



EXPLORING THE POTENTIAL FOR HYPER-PERSONALIZED BANKING IN KUWAIT: CUSTOMER PERSPECTIVES AND SECTOR READINESS

أحد مشاريع



رؤية بنك الكويت المركزي والبنوك الكويتية
لتطوير الشباب الكويتي

**The 2023 First Place Research Paper Winner
"Kuwaiti Economic Student Prize"**

البحث الفائز بالمركز الأول "بجائزة الطالب الاقتصادي الكويتي" لعام 2023

EXPLORING THE POTENTIAL FOR HYPER-PERSONALIZED BANKING IN KUWAIT: CUSTOMER PERSPECTIVES AND SECTOR READINESS

Mohammad Rashed Fahad Al-Bous

The 2023 First Place Research Paper Winner
"Kuwaiti Economic Student Prize"

استكشاف إمكانيات الشخنة الفائقة في القطاع المصرفي الكويتي: وجهات نظر العملاء وجاهزية القطاع

توفر الخدمات المصرفية ذات الشخنة الفائقة، والتي يتم تمكينها من خلال تحليلات البيانات المتقدمة والذكاء الاصطناعي، القدرة على إحداث ثورة في تجربة العملاء في القطاع المالي. تستكشف هذه الدراسة جدوى تنفيذ نماذج مصرفية ذات شخنة فائقة داخل السوق الكويتي. وتوفر الدراسة استقصاء لمواقف العملاء تجاه مشاركة البيانات والخصوصية، بهدف تحديد العوامل التي تؤثر على الثقة والاستعداد لتبني الخدمات المصرفية ذات الشخنة الفائقة. كما تقوم بتقييم القدرات التكنولوجية للقطاع المصرفي الكويتي والإطار التنظيمي الحالي لتحديد مدى استعدادهم لدعم هذا التحول.

تكشف النتائج عن مزيج من حماس العملاء وتخوفهم بشأن خدمات الشخنة الفائقة في القطاع المصرفي. وتشكل المخاوف المحيطة بخصوصية البيانات وأمنها تحدياً كبيراً. وتسلط الدراسة الضوء على الحاجة إلى ممارسات شفافة للبيانات، وتدابير أمنية قوية، وفوائد واضحة للعملاء لتعزيز الثقة في خدمات الشخنة الفائقة. وتشير الدراسة إلى أنه في حين أن القطاع المصرفي الكويتي يمتلك التكنولوجيا الأساسية، إلا أن هناك حاجة إلى مزيد من الاستثمار في الطول التي تعتمد على الذكاء الاصطناعي والتكيفات التنظيمية لضمان التنفيذ الناجح للشخنة الفائقة. توفر هذه الدراسة رؤى قيمة للبنوك الكويتية التي تسعى إلى تعزيز تجربة العملاء والولاء من خلال الشخنة الفائقة. وتؤكد على أهمية معالجة مخاوف العملاء بشأن الخصوصية والاستثمار في التقنيات المناسبة، والانتقال السلس والناجح نحو مستقبل يتبنى الشخنة الفائقة في مجال الخدمات المصرفية في الكويت.

ABSTRACT

This research investigates the potential for hyper-personalized banking within the Kuwaiti market. It explores customer perspectives on data privacy, trust, and desired benefits, alongside an assessment of the Kuwaiti banking sector's technological readiness and the regulatory landscape. The study employs a qualitative approach with in-depth interviews with banking customers and industry professionals. It also analyzes successful case studies of hyper-personalized banking implementation in similar markets. The research aims to identify key factors that would enable successful adoption of hyper-personalized banking in Kuwait. This includes understanding how to increase customer trust in data privacy practices and how hyper-personalization can enhance customer satisfaction and loyalty. The findings will contribute to a comprehensive understanding of the potential for hyper-personalized banking in Kuwait and inform strategic decision-making for Kuwaiti banks.

Keywords: Kuwait, hyper-personalization, banking, data privacy, customer trust, regulations.

CHAPTER ONE: INTRODUCTION

1.1 Research Overview

Hyper-personalized banking involves leveraging customer data and advanced analytics to tailor financial products, services, and communications to individual needs and preferences (McKinsey, 2023; Rane et al., 2023). In today's digital landscape, customers across industries demand tailored experiences that cater to their individual preferences. The trend of hyper-personalization is a global one, and the banking sector is no exception. Hyper-personalized banking leverages advanced data analytics, artificial intelligence (AI), and machine learning (ML) to deliver highly individualized products, services, and recommendations. This includes real-time financial advice, targeted product offers, and proactive alerts uniquely relevant to each customer's financial profile and behaviors (Rane, 2023).

Globally, the push towards hyper-personalization is undeniable. Statistics show that 80% of customers are more likely to do business with a company that offers personalized experiences (McKinsey, 2021). Major banks known for their hyper-personalization initiatives, such as JP Morgan Chase or Bank of America, are setting industry benchmarks (Bodemer, 2024). AI-powered recommendation engines suggest suitable investment options and streamline loan applications, while intelligent chatbots provide 24/7 support, address common queries, and offer personalized financial guidance. By deeply understanding individual needs, banks are cultivating stronger customer relationships, increasing loyalty, and potentially unlocking new revenue streams (Valdez Mendia & Flores-Cuautle, 2022).

However, the exploration of hyper-personalization and customer receptiveness within Kuwait's unique banking landscape remains limited.

1.2 Defining the Problem

While hyper-personalization transforms customer experiences in banking worldwide, banks in Kuwait could be doing more to personalize their services to stay competitive. This is an area where many other banks are focusing (Ooi et al., 2023). This represents a potential missed opportunity, as hyper-personalized services hold the promise to significantly enhance

customer satisfaction and loyalty within Kuwait. However, a significant research gap surrounds Kuwaiti customers' attitudes towards hyper-personalization (Abdallah et al., 2022). Understanding their trust in banks regarding responsible data use, factors influencing that trust, and specific privacy concerns is crucial. Additionally, exploring the potential benefits Kuwaiti customers envision from hyper-personalized banking will help inform successful implementation strategies (AL-Dosari et al., 2024).

