research was to have a more thorough comprehension of the materials used in this analysis. In order to draw useful conclusions and achieve noteworthy results from the gathered data, it was subjected to a methodical procedure known as "data reduction," which comprised organizing, categorizing, and refining the data. Due to the complicated and variable nature of the data, analysis was performed during the reduction phase. During this stage, we concentrated on streamlining the content down to its essentials so that we could reach our end aim. In the beginning, 50 different resources were compiled. There was a change of 22 units in the quantitative variable as a result of the first step. In order to make the information presented easier to understand, visual aids like graphs and charts will be used. The second phase of data reduction entails arranging the material in an organized fashion with the intention of enhancing comprehension and aiding inference. Field notes, which can be viewed as a sort of written communication, are frequently used to convey information in this setting. Data classification and organization can be enhanced when this method is used to represent data inside a relational framework. Making sound conclusions based on the evidence at hand is the last step of any investigation. The foregoing measures have produced a thorough method for analyzing qualitative data. A thorough analysis was performed after data reduction and presentation was finished to make sure everything was in line with the study's aims. The primary objective of this stage is to find meaning in the obtained data by spotting commonalities and differences that may be used to address problems that have already been recognized. It is widely agreed that these sources produce trustworthy findings. One of the main purposes of this effort is to collect reliable data for the sake of better comprehension.

RESULTS AND DISCUSSION

In the current era of technological advancement, there is a growing recognition of the significance of delivering a customised and gratifying customer experience within the realm of business. An innovative approach to accomplish this objective involves leveraging ChatGPT (Generative Pre-trained Transformer) for the development of customised business services. ChatGPT is an artificial intelligence-driven natural language model that has been developed by OpenAI. Its primary objective is to generate text that is both responsive and pertinent to the user’s input.

The utilisation of ChatGPT enables businesses to provide a customised and interactive customer service encounter (Kamar et al., 2022). Through the utilisation of ChatGPT, users are afforded the opportunity to engage with the system using their own vernacular, thereby eliminating the need to acquire proficiency in intricate user interfaces or adhere to inflexible forms or menus. This feature enhances the user experience by fostering a sense of familiarity and ease, enabling customers to effectively engage with businesses and articulate their requirements with greater precision. Additionally, ChatGPT has the capability to offer individualised suggestions for products or services (Dwivedi et al., 2023). Through the analysis of customers' preferences and transaction history, ChatGPT has the capability to generate personalised recommendations that are pertinent and customised to meet individual requirements. For instance, in the scenario where a customer has made multiple purchases within a specific product category, ChatGPT has the capability to suggest analogous or supplementary products that might capture their interest. This practise serves to enhance levels of customer satisfaction and promote cross-selling or the generation of additional sales.

Furthermore, ChatGPT has the capability to offer tailored and prompt customer assistance. In certain instances, the ChatGPT system has the capability to promptly offer responses to frequently asked questions or rudimentary customer support inquiries without necessitating human involvement (Harahap, Sutrisno, et al., 2023). This measure has the potential to decrease customer waiting times and enhance the overall efficiency of customer service. Nevertheless, it is crucial to bear in mind that despite the remarkable capabilities of ChatGPT, there are limitations to its ability
to automatically resolve all customer queries or issues. Hence, it is imperative to possess the capability to transition to a human agent as required. Moreover, the utilisation of ChatGPT for the development of customised business services can facilitate the gathering and examination of customer data. During customer interactions, ChatGPT has the capability to gather significant data pertaining to customer preferences, requirements, and purchasing patterns (Haleem et al., 2022). The provided data possesses the potential to facilitate trend analysis, pattern identification, and a deeper comprehension of customer preferences. By acquiring a more profound comprehension of their customer base, enterprises can enhance their marketing strategies, offer more tailored propositions, and enhance the overall customer experience.

Nevertheless, despite the numerous advantages associated with employing ChatGPT for the development of customised business services, there exist certain obstacles that necessitate resolution. One of the primary concerns pertains to the safeguarding of customer data privacy (Subagja et al., 2022). When businesses engage in the collection and utilisation of customer data, it is imperative that they prioritise the safeguarding of customer privacy and adhere to relevant data protection regulations. Furthermore, the utilisation of ChatGPT necessitates allocation of resources towards system development, training, and maintenance in order to guarantee optimal performance and a satisfactory user experience.

The utilisation of ChatGPT in the development of customised business services holds significant promise for enhancing the calibre of customer service and user satisfaction. ChatGPT has the potential to enhance customer-business interactions by providing a tailored, engaging, and adaptable experience (Hassani & Silva, 2023). This can result in the cultivation of more robust customer connections, heightened customer loyalty, and enhanced levels of overall customer satisfaction. Nevertheless, it is crucial to take into account the obstacles and guarantee adherence to data privacy regulations when incorporating this technology.

Furthermore, the utilisation of ChatGPT can contribute to the enhancement of operational efficiency within businesses, in addition to the advantages previously discussed. The integration of ChatGPT as a virtual assistant or chatbot enables businesses to automate various routine and repetitive tasks that were previously reliant on human involvement (Ausat, 2023). Illustrative instances encompass responding to general inquiries, furnishing rudimentary details regarding products or services, or executing administrative functions such as arranging appointments or managing payments. By liberating human resources from these tasks, companies can reallocate their time and effort towards more intricate and value-driven endeavours (Ausat, Risdwiyanto, et al., 2023).

