Employee Perceptions of Artificial Intelligence Adoption and Its Relationship With Customer Satisfaction and Financial Performance: Evidence From CIMB Bank Malaysia

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ABSTRACT

AI has become a significant factor in banking and plays a major role in handling customer relations and operations. This research examines employees' perceptions of the relationship between AI adoption and customer satisfaction and financial performance at CIMB Bank, Malaysia. A descriptive cross-sectional research design and a positivist philosophy were used in this study to conduct quantitative research, whereby data from 30 employees from the managerial, IT, and operational positions were gathered using structured questionnaires. Data analysis was achieved with the help of SPSS. Descriptive and inferential statistics showed a strong correlation between AI integration and perceived financial performance, as indicated by decreased operational costs, increased revenues, and improved operational efficiency. However, although AI is recognized to facilitate operation improvements, its positive influence on customer-related outcomes, including relationship quality, customer experiences, and trust, is less significant. Mean scores for these customer-centric dimensions are lower, and correlation analyses show that these dimensions are not significantly related to AI integration, which suggests that AI's contribution to customer satisfaction may depend on other factors. The study underscores the dual nature of AI's impact. Although AI is perceived to be strongly associated with operational performance, the extent of its contribution to the customer experience is still a subject of research. Therefore, future research should pay attention to these issues and investigate ways to optimise the use of AI to achieve operation and customer satisfaction benefits.

Keywords: Artificial Intelligence (AI), Bank Profitability, CIMB Bank, Customer Satisfaction, Operational Efficiency

INTRODUCTION

Artificial intelligence (AI) refers to systems that can mimic tasks that people perform using their intelligence to learn, think, or decide (Shambira, 2020; Velev & Zahariev, 2022). It has recently received attention, especially in the financial (Rabbani et al., 2023). Polireddi (2024), Payne et al. (2021), Rabbani et al. (2023), and Shambira (2020) have pointed out that AI is gradually turning into a necessity for banking institutions as customers continue to seek better ways of managing their funds. Hence, the purpose of this study is to examine the relationship between AI adoption and customer satisfaction and financial performance in a Malaysian bank, as perceived by its employees.

AI improves the banking system through the digitisation of processes, customer-friendly services, and efficient service delivery and decision-making (Ashta & Herrmann, 2021). According to Karim et al. (2021), AI has positively impacted the processing of financial data and the customer experience through digital applications, digital payments, and chatbot systems. Some others point out that AI increases banking through real-time data analytics, which helps banks identify and prevent fraudulent activities (Oyetunji, 2024; Polireddi, 2024; Smit, 2023). It improves customer relations through chatbots and personalised financial solutions and products based on the customer data, decision-making, and business processes, cost-cutting, and elimination of risks such as

mistakes made by humans or biases in credit rating (Atadoga et al., 2024; Oyetunji, 2024; Smit, 2023). Atadoga et al. (2024) and Smit (2023) also mentioned that although AI has advanced significantly, it is still relatively new and growing in the banking industry. It is also linked to several difficulties in the banking sector, which include organisational cultural barriers, excessively stringent rules and guidelines, privacy issues concerning customer data, the existence of cyber risks, and the intricacies of navigating emerging and evolving AI security systems.

The use of AI in banks is strongly associated with the level of customer satisfaction and their experience (Ni, 2024; Svoboda, 2023). Customers have become more demanding over the years and are expecting quick responses and targeted content (Svoboda, 2023). Coupled with machine learning, AI employs concrete algorithms that help banks study and forecast the tendencies of their clients' activity and credit scores, as well as develop individual programs for them (Svoboda, 2023). According to several authors, AI contributes to the digital transformation of banks to improve customer experience. For instance, having investigated the role of AI technology in the digital banking environment and its influence on customers' satisfaction and loyalty, Hussain and Sudha (2024) found that the banking services enabled by AI technology can enhance customer loyalty by increasing the quality of service and levels of satisfaction. Ni (2024) also mentioned that banks should consider the accuracy, uniqueness, and customer risk propensity of AI systems to increase customer trust and satisfaction. However, according to Alnaser et al. (2023), despite the advancements in utilising AI in digital banking, user adoption of these technologies is still in its infancy.

