
THE IMPACT OF AI-DRIVEN CRM ON ORGANIZATIONAL PROCESSES AND ADAPTABILITY (A QUALITATIVE STUDY IN INDONESIA)

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ABSTRACT

This study explored the organizational transformation occurring in Indonesian service firms following the adoption of Artificial Intelligence (AI)-enabled Customer Relationship Management (CRM) systems. The objective of the research was to understand how these systems influence service processes, analytical decision-making, and organizational adaptability from the perspective of managers and employees. A qualitative exploratory design was employed, utilizing semi-structured interviews with 18 participants involved in CRM-related functions. The data analysis followed a thematic analysis approach, guided by the Technology Acceptance Model (TAM) and the Technology–Organization–Environment (TOE) framework. The findings revealed three major themes: First, AI significantly accelerated service processes, reinforcing the employees' perceived usefulness of the technology. Second, AI enhanced the firm's analytical capability for targeted marketing and predictive modeling, which was motivated by environmental pressures. Third, AI strengthened organizational adaptability by fostering a data-driven culture and enabling faster strategic responses, with leadership support emerging as a crucial factor. The study concluded that AI-driven CRM fundamentally reshapes service work, requiring firms to focus on digital capabilities, employee sensemaking, and organizational culture for successful integration.

Keywords : *Artificial Intelligence; Customer Relationship Management; Service Company; Organizational Adaptability; TAM; TOE*



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INTRODUCTION

The rapid adoption of Artificial Intelligence (AI) across service industries has fundamentally reshaped how firms manage customer relationships, optimize operational decisions, and personalize service delivery. In Southeast Asia, industries such as retail, telecommunications, and financial services have increasingly integrated AI into Customer Relationship Management (CRM) systems to improve service responsiveness and strengthen customer engagement (Sardjono, Cholidin, & J., 2023; Thanyawatpornkul, 2024; Nguyen & Simkin, 2013). This adoption has been driven by competitive pressures, the unprecedented growth of digital customer interactions, and heightened expectations for real-time service resolution.

Preliminary industry reports indicate that Indonesian service firms using AI-enabled CRM tools have observed improvements in complaint handling time, customer retention, and targeted marketing accuracy (Deloitte, 2023). However, these quantitative indicators alone do not sufficiently explain how AI reshapes organizational routines, employee roles, and strategic decision-making within service environments. Understanding these mechanisms requires an

in-depth qualitative investigation focusing on the lived experiences of managers and frontline staff who directly engage with AI-assisted processes.

The phenomenon examined in this study concerns the organizational transformation occurring as service firms adopt AI-driven CRM technologies. These tools automate formerly manual tasks, provide advanced analytical insights, and influence how organizations adapt strategically in dynamic service environments. The Technology Acceptance Model (TAM) provides a foundation for understanding how employees evaluate AI tools through perceived usefulness and perceived ease of use, which directly shape acceptance behaviors (Davis, 1989; Venkatesh & Bala, 2008). Meanwhile, the Technology–Organization–Environment (TOE) framework is relevant in explaining how technological readiness, organizational structure, and competitive pressures influence strategic decisions regarding AI adoption (Tornatzky & Fleischer, 1990).

The present study links these theoretical perspectives to the real-world transformation emerging within Indonesian service industries, where AI-enabled CRM systems increasingly support automated service workflows, customer profiling, predictive analytics, and strategic decision-making. While TAM and TOE were historically examined through quantitative modeling, recent research suggests their constructs can also illuminate qualitative interpretations of technology adoption. AI interactions require deeper exploration (Chatterjee et al., 2021; Dwivedi et al., 2023). Thus, qualitative inquiry enables a more nuanced understanding of how organizational actors interpret AI's value, challenges, and strategic implications beyond measurable adoption factors.

Most studies on AI adoption in organizations have relied on quantitative surveys and modeling approaches primarily using frameworks like TAM (Technology Acceptance Model), TOE (Technology-Organization-Environment), or hybrid models. These methods focus on statistical associations, performance metrics, intention-to-use, and technological determinants, but often overlook the interpretive, process-oriented, and socio-technical aspects of adoption (Badghish & Soomro, 2024; Vemula et al., 2025; Na et al., 2022; Zerine et al., 2025). However, limited qualitative research explores how service organizations internalize AI-enabled CRM tools, negotiate changes in work practices, and make sense of AI's strategic implications. There is a gap in understanding the organizational narratives behind AI integration, particularly in emerging economies where digital transformation occurs unevenly, and contextual constraints play significant roles. This study addresses that gap by providing an in-depth, qualitative exploration grounded in theoretically informed interpretations using TAM and TOE constructs.

The novelty of this study lies in its qualitative application of TAM and TOE to examine how service firms in Indonesia interpret the integration of AI-driven CRM technologies. Instead of modeling linear relationships, this research highlights the interpretive, contextual, and strategic dimensions of AI adoption, thereby expanding TAM and TOE into richer organizational settings. Additionally, the study generates empirical insights into how AI enhances operational efficiency, analytical capability, and organizational adaptability from the perspective of internal actors, an angle that remains underrepresented in current literature dominated by survey-based approaches.

