

**EXPLORATORY STUDY ON THE
ACCEPTANCE OF MOBILE LEARNING IN
THE COMMERCIAL BANKING SECTOR**

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EXPLORATORY STUDY ON THE ACCEPTANCE OF MOBILE
LEARNING IN THE COMMERCIAL BANKING SECTOR

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ABSTRACT

In the era of digitalisation, mobile learning – the use of mobile technologies to access educational content and training – has emerged as a transformative tool with significant potential benefits for various sectors. However, the commercial banking sector in Malaysia faces low adoption rates due to resistance to change, limited awareness, technical barriers, and data security concerns. This study investigates the acceptance of mobile learning among employees in the commercial banking sector, focusing on their attitudes, beliefs, and expectations. Specifically, the research aims to (i) examine the impact of mobile learning on organisational learning and improvement, (ii) investigate the perceived benefits, challenges, and expectations of employees, and (iii) explore the factors contributing to the acceptance of mobile learning. Using a qualitative methodology within the interpretivism paradigm, data were collected through semi-structured interviews, focus group discussions, and document analysis. Participants included decision makers and operational employees from various levels within the sector in the Klang Valley, encompassing Selangor and Kuala Lumpur. Data analysis techniques such as thematic analysis and constant comparative analysis were employed to identify patterns and themes. The findings reveal the perceived impact of mobile learning on organisational improvement, professional development, and operational efficiency, with varying acceptance levels among decision makers and operational employees. Key factors influencing adoption include leadership, training, and user friendly platform. A comprehensive framework is proposed, addressing these factors and providing actionable strategies for successful implementation. In conclusion, this study offers valuable insights and practical guidance for commercial banks aiming to leverage mobile learning. While the findings are specific to a case study within the commercial banking sector in Malaysia, they provide a foundation for future empirical research in other business environments. However, the study's limitations include its focus on a single sector and geographical region, which may affect the generalisability of the findings.

Keywords: Mobile learning, organisational improvement, professional development, operational employees, decision makers, commercial banking

APPROVAL

This is to certify that this thesis conforms to acceptable standards of scholarly presentation and is fully adequate, in quality and scope, for the fulfilment of the requirements for the Doctor of Business Administration.

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DECLARATION

I hereby declare that the thesis submitted in fulfilment of the DBA degree is my own work and that all contributions from any other persons or sources are properly and duly cited. I further declare that the material has not been submitted either in whole or in part, for a degree at this or any other university. In making this declaration, I understand and acknowledge any breaches in this declaration constitute academic misconduct, which may result in my expulsion from the programme and/or exclusion from the award of the degree.

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LIST OF ABBREVIATION

AML	Anti-Money Laundering
BCG	Boston Consulting Group
BNM	Bank Negara Malaysia
DM	Decision Maker
e-KYC	Electronic Know-Your-Customer
FAQ	Frequently Asked Questions
FG-A	Focus Group A
FG-B	Focus Group B
GDP	Gross Domestic Product
LMSs	Learning Management Systems
MDEC	Malaysian Digital Economy Corporation
M-Learning	Mobile Learning
SME	Small and Medium Enterprises
WEF	World Economic Forum

CHAPTER 1

INTRODUCTION

1.0 Overview

Effective communication and continuous innovation are imperative for managers across industries in today's rapidly evolving digital economy. The dynamic nature of the digital landscape has reshaped the competitive terrain, requiring businesses to adapt swiftly to remain competitive. In this context, effective communication underpins collaboration, informed decision making, and adept problem solving.

Organisations increasingly turn to mobile learning as a powerful tool to enhance overall performance and amplify engagement within their human resources to meet these challenges. Mobile learning leverages diverse technologies to deliver training and learning opportunities accessible through mobile devices. By embracing this approach, employees and managers can unlock its manifold benefits, forging new pathways for communication enhancement and skill refinement.

The repercussions of neglecting mobile learning are substantial. Organisations that disregard its potential miss out on leveraging technology for training and communication, leading to squandered prospects for improvement and innovation. In a landscape where traditional training methods risk obsolescence, the absence of mobile devices' flexible, accessible, and personalised learning experiences could precipitate dwindling employee productivity and engagement.

Furthermore, in a world characterised by speed and digital connectivity, employees expect information and learning resources at their fingertips, on demand. Lag in adopting mobile learning might render organisations ill equipped to meet these expectations, resulting in diminished employee motivation and engagement. The

failure to adopt mobile learning can also instigate communication gaps, delays in vital information sharing, and a decline in team collaboration.

One sector where mobile learning assumes pivotal importance is the banking industry. Staying abreast of industry trends and regulations is paramount in this fiercely competitive and ever evolving domain. Mobile learning empowers banking professionals with unprecedented accessibility and flexibility, enabling them to access training materials and updates anytime, anywhere, via their mobile devices. This proves particularly advantageous for mobile banking staff, whether they are on the move or stationed at different branches.