Further research is also needed to assess the Kuwaiti banking sector's readiness for hyper-personalization. This involves evaluating banks' current technological capabilities in areas like data analytics, AI infrastructure, and cybersecurity. A thorough examination of Kuwaiti data privacy regulations is essential to identify their impact on potential hyper-personalization implementation, including potential limitations or specific requirements (Almutairi, 2024).

This research aims to address these gaps. By investigating Kuwaiti customer perspectives and the technological and regulatory landscape, the study will provide valuable insights to guide Kuwaiti banks in their potential adoption of hyper-personalization strategies.

1.3 Research Objective

This research seeks a comprehensive understanding of the potential for hyper-personalized banking within the Kuwaiti market. A core focus will be on identifying the key factors that could enable successful adoption in this context. The research will pursue this goal through a combination of customer-focused and sector-focused objectives.

Firstly, the research will delve into understanding Kuwaiti banking customers' attitudes towards hyper-personalization, with a specific emphasis on data privacy. A crucial objective lies in exploring potential concerns, the level of comfort customers have with sharing different types of personal data, and the factors that would increase their trust in banks to handle their data responsibly. Secondly, the research aims to identify the specific ways in which Kuwaiti customers believe hyper-personalized banking could improve their satisfaction and increase their loyalty towards their banks. Uncovering these desired benefits will provide valuable insights into effective personalization strategies in the Kuwaiti context.

Additionally, the research will evaluate the current technological readiness of Kuwaiti banks for adopting hyper-personalization. This involves a thorough assessment of their data analytics capabilities,

AI integration, and cybersecurity measures, all of which are crucial foundations for successful implementation. The research will also analyze the Kuwaiti regulatory landscape in relation to data privacy regulations. Understanding potential limitations, specific requirements, and the overall regulatory environment will help to ensure responsible and compliant adoption of hyper-personalization technologies.

By addressing these customer-focused and sector-focused objectives, this research will provide much-needed insights and fill the existing knowledge gap concerning the potential of hyper-personalization within Kuwait. The findings will illuminate customer perspectives on trust, data sharing, and desired benefits, alongside a clear understanding of the sector's technological readiness and regulatory considerations. This comprehensive knowledge base will be instrumental for Kuwaiti banks as they navigate strategic decision-making, potentially adopting hyper-personalization to enhance customer experiences, and position themselves as leaders within the evolving financial landscape.

1.4 Research Questions

Understanding the potential for hyper-personalization within Kuwait's banking sector demands a multifaceted investigation. This research seeks to answer several crucial questions that will illuminate both customer perspectives and the wider market landscape. Firstly, establishing trust is a cornerstone for the success of hyper-personalization. This leads to questions about how banks can reassure customers about the safety and responsible use of their data, a concern addressed by the following research question:

RQ1: What factors would increase Kuwaiti customers trust in hyper-personalized banking services, especially with regards to data privacy?

Secondly, it's essential to understand how hyper-personalized banking could improve customer satisfaction and increase loyalty towards their bank. This will be explored through:

RQ2: In what ways do Kuwaiti customers believe hyper-personalized banking could improve their satisfaction and increase their loyalty towards their bank?

On the sector side, sectoral readiness is essential. This research examines whether Kuwaiti banks currently possess the necessary technological capabilities and regulations to implement hyper-personalization strategies. This aspect is addressed through the following questions:

RQ3: What is the current level of technological readiness among Kuwaiti banks for implementing hyper-personalization?

RQ4: How do existing Kuwaiti data privacy regulations impact the potential implementation of hyper-personalized banking services?

To provide a comprehensive understanding of the regional landscape and inform effective implementation in Kuwait, this research will also investigate and compare strategies employed by selected banks in the GCC to identify best practices and areas for improvement. This comparative analysis will be guided by the following question:

RQ5: What are the most effective strategies employed by banks in the GCC to implement hyper-personalized banking services, and how can these best practices be leveraged to address areas for improvement and enhance customer experiences in Kuwaiti banks?

1.5 Research Methodology

This study employs a qualitative research approach with a phenomenological emphasis to gain a deep understanding of the potential for hyper-personalized banking within the Kuwaiti market. Given the limited implementation of hyper-personalization within Kuwait, this approach prioritizes exploring customer perceptions, concerns, and expectations, alongside professional insights into the sector's readiness.

1.6 Data Collection

In-depth Interviews. A diverse sample of 15 Kuwaiti banking customers will be recruited, representing variations in age, gender, technological proficiency, and banking affiliations. Semi-structured interviews will explore their understanding of hyper-personalization, perceived benefits and concerns, attitudes towards data sharing, and factors influencing trust. Additionally, 10 interviews will be conducted with banking executives, technology specialists, and those directly involved with personalization initiatives. These interviews will delve into technological capabilities, challenges and opportunities regarding hyper-personalization, the impact of regulations, and industry trends.

Comparative Case Study. This study will carefully analyze two successful cases of hyper-personalization implementation by international banks operating in markets similar to Kuwait, like GCC market. These markets will share characteristics such as demographics, technological development, regional customer expectations, and evolving regulatory landscapes. This focus will provide a strong basis for transferring insights, given the similarities and the growing adoption of digital banking practices across the GCC. Analysis will draw on public information and industry reports to inform these case studies. The emphasis will be on

identifying the strategies employed, lessons learned, and key factors contributing to success within those specific contexts. The ultimate goal is to derive actionable insights that can be applied and potentially adapted to the Kuwaiti market.

1.7 Data Analysis

Interview transcripts and case study materials will undergo rigorous thematic analysis using NVivo 14 software. This iterative process will involve coding, identifying recurring themes, and uncovering patterns across datasets. Both commonalities and divergences in perspectives will be considered to provide a nuanced understanding of the potential for hyper-personalization within Kuwait.