Malaysian banks, including CIMB, are already considering the strategic importance of the digitalisation of the processes to increase efficiency and to decrease the costs to serve and the operational risks (Mohd Nor, 2024; Sharmine, 2024). Nearly 70% of executives believe that AI and virtual assistants are set to become the standard for customer service in this country and the rest of the world in the coming years (Sharmine, 2024). After investigating the importance and challenges of adopting AI in Malaysia's banking industry, focusing on the factors influencing consumers' intention to adopt AI in banking services, Rahman et al. (2021) noted that AI is essential for fraud detection and risk prevention within the banking sector. However, its adoption in Malaysia is hindered by several barriers, including the absence of regulatory requirements, data privacy and security concerns, a lack of relevant skills, and insufficient IT infrastructure. In addition, there is a significant gap in the research on how Fintech is transforming banking services in Malaysia. Therefore, the current study aims to fill this gap by examining the relationship between AI adoption and perceived customer satisfaction and financial performance at CIMB Bank Malaysia. Specifically, the study addresses two research questions: (1) What is the relationship between AI adoption and perceived financial performance, as reflected in operating costs, revenue, and operational efficiency? (2) What is the relationship between AI adoption and perceived customer satisfaction, as reflected in customer relationship quality, anticipation of customer needs, personalisation, data management, and customer trust?

LITERATURE REVIEW

AI and Bank Profitability

AI in banking systems helps improve the profit margin and increases work efficiency. Velev and Zahariev (2022) explored this potential and noted that AI could provide savings in the hundreds of billions and improve such activities as security, customer relations, and information handling. In their view, AI has the potential to make organisational processes less complex, and the decision-making process, which is central to the banking industry, is eager to enhance its efficiency. Thus, in the context of the above-mentioned, Svoboda (2023) describes the changes that are introduced by AI in the financial area and notes that AI systems can contribute to the enhancement of bank efficiency and the alteration of the financial environment. To this extent, it reinforces Velev and Zahariev's argument by reiterating that AI-driven decision-making is essential to enhancing profitability and organizational effectiveness.

Almustafa et al. (2023) provide a detailed analysis of the potential of AI in Jordanian commercial banks. They show that AI can enhance the quality of credit analysis, market risk analysis, financial forecasting, and creditworthiness. In this regard, they reveal that AI plays a pivotal role in enhancing credit risk in the banking

industry. From conceptualizing AI as a tool for change, Lazo and Ebardo (2023) proceed to assert that for banking institutions to remain competitive in their industries, they must embrace the use of AI. They detail the following barriers that prevent the complete implementation of AI: algorithm explainability, data privacy, and regulation. Despite these challenges, they assert that AI is a good rationale for improving the customers' experience as well as the banking sector's profitability.

From another perspective, Armutcu et al. (2024) examine the impact of AI on branding and marketing communication activities and their consequences for brand experience and preference. They pinpoint four facets of AI marketing that influence customers' brand experience and choice: information, interactivity, accessibility, and personalisation. These effects on the brand image are related to the profitability of the bank, thus linking AI in marketing to its financial consequences. Building on the above-discussed operational advantages of AI, Oyeniyi et al. (2024) examine how customer service and operations transform through the use of AI. Through their thematic analysis, they establish notable improvements in customers' experience arising from AI in aspects such as customised experiences and service improvements. These enhancements bring about improved profitability, which supports the notion that AI benefits are not limited to one part of banking.