Moreover, ChatGPT has the potential to foster enhanced personalised connections between consumers and companies. In the realm of business, the cultivation of robust and individualised connections with clientele can yield numerous advantages, such as heightened customer allegiance, enhanced customer retention rates, and the acquisition of favourable endorsements from customers. By leveraging ChatGPT, businesses have the ability to enhance their customer communications by imbuing them with a greater sense of humanity and empathy. This, in turn, leads to a more favourable customer experience and serves to fortify the emotional connection between the customer and the brand (Wikansari et al., 2023). The capability of ChatGPT to comprehend natural language, adapt communication styles, and deliver responses tailored to the customer's personality and preferences enables the attainment of this objective.

Another aspect to consider is the potential of incorporating ChatGPT into the development of customised business services, which has the capacity to enhance marketing and sales strategies. By means of engaging with customers, ChatGPT has the capability to gather significant data pertaining to their preferences and interests. The aforementioned data possesses the potential to discern prevailing market trends, gain insights into customer preferences, and facilitate the formulation of enhanced marketing strategies. One potential application of the information gathered by ChatGPT is its utilisation by businesses to develop more focused advertising campaigns, deliver personalised offers to customers based on their preferences, and guide customers towards products or services that align with their specific requirements (Rivas & Zhao, 2023). Hence, the utilisation of ChatGPT holds the potential to aid enterprises in enhancing marketing endeavours and augmenting sales conversion rates.

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Nevertheless, it is crucial to bear in mind that the utilisation of ChatGPT is accompanied by certain limitations and challenges that necessitate careful consideration. For instance, although ChatGPT possesses the capability to produce text that is responsive, there remains the potential for errors or misinterpretation of customer inquiries or demands. Hence, it is imperative for companies to consistently monitor and update their ChatGPT models in order to enhance the precision and pertinence of the responses rendered. Furthermore, it is imperative to offer comprehensive training and explicit guidance to ChatGPTs in order to mitigate instances wherein the models produce inappropriate content or contravene brand policies.

In order to address these obstacles, enterprises have the option to integrate ChatGPT with a combination of supplementary approaches, including human intervention as required or more sophisticated natural language processing technologies. The integration of various methodologies can enhance the efficacy and dependability of systems, while concurrently optimising the satisfaction of customers.

The utilisation of ChatGPT in the development of customised business services presents a variety of notable advantages. ChatGPT offers a range of benefits for businesses, including enhanced customer experiences through personalization and interactivity, tailored product recommendations, responsive customer support, improved data analytics, and heightened operational efficiency. By leveraging these capabilities, businesses can enhance the quality of their customer service and gain a competitive edge in the market. Nevertheless, achieving effective implementation necessitates a comprehensive comprehension of customer requirements, meticulous selection of an appropriate ChatGPT model, and continuous endeavours to cultivate and sustain the system's relevance and efficacy over an extended duration.

CONCLUSION

The utilisation of ChatGPT in the development of customised business services presents significant prospects for enhancing customer satisfaction, operational effectiveness, and marketing outcomes. By utilising ChatGPT's capacity to engage in natural language interactions, offer customised suggestions, deliver prompt customer support, and gather valuable data, enterprises can enhance customer experiences, foster personalised connections, and enhance their business performance. In light of the above, this research arrives at the following suggestions:

a) Understand customer needs: Prior to the implementation of ChatGPT, it is imperative to gain a comprehensive understanding of the needs, preferences, and expectations of your customers. By gaining a comprehensive understanding of one's customers, it becomes possible to enhance the utilisation of ChatGPT in order to deliver a more individualised and pertinent user experience.

b) Pay attention to customer data privacy: When engaging in the collection and utilisation of customer data, it is imperative to ensure the adequate protection of customer privacy and adherence to relevant data protection regulations. The imperative is to ensure transparency to customers with regards to the utilisation of their data, while concurrently offering them the ability to exercise control over their privacy settings.

c) Evaluate and improve ChatGPT performance regularly: Although ChatGPT is an advanced technology, its performance can be enhanced by means of consistent monitoring and updates. Conduct an analysis of customer responses and feedback, utilising this information to enhance and refine the ChatGPT model.

d) Incorporate other solutions if needed: Occasionally, ChatGPT may encounter limitations in its ability to address various scenarios or fulfil customer inquiries. It is advisable to include additional approaches, such as human intervention or more sophisticated natural language processing technologies, in order to offer comprehensive and precise assistance.

e) Provide clear training and guidance to ChatGPT: In order to mitigate instances wherein ChatGPT produces inappropriate responses or contravenes brand policies, it is imperative to furnish comprehensive training and explicit guidance to the ChatGPT models. It is essential to establish explicit parameters and regulations, while also consistently monitoring the produced responses.

By adhering to the aforementioned recommendations, one can effectively utilise ChatGPT
to develop customised services for their enterprise and attain favourable outcomes. By enhancing the customer experience, fostering personalised relationships, and optimising operational efficiency, businesses have the potential to surpass competitors, enhance customer retention rates, and attain sustained success in the long run.

REFERENCES