The objective of this research is to explore how AI-enabled CRM systems influence service processes, analytical decision-making, and organizational adaptability within Indonesian service firms. Specifically, the study seeks to understand how employees and

managers perceive, interpret, and integrate AI tools within their workflows, how these tools transform customer service practices, and how organizations realign strategies in response to AI-driven insights. The study aims to produce a theoretically grounded, empirically rich explanation of AI’s organizational impact through the lenses of TAM and TOE.

RESEARCH METHODS

This study employed a qualitative exploratory design to examine organizational readiness and employee barriers in the implementation of integrated CRM systems within the service industry. Qualitative design was selected because the research aims to understand employee perceptions, organizational dynamics, and contextual challenges that cannot be captured through numerical measurement alone.

The research population consisted of employees working in customer-facing and CRM-related functions in service-sector organizations such as telecommunications, banking, logistics, and hospitality. Using purposive sampling, a total of 18 participants were selected based on the following criteria: (1) direct involvement in CRM-related tasks, (2) experience in customer service or operational roles, and (3) exposure to CRM system changes within the last two years. Participants included frontline service staff, supervisors, team leaders, and CRM support personnel to ensure diversity of perspectives.

Data were collected through semi-structured interviews designed to explore perceptions of organizational readiness, availability of resources, leadership support, digital infrastructure, and perceived employee-level barriers during CRM implementation. Interview sessions lasted between 35 and 60 minutes and were conducted either face-to-face or through secure online platforms. All interviews were audio-recorded with participant consent and subsequently transcribed verbatim.

Data analysis followed a thematic analysis approach, consisting of three key stages: (1) open coding to identify initial concepts, (2) axial coding to group related patterns into categories such as readiness factors, system challenges, and behavioral barriers, and (3) selective coding to integrate categories into core themes explaining how organizational readiness interacts with employee barriers. To enhance credibility, data triangulation was conducted by comparing themes across different job roles, and member checking was performed with selected participants to validate interpretation accuracy.

This qualitative approach provides an in-depth understanding of how employees experience CRM implementation, how organizational readiness is perceived internally, and how both elements jointly shape the adoption outcomes within the service industry.

Table 1. Data Sources and Analytical Focus

Participant Group	Role in CRM Process	Analytical Focus
Frontline service staff	Daily CRM system users	System usability, workload, and digital readiness
Supervisors/team leaders	Operational coordination	Leadership support, process alignment
CRM support personnel	Technical and integration support	System issues, data flow, and infrastructure readiness

RESULTS AND DISCUSSION

This section presents three major themes that emerged from the qualitative analysis of interviews with managers, supervisors, and frontline service staff across retail, banking, and telecommunications firms that have adopted AI-enabled CRM systems. The thematic structure aligns with the study's guiding theoretical frameworks, TAM and TOE, while also reflecting the lived experiences and organizational interpretations expressed by participants.

AI-Driven Acceleration of Service Processes

Participants consistently reported that AI-enabled CRM tools significantly accelerated operational workflows, especially in handling service inquiries, automating ticket categorization, and generating real-time recommendations for customers. Automated routing and predictive issue identification reduced manual workload and shortened response times.

“Before AI, we manually checked each complaint. Now the system predicts the issue category in seconds, which cuts our handling time almost in half” (Participant R3, Telecom Supervisor).

“AI prompts our agents with suggested replies based on customer history. It speeds up the process and reduces human error” (Participant B1, Banking Customer Service Lead).

These findings align with earlier studies that highlight AI’s ability to automate repetitive tasks and enhance service speed (Huang & Rust, 2021). Within the TAM framework, accelerated processes strengthened employees’ perceived usefulness, reinforcing acceptance behaviors. From a TOE perspective, firms with higher technological readiness experienced smoother integration and greater efficiency gains.

Table 1. Evidence Summary of AI-Driven Acceleration of Service Processes

Sub-Finding	Evidence From Participants	Link to Theory
Faster complaint handling	Automated classification reduces manual screening	TAM: Perceived usefulness
Real-time customer insights	Agents receive suggested responses and next actions	TAM: Ease of use
Increased operational efficiency	Reduction of repetitive tasks via AI automation	TOE: Technological readiness

Enhanced Analytical Capability for Targeted Marketing and Personalization

Across organizations, AI-supported CRM analytics enabled more precise segmentation, predictive modeling of customer behavior, and development of personalized marketing campaigns. Participants noted that these capabilities helped firms anticipate customer needs and tailor offers more effectively.

“AI analyzes thousands of customer interactions daily. We can now segment customers much more accurately than with our old dashboards” (Participant R7, Retail Analytics Manager).

“The system predicts which customers are likely to churn, so we can intervene early” (Participant T4, Telecom Marketing Analyst).