1.8 The Potential of Hyper-Personalization in Kuwait

To fully grasp the potential impact within Kuwait, it's imperative to examine how these concepts resonate within the nation's distinct economic and technological landscape. Kuwait's high smartphone penetration rate and growing comfort with digital services suggest a population receptive to technology-driven banking innovations (Alghareeb, 2022). Additionally, Kuwait's strong focus on economic diversification creates an environment where banks may be looking to differentiate themselves through enhanced customer experiences (Almassri et al., 2020). However, Kuwait also operates within a specific regulatory framework (Almutairi, 2024), and its banking customers possess unique attitudes towards data sharing and technology adoption. Implementing thoughtful hyper-personalization strategies holds the potential to transform the Kuwaiti banking experience. Understanding both customer preferences and the sector's readiness will be crucial for success.

This research will shed light on how hyper-personalization could enhance customer satisfaction, drive loyalty, and unlock business growth for Kuwaiti banks. Additionally, the study's findings could offer insights into how existing data privacy regulations might need to evolve alongside innovation, fostering a thriving financial ecosystem.

1.9 Thesis Elements

This paper is structured as follows: Chapter 1 provides the introduction, Chapter 2 presents the literature review, Chapter 3 outlines the methodological framework and research design, Chapter 4 discusses the findings and analysis, and Chapter 5 offers the conclusion and recommendations.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The financial services industry is undergoing a transformative shift, driven by the emergence of hyper-personalization. By leveraging cutting-edge technologies like artificial intelligence and big data, banks are now able to deliver highly individualized experiences that cater to each customer's unique needs and preferences (Alexander, 2024; Rane et al., 2023). However, limited research has explored the potential and challenges of hyper-personalized banking within the specific context of the Kuwaiti market. This literature review aims to address this gap by examining existing academic studies and industry reports to gain insights into the global trends, best practices, and potential challenges associated with hyper-personalization in banking. By understanding how other institutions are implementing these strategies, this review will inform the development of a successful hyper-personalization framework for Kuwaiti banks.

2.2 The Impact of Hyper-Personalization on Customer Experiences

In today's competitive banking landscape, delivering exceptional customer experiences is essential for attracting and retaining customers. Hyper-personalization has emerged as a powerful tool to meet these rising expectations. Research suggests that by tailoring experiences to individual preferences and behaviors, hyper-personalization can significantly enhance customer satisfaction. Customers feel understood and valued, leading to a heightened sense of satisfaction (McKinsey, 2023). Moreover, hyper-personalization streamlines processes by anticipating customer needs. This efficiency saves time and increases convenience, further contributing to customer satisfaction (Morton et al., 2024). Tailoring recommendations, insights, and alerts based on individual data translates into a high degree of relevance and meets customer needs efficiently (Deloitte, 2024).

Beyond satisfaction, hyper-personalization plays a key role in fostering loyalty. Personalized interactions help build deeper relationships between banks and customers, creating an emotional bond that strengthens loyalty (Rane et al., 2023). By proactively addressing concerns, exceeding expectations, and providing offers aligned with evolving needs, hyper-personalization can minimize the likelihood of customers seeking alternative banking providers (Das et al., 2024). Highly satisfied customers often become brand advocates, attracting new business through positive word-of-mouth (Coelho & Cachola, 2023).

Hyper-personalization also directly influences customer financial decision-making. By offering personalized guidance and insights, hyper-personalization empowers customers to make informed choices aligned with their financial objectives (Rane, 2023). Real-time alerts about potential savings opportunities, investment risks, or changes in a customer's financial situation enable better financial management and proactive planning (Kotios et al., 2022). Importantly, when implemented with transparency and ethical data practices, hyper-personalization can strengthen trust between banks and customers. This heightened trust can positively influence financial behaviors and increase willingness to explore new products and services (AL-Dosari et al., 2024; Rooij, 2022).

Hyper-personalization holds the potential to transform customer experiences, but achieving sustained success depends on prioritizing data privacy, transparency, and avoiding intrusive personalization efforts.

2.3 Technological Foundations and Challenges of Hyper-Personalization

Realizing the full potential of hyper-personalization within the banking sector depends on harnessing a range of cutting-edge technologies. Understanding how these technologies work together, along with the potential challenges banks face when integrating them, is crucial for successful adoption.

Artificial intelligence (AI) and machine learning (ML) lie at the heart of hyper-personalization. AI and ML models analyze vast amounts of customer data, uncovering patterns, predicting behaviors, and even highlighting needs customers themselves may not be aware of (Coelho & Cachola, 2023). This powers hyper-personalized experiences, with AI-driven recommendation systems suggesting tailored financial products, offers, and content based on unique customer profiles (McKinsey, 2023). Intelligent chatbots, equipped with natural language processing (NLP)

capabilities, provide 24/7 support and personalize interactions while extracting valuable insights from conversations (Kacar, 2023).

Hyper-personalization also relies heavily on data analytics. Banks must have the capacity to collect, store, and process massive volumes of structured and unstructured data from multiple sources. Real-time analytics is essential for timely and relevant personalization, enabling banks to respond immediately based on real-time data streams such as a customer's website activity (Coelho & Cachola, 2023; Waupsh, 2022).

Cybersecurity is very important in hyper-personalization strategies. Banks handle highly sensitive customer information, necessitating robust measures to safeguard data and prevent breaches (AL-Dosari et al., 2024). Additionally, securing the AI systems themselves is critically important, as these models can be vulnerable to manipulation or attacks (Ghelani et al., 2022).

Banks face several challenges when integrating these technologies. Poor data quality or siloed data sources can undermine personalization efforts (Karkošková, 2023). The tech talent gap also poses a hurdle, as banks might struggle to attract and retain skilled data scientists, AI engineers, and cybersecurity experts (St-Onge et al., 2022). Outdated legacy IT systems can present compatibility issues with modern tools, requiring potentially large investments in modernization (Mithra et al., 2023). Building ethical, transparent, and trustworthy personalization systems means focusing on algorithmic fairness, preventing biases, and employing explainable AI (Cao, 2021; Kordzadeh & Ghasemaghaei, 2022). To enable effective hyper-personalization, banks must prioritize strong data governance, strategic upskilling or partnerships, and maintain technological agility in a dynamic landscape.