Likewise, Polireddi (2024) offers another angle by pointing out how AI improves financial operations and risk mitigation. In his study, he concluded that AI can help improve the management and enhancement of financial transactions and cybersecurity, leading to enhanced financial systems. It allows the managers to focus more on core managerial responsibilities rather than performing routine organisational tasks, thereby enhancing overall organisational efficiency and profitability. In another and rather comprehensive study of AI frameworks, Edunjobi and Odejide (2024) also claim that AI improves credit risk management by improving credit scoring, adjusting loan terms, and even managing credit portfolios in real-time. This minimizes the occurrence of negative events and maximizes financial outcomes.

From the analysis above, one can deduce that AI is already changing the profitability and operational efficiency of the banking sector in several ways. It is far-reaching and influences every aspect of an organisation, from operations to decision-making processes, marketing strategies, and credit risk assessments. However, the two issues of algorithm explanation and data protection show that there is a need to tread slowly for AI to be fully effective. In total, these studies imply that despite the existing problems, the application of practical AI is necessary for banks that strive to improve the results and outcomes, which makes AI one of the effective factors for the development of banking systems.

AI and Customer Satisfaction

Another area that has been affected by the use of AI is customer satisfaction, which is still one of the determinants of the bank's profitability. Ryzhkova et al. (2020) described the advantages and possible issues of applying AI to customer satisfaction. From their findings, we can deduce that consumers have a positive attitude towards adopting AI applications; however, they have a high level of mistrust because of a lack of knowledge and privacy concerns. This mistrust has made it necessary for banks to consider risks and to create awareness of the usage of AI technologies among customers. In line with these studies, Al-Araj et al. (2022) also investigate the effects of AI on the enhancement of service quality and customer satisfaction in the Jordanian context and within the banking sector. In their opinion, it is clear that a significant number of AI advancements, such as fraud detection and loyalty evaluation, enhance the banking environment for customers and employees alike.

Expanding on the concept of customer satisfaction, Alnaser et al. (2023) explore what affects satisfaction with AI-based digital banking services. Their research shows that expectation confirmation, perceived performance, and communication quality strongly influence customer satisfaction. But, the degree of trendiness and customisation included did not have any impact. These particular factors of satisfaction provide more depth to talk about the positive effects of AI on customer experience and associate the functional benefits of AI with specific elements of satisfaction. Another study by Hariguna and Ruangkanjanases (2024) analyzes the impact of AI on customers' performance and determines factors like organisational agility and customer experience that enable the effectiveness of AI to improve customer performance. Their findings are supported by Qureshi

et al. (2024), who, after focusing specifically on chatbot services and their effect on customer satisfaction, noted that the quality of chatbot interactions has a direct impact on customer satisfaction, stressing efficiency, accuracy, and user-friendliness of AI services.

Geetha and Lidwina (2024) examine the role of demographic variables in customers' interaction with AI and their level of satisfaction with AI-based banking services. They found that young people and those who are more actively involved in the digital world are more satisfied with AI. However, the privacy concerns were higher among the older adults and highly educated individuals. Finally, Hussain and Sudha (2024) discuss the impact of AI-based banking services on customer loyalty. They note that AI has a positive effect on customer satisfaction and loyalty because of enhanced service quality dimensions like reliability, customisation, and ease of use.

From the above literature, both AI and customer satisfaction play a critical role in banks' profitability. The overall perception of AI is still positive, but consumers are still sceptical and have privacy concerns, and this is something that banks must address and educate them on. The correlation between AI and service quality provides evidence of the technology's ability to not only optimise processes within a company but also enrich the experiences of consumers. Understanding aspects of customer satisfaction, such as expectation confirmation or service performance, shows how AI can result in the improvement of banking services.