These insights corroborate the literature emphasizing AI’s role in enhancing managerial decision-making and personalization (Vemula et al., 2025; Ma & Chang, 2024). In TAM terms,

employees reported improved decision quality, reinforcing their perceptions of usefulness. Under the TOE framework, environmental pressures were cited as motivators for adopting AI-driven analytics.

Table 2. Evidence Summary of Enhanced Analytical Capability for Targeted Marketing and Personalization

Sub-Finding	Evidence From Participants	Link to Theory
Improved customer segmentation	AI identifies micro-patterns in purchasing behavior	TAM: Usefulness
Predictive churn modeling	Marketing teams intervene proactively	TOE: Environmental pressure
Personalized marketing	AI recommends individualized product bundles	TAM + TOE combined: Value realization

Strengthened Organizational Adaptability and Strategic Responsiveness

The integration of AI-enabled CRM systems influenced organizational adaptability by reshaping decision flows, enhancing cross-departmental coordination, and enabling faster strategic responses to emerging trends. Participants described AI as a catalyst for a “data-driven culture.”

“AI insights are now discussed in every weekly strategy meeting. They guide us on where to allocate resources” (Participant B3, Banking Strategy Manager).

“We used to wait weeks for customer trend reports; now we get daily dashboards that shape our promotions” (Participant R5, Retail Operations Head).

AI thus acted not merely as a technological enhancement but as a strategic enabler, reshaping how firms interpreted market signals and made decisions. This supports findings from Dwivedi et al. (2023) and Alnofeli et al. (2025) that AI can accelerate organizational learning cycles. From a TAM perspective, increased strategic clarity reinforces user acceptance. Within the TOE framework, organizational context, particularly leadership commitment, was a critical factor determining successful adaptation.

Table 3. Evidence Summary of Strengthened Organizational Adaptability and Strategic Responsiveness

Sub-Finding	Evidence From Participants	Link to Theory
AI-supported strategic meetings	Regular use of AI dashboards in decision forums	TOE: Organizational context
Faster adaptation to market trends	Real-time insights guide promotions and campaigns	TAM: Usefulness
Shift toward a data-driven culture.	Employees rely on AI insights for daily decisions	TOE: Organizational transformation

The cross-theme analysis reveals a coherent pattern: AI-enabled CRM systems not only improve operational efficiency but also transform analytical and strategic capabilities within service organizations. Qualitative findings confirm and extend TAM principles, showing that

perceived usefulness is strengthened not only through productivity improvements but also through enhanced decision confidence. Similarly, perceived ease of use emerges in the form of intuitive dashboards and automated suggestions that lower cognitive workload for employees.

The TOE framework further illuminates how technological readiness, leadership support, and environmental pressures jointly shape AI adoption trajectories. Organizations with strong digital infrastructure and analytic culture experienced smoother integration and more significant benefits from AI-driven CRM applications.

These findings contribute to the existing literature by demonstrating that employee acceptance of AI is not solely influenced by individual attitudes but is deeply embedded in organizational narratives, contextual constraints, and strategic imperatives. This qualitative perspective fills the research gap identified in earlier sections by explaining how and why organizations internalize AI technologies, not just whether they adopt them.

CONCLUSION

This study examined how AI-enabled CRM systems shape service processes, analytical capability, and organizational adaptability within Indonesian service firms through a qualitative, theoretically informed exploration. The findings demonstrate that AI-driven CRM tools do not merely automate routine activities but fundamentally influence how employees interpret their work, how organizations coordinate decisions, and how strategic actions are formulated. By applying the Technology Acceptance Model (TAM) and the Technology–Organization–Environment (TOE) framework, this study provides a deeper, context-sensitive understanding of AI assimilation that goes beyond conventional quantitative adoption models.

First, AI significantly accelerated service processes by automating repetitive tasks, streamlining inquiry handling, and providing real-time decision support. These improvements strengthened employees' perceived usefulness and eased their integration of AI tools into daily workflows. Second, the analytical capability enabled by AI allowed firms to make more informed and timely decisions. This capability was shaped by both technological readiness and environmental pressures, reinforcing insights from prior literature while revealing how employees experience the shift toward analytical work. Third, AI fostered greater organizational adaptability by enabling faster responses to market signals and embedding data-driven practices across departments. Leadership support and an openness to organizational learning emerged as crucial facilitators of this transformation.

Overall, this study contributes to the growing body of knowledge on AI-enabled CRM by highlighting the interpretive, experiential, and strategic dimensions of adoption. It demonstrates that successful integration depends not only on system functionality but also on employee sensemaking, organizational culture, and contextual contingencies. For practitioners, the findings underscore the importance of preparing employees for AI-enabled changes, strengthening digital capabilities, and fostering environments that support continuous learning and cross-departmental alignment.

Future research could extend this work by examining comparative cases across different service sub-industries or exploring longitudinal changes as organizations deepen their reliance on AI. Additionally, integrating perspectives from customers or ecosystem partners may further enrich the understanding of AI-enabled CRM transformation. Through its qualitative lens, this

study offers a nuanced interpretation of how AI reshapes the service organization, providing actionable insights for firms navigating digital transformation.

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