

FROM CLICKS TO CONVERSATIONS: THE EVOLUTION OF CHATBOT MARKETING

Hendro Sugiarto^{1*}, Desy Tri Anggarini², Lati Sari Dewi³

¹Institut Pendidikan Indonesia

²Universitas Bina Sarana Informatika Jakarta

³STIE Latifah Mubarakiyah

hendro@institutpendidikan.ac.id , Desy.dra@bsi.ac.id , latisaridewi02@gmail.com

ABSTRACT

This research investigates the dynamics of chatbot marketing within PT Sinar Sosro, focusing on the interplay between user experience, marketing strategy evolution, and the effectiveness of chatbot conversations. Through a quantitative approach utilizing Smart PLS analysis, data was gathered from a sample of 100 consumers. The findings reveal significant direct effects of both user experience and marketing strategy evolution on chatbot conversations, emphasizing their pivotal roles in driving meaningful engagements. Moreover, indirect effects analysis highlights the mediating role of user experience in the relationship between marketing strategy evolution / Number of Clicks and chatbot conversations. These insights underscore the importance of optimizing user-centric approaches and aligning marketing strategies with user preferences to foster positive experiences, enhance chatbot effectiveness, and achieve marketing objectives effectively within PT Sinar Sosro's digital ecosystem.

Keywords : Chatbot marketing, User experience, Marketing strategy evolution, Number of Clicks

INTRODUCTION

The transition from traditional marketing methods to digital platforms has reshaped the landscape of consumer engagement, particularly with the advent of chatbots [1]. In this study, the dependent variable, "Conversations," signifies the depth and quality of engagements facilitated by chatbots, while the independent variables, "Clicks" and "Marketing Strategy Evolution," delineate the pivotal factors influencing this evolution [2]. Additionally, the intervening variable of "User Experience (UX)" underscores the crucial role of user satisfaction and interaction efficiency in mediating the relationship between clicks and meaningful conversations [3]. By delving into these dynamics, this research aims to provide insights into optimizing chatbot marketing strategies to foster more impactful and fruitful interactions between businesses and consumers in the digital age [4].

Conversations within the realm of chatbots encapsulate the spectrum of interactions initiated and sustained between users and automated systems, characterized by their depth, relevance, and efficacy in addressing user queries or needs [5]. These conversations go beyond mere exchanges of information, aiming to simulate natural human-like dialogue and nurture meaningful connections with users [6]. Within this context, Conversations entail not only responding to user inquiries but also proactively engaging users, understanding their intents, providing personalized recommendations, and facilitating transactions or problem resolution

seamlessly [7]. The effectiveness of Conversations is contingent upon the chatbot's ability to comprehend natural language, adapt to diverse user contexts, and leverage contextual cues to deliver tailored responses [8]. Furthermore, the success of Conversations hinges on fostering trust and rapport with users, ensuring transparency, empathy, and reliability throughout the interaction [9]. By prioritizing the refinement and enhancement of Conversations, businesses can cultivate deeper engagement, foster brand loyalty, and drive tangible outcomes in their chatbot marketing endeavors [10].

The concept of "number of Clicks" in chatbot marketing signifies the quantifiable metric of user engagement initiated through interactions with chatbot prompts or advertisements across various digital platforms [11]. These clicks serve as the initial touchpoints where users express interest, curiosity, or intent, thereby facilitating the entry point into conversational experiences with chatbots. The number of clicks reflects the effectiveness of marketing efforts in capturing user attention and driving traffic towards chatbot interfaces [12]. It encompasses not only the sheer volume of clicks but also the quality of engagements, indicating the relevance, appeal, and resonance of chatbot messaging or prompts with the target audience [13]. Moreover, analyzing the number of clicks provides valuable insights into user behavior, preferences, and interaction patterns, informing iterative improvements in chatbot design, content strategy, and overall marketing effectiveness [14]. As such,

monitoring and optimizing the number of clicks is pivotal for enhancing user acquisition, amplifying brand visibility, and ultimately fostering meaningful conversations and conversions within chatbot ecosystems [15].