CONCEPTUAL FRAMEWORK

Drawing on the literature reviewed above, this study proposes a conceptual framework in which AI adoption is the independent variable and two separate outcomes are the dependent variables. The first outcome, financial performance, is captured through reduction in operational costs, increase in revenue, and operational efficiency (Polireddi, 2024; Svoboda, 2023; Velev & Zahariev, 2022). The second outcome, customer satisfaction, is captured through customer relationship quality, anticipation of customer needs, personalised customer experience, efficient data management, and customer trust (Alnaser et al., 2023; Hussain & Sudha, 2024; Ni, 2024). Because these two outcomes differ in nature, they are treated as distinct constructs and measured with separate questionnaire items. Financial performance is also shaped by factors other than AI, including market competition, economic conditions, operating costs unrelated to technology, and organisational strategy. These factors are acknowledged as potential confounding variables. Because they were not controlled in this study, any relationship observed between AI adoption and financial performance is interpreted as an association rather than a causal effect. Accordingly, the following hypotheses were formulated:

H1: There is a significant positive relationship between AI adoption and perceived financial performance.
H2: There is a significant positive relationship between AI adoption and perceived customer satisfaction.

Methodology Research Philosophy and Design

In the present research, a descriptive cross-sectional research design was applied due to its ability to collect and analyze data at a specific point in time (Saunders et al., 2019; Wang & Cheng, 2020), thus producing a picture of the current status of AI adoption and its relationship to customer satisfaction and profitability. Because this design focused only on the current state, it was useful in recognizing patterns, interplays, and prospects in the banking industry concerning the implementation of AI tools. The study also adopted positivism because this paradigm supports quantitative approaches, formal processes, and statistical data (Saunders et al., 2019; Turner, 2001), which aligns with the general assumption that knowledge is derived from observable actions and results. Because the design is cross-sectional and correlational, it can identify associations between variables but cannot establish cause-and-effect relationships.

Target Population

The target population for this study was the CIMB Bank employees within the Malaysia region. In this

research, only the employees in the managerial, IT, and operational levels were targeted because they would be able to give first-hand information on the use of AI in their organisation. Accordingly, customer satisfaction and financial performance were measured through employees' perceptions rather than through direct customer surveys or audited financial data.

Sample and Sampling Technique

Due to the time constraint, the current study employed a random sampling technique to get to 30 participants from CIMB Bank. Random sampling is the process of getting a sample from a population in such a way that any individual in the population has an equal chance of being selected (Saunders et al., 2019). This approach reduces selection bias (Saunders et al., 2019). However, because the sample comprised only 30 respondents from a single bank, the findings should be treated as indicative and cannot be generalised to the wider CIMB workforce or the Malaysian banking industry.

Data Collection and Analysis

The quantitative data were obtained through structured questionnaires. The benefits of questionnaires include ease of data collection, cheapness, and the fact that they can be done on a large scale (Marshall, 2005; Ponto, 2015). One of the main advantages of questionnaires is the ability to send them to a large number of respondents, thus collecting a huge amount of data in a short period (Zohrabi, 2013). They produce pre-recorded answers, which help to facilitate data analysis and decrease the chances of interviewer influence (Ponto, 2015). Also, questionnaires can be developed to obtain both numerical and non-numerical information, which provides the ability to obtain various types of information (Ponto, 2015; Zohrabi, 2013). They also enable the respondents to provide answers that are not influenced by the researcher's presence, hence giving accurate results. The questionnaires used in this research had Likert-scale items that enabled the respondents to show the level of their acceptance or rejection of statements concerning AI use in banking. Perceived financial performance was measured through items on reduction in operational costs, increase in revenue, and operational efficiency, while perceived customer satisfaction was measured through items on customer relationship quality, anticipation of customer needs, personalised customer experience, efficient data management, and customer trust. The items were adapted from [insert source(s) of the validated scales used]. The collected data were analysed using SPSS software. Descriptive statistics summarised the data to reveal the key trends and patterns observed in the responses using mean, median, mode, and standard deviation measures. Pearson correlation analysis was used to assess the strength and direction of the relationship between AI integration and each indicator of financial performance and customer satisfaction.