Moreover, compliance training is crucial in the banking sector, and mobile learning expedites the efficient delivery of essential compliance modules to employees. Embracing mobile learning ensures that bank employees remain updated with the latest regulations and guidelines, effectively mitigating compliance risks. Additionally, mobile learning supports continuous education in banking, offering professionals bite-sized modules, videos, and interactive content on their mobile devices. This fosters professional improvement and adaptability in an industry that is constantly evolving. Furthermore, the banking sector often employs many tech-savvy and mobile-dependent millennials. Embracing mobile learning caters to their preferences and leads to heightened engagement and retention among this demographic.

The pressure on managers to innovate and communicate effectively is a response to the shifting competitive landscape of the digital economy. Neglecting mobile learning entails the risk of missed opportunities, reduced employee engagement, and inefficient communication channels. In the specific context of this study, i.e., the

banking sector, embracing mobile learning is imperative for competitiveness, compliance, continuous learning, and engaging the millennial workforce. Integrating mobile learning technologies can significantly enhance overall organisational performance, offering a competitive edge in the evolving business environment.

1.1 Background of the Study

In the digital era, mobile learning (m-Learning) has transformed education and training, utilising tablets and smartphones to deliver learning content and experiences (Traxler, 2008; Wang et al., 2023). With its presence in diverse industries, mobile learning has gained prominence, especially in the banking sector.

In Malaysia, a competitive and dynamic banking industry sees mobile learning as a means to enhance employee performance, improve customer experiences, and stay informed about regulatory shifts (Nagarajan et al., 2022; Dang et al., 2023).

1.1.1 Technology Advancement and Impact on the Banking Sector

Digital Transformation in Banking

The banking sector has undergone a profound digital transformation, leveraging technologies such as artificial intelligence, machine learning, and big data analytics (Lorente, 2023; Lugovsky, 2021; Husain et al., 2022). This shift has significantly improved operational efficiency and enhanced the overall customer experience.

Blockchain and Cryptocurrencies

Introducing blockchain technology and cryptocurrencies has reshaped the traditional banking landscape by providing alternatives to conventional payment systems and enhancing security measures (World Bank, 2018; Seele & Dierksmeier, 2021).

Mobile Banking and FinTech

The surge in mobile banking and the emergence of FinTech companies have revolutionised how customers interact with financial services, offering convenient and user-friendly alternatives to traditional banking channels (Wilson, 2021; Shaikh et al., 2022; Team, 2023).

AI-Powered Chatbots and Customer Service

Artificial Intelligence (AI) has been integrated into the banking sector by implementing chatbots and virtual assistants, improving customer service and providing real-time support (Adam et al., 2020; Krishnan et al., 2022).

Cybersecurity Challenges

With technological advancements, the banking sector faces escalating cybersecurity challenges. The imperative for robust security measures to safeguard customer data and financial transactions has become paramount (Duddu, 2022).

Technological advancements in Malaysia's banking sector, such as mobile banking applications and AI-driven solutions, align well with mobile learning's offerings. Integrating learning management systems, mobile apps, and multimedia tools has become integral to mobile learning platforms, empowering banking professionals with efficient, personalised learning experiences (Ooi et al., 2023).

In the banking sector in Malaysia, there is a growing need for a well-rounded and adaptable workforce, with a particular emphasis on digital literacy, risk management, and customer service skills. The PwC reports (2014) emphasised the importance of these skills, highlighting the demand for employees who can navigate the digital landscape, mitigate risks effectively, and provide excellent customer service (PwC, 2014; PwC, 2021; Low et al., 2023).

The London Institute of Banking & Finance (LIBF) article also highlights the significance of digital skills in the banking sector and competencies such as communication and problem-solving. The article suggests that these skills are essential for fostering strong customer relationships and addressing complex challenges (LIBF, 2021).

Looking ahead, the future of work in the banking sector is closely intertwined with technological advancements and automation. The McKinsey report (2019) provides valuable insights into how banks can build their future workforce by harnessing technology and automation. This approach can enhance efficiency and streamline operations, helping banks stay competitive in the digital age (McKinsey & Company, 2019).

The initiative programme on the future of work in the banking industry also addresses technology's transformative impact on the sector. It emphasises the need for banks to adapt to these developments and changes to remain relevant and competitive (Asian Institute of Chartered Bankers, 2020).

Banks must implement strategies for developing talent to address these skill requirements and navigate the changing banking landscape. The PwC report suggests that creating a culture of continuous learning within banks can be highly beneficial. This approach lets employees stay updated on evolving industry trends and acquire the necessary skills (PwC, 2021).

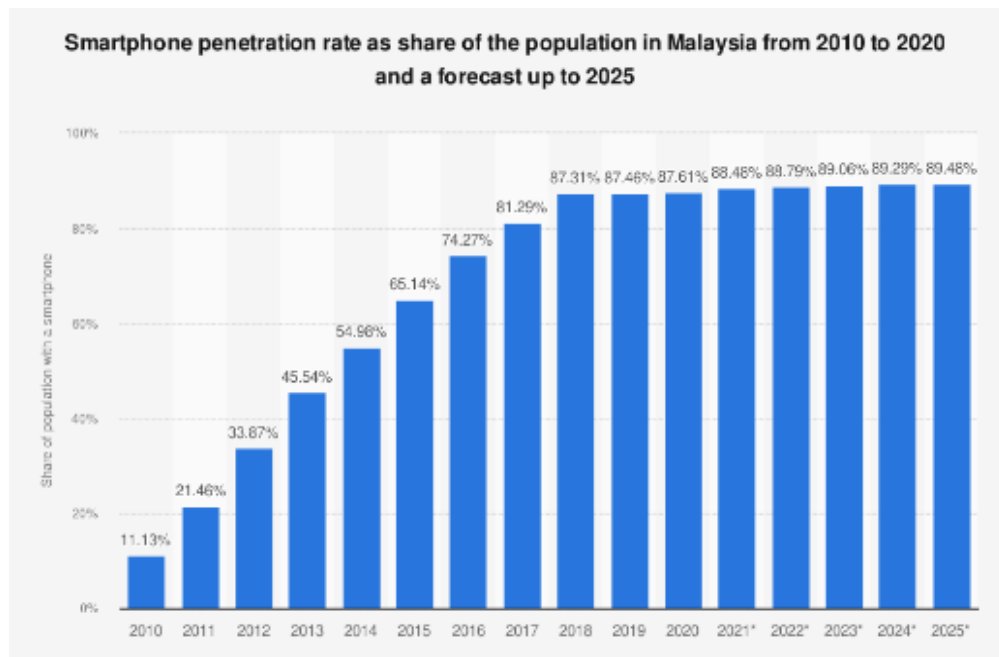
Moreover, the LIBF article recommends using competency-based assessments to identify skill gaps and tailor training and development programs accordingly (LIBF, 2021). These assessments help ensure that employees possess the essential skills needed in the banking sector, including digital proficiency and problem-solving abilities.

In summary, the banking sector in Malaysia places a premium on digital literacy, risk management, and customer service skills. As the industry evolves, banks must embrace technology and automation to remain competitive. Developing talent within the workforce is crucial, and this can be achieved through strategies such as continuous learning and competency based assessments, as recommended by the PwC report and LIBF article. The insights from the McKinsey report further underline the importance of adapting to technological advancements in shaping the future of work in the banking sector.

1.1.2 Mobile Learning Imperatives in Enhancing the Workforce of the Banking Sector

Amid a modern business landscape where organisations strive for knowledge enrichment, and employees are consistently mobile, mobile learning offers a promising solution. As projected by Statista, global smartphone penetration is set to reach 44.9% in 2023. In a similar period, the penetration rate in Malaysia was reported at 89.06%, signifying substantial accessibility to mobile devices (Statista, 2022b). This statistic indicates mobile learning's potential to effectively reach audiences in the commercial banking sector, encompassing employees, executives, and customers.

Figure 1.1: Smartphone penetration rate



Source: Statista, 2022b

Mobile learning is pivotal in addressing industry-specific challenges within Malaysia's banking sector. Given the continuous evolution of technology and shifting customer expectations, providing accessible and flexible training for banking professionals is essential (Ministry of Finance Malaysia, 2021). Furthermore, mobile learning caters to the tech-savvy millennial workforce, a significant component of the industry's talent pool. It is worth noting that the Malaysian government's emphasis on technological innovation extends beyond the digital economy. By embracing mobile learning, organisations in the banking sector can adopt innovative learning methodologies that align with the broader drive for technological innovation across industries (MIDA, 2022).

This study bridges a practical gap by exploring the impact, perceptions, and acceptance of mobile learning from the perspective of employees within Malaysia's banking sector. By addressing these dimensions, the research aims to uncover the benefits, challenges, and factors influencing the adoption of mobile learning. The

ultimate aim is to propose a framework that enhances the integration of mobile learning in the industry, contributing to the sector's improvement and development.

1.2 Problem Statement

The commercial banking sector in Malaysia faces a critical challenge in understanding and leveraging the benefits of mobile learning. Despite expanding research on mobile learning, significant uncertainty persists regarding its specific contributions to skill enhancement, operational efficiency, organisational learning, human resource development, and overall organisational improvement within the sector (Kumar et al., 2023; Malini, 2022; Chaouali et al., 2023). This uncertainty creates a considerable knowledge gap that hampers the sector's ability to develop effective strategies and fully exploit mobile learning's potential (Mohd et al., 2019).

Practically, there needs to be more understanding of how mobile learning can be effectively integrated into daily banking operations to achieve tangible improvements. While mobile learning offers flexibility and convenience, data on its impact on key performance metrics—such as productivity, retention rates, and employee satisfaction—within the banking sector are lacking. For example, TheHRDirector (2024) notes a 25% increase in training efficiency and a 15% boost in employee satisfaction with mobile learning apps, but these statistics are not specific to the Malaysian banking context. Similarly, eLearning Industry (2023) indicates that 67% of organisations using mobile learning see a 72% increase in engagement and a 43% rise in productivity (Limbachiya, 2024); however, this data is generalised across industries. Sector-specific research is essential to understand how mobile learning can be tailored to enhance operational efficiency, employee development, and overall organisational improvement in Malaysian banks (Accenture, 2024; KPMG, 2024).

Theoretically, existing studies still need to thoroughly examine the unique challenges and benefits of mobile learning in the commercial banking sector. While general technology adoption theories offer frameworks, they often do not address the specific nuances of mobile learning in specialised contexts like banking (Sharma & Al-Muharrami, 2018; Liu et al., 2023). The "Learning at Work Survey 2023" highlights that 54% of organisations struggle to measure the impact of learning programs, emphasising a gap in understanding how mobile learning affects metrics such as productivity and engagement (Overton, 2023). Additionally, factors like perceived security, social impact, and organisational culture's influence on mobile learning adoption require further investigation (Ali et al., 2022; Cross et al., 2019). Addressing these theoretical gaps is crucial for developing a comprehensive understanding of mobile learning's role within the banking sector.

Perspectives – Operational Employees and Decision Makers

Theoretical gaps in the study of mobile learning in the banking sector are closely linked to the varying perspectives of operational employees and decision makers. Understanding these perspectives is essential for bridging the gap between theory and practice (Fares et al., 2022). Limited studies have explored the specific viewpoints of operational employees and decision makers within the commercial banking sector. Similar research in other industries has highlighted the importance of aligning perceived benefits with actual outcomes to ensure the success of learning initiatives.

Divergent viewpoints among operational employees and decision makers contribute to ambiguity regarding the effectiveness and role of mobile learning. For instance, the "Learning at Work Survey 2023" indicates that organisations with intense learning and development programs report higher employee engagement rates (62%),

suggesting that aligning perceived benefits with actual outcomes is crucial. This study aims to address these differing perspectives to gain a deeper understanding of the real-world implications of mobile learning, particularly its impact on employee engagement and overall operational efficiency.

By focusing on both groups' distinct experiences and expectations, this research will uncover the practical challenges and opportunities associated with mobile learning in the banking sector. This comprehensive approach will help bridge the theoretical gaps and provide actionable insights to enhance the adoption and effectiveness of mobile learning programs.

Business Sustainability and Competitiveness

In an era where digital transformation drives competitive advantage, effectively leveraging mobile learning can influence a bank's business sustainability and market position. The Accenture (2024) report on banking trends emphasises that embracing digital learning tools is pivotal for maintaining competitiveness. Moreover, as outlined by GMO Research (2024), the future of digital banking in Malaysia hinges on innovative approaches to skill development and employee engagement. Thus, understanding the benefits of mobile learning and acknowledging its full acceptance and integration challenges is critical for profitability and long-term business interests (Accenture, 2024; GMO Research, 2024).

By addressing these practical and theoretical gaps, this study aims to provide a framework for enhancing the adoption of mobile learning within Malaysia's commercial banking sector, ultimately contributing to the sector's sustainable growth and competitive edge.

1.3 Research Questions

With the defined central problem that underlies this study, a formulation for the research questions is essential to delve deeper into the issues. These research questions will guide the investigation into the complexities of mobile learning in the banking sector, providing a structured approach to address the identified challenge.

The research questions (RQ) are as follows:

RQ I. How does mobile learning impact organisational learning and overall organisational improvement within the commercial banking sector from the perspectives of decision makers and operational employees?

RQ II. What are the perceived benefits, challenges, and expectations of decision makers and operational employees in the commercial banking sector regarding the implementation and impact of mobile learning on skill enhancement, operational efficiency, human resources development and professional improvement?

RQ III. What factors contribute to the acceptance and resistance to mobile learning among decision makers and operational employees within the commercial banking sector, and to what extent do they impact the adoption and integration of mobile learning initiatives aimed at enhancing skill development, operational efficiency, organisational learning, human resources development, professional improvement, and organisational improvement?

This research question is crucial as it aims to provide actionable insights and practical recommendations for improving the adoption of mobile learning in the commercial banking sector. By considering the perspectives of decision makers and