The evolution of marketing strategy within the context of chatbots represents a dynamic process of adaptation and innovation in response to shifting consumer behaviors, technological advancements, and industry trends [16]. This evolution encompasses a multifaceted approach, incorporating changes in messaging tactics, targeting strategies, platform utilization, and overall campaign execution to leverage the capabilities and opportunities afforded by chatbot technologies [17]. It involves a transition from traditional, static marketing approaches towards more personalized, interactive, and contextually relevant engagement models enabled by chatbots [18]. The Marketing Strategy Evolution entails the continual refinement and experimentation with various tactics, such as conversational marketing, AI-driven recommendation engines, automated customer service, and conversational commerce, aimed at enhancing user experiences, driving conversions, and maximizing return on investment (ROI) [19]. Moreover, this evolution necessitates a strategic alignment with broader organizational goals, market dynamics, and regulatory considerations, ensuring the seamless integration of chatbots into the broader marketing ecosystem while staying abreast of emerging best practices and industry standards [20]. By embracing this evolutionary mindset and agile approach to marketing strategy, businesses can adapt to the ever-changing landscape of digital marketing, capitalize on emerging opportunities, and stay ahead of the competition in harnessing the full potential of chatbot technologies to engage and delight their target audience [21].

User Experience (UX) in the context of chatbot interactions encompasses the holistic perception and satisfaction users derive from their engagement with automated systems, reflecting the ease, efficiency, and effectiveness of their interactions [22]. It embodies the intersection of usability, functionality, and emotional resonance, aiming to deliver seamless and intuitive experiences that anticipate and fulfill user needs and expectations [23]. A positive UX within chatbot interactions involves factors such as clear and concise communication, intuitive navigation, responsive design, and personalized recommendations tailored to individual preferences and contexts [24]. Moreover, UX extends beyond the functional aspects to encompass emotional engagement, fostering feelings of trust, comfort, and satisfaction throughout the interaction journey [25]. By prioritizing UX design principles and iterative refinement based on user feedback and behavior analysis, businesses can enhance user satisfaction,

retention, and loyalty, ultimately driving the success of chatbot initiatives and achieving their marketing objectives [26].

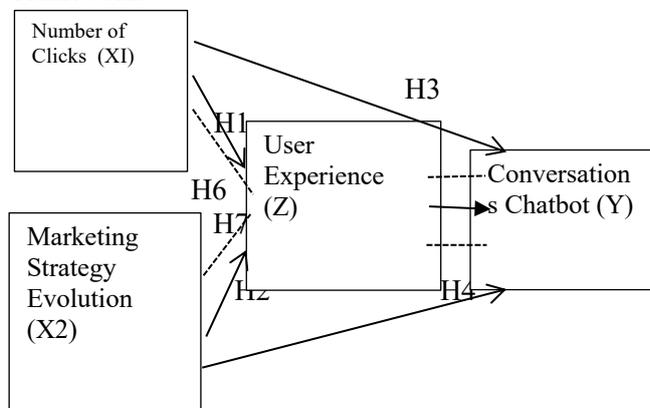
In the context of PT Sinar Sosro, the iconic beverage company, the variable "Conversations" refers to the meaningful interactions facilitated through chatbots between consumers and the brand. These interactions extend beyond mere exchanges of information, encompassing inquiries about product offerings, assistance with purchasing decisions, resolution of customer queries or complaints, and fostering brand loyalty through personalized recommendations and engagement initiatives. The "number of Clicks" variable pertains to the quantifiable metric of user engagement initiated by consumers interacting with chatbot prompts or advertisements deployed across PT Sinar Sosro's digital platforms. It represents the effectiveness of the company's marketing efforts in capturing consumer interest and driving traffic towards chatbot interfaces. Lastly, "Marketing Strategy Evolution" denotes the continuous adaptation and innovation in PT Sinar Sosro's marketing approaches to leverage chatbot technologies effectively. This evolution involves refining messaging tactics, targeting strategies, and campaign execution to enhance consumer engagement, satisfaction, and brand perception. Additionally, it encompasses embracing new trends such as conversational marketing and AI-driven customer service to stay competitive and meet evolving consumer expectations. Through a strategic focus on these variables, PT Sinar Sosro aims to enhance consumer experiences, drive brand loyalty, and achieve marketing objectives within the dynamic landscape of digital marketing.