2.4 Data Privacy, Regulation, and Customer Trust

The success of hyper-personalization strategies rests on a delicate balance. Banks must leverage customer data to enhance experiences while simultaneously fostering strong customer trust by ensuring privacy and adhering to regulations. Research highlights widespread concerns about data privacy among consumers, even though they recognize the potential benefits of hyper-personalization (Ke & Sudhir, 2023; Rane, 2023). Factors like transparency about data use, customer control over their own data, and the perceived value gained from personalization significantly influence a customer's willingness to share data (Fehrenbach & Herrando, 2021; Kaabachi et al., 2022). Importantly, attitudes around privacy and

data sharing can vary based on cultural context, necessitating adaptable personalization approaches (Lee et al., 2023).

The regulatory landscape surrounding data privacy is rapidly evolving. Regulations like the EU's General Data Protection Regulation (GDPR) and similar laws emerging worldwide are strengthening data privacy and emphasizing customer rights (Deloitte, 2022). Banks that proactively prioritize privacy-centric practices can gain a competitive edge as consumers become increasingly discerning about how their data is used (IBM, 2021). However, the regulatory landscape remains complex and varies across regions, posing compliance challenges for banks with global operations (Deloitte, 2023).

Building trust is paramount for banks embracing hyper-personalization. Clear communication about how customer data is collected, used, and protected lays the groundwork (AL-Dosari et al., 2024; Rooij, 2022). Furthermore, empowering customers with easy-to-use mechanisms to manage data preferences and opt-outs fosters trust and a sense of agency (Babina, 2024; Zeitlin & Rangoni, 2023). Continuous education efforts to inform customers about the benefits of hyper-personalization, how their data is used responsibly, and the security measures in place can increase trust and alleviate concerns (Valdez Mendia & Flores-Cuautle, 2022).

The interplay of data privacy, evolving regulations, and customer trust requires continuous investigation, especially in under-researched markets, to inform successful hyper-personalization strategies.

2.5 Understanding the Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), developed by Davis (1989) and expanded upon by Davis et al. (1992), provides a robust framework for understanding and predicting user adoption of new technologies (Tran et al., 2023). At its core, TAM posits that an individual's beliefs, attitudes, and intentions are the primary drivers of technology acceptance. By applying TAM during the introduction of an innovative technology, researchers can gain insights into its potential future usage. The original TAM focused on four key internal variables influencing actual technology use: perceived ease of use (PEU), perceived usefulness (PU), attitude toward use (ATU), and behavioral intention to use (BI). Additionally, TAM incorporates external variables, such as specific technological attributes, which influence both the perceived ease of use and perceived usefulness of the innovation (Figure 1).

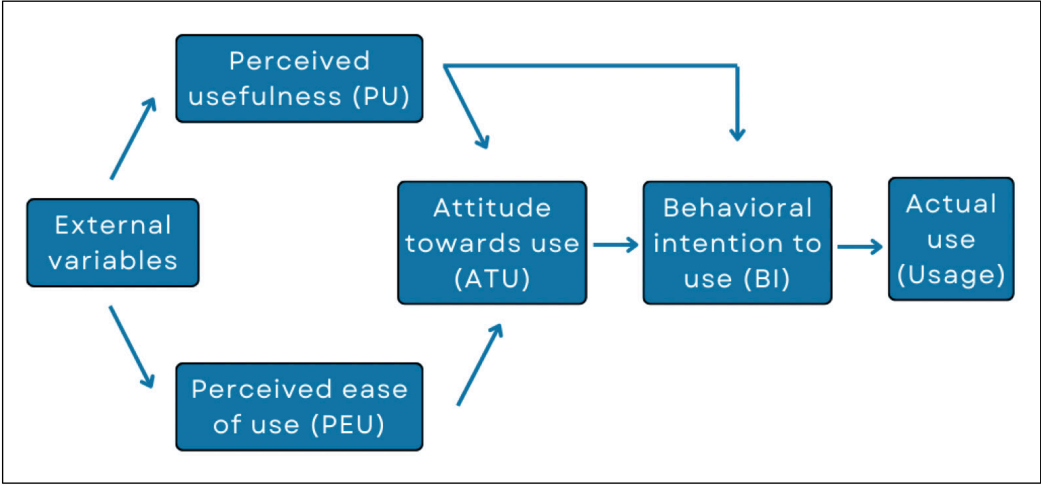


Figure 1. The original technology acceptance model (TAM) (Davis et al., 1989; Kowalska-Pyzalska, 2024).

Examining hyper-personalization within the banking sector through the lens of TAM highlights several key factors likely to influence customer acceptance. Customers will be more likely to engage with hyper-personalization if they perceive it as offering tangible benefits, such as highly relevant product recommendations, time savings due to streamlined processes, or proactive financial guidance. Intuitive interfaces, clear explanations of how personalization functions, and easy-to-manage privacy settings are crucial for enhancing Perceived Ease of Use (PEU). Overly complex or intrusive personalization efforts can negatively impact PEU and hinder adoption (Almourad, 2021). TAM extensions like (TAM2) often incorporate perceived security and trust as essential factors (Uche et al., 2021). For customers to embrace hyper-personalization, they must believe that their data is handled responsibly and transparently.

While TAM provides a valuable framework, its applicability to hyper-personalized banking within the Kuwaiti context warrants specific considerations. Cultural attitudes towards data sharing, the evolving digital literacy of Kuwaiti banking customers, and the specific technological capabilities of Kuwaiti banks may necessitate adaptations or extensions to the traditional TAM model. This research aims to explore these potential nuances, thereby contributing to a deeper understanding of the factors influencing hyper-personalization acceptance within Kuwait. Interviews will investigate how customers perceive the security, privacy, usefulness, and ease of use of potential hyper-personalized banking applications.

2.6 Kuwaiti Banking Sector Overview

The Kuwaiti banking sector boasts strong financial performance, healthy liquidity levels, and a well-capitalized position. Operating under the supervision of the Central Bank of Kuwait (CBK), the sector benefits from its proactive role in fostering stability and modernization (Oxford Business Group, 2022). The market features both conventional and Islamic banks, with major players like the National Bank of Kuwait (NBK) and Kuwait Finance House (KFH) holding significant market share. International banks also operate within the Kuwait Banking Association. Despite the impact of COVID-19, the outlook for Kuwait's banking sector remains positive. Factors like government infrastructure projects, increasing consumer spending power, and a growing young population point towards future growth potential. Fitch Ratings recently affirmed Kuwait's sovereign credit rating at AA- with a stable outlook (Fitch Ratings, 2024).