Reliability and Validity

To ensure the reliability of the data collection instruments, a pilot study was conducted with a small subset of the sample. This was particularly beneficial since it was a pilot study, and it helped in pointing out mistakes such as wrong questions in the data collection instrument or even some of the responses that did not tally with others; hence, it was able to be rectified before the actual study was carried out. The reliability of the questionnaire was assessed using Cronbach's alpha coefficient, where only the items with a value of 0.7 or higher were used (Bonett & Wright, 2015). For validity, the questionnaire was thoroughly reviewed by AI and banking experts who evaluated the instrument's content validity, ensuring that it adequately covers all relevant aspects of AI implementation and its potential impacts.

Ethical Considerations

The participants read and signed informed consent forms prior to participation in the study, during which they were informed of the purpose and process of the study as well as their rights as subjects. They were told that their consent was voluntary and that they could opt out of the study at any time without any consequences. To ensure that participants' identities were not revealed at any time, all the collected data were anonymised and kept secure, with restricted access to only the researchers involved in the study.

RESULTS

Demographic Information

The demographic analysis of the sample population (N=30) revealed that the majority of participants were male, accounting for 56.7% (n=17), while females made up 43.3% (n=13). In terms of age distribution, most respondents were between 31-40 years old, representing 43.3% (n=13) of the sample, followed by those aged 41-50 years (26.7%, n=8), 21-30 years (20.0%, n=6), and those aged 51 years and above (10.0%, n=3). Regarding years of experience, participants varied, with 26.7% (n=8) having more than 15 years of experience, 23.3% (n=7) having 6-10 years, 20.0% (n=6) having 1-5 years, 16.7% (n=5) having 11-15 years, and 13.3% (n=4) having less than 1 year. The educational background of respondents showed that 60.0% (n=18) held a Bachelor's degree, 20.0% (n=6) had postgraduate education, 16.7% (n=5) had a certificate or diploma, and 3.3% (n=1) possessed a professional certificate. Lastly, the participants' current positions were diverse, with 26.7% (n=8) working in IT/Technology, 20.0% (n=6) in digital banking, 20.0% (n=6) in financial analysis, 20.0% (n=6) in management, and 13.3% (n=4) in customer service. The results of demographic information are recorded in **Table 1 below**.

Table 1: Demographic Characteristics

	Frequency (N=30)	**Percentage (%)**
Gender		
Female	13	43.3
Male	17	56.7
Age		
21-30	6	20.0
31-40	13	43.3
41-50	8	26.7
51 +	3	10.0
Years of Experience		
Less than 1 year	4	13.3
1-5 years	6	20.0
6-10 years	7	23.3
11-15 years	5	16.7
More than 15 years	8	26.7
Level of Education		
Bachelor's Degree	18	60.0
Certificate or Diploma	5	16.7
Postgraduate Education	6	20.0
Professional Certificate	1	3.3
Current Position		
Customer Service	4	13.3
Digital Banking	6	20.0
Financial Analysis	6	20.0
IT/Technology	8	26.7
Management	6	20.0

Descriptive Statistics

The study results show that AI integration across departments, reduction in operational costs, increase in revenue, and operational efficiency all received a high mean score of 4.67 with a consistent standard deviation (SD) of .479, as indicated in **Table 2**. The improvement in customer relationship quality had a mean score of

4.40 (SD = .498). AI's ability to anticipate customer needs scored a mean of 4.47 (SD = .507), while its impact on enhancing personalized customer experiences had a mean of 4.43 (SD = .504). Efficient data management was rated with a mean of 4.30 (SD = .466), and the effect of AI on building customer trust had the lowest mean score of 4.13, with an SD of .346.