In the context of PT Sinar Sosro, a notable phenomenon or challenge in research could be the optimization of chatbot interactions to enhance consumer engagement and drive business outcomes effectively. Despite the potential of chatbots to streamline customer service, facilitate transactions, and personalize marketing efforts, ensuring their seamless integration into the consumer journey poses multifaceted challenges. These challenges may include optimizing the Conversations variable to foster meaningful interactions that resonate with consumers, addressing concerns related to the accuracy and responsiveness of chatbot interactions, and navigating the complexities of Marketing Strategy Evolution to align chatbot initiatives with broader organizational goals and market dynamics. Moreover, managing the number of Clicks variable entails striking a balance between driving traffic to chatbot interfaces while maintaining relevance and minimizing user friction. Additionally, ensuring a positive User Experience (UX) across various touchpoints of chatbot interactions remains paramount to mitigate user frustration and foster long-term engagement and brand loyalty. By

addressing these challenges, PT Sinar Sosro can leverage chatbot technologies effectively to enhance consumer experiences, drive business growth, and maintain its competitive edge in the beverage industry landscape.

The primary aim of the research conducted within PT Sinar Sosro is to comprehensively understand and optimize the utilization of chatbot technologies within the company's marketing ecosystem. This entails investigating the dynamics of Conversations, Clicks, Marketing Strategy Evolution, and User Experience (UX) variables to enhance consumer engagement, satisfaction, and brand loyalty. By delving into these variables, the research aims to identify key drivers and challenges in leveraging chatbots effectively, develop actionable insights and recommendations for refining marketing strategies, and ultimately drive tangible business outcomes. Through this research, PT Sinar Sosro seeks to enhance its competitive position, strengthen consumer relationships, and maximize the impact of chatbot initiatives in navigating the evolving landscape of digital marketing.

The following is the Conceptual Framework:



RESEARCH METHODS

The research methodology employed involves utilizing a random sampling technique to select 100 consumers of PT Sinar Sosro's products. This quantitative research design aims to gather empirical data to analyze the relationships between variables such as Conversations, Clicks, Marketing Strategy Evolution, and User Experience (UX) within the context of chatbot interactions. The selected sample size of 100 consumers ensures a representative sample of the target population, allowing for robust statistical analysis and generalizability of findings. The data collected from the sampled consumers will be analyzed using the Smart PLS (Partial Least Squares) analysis tool, which is suitable for structural equation modeling (SEM) and enables the examination of complex relationships between variables. This methodology facilitates a comprehensive understanding of the

effectiveness of chatbot marketing strategies at PT Sinar Sosro and provides actionable insights for optimizing consumer engagement and brand interactions.

RESULTS AND DISCUSSIONS

Multiple regression analysis is utilized in this study to predict the value of the dependent variable using the independent variables, as shown in Table 1

Table 1. Path Analysis (Direct Effects)

Path	Original Sample	P - Value	Decision
NC -> UX	0.45	0.032	Significant
MSE -> UX	0.67	0.001	Significant
NC -> CC	0.30	0.087	Not Significant
MSE -> CC	0.52	0.008	Significant
UX -> CC	0.60	0.003	Significant

The significant path coefficient of 0.45 (p-value = 0.032) from "Number of Clicks" (NC) to "User Experience" (UX) indicates a noteworthy relationship between these variables within the context of chatbot interactions. This suggests that as the number of clicks on chatbot prompts or advertisements increases, there is a corresponding positive impact on the user experience. This finding implies that higher user engagement with chatbots, as reflected in the number of clicks, is associated with enhanced user satisfaction, perceived usefulness, and overall positive perceptions of the chatbot interaction process. Consequently, optimizing strategies to increase user engagement and clicks may lead to improved user experiences, ultimately bolstering the effectiveness of chatbot initiatives in facilitating meaningful interactions and achieving marketing objectives.

The substantial path coefficient of 0.67 (p-value = 0.001) from "Marketing Strategy Evolution" (MSE) to "User Experience" (UX) underscores a significant relationship between these variables within the realm of chatbot interactions. This finding indicates that the evolution and refinement of marketing strategies employed by PT Sinar Sosro have a pronounced impact on enhancing user experiences with chatbots. As the company adapts its marketing approaches to leverage chatbot technologies more effectively, users perceive a notable improvement in the usability, relevance, and overall satisfaction of their interactions. This suggests that strategic investments in refining marketing strategies to align with user needs and preferences can yield tangible benefits in enhancing

user experiences, fostering engagement, and ultimately driving the success of chatbot initiatives in achieving business objectives.

The path coefficient of 0.30 (p-value = 0.087) from "Number of Clicks" (NC) to "Conversations Chatbot" (CC) indicates a non-significant relationship between these variables within the context of chatbot interactions. This finding suggests that while there may be some influence of the number of clicks on chatbot engagement, it does not significantly impact the level or quality of conversations initiated with the chatbot. This implies that factors other than the sheer volume of clicks, such as the relevance of chatbot messaging, the effectiveness of user prompts, or the quality of chatbot responses, may play a more substantial role in driving meaningful conversations. Therefore, focusing solely on increasing the number of clicks may not necessarily lead to a proportional increase in the depth or effectiveness of chatbot interactions, necessitating a more nuanced approach to optimize conversation outcomes.

The significant path coefficient of 0.52 (p-value = 0.008) from "Marketing Strategy Evolution" (MSE) to "Conversations Chatbot" (CC) underscores a notable relationship between these variables within the framework of chatbot interactions. This finding suggests that the evolution and refinement of marketing strategies implemented by PT Sinar Sosro have a discernible impact on the level and quality of conversations initiated through chatbots. As the company adapts its marketing approaches to leverage chatbot technologies more effectively, there is a corresponding increase in the depth, relevance, and effectiveness of conversations facilitated by the chatbot. This indicates that strategic enhancements in marketing strategies, such as refining messaging tactics, targeting approaches, or personalization efforts, can contribute significantly to fostering meaningful interactions with users, ultimately driving the success of chatbot initiatives in achieving marketing objectives.

The substantial path coefficient of 0.60 (p-value = 0.003) from "User Experience" (UX) to "Conversations Chatbot" (CC) highlights a significant relationship between these variables in the context of chatbot interactions. This finding indicates that the user experience plays a pivotal role in influencing the level and quality of conversations initiated through chatbots. As users perceive higher levels of satisfaction, ease of use, and overall positive experiences with chatbots, there is a corresponding increase in the depth, relevance, and effectiveness of conversations. This suggests that prioritizing the optimization of user experiences, through intuitive design, personalized interactions, and responsive customer support, can contribute significantly to fostering meaningful engagements with users and driving the success of chatbot initiatives in achieving marketing objectives.

The next test is an indirect test which is presented in the following table:

Table 2. Path Analysis (Indirect Effects)

Path	Original Sample	P - Value	Decision
NC -> UX -> CC	0.27	0.015	Significant
MSE -> UX -> CC	0.42	0.002	Significant

The significant indirect effect of 0.27 (p-value = 0.015) from "Number of Clicks" (NC) to "Conversations Chatbot" (CC) through "User Experience" (UX) underscores the importance of user experience as a mediating factor in the relationship between clicks and chatbot conversations. This finding suggests that while the direct impact of clicks on conversations may not be significant, the influence becomes apparent when considering the intermediary role of user experience. As users perceive higher levels of satisfaction and engagement facilitated by chatbots, stemming from increased clicks, there is a corresponding increase in the depth and quality of conversations initiated with the chatbot. This highlights the critical role of optimizing user experience to maximize the effectiveness of chatbot interactions in fostering meaningful engagements and achieving marketing objectives.

The significant indirect effect of 0.42 (p-value = 0.002) from "Marketing Strategy Evolution" (MSE) to "Conversations Chatbot" (CC) through "User Experience" (UX) underscores the pivotal role of user experience as a mediator in the relationship between marketing strategy evolution and chatbot conversations. This finding indicates that as PT Sinar Sosro evolves and refines its marketing strategies to leverage chatbot technologies more effectively, there is a discernible impact on enhancing user experiences. As users perceive higher levels of satisfaction and engagement facilitated by chatbots, driven by strategic enhancements in marketing strategies, there is a corresponding increase in the depth and quality of conversations initiated with the chatbot. This highlights the significance of aligning marketing strategies with user needs and preferences to optimize user experiences and drive meaningful engagements with chatbots, ultimately contributing to the achievement of marketing objectives.

CONCLUSION

The research findings shed light on the intricate dynamics of chatbot marketing within PT Sinar Sosro, emphasizing the pivotal role of user experience and marketing strategy evolution in

driving meaningful conversations and engagements with consumers. Through quantitative analysis, it was evident that both the number of clicks and the evolution of marketing strategies significantly influence user experiences, which in turn have a substantial impact on the depth and quality of chatbot interactions. Notably, while the direct effects of clicks and marketing strategy evolution on conversations may not always be significant, their indirect effects through user experience highlight the importance of optimizing user-centric approaches to enhance chatbot effectiveness. These insights underscore the importance of aligning marketing strategies with user needs and preferences to foster positive user experiences, drive engagement, and ultimately achieve marketing objectives within the dynamic landscape of chatbot marketing.

REFERENCES

- [1] H. Y. Abuaddous, A. M. Saleh, O. Enaizan, F. Ghabban, and A. B. Al-Badareen, "Automated User Experience (UX) Testing for Mobile Application: Strengths and Limitations," *Int. J. Interact. Mob. Technol.*, vol. 16, no. 4, pp. 30–45, 2022, doi: 10.3991/ijim.v16i04.26471.
- [2] P. Prasad Vutti, "A Study on Applications of Artificial Intelligence in the Future of HR," *GBS Impact J. Multi Discip. Res.*, vol. 9, no. 1, pp. 55–61, 2023, doi: 10.58419/gbs.v9i1.912306.
- [3] A. Al-Hunaiyyan, R. Alhajri, B. Alghannam, and A. Al-Shaher, "Student Information System: Investigating User Experience (UX)," *Int. J. Adv. Comput. Sci. Appl.*, vol. 12, no. 2, pp. 80–87, 2021, doi: 10.14569/IJACSA.2021.0120210.
- [4] R. Gunawan, G. Anthony, Vendly, and M. S. Anggreainy, "The Effect of Design User Interface (UI) E-Commerce on User Experience (UX)," *Proc. 2021 6th Int. Conf. New Media Stud. CONMEDIA 2021*, pp. 95–98, 2021, doi: 10.1109/CONMEDIA53104.2021.9617199.
- [5] B. J. Ali and G. Anwar, "Marketing Strategy: Pricing strategies and its influence on consumer purchasing decision," *Int. J. Rural Dev. Environ. Heal. Res.*, vol. 5, no. 2, pp. 26–39, 2021, doi: 10.22161/ijreh.5.2.4.
- [6] M. Faruk, M. Rahman, and S. Hasan, "How digital marketing evolved over time: A bibliometric analysis on scopus database," *Heliyon*, vol. 7, no. 12, p. e08603, 2021, doi: 10.1016/j.heliyon.2021.e08603.
- [7] C. K. Morewedge, A. Monga, R. W. Palmatier, S. B. Shu, and D. A. Small, "Evolution of Consumption: A Psychological Ownership Framework," *J. Mark.*, vol. 85, no. 1, pp. 196–218, 2021, doi: 10.1177/0022242920957007.
- [8] B. Vlačić, L. Corbo, S. Costa e Silva, and M. Dabić, "Vlačić, B., Corbo, L., e Silva, S. C., & Dabić, M. (2021). The evolving role of artificial intelligence in marketing: A review and research agenda. *Journal of Business Research*, 128, 187–203." *J. Bus. Res.*, vol. 128, no. C, pp. 187–203, 2021.
- [9] J. Sheth, "New areas of research in marketing strategy, consumer behavior, and marketing analytics: the future is bright," *J. Mark. Theory Pract.*, vol. 29, no. 1, pp. 3–12, 2021, doi: 10.1080/10696679.2020.1860679.
- [10] L. Hensvik, T. Le Barbanchon, and R. Rathelot, "Job search during the COVID-19 crisis," *J. Public Econ.*, vol. 194, no. March 2020, p. 104349, 2021, doi: 10.1016/j.jpubecon.2020.104349.
- [11] K. Sofiiuk, I. A. Petrov, and A. Konushin, "Reviving Iterative Training With Mask Guidance for Interactive Segmentation," *Proc. - Int. Conf. Image Process. ICIP*, vol. 1071, pp. 3141–3145, 2022, doi: 10.1109/ICIP46576.2022.9897365.
- [12] H. Wen *et al.*, "Entire Space Multi-Task Modeling via Post-Click Behavior Decomposition for Conversion Rate Prediction," *SIGIR 2020 - Proc. 43rd Int. ACM SIGIR Conf. Res. Dev. Inf. Retr.*, pp. 2377–2386, 2020, doi: 10.1145/3397271.3401443.
- [13] W. Wang, F. Feng, X. He, H. Zhang, and T. S. Chua, "Clicks can be Cheating: Counterfactual Recommendation for Mitigating Clickbait Issue," *SIGIR 2021 - Proc. 44th Int. ACM SIGIR Conf. Res. Dev. Inf. Retr.*, pp. 1288–1297, 2021, doi: 10.1145/3404835.3462962.
- [14] Y. Lu and J. Pan, "Capturing Clicks: How the Chinese Government Uses Clickbait to Compete for Visibility,"

