

Utilizing AI to Optimize Product Sales at UD Bima Baru

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Abstract

Purpose: The study aims to evaluate the effectiveness of activities in reaching participants, achieving training goals, improving proficiency, and enhancing sales through AI technologies.

Method: This study teaches and evaluates the use of AI in sales optimization through lectures, demonstrations, tasks, and question-and-answer meetings. How well the activity worked is judged by how well the players met the goals and understood the material.

Practical Application: The participants from UD. Bima Baru showed high levels of enthusiasm and engagement during each session of the activity. This indicates the possibility for enhancing their skills, operational efficiency, and revenue, while also fostering collaboration and fostering creativity in the future.

Conclusion: Artificial intelligence (AI) has considerable potential to augment sales for MSMEs, like UD Bima Baru, through data-driven decision-making. Effective AI adoption requires practical experience, underscoring the significance of collaboration between academia and MSMEs in providing education, training, and mentorship. This collaboration fosters technological adoption and enhances local economic growth by generating practical, concrete ideas. Future training must include sequential courses for MSMEs to leverage AI.



Introduction

UD Bima Baru, a firm specializing in product sales, can employ artificial intelligence (AI) to maximize the efficiency of its product sales. to maximize the sales of its items. The application of artificial intelligence (AI) can offer several advantages and enhance operational effectiveness. Artificial intelligence (AI) can efficiently and precisely assess customer data, buying trends, and consumer preferences. Swiftly and precisely. This enables organizations to comprehend consumer behavior in order to develop more efficient sales techniques. Through the application of artificial intelligence (AI), UD Bima Baru is able to offer a highly tailored and individualized client experience. Enhanced client experience tailored to individual preferences. The AI system may evaluate client data to suggest items that align with individual interests and requirements, hence enhancing the likelihood of conversion.

Artificial intelligence technologies can enhance the efficiency of stock management (Dhaliwal et al., 2023). By conducting an analysis of historical data and making predictions about demand, organizations may enhance their stock management, mitigate the risk of having too much or too little inventory, and enhance customer satisfaction (Gupta & Ravi Kumar, 2024). Artificial intelligence may be utilized to create sophisticated product recommendation systems. By analyzing customer's purchasing behaviors and integrating them with additional data, these systems have the capability to offer pertinent product suggestions, hence enhancing sales across various categories. By doing an analysis of market prices and demand, artificial intelligence (AI) may assist in identifying the most effective pricing approach (Nguyen, 2023). Companies may use this feature to flexibly modify pricing in response to factors like as competition, seasonality, and demand levels.

Artificial intelligence (AI) powered chatbots can enhance the quality of customer support provided to clients (Misischia et al., 2022; Nze, 2024). They have the ability to promptly address customer inquiries, aid in resolving issues, and enhance overall customer engagement. Customer engagement. Artificial intelligence has the capability to analyze the sentiment of client comments on many platforms (Taherdoost & Madanchian, 2023). By analyzing consumer responses, UD Bima Baru may gain insights into how their products and services are perceived, enabling them to implement any required modifications. The firm can implement the required modifications.

Through the utilization of advanced algorithms to analyze large sets of data, the management of UD Bima Baru may enhance their decision-making process in strategic planning, marketing, and operations, leading to improved outcomes and more knowledge. The use of AI at UD Bima Baru is anticipated to yield favorable outcomes in terms of sales growth, operational effectiveness, and customer contentment. Furthermore, implementing this technology will enhance the company's competitiveness in a dynamic market (Klimova et al., 2023).

UD Bima Baru encounters many significant obstacles that impede its business operation. These issues encompass a deficiency in comprehending client trends and preferences, an inability to recognize sales prospects, and constraints in tailoring product offers. Furthermore, the organization had setbacks in the process of making decisions and faced challenges in effectively engaging with clients, leading to financial setbacks, missed business prospects, and poor rates of converting sales.

Method

The community service initiative is implemented through a partnership between UD. Bima Baru and the Asia Institute of Technology & Business Malang, with the primary objective of enhancing product sales through AI utilization training. Recognizing the need for such training, UD. Bima Baru expressed the necessity for improving employees' understanding of AI applications in business. In response, the Community Service Team of

the Asian Institute of Technology and Business Malang structured the training materials and event schedule to ensure an effective learning process.