Table 2: Descriptive Statistics

Items	Minimum	Maximum	Mean	Std.D
AI Integration Across Departments	**4**	5	4.67	.479
Reduction in Operational Costs	4	5	4.67	.479
Increase in Revenue	4	5	4.67	.479
Operational Efficiency	4	5	4.67	.479
Improvement in Customer Relationship Quality	4	5	4.40	.498
Anticipating Customer Needs	4	5	4.47	.507
Personalized Customer Experience	4	5	4.43	.504
Efficient Data Management	4	5	4.30	.466
Building Customer Trust	4	5	4.13	.346

Inferential Statistics

The Pearson correlation coefficient was used to measure the strength and direction of the relationship between the variables under investigation. The Pearson correlation results show a perfect positive correlation of 1.000 between AI integration and reduction in operational costs, as indicated in **Table 3**.

The significance level (p-value) is less than .001, indicating a highly significant linear relationship between these two variables. However, a coefficient of exactly 1.000 indicates that respondents gave identical ratings on both items, reflecting limited variation in the responses; this result should therefore be interpreted with caution and does not demonstrate that AI integration caused the reduction in operational costs.

Table 3: AI Integration and Reduction in Operational Costs

	AI Integration		**Reduction in Operational Costs**
AI Integration	Pearson Correlation	1	1.000**
	Sig. (2-tailed)		<.001
	N	30	30
Reduction in Operational Costs	Pearson Correlation	1.000**	1
	Sig. (2-tailed)	<.001	
	N	30	30
**. Correlation is significant at the 0.01 level (2-tailed).			

The Pearson correlation results also showed a perfect positive correlation of 1.000 between AI Integration and an increase in revenue, as indicated by **Table 4**. The significance level (p-value) was less than .001, demonstrating a highly significant linear relationship between these two variables. As with Table 3, this perfect correlation reflects identical response patterns and should be interpreted with caution.

Table 4: AI Integration and Increase in Revenue

		AI Integration	**Increase in Revenue**
AI Integration	Pearson Correlation	1	1.000**
	Sig. (2-tailed)		<.001
	N	30	30
Increase in Revenue	Pearson Correlation	1.000**	1
	Sig. (2-tailed)	<.001	
	N	30	30
**. Correlation is significant at the 0.01 level (2-tailed).			

The Pearson correlation results also showed a perfect positive correlation of 1.000 between AI Integration and operational efficiency, as shown in **Table 5**. The significance level (p-value) was less than .001, indicating a highly significant linear relationship between these two variables. As with Table 3, this perfect correlation reflects identical response patterns and should be interpreted with caution.

Table 5: AI Integration and Operational Efficiency

		AI Integration	Operational Efficiency
AI Integration	Pearson Correlation	1	1.000**
	Sig. (2-tailed)		<.001
	N	30	30
Operational Efficiency	Pearson Correlation	1.000**	1
	Sig. (2-tailed)	<.001	
	N	30	30
**. Correlation is significant at the 0.01 level (2-tailed).			

Customer Satisfaction

AI Integration and Improvement in Customer Relationship Quality

The Pearson correlation results show a correlation of .144 between AI integration and improvement in customer relationship quality, as indicated by **Table 6**. However, this correlation is not statistically significant, with a p-value of .447. This indicates that there is no significant linear relationship between AI integration and the improvement in customer relationship quality.

Table 6: AI Integration and Improvement in Customer Relationship Quality

		AI Integration	**Improvement in Customer Relationship Quality**
AI Integration	Pearson Correlation	1	.144
	Sig. (2-tailed)		.447
	N	30	30
Improvement in Customer Relationship Quality	Pearson Correlation	.144	1
	Sig. (2-tailed)	.447	
	N	30	30

AI Integration and Anticipating Customer Needs

The Pearson correlation results also revealed a correlation of .094 between AI integration and anticipating customer needs, as shown in **Table 7**. This correlation is not statistically significant, with a p-value of .619. This indicates that there is no significant linear relationship between AI integration and the ability to anticipate customer needs.

Table 7: AI Integration and Anticipating Customer Needs

		AI Integration	**Anticipating Customer Needs**
AI Integration	Pearson Correlation	1	.094
	Sig. (2-tailed)		.619
	N	30	30
Anticipating Customer Needs	Pearson Correlation	.094	1
	Sig. (2-tailed)	.619	
	N	30	30

AI Integration and Personalized Customer Experience

The Pearson correlation results also showed a correlation of -.238 between AI integration and personalized customer experience, as indicated by **Table 8**. However, this correlation is not statistically significant, with a

p-value of .206. This suggests that there is no significant linear relationship between AI integration and the level of personalized customer experience.

Table 8: AI Integration and Personalized Customer Experience

		AI Integration	Personalized Customer Experience
AI Integration	Pearson Correlation	1	-.238
	Sig. (2-tailed)		.206
	N	30	30
Personalized Customer Experience	Pearson Correlation	-.238	1
	Sig. (2-tailed)	.206	
	N	30	30

AI Integration and Efficient Data Management

The Pearson correlation results show a correlation of .000 between AI integration and efficient data management, as shown in **Table 9**. This correlation is not statistically significant, with a p-value of 1.000. This indicates that there is no linear relationship between AI integration and efficient data management.

Table 9:AI Integration and Efficient Data Management

		AI Integration	Efficient Data Management
AI Integration	Pearson Correlation	1	.000
	Sig. (2-tailed)		1.000
	N	30	30
Efficient Data Management	Pearson Correlation	.000	1
	Sig. (2-tailed)	1.000	
	N	30	30

AI Integration and Building Customer Trust

The Pearson correlation results show a correlation of .277 between AI integration and building customer trust, as indicated by **Table 10**. This correlation is not statistically significant, with a p-value of .138. This suggests that there is no significant linear relationship between AI integration and the level of building customer trust.

Table 10: AI Integration and Building Customer Trust

		AI Integration	Building Customer Trust
AI Integration	Pearson Correlation	1	.277
	Sig. (2-tailed)		.138
	N	30	30
Building Customer Trust	Pearson Correlation	.277	1
	Sig. (2-tailed)	.138	
	N	30	30

DISCUSSION

This research has examined employees' perceptions of the relationship between AI adoption and both financial performance and customer satisfaction at CIMB Bank Malaysia. Following the analysis of 30 employees of CIMB Bank Malaysia, the descriptive statistics showed that AI integration is appreciated in various aspects of operations. Mean scores for AI integration in reducing operational costs, increasing revenue, and enhancing operational efficiency all reach 4.67, reflecting a strong positive assessment of AI's impact in these areas. The standard deviation is 0.479, which is low, signifying that participants have a similar understanding of the ability of AI to deliver these operational enhancements. The Pearson correlation coefficients denote a positive correlation of 1.000 between AI integration and the decrease in operational costs, increase in revenues, and

enhancement of operations efficiency. All these correlations with p<.001 show a highly significant relationship, thus indicating a strong association between AI integration and these operational areas. However, as these perfect coefficients reflect identical response patterns, they should be interpreted cautiously and do not establish that AI caused these improvements.

Some previous studies back these findings. For instance, Almustafa et al. (2023) showed that AI improves credit risk and other financial predictions. Velev and Zahariev (2022) highlighted that AI, when applied in the banking sector, improves efficiency and decision-making by an estimation of billions, possibly improving security and customer relations. Svoboda (2023) backs this up by stressing that AI systems help to increase the effectiveness of banks and change the financial environment, thus underlining the claims that AI is crucial for improving profitability and organisational performance. In the same vein, Edunjobi and Odejide (2024) point to the ability of AI to enhance credit scoring and credit portfolio as evidence of the effects on the financial end.