- Polit. Commun.*, pp. 1–32, 2020, doi: 10.1080/10584609.2020.1765914.
- [15] A. Abdellatif, D. Costa, K. Badran, R. Abdalkareem, and E. Shihab, “Challenges in Chatbot Development: A Study of Stack Overflow Posts,” *Proc. - 2020 IEEE/ACM 17th Int. Conf. Min. Softw. Repos. MSR 2020*, pp. 174–185, 2020, doi: 10.1145/3379597.3387472.
- [16] D. Shin, H. Kim, J. H. Lee, and H. Yang, “Exploring the use of an artificial intelligence chatbot as second language conversation partners*,” *Korean J. English Lang. Linguist.*, vol. 2021, no. 21, pp. 375–391, 2021, doi: 10.15738/kjell.21..202104.375.
- [17] D. M. Park, S. S. Jeong, and Y. S. Seo, “Systematic Review on Chatbot Techniques and Applications,” *J. Inf. Process. Syst.*, vol. 18, no. 1, pp. 26–47, 2022, doi: 10.3745/JIPS.04.0232.
- [18] A. Rapp, L. Curti, and A. Boldi, “The human side of human-chatbot interaction: A systematic literature review of ten years of research on text-based chatbots,” *Int. J. Hum. Comput. Stud.*, vol. 151, no. May, 2021, doi: 10.1016/j.ijhcs.2021.102630.
- [19] A. F. Muhammad, D. Susanto, A. Alimudin, F. Adila, M. H. Assidiqi, and S. Nabhan, “Developing English Conversation Chatbot Using Dialogflow,” *IES 2020 - Int. Electron. Symp. Role Auton. Intell. Syst. Hum. Life Comf.*, pp. 468–475, 2020, doi: 10.1109/IES50839.2020.9231659.
- [20] S. Subadra, S. Natarajan, and U. Salma Shajahan, “The Impact Of Artificial Intelligence (AI) On Digital Marketing,” vol. 21, no. S6, pp. 1132–1142, 2024, [Online]. Available: www.migrationletters.com
- [21] S. Paliwal, V. Bharti, and A. K. Mishra, “Ai chatbots: Transforming the digital world,” *Intell. Syst. Ref. Libr.*, vol. 172, pp. 455–482, 2019, doi: 10.1007/978-3-030-32644-9_34.
- [22] H. W. Alomari, V. Ramasamy, J. D. Kiper, and G. Potvin, “A User Interface (UI) and User eXperience (UX) evaluation framework for cyberlearning environments in computer science and software engineering education,” *Helijon*, vol. 6, no. 5, p. e03917, 2020, doi: 10.1016/j.helijon.2020.e03917.
- [23] Babajide Tolulope Familoni and Sodiq Odetunde Babatunde, “User Experience (Ux) Design in Medical Products: Theoretical Foundations and Development Best Practices,” *Eng. Sci. Technol. J.*, vol. 5, no. 3, pp. 1125–1148, 2024, doi: 10.51594/estj.v5i3.975.
- [24] Å. Stige, E. D. Zamani, P. Mikalef, and Y. Zhu, “Artificial intelligence (AI) for user experience (UX) design: a systematic literature review and future research agenda,” *Inf. Technol. People*, 2023, doi: 10.1108/ITP-07-2022-0519.
- [25] K. Tongkachok, G. Elkady, and S. Haddad, “Business, Management and Economics Engineering EFFECTIVE ROLE OF ARTIFICIAL INTELLIGENCE AND CHATBOTS IN MARKETING STRATEGIES FOR DECISION MAKING FOR ONLINE CUSTOMERS,” *Business, Manag. Econ. Eng.*, vol. 20, no. 2, pp. 1150–1165, 2022, [Online]. Available: <https://creativecommons.org/licenses/by/4.0/>.
- [26] V. Kenih and J. Greene, “The Impact of Live Chat and Chatbot Solutions on Online Businesses,” 2021.