Kuwaiti banks have made significant strides in their digital transformation efforts in recent years. This includes substantial investments in mobile banking, online portals, and contactless payment solutions (Bioumy, 2024). While adoption levels may vary across banks, there is a growing interest in leveraging AI, machine learning, and data analytics for diverse applications like risk assessment, fraud detection, and personalized customer experiences (Alabdullah & Tawfeeq, 2023). To accelerate innovation, some Kuwaiti banks are strategically collaborating with fintech companies, especially in areas like payment solutions and digital onboarding (Markaz, 2022; Zawya, 2024).

While Kuwaiti banks are embracing technological advancements, further research is warranted to understand the level of digital banking adoption and openness to hyper-personalization among Kuwaiti customers. It's also important to closely monitor the evolving legal landscape, as the passage of a comprehensive data protection law could necessitate adjustments to how banks handle customer data. Investigating the specific technological capabilities and digital strategies employed by individual Kuwaiti banks would provide valuable insights into the competitive landscape.

2.7 Research Gaps

There are several potential knowledge gaps that directly impact the study of hyper-personalization within the Kuwaiti banking sector. A crucial area is understanding Kuwaiti banking customers' specific perceptions and preferences regarding hyper-personalization. Limited research likely exists on their comfort with data sharing, desired types of personalization, and potential privacy concerns knowledge essential for successful implementation. Additionally, understanding the technological readiness of Kuwaiti banks is important. While general trends might be available, there might be limited data on individual banks' AI capabilities, data analytics infrastructure, and cybersecurity preparedness, all of which are vital for effective and secure hyper-personalization.

CHAPTER THREE: THE METHODOLOGICAL FRAMEWORK AND RESEARCH DESIGN

3.1 Introduction

This chapter outlines the methodological framework and research design employed to address the identified gaps in knowledge regarding hyper-personalization within the Kuwaiti banking sector. A qualitative approach with a phenomenological emphasis has been adopted to gain a deep understanding of customer perceptions and the experiences of banks navigating this landscape. The following sections will detail the specific methods used to gather rich insights and the strategies employed to ensure the trustworthiness and ethical conduct of this research.

3.2 Research Methodology

To gain a nuanced understanding of hyper-personalization within the Kuwaiti banking context, this study adopts a qualitative research approach with a phenomenological emphasis. Qualitative methods are particularly well-suited for this investigation for several reasons. Firstly, hyper-personalization in banking is heavily influenced by customer attitudes, trust in technology, and their evolving expectations for tailored experiences. Qualitative research allows for an in-depth exploration of these nuanced human factors, which are difficult to quantify through purely numerical data. Secondly, as Kuwait's banking landscape and regulatory environment are still developing, qualitative methods allow for capturing rich insights into the unique challenges and opportunities banks face in adopting hyper-personalization strategies within this specific context. Finally, qualitative research facilitates a flexible and open-ended exploration of how hyper-personalization is perceived and implemented differently by various stakeholders within Kuwaiti banking, helping move beyond preconceived notions and allowing for unexpected themes and insights to emerge.

3.2.1 Phenomenological Emphasis

This study employs a phenomenological emphasis within the broader qualitative approach. Phenomenology is concerned with understanding the lived experiences of individuals and how they make sense of the world around them (Cilesiz, 2011; Neubauer et al., 2019). This aligns directly with the study's objectives. A phenomenological approach is crucial for uncovering how Kuwaiti banking customers experience and interpret hyper-personalization, their feelings of comfort or hesitation regarding data sharing, their perceived benefits or drawbacks of tailored banking services, and their overall expectations regarding personalization. Additionally, applying phenomenology to interviews with key decision-makers or technology specialists within Kuwaiti banks can illuminate their lived experiences with the challenges, successes, and strategic considerations they face when implementing hyper-personalization initiatives. This in-depth exploration of lived experiences will provide a rich foundation for understanding the complexities of hyper-personalization within the Kuwaiti context (Neubauer et al., 2019; Pringle et al., 2011).

3.3 Target Population and Sampling Methods

This research investigates hyper-personalization within Kuwait's banking sector by focusing on two main groups: Kuwaiti banking customers and banking professionals involved in technology, strategy, or initiatives related to personalization. To obtain rich qualitative data, the study will use non-probability sampling. Purposive sampling will ensure a diverse participant pool, considering factors like age, gender, technological proficiency, and banking affiliations for customers. Professionals will be selected based on their role and involvement in personalization initiatives within banks of varying sizes. Snowball sampling may be used to find additional banking professionals. The target sample size is approximately 15 customer interviews and 10 professional interviews, with data collection continuing until thematic saturation is reached. This approach aims to capture a broad spectrum of perspectives on hyper-personalization within the Kuwaiti banking context.

3.4 Research design

This study employs a mixed-methods approach to data collection, combining in-depth interviews with comparative case studies to provide a multifaceted understanding of hyper-personalization within the Kuwaiti banking context.

3.4.1 Ethical considerations

This research prioritizes the highest ethical standards throughout its design and execution. Informed consent will be obtained from all participants, emphasizing the study's purpose, voluntary participation, potential benefits and risks, data confidentiality, and the right to withdraw at any time. Confidentiality and data protection are of the utmost importance, participant identities will be anonymized, data stored securely, and access restricted to authorized personnel. To ensure responsible data collection, analysis, and reporting, the researcher will maintain a reflexive approach, critically examining potential biases through journaling and peer consultation. This commitment to ethical research practices aligns with the study's scientific rigor and aims to uphold respect for all participants.

3.4.2 Data Collection Methods

In-depth interviews. The in-depth interviews will employ a semi-structured format for both Kuwaiti banking customers and professionals (including executives, technology specialists, and those directly involved with personalization initiatives). This format provides a framework to guide discussion around key topics while retaining flexibility. This flexibility allows for exploring emerging themes and delving into individual experiences, providing a richer understanding of perspectives on hyper-personalization within the Kuwaiti banking context.