As for the customer-related outcomes, the mean scores are slightly lower yet remain positive. The mean score for improvement in customer relationship quality was 4.40, which implies that although respondents believe that the use of AI strengthens the relationship between them and the company, it may not have a strong positive impact as compared to its effect on operations. Likewise, regarding the extent to which AI is useful in predicting customers' needs and improving their experience, both of these factors received means of 4.47 and 4.43, respectively, which suggests that while these factors are important, they are slightly less significant than operational enhancements. Another area that has received a positive perception with a mean score of 4.30 is efficient data management. However, it indicates some drawbacks to efficient data management through AI. The lowest score was recorded in building customer trust, which stands at 4.13, further implying that while AI assists with trust, it may not do so optimally compared to other factors. However, as far as outcomes focused on customers are concerned, the correlations show a different picture. The correlations between AI implementation and enhanced customer relations quality, customer needs prediction, customized client experience, data handling, and customer trust are weak and not significant at $p < 0.05$. The correlation coefficients in these areas range from -.238 to .277, while p-values are non-significant, ranging from 0.138 to 1.000. This implies that even though the integration of AI is regarded positively in operational activities, its influence on the observed customer-focused results may not be significant or may warrant additional study to determine the extent of its influence.

Previous studies also support these findings. For instance, Ryzhkova et al. (2020) reveal a positive general attitude toward AI among consumers. However, they argue that privacy concerns and the lack of information cause a high level of mistrust. This resonates with the discussion's conclusion, which was that while the operational benefits of AI are viewed positively, customer trust, which has a lower mean of 4.13, remains an issue. The necessity to address these concerns indicates that such factors may limit AI's ability to enhance customer trust and satisfaction. Based on the investigation, Alnaser et al. (2023) establish expectation confirmation, perceived performance, and communication quality as the primary determinants of customer satisfaction in AI-based services. This supports the discussion's finding that factors like anticipation of customer needs and personalized experiences, although positive, are not as impactful as operational improvements. The lack of impact from trendiness and customization further corroborates the discussion's emphasis on more substantial factors affecting customer satisfaction. Geetha and Lidwina (2024) also note that customers at a young age who use digital platforms are more satisfied with AI-based banking services than customers with high privacy concerns, including the elderly and highly educated persons. This supports the discussion's point that demographic variables and privacy concerns play a role in customer perceptions of AI, aligning with the lower score in building customer trust and satisfaction. Hussain and Sudha (2024) also explain that AI enables improved satisfaction and customer loyalty due to modifications in service quality attributes such as reliability, customization, and usability. This aligns with the discussion's conclusion that while AI is seen as beneficial in certain service quality dimensions, its overall impact on customer-centric outcomes such as relationship quality and trust may require further investigation.

CONCLUSION

In conclusion, this study has given important information concerning the benefits of AI in the banking

industry, particularly in CIMB Bank Malaysia. Employees perceived AI integration to be strongly associated with operational performance, including cost savings, increased revenues, and improved efficiency, with statistically significant correlation coefficients supporting these associations. The coherency of the employees' attitudes is consistent with the findings of other studies that reveal the significance of AI implementation in enhancing operational efficiency and financial performance in the banking sector.

However, at the same time, the study shows that although AI is seen as positive in operational terms, it does not appear to be as strongly associated with customer-related aspects such as relationship quality, individualization, or trust development. The lower mean scores and insignificant correlation coefficients for these customer-orientation areas suggest that AI's potential to improve customer satisfaction is not as straightforward as it may appear. Therefore, future research should investigate the impact of AI on customer trust and satisfaction, taking into consideration demographic factors and privacy concerns that may hinder or enhance the role of AI in improving customer experience.

This study has several limitations. First, the data were drawn from 30 employees of a single bank, which limits the generalisability of the findings. Second, customer satisfaction and financial performance were measured through employee perceptions rather than customer surveys or audited financial data. Third, the cross-sectional, correlational design does not permit causal conclusions, and confounding variables such as market competition, economic conditions, and organisational strategy were not controlled. Future studies should therefore use larger samples drawn from several banks, combine customer surveys with organisational financial data, such as the cost-to-income ratio and return on assets, where access permits, and apply research designs capable of supporting causal inference.

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