The training focuses on equipping employees with the necessary knowledge and skills to leverage artificial intelligence in overcoming business challenges. The program combines theoretical instruction with hands-on tutorials, beginning with a brief theoretical overview followed by immediate practical exercises. The practical content is designed using a fast-learning approach, allowing participants to quickly grasp and apply new knowledge. This strategy optimizes the training duration while enabling employees to efficiently utilize AI for improving operational processes and decision-making within the company.

As the designated service partner, UD. Bima Baru plays a crucial role in facilitating the initiative by providing the necessary venue and training facilities. Additionally, the effectiveness of the training is assessed at the end of the program to evaluate participants' comprehension and measure the overall impact of the community service project. The assessment ensures that the knowledge imparted has been effectively received and can be practically applied in business operations.

Table 1. Participant Competency Evaluation Criteria

Aspect	Indicator
Participants possess the capability to employ AI in product sales	Students comprehend artificial intelligence
	Participants possess practical proficiency in the application of artificial intelligence.

The team of lecturers assessed the participants' competencies post-training and evaluated their feedback on the content and its delivery during the course.

Table 2. Participant Feedback

Aspect	Questions
The material	The materials align with the participants' requirements.
	The allotted time is suitable for the dissemination of training materials and activities.
	The implementation team engaged in activities delivers services tailored to the participants' needs.
	All complaints, inquiries, and issues made are effectively addressed by the training resource personnel involved.
Serving	Training activities conducted in alignment with the objectives of Partners and Participants.
	The speaker's presentation of the training content is engaging.
	The supplied material is lucid and comprehensible.
	Training activities are conducted continuously.

Result

The preliminary phase of the service activity involved collaboration with the proprietor of UD. Bima Baru, who has an existing partnership with ITB Asia Malang. The collaboration yielded insights into the requirements of UD. Bima Baru focuses on training in the application of AI for optimizing product sales. This is due to UD. Bima Baru possesses market-ready

products while lacking expertise in web marketing. The service implementation team is prepared to provide AI training to enhance product sales.

The training occurred in a single day, commencing at 08:00 and concluding at 13:00, attended by the marketing and promotion department of UD. Bima Baru. The training took place in UD. Bima Baru, situated in Pakis village, Malang Regency. The content discussed the utilization of prediction algorithms, analysis of customer data, customization of product offerings, implementation of cross-selling predictive models, employment of data analysis platforms, and recognition of prospective sales prospects. The following are the specifics of the actions to be conducted:

- a) Session I: Examination of AI's Role at UD. Bima Baru
- b) Session II: Overview of the Implementation Method
- c) Session III: Training Simulation

Instructions were delivered by the Community Service Speaker team on the application of AI. The specifics of the presented material are as follows:

- a. Utilization of Predictive Algorithms:
IBM Planning Analytics utilizing Watson: Employs machine learning to examine past sales data, market trends, and additional factors influencing demand. This facilitates a more precise prediction of stock requirements (Badmus et al., 2024).
- b. Customer Data Analytics:
Salesforce Einstein integrates artificial intelligence into Customer Relationship Management (CRM), facilitating the analysis of customer data to provide insights, offer recommendations, and enhance customer engagement (Patnaik, 2024).
- c. Utilization of Data Analytics Platform
Google Analytics offers comprehensive insights into website visitor behavior, traffic sources, and conversions. It possesses intelligent analytical capabilities (Jansen et al., 2022).
- d. Identify Prospective Sales Opportunities
CB Insights offers a study of market and industry trends, emphasizing innovation, investment, and company prospects. The tool can assist in identifying prospective sales prospects through market data analysis (Peesker et al., 2022).
- e. Utilization of Sentiment Analysis Tools
Brandwatch is a social media analytics software that employs artificial intelligence to assess and evaluate client sentiment toward the brand. It enables comprehension of client feedback and trends across many channels (Ahmad et al., 2023).
- f. Expeditious Strategic Decisions
Smarterly.ai is a platform that facilitates the development of virtual assistants and chatbots capable of simulating real-world scenarios for decision-making exercises (Khneyzer et al., 2024).
- g. Implementation of an Efficient Customer Interaction and Swift Response System
Chatbot.com is a platform that facilitates the development of chatbots through a user-friendly interface. Features a user-friendly interface. It provides multiple functionalities to enhance the efficacy and rapidity of consumer engagements (Johari et al., 2022).

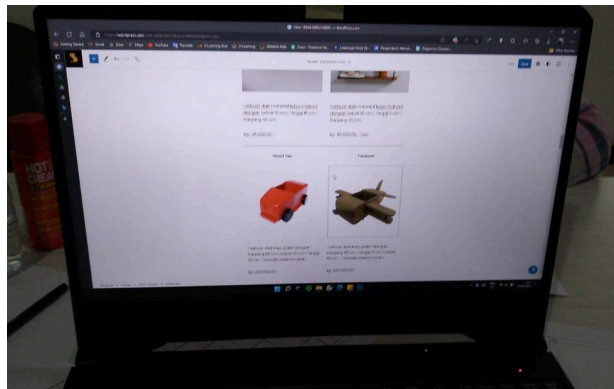
At the conclusion of the program, participants were proficient in addressing theoretical inquiries regarding artificial intelligence (AI), encompassing definitions, fundamental concepts, and its operational mechanisms in diverse commercial situations. In addition, participants were also able to identify specific advantages of using AI in the sales process at UD Bima Baru, such as increasing the efficiency of customer data analysis, personalizing product recommendations, and optimizing marketing strategies through automation and accurate sales trend predictions. This capability demonstrates the participants' comprehension of the strategic advantages of AI pertinent to UD Bima Baru's

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operational requirements.

Participants effectively conduct simulations or case studies demonstrating the implementation of artificial intelligence (AI) in the sales process at UD. Bima Baru. In this simulation, participants utilized AI technologies to analyze consumer data, forecast market trends, and provide recommendations pertinent to customer requirements. Furthermore, participants have shown the capacity to incorporate AI analytical outcomes into a proficient sales strategy at UD. Bima Baru, including the formulation of more focused marketing campaigns, enhancement of client experience, and optimization of sales prospects.

Figure 1. Website of UD. Bima Baru



This achievement demonstrates the participants' proficiency in employing AI to strategically enhance business decisions.

Discussion

During the training on artificial intelligence (AI) at UD. Bima Baru, problems included a poor initial comprehension of fundamental AI ideas, particularly among individuals unfamiliar with the technology. During the training with Chatbot.com, participants expressed a need for additional time to utilize the platform. Chatbot.com facilitates connectivity with other technologies; nevertheless, users encountered challenges when attempting to link it to more intricate systems like CRM and ERP. Caldarini further articulates that the utilization of chatbots presents numerous obstacles and constraints in their deployment (Caldarini et al., 2022). This necessitated supplementary coding or professional expertise.

Moreover, insufficient infrastructure, including hardware deficiencies or unreliable internet connections, frequently obstructed the seamless simulation or execution of AI-based technologies (Rjab et al., 2023). Convincing participants to utilize AI for optimizing product sales is tough. Conversely, technical limitations manifest as challenges in utilizing certain AI software that necessitates advanced technological expertise. Consequently, a more compelling methodology is required in the training, encompassing rigorous mentorship and simulations tailored to UD Bima Baru's business requirements to address the challenges faced by participants.

To address the obstacles of deploying AI technology, offering advanced training is a strategic measure that can enhance participants' comprehension of AI ideas and applications, including the functionality of tools such as chatbots and other AI platforms. This training should concentrate on certain business requirements, such as enhancing marketing techniques or increasing operational efficiency. The coaching encompasses regular conversations, assessment of implementation outcomes, and strategic modifications informed by data and market trends. Through comprehensive training and continuous mentoring, firms can confidently leverage AI's promise to attain a competitive edge.

Conclusion

Artificial intelligence (AI) technology possesses significant potential to enhance sales in MSMEs such as UD Bima Baru, particularly through sophisticated data analysis, customer experience customization, and marketing process automation. Through the utilization of AI, MSMEs may more effectively comprehend market demands, enhance sales methods, and cultivate robust client relationships. Successful AI application necessitates proficient technological knowledge among MSME participants. Collaboration between academics and MSME stakeholders is essential, as academics may offer research-driven education, training, and mentorship to enhance technical comprehension and proficiency. This collaboration not only expedites technology adoption in MSMEs but also generates pertinent and applicable ideas to foster local economic growth.

Future training recommendations include the creation of modules that adopt a practical and pertinent approach, featuring step-by-step instructions for implementing AI in sales, marketing, and customer support activities. The contents must be customized to address the issues encountered by MSME entities, including resource limitations and technical limits. By utilizing more focused modules, participants can directly implement the knowledge gained into their enterprises, resulting in measurable outcomes that substantially influence corporate expansion.

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Reference

- Ahmad, I., Khan, I. A., Verma, A., & Sharma, S. (2023). *Recent trends in sentiment analysis tools*. 020054. <https://doi.org/10.1063/5.0152220>
- Caldarini, G., Jaf, S., & McGarry, K. (2022). *A Literature Survey of Recent Advances in Chatbots*. *Information*, 13(1), 41. <https://doi.org/10.3390/info13010041>
- Dhaliwal, N., Tomar, P. K., Joshi, A., Reddy, G. S., Hussein, A., & Alazzam, M. B. (2023). *A detailed Analysis of Use of AI in Inventory Management for technically better management*. *2023 3rd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE)*, 197–201. <https://doi.org/10.1109/ICACITE57410.2023.10183082>
- Gupta, C. P., & Ravi Kumar, V. V. (2024). *Recommendation System: A transformative Artificial Intelligence Tool for E-commerce*. *2024 7th International Conference on Informatics and Computational Sciences (ICICoS)*, 60–65. <https://doi.org/10.1109/ICICoS62600.2024.10636825>
- Jansen, B. J., Jung, S., & Salminen, J. (2022). *Measuring user interactions with websites: A comparison of two industry standard analytics approaches using data of 86 websites*. *PLOS ONE*, 17(5), e0268212. <https://doi.org/10.1371/journal.pone.0268212>
- Johari, N. M., Nohuddin, P. N. E., Baharin, A. H. A., Yakob, N. A., & Ebadi, M. J. (2022). *Features requirement elicitation process for designing a chatbot application*. *IET Networks*. <https://doi.org/10.1049/ntw2.12071>
- Khneyzer, C., Boustany, Z., & Dagher, J. (2024). *AI-Driven Chatbots in CRM: Economic and Managerial Implications across Industries*. *Administrative Sciences*, 14(8), 182. <https://doi.org/10.3390/admsci14080182>
- Klimova, I., Hordieieva, I., Sereda, N., Pashchenko, O., & Petecki, I. (2023). *Strategic Marketing In A Dynamic Market Environment*. *Conhecimento & Diversidade*, 15(40), 98–118. <https://doi.org/10.18316/rcd.v15i40.11273>
- Misischia, C. V., Poecze, F., & Strauss, C. (2022). *Chatbots in customer service: Their*

85) Utilizing AI to Optimize Product Sales at UD Bima Baru, Widayanti, L., Vivi A. F., Adriani K., Widya A. R., Suastika Y. R.

- relevance and impact on service quality*. *Procedia Computer Science*, 201, 421–428. <https://doi.org/10.1016/j.procs.2022.03.055>
- Nguyen, T. T. H. (2023). *Applications of Artificial Intelligence for Demand Forecasting. Operations and Supply Chain Management: An International Journal*, 424–434. <https://doi.org/10.31387/oscm0550401>
- Nze, S. U. (2024). *AI-Powered Chatbots*. *Global Journal of Human Resource Management*, 12(6), 34–45. <https://doi.org/10.37745/gjhrm.2013/vol12n63445>
- Oluwaseun Badmus, Shahab Anas Rajput, John Babatope Arogundade, & Mosope Williams. (2024). *AI-driven business analytics and decision making*. *World Journal of Advanced Research and Reviews*, 24(1), 616–633. <https://doi.org/10.30574/wjarr.2024.24.1.3093>
- Patnaik, R. (2024). *Salesforce Einstein GPT: Pioneering Generative AI in CRM Technology*. *International Journal of Science and Research (IJSR)*, 13(6), 92–94. <https://doi.org/10.21275/SR24523234811>
- Peesker, K. M., Kerr, P. D., Bolander, W., Ryals, L. J., Lister, J. A., & Dover, H. F. (2022). *Hiring for sales success: The emerging importance of salesperson analytical skills*. *Journal of Business Research*, 144, 17–30. <https://doi.org/10.1016/j.jbusres.2022.01.070>
- Rjab, A. Ben, Mellouli, S., & Corbett, J. (2023). *Barriers to artificial intelligence adoption in smart cities: A systematic literature review and research agenda*. *Government Information Quarterly*, 40(3), 101814. <https://doi.org/10.1016/j.giq.2023.101814>
- Taherdoost, H., & Madanchian, M. (2023). *Artificial Intelligence and Sentiment Analysis: A Review in Competitive Research*. *Computers*, 12(2), 37. <https://doi.org/10.3390/computers12020037>