The interview process is designed to gather insights from two key groups: customers and banking professionals. Interviews with customers seek to reveal their attitudes towards data sharing, their comfort levels with personalization, and their overall expectations regarding hyper-personalized banking experiences. Meanwhile, interviews with banking professionals will delve into their perspectives on technological capabilities, the challenges of implementing hyper-personalization strategies, and regulatory considerations they must navigate.

The study will employ purposive sampling to ensure a diverse range of customer participants based on their demographics, their banks services they use, and varying levels of technology adoption. For banking professionals, a combination of purposive and snowball sampling may be used. This hybrid approach will help identify key individuals directly responsible for implementing or overseeing hyper-personalization initiatives, with snowball sampling potentially leading to referrals

of additional relevant experts. The target number of interviews is approximately 15 with customers and 10 with banking professionals. This aims to achieve thematic saturation, where no new themes emerge from the interviews, while remaining manageable for data analysis.

Before commencing the full data collection phase, the interview guides for both customer and banking professional interviews will undergo pilot testing with a small number (2-3) of participants representative of the target groups. During pilot testing, feedback will be carefully gathered on the clarity of questions, potential sensitivities, and the overall flow of the interview. This iterative process will help identify any awkward phrasing, ambiguous questions, or areas where additional probing might be needed. Pilot testing will refine the interview guides, enhancing their ability to capture rich insights about hyper-personalization perceptions.

Comparative case study. The study will carefully select two successful cases of hyper-personalization implemented by international banks operating in markets similar to Kuwait, particularly in GCC. The selection criteria will prioritize banks with industry recognition, documented metrics demonstrating the success of their initiatives, and the availability of reliable information about their strategies.

The analysis will rely on publicly available information sources like company websites, press releases, and industry reports. These sources will provide valuable insights into the selected banks' hyper-personalization strategies, potentially including details on their technology implementations, data usage, and customer engagement techniques.

The case study analysis will delve into several key areas: the technological infrastructure underpinning the banks' personalization efforts, their data use practices, the customer engagement strategies they employ, how they successfully navigate regulatory environments, and any reported challenges or lessons learned throughout their hyper-personalization journeys.

The ultimate goal of these case studies is to identify transferable insights, best practices, and potential pitfalls that Kuwaiti banks can learn from and apply to their own hyper-personalization initiatives. This knowledge will provide a valuable foundation for Kuwaiti banks as they seek to create tailored and meaningful banking experiences for their customers.

3.5 Data Analysis

This study will employ thematic analysis to systematically identify patterns and extract meaning from interview transcripts and case study materials (Figure 2). Its flexibility aligns well with the study's qualitative and phenomenological approach. Thematic analysis will be conducted with the assistance of NVivo software, facilitating the coding, organization, and identification of themes within the interview transcripts and case study materials.

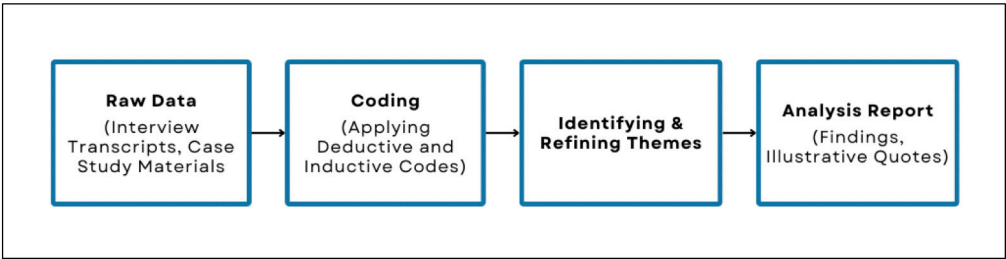


Figure 2. Thematic Analysis Process in this Study

The coding process will leverage a combination of deductive codes (based on existing literature and the study's research questions) and inductive codes (arising organically from the interviews). The researcher will use a qualitative data analysis software tool to streamline code application across the textual dataset. The software will enable efficient analysis of code relationships, patterns, and clusters, aiding the emergence of central themes within the data.

The identified themes will undergo a rigorous review process. They will be assessed to ensure they accurately and holistically represent the data. This might involve combining themes, splitting them for clarity, or redefining their scope for better focus. Each finalized theme will be given a clear and concise name that captures its core meaning. Additionally, well-defined definitions will be created for each theme, ensuring consistency and clarity in the subsequent analysis.

3.6 Research Questions

This study aims to address the following overarching research questions to gain a comprehensive understanding of hyper-personalization within the Kuwaiti banking sector:

3.6.1 Customer-Focused Questions

The questions in this section were influenced by the Technology Acceptance Model (TAM), with RQ1 addressing perceived security and privacy, and RQ2 focusing on perceived usefulness and ease of use

RQ1: What factors would increase Kuwaiti customers' trust in hyper-personalized banking services, especially with regards to data privacy?

RQ2: In what ways do Kuwaiti customers believe hyper-personalized banking could improve their satisfaction and increase their loyalty towards their bank?

3.6.2 Sector-Focused Questions

RQ3: What is the current level of technological readiness among Kuwaiti banks for implementing hyper-personalization?

RQ4: How do existing Kuwaiti data privacy regulations impact the potential implementation of hyper-personalized banking services?

3.6.3 Comparative case studies question

RQ5: What are the most effective strategies employed by banks in the GCC to implement hyper-personalized banking services, and how can these best practices be leveraged to address areas for improvement and enhance customer experiences in Kuwaiti banks?

3.7 Assumptions

This study operates under several key assumptions that shape its scope and the interpretation of the findings. Firstly, it is assumed that participants will be willing to share their experiences and perspectives on hyper-personalization honestly and to a reasonable degree of depth. While measures will be taken to build connections and create a safe interview environment, the researcher acknowledges that some aspects of experiences may remain unspoken. Secondly, the research assumes that a certain level of technological infrastructure (data collection systems, analytics capabilities) exists within the Kuwaiti banks being studied. While interviews will explore these capabilities, it is not feasible within the project's scope to conduct a full technical audit of each bank. Finally, while the sampling strategy aims for diversity, it is assumed that the participants may not fully represent all demographics and banking experiences within Kuwait. The findings will be interpreted in light of this potential limitation.

3.8 Limitations

This research, like all studies, has certain limitations that should be acknowledged. Firstly, while the study aims to uncover core themes related to hyper-personalization within Kuwait, the findings may not be directly generalizable to other GCC countries due to potential variations in regulatory environments and levels of technological development in their banking sectors. Secondly, the fields of hyper-personalization and data privacy are rapidly changing. New technologies or regulatory shifts occurring during the research period might influence the outcomes or necessitate adjustments to the analysis. Finally, while reflexivity will be employed to minimize the impact, the researcher's own experiences and preconceptions may subtly influence the collection and interpretation of data. Measures such as peer consultation will be used to mitigate this potential bias.

CHAPTER FOUR: FINDINGS AND ANALYSIS

4.1 Introduction

This chapter presents the key findings and analysis derived from in-depth interviews with Kuwaiti banking customers and banking professionals. The study's overarching research questions aimed to illuminate customer perspectives on hyper-personalization, explore the sector's readiness, and examine the influence of Kuwait's specific regulatory landscape.

A total of 25 interviews were conducted. These included 15 interviews with a group of customer participants representing diverse demographics (a mix of ages, genders, technological proficiency, and banking affiliations) and 10 with banking professional participants (executives, technology specialists, and those directly involved with personalization initiatives). Thematic analysis of these interviews revealed rich insights into the potential for hyper-personalization within the Kuwaiti banking sector. This thematic analysis carried with the assistance of NVivo software (Appendix 1). Certain age groups have differing perspectives on hyper-personalization. For instance, younger generations tend to be more open to hyper-personalization than older people (Table 1).

It is important to acknowledge that certain themes and sub-themes emerged from the responses of a small subset of participants. While these perspectives offer valuable insights, they may not be representative of the entire sample. Given the qualitative nature of this study and its focus on thematic saturation rather than statistical generalization (as described in section 3.3), these findings should be interpreted with this limitation in mind.

Table 1. Participants profiles

Participants ID	Nationality	Education	Age	Gender	Banking Affiliations	Openness to Hyper - personalization
Participant 1	Kuwaiti	Graduate	26	Male	Islamic	Yes
Participant 2	Kuwaiti	Graduate	36	Female	Conventional	No
Participant 3	Kuwaiti	Graduate	25	Female	Conventional	Yes
Participant 4	Kuwaiti	Graduate	24	Male	Conventional	Yes
Participant 5	Kuwaiti	Graduate	34	Female	Islamic	Yes
Participant 6	Kuwaiti	Graduate	49	Male	Conventional	No
Participant 7	Kuwaiti	Graduate	27	Male	Islamic	Yes
Participant 8	Kuwaiti	Graduate	29	Male	Islamic	Yes

Participant 9	Kuwaiti	Graduate	44	Female	Islamic	No
Participant 10	Kuwaiti	Graduate	25	Female	Conventional	Yes
Participant 11	Kuwaiti	Graduate	38	Female	Conventional	Yes
Participant 12	Kuwaiti	Graduate	27	Female	Conventional	Yes
Participant 13	Kuwaiti	Graduate	24	Male	Islamic	Yes
Participant 14	Kuwaiti	Graduate	37	Male	Conventional	No
Participant 15	Kuwaiti	Graduate	23	Male	Conventional	Yes

4.2 Customer Perspectives on Hyper-Personalization

This section explores the attitudes, concerns, and expectations of Kuwaiti banking customers regarding hyper-personalization. The analysis reveals key themes that emerged from the interview data. These themes provide insight into how customers perceive the potential benefits and risks of hyper-personalization and what factors influence their willingness to share personal data with banks. Additionally, this section highlights customer preferences regarding types of personalized services and their overall expectations for tailored banking experiences tailored to their preferences and behaviors.

4.2.1 Theme 1. Data Privacy and Trust

This theme centers on the complex and nuanced perceptions Kuwaiti banking customers hold regarding the collection, use, and security of their personal data by banks. Customers expressed varying levels of comfort depending on the specific data involved, with particular concerns, especially among some female customers from conservative backgrounds. Beyond core privacy concerns, participants emphasized the importance of banks demonstrating transparency in data use, offering customers control or opt-out options for data sharing, and implementing robust security measures to prioritize customer interests.

Kuwaiti customers' trust levels are influenced by cultural norms surrounding privacy, past experiences with data breaches stories, and the evolving regulatory landscape. These concerns about data privacy and trust significantly impact customers' willingness to share data and their overall openness to engaging with hyper-personalized services. Thus, this theme analysis revealed several sub-themes:

A. Concerns about Data Use and Sharing

A significant concern expressed by participants was the potential for their personal information to be shared with third-party companies or used for purposes beyond their initial expectations. Some customers stated:

"I'm just not sure where my data goes once the bank has it, and that makes me uneasy" (Participant 2, 3, 7)

This sentiment was echoed by many participants who emphasized a desire for greater transparency about how their data is used and shared by their banks

"I want to be sure my bank is doing everything possible to protect my money and identity" (Participant 14)

This participant expresses a fundamental need for trust in their bank's ability to safeguard highly sensitive financial and personal information. They want reassurance that security measures are in place to minimize risks.

B. The Importance of Control

Customers repeatedly stressed the need for clear and accessible options to control what data is collected and how it is used. One participant explained:

"It's not about never sharing anything, but I want to be the one making the choice, not the bank" (Participant 5)

This desire for control suggests that offering personalized opt-out settings and easy-to-understand privacy policies could be powerful ways for banks to build trust with customers.

4.2.1.1 Literature Connections

Kuwaiti participants echoed global concerns about data sharing and transparency. They expressed specific worries about their data being used beyond its initial purpose, the potential for sharing with third parties, and a strong desire to maintain control over their information. These concerns align with findings in established studies and industry reports, such as those by Accenture (2021) and McKinsey (2023). McKinsey's recent survey (2023) revealed that 85% of consumers consider a company's privacy policies before making a purchase. To build customer trust, especially regarding personalization, banks must proactively address these privacy concerns.

The Technology Acceptance Model (TAM), mentioned in Section 2.5, posits that "Perceived Usefulness" and "Perceived Ease of Use" drive technology adoption. While Kuwaiti customers recognized the potential benefits of hyper-personalization, their willingness to share data was strongly tied to a need for clear, fine-grained control over their data. This

suggests a potential need for personalization interfaces that prioritize customer agency, even if slightly more complex than a purely streamlined experience.

The Kuwaiti customers' emphasis on transparency and control as preconditions for trust strongly aligns with broader privacy literature (Alexander, 2024; Rane et al., 2023). This finding underscores that responsible data practices are not merely a matter of compliance but crucial for fostering a sense of customer empowerment, which appears particularly valued within the Kuwaiti context. Banks seeking to build hyper-personalization strategies must go beyond simply disclosing their data usage and actively implement user-centric controls and clear opt-out mechanisms to address these sophisticated customer expectations.

The Kuwaiti context presents unique considerations for banks implementing hyper-personalization. Cultural sensitivities around privacy, particularly among some female participants from conservative backgrounds, highlight the importance of sensitivity in data collection practices. Banks should explicitly acknowledge these norms in their communications and be exceptionally transparent about the purpose behind collecting each data type, emphasizing the benefits to the customer. (Arora et al., 2023). Additionally, the impact of well-publicized regional data breaches on customer trust indicates heightened security concerns among Kuwaiti customers. Banks can proactively address this by emphasizing their robust security measures, relevant certifications, and clear incident response plans.

4.2.2 Theme 2. Desired Benefits and Expectations

This theme centers on how Kuwaiti banking customers believe hyper-personalized services could positively transform their banking experiences, increase their satisfaction, and ultimately, strengthen their loyalty to their banks.

Customers anticipate hyper-personalization to deliver practical advantages. These include saving time by streamlining processes, improving financial management through tailored insights, and generally making their banking interactions more convenient. Beyond practical gains, customers envision hyper-personalization as a way to feel more valued and understood by their banks. They hope this will not only enhance their overall satisfaction but potentially reduce anxieties or stresses associated with financial tasks.

For hyper-personalized services to be successful in the Kuwaiti market, customers have clear expectations. These expectations include essential

features or experiences that banks must deliver to build trust and provide genuine value through personalization efforts. Therefore, this theme analysis revealed several sub-themes:

A. Time Saving

These quotes highlight a strong desire for tangible benefits that make banking less of a hassle. The customer prioritizes time savings and streamlining their financial tasks. As they mentioned below:

"I lead a busy life. If my bank could anticipate my regular bill payments and send reminders, or streamline how I transfer money, that would be a huge help" (Participant 4, 9)

"Honestly, if the bank knows my typical spending patterns, I'd rather they just automatically transfer money to my savings when there's extra left over" (Participant 6)

Kuwaiti banks could find success with personalization features that offer automation options or proactive suggestions tailored to the customer's behavior, reducing manual effort required.

B. Proactive Financial Insights

Hyper-personalization shouldn't just be about offers. Visualizations, tailored budgeting tips, and insights into spending habits could be powerful tools to satisfy the Kuwaiti customer's desire for empowerment. The quotes below illustrate these ideas:

"It would be great if my banking app could alert me about potential savings opportunities or unusual spending patterns. It's like having a smart financial assistant" (Participant 12, 8)

"I want a breakdown of where my money goes, but not just the usual categories. Show me how much I spend at coffee shops versus on necessities, then compare it to others like me" (Participant 15)

The last quote by participant 15 speaks to an emotional benefit. The customer seeks to feel more in control of their finances and make better-informed decisions. The "others like me" aspect suggests a desire for context and guidance.

C. Expectations of Transparency and Control

Kuwaiti banks should prioritize making personalization settings easy to find and manage. Transparent, plain-language explanations of how data is used will be vital for building the trust required for adoption.

"It's fine if they suggest things based on what I do, but I need to be able to turn specific things off if I don't want them. And tell me clearly what data they're using" (Participant 10)

The last quote centers on a baseline expectation for any personalization to be genuinely valuable. The emphasis on opting out and understanding data use speaks to a need for a sense of agency.

D. Convenience

Kuwaiti customers are not opposed to data sharing if they see clear benefits. They expect convenience beside transparency and control over data usage in exchange.

"I hate filling out forms every time. If my bank already knows my details, why can't they pre-populate applications or suggest products relevant to my recent purchases?" (Participant 1)

While practical advantages are important, there's strong interest in hyper-personalization contributing to a positive emotional experience and reducing financial stress.

4.2.2.1 Literature Connections

The Kuwaiti customers' desire for time-saving features, proactive financial insights, and transparent control mechanisms aligns with broader international trends in hyper-personalization. Studies by McKinsey (2022, 2023), Deloitte (2024) and others consistently identify convenience and personalized guidance as primary motivators for customers. However, Kuwaiti customers may have distinctly heightened expectations in certain areas. Their emphasis on automating routine tasks and their pronounced need for customized control over how their data is used suggest greater emphasis on maximizing time savings and ensuring agency compared to some other markets.

Furthermore, participant 15's use of the phrase "others like me" reveals an interest among some Kuwaiti customers in having social comparisons for budgeting purposes. This interest offers a fascinating nuance, as this specific desire for benchmarking as a core personalization feature appears relatively novel. Kuwaiti banks might find a competitive edge by integrating such comparisons into their hyper-personalized services. Additionally, the phrase "others like me" suggests a need for social proof. Studies such as Roethke et al. (2020) define social proof as "a psychological social phenomenon where people tend to conform to the actions of others", while authors like Alenizi (2023) have explored the relevance of social proof in financial contexts.

The Kuwaiti customers' strong emphasis on transparency and control aligns with global discussions around data privacy, but their expressed desire for customized, easy-to-manage opt-out settings goes beyond typical privacy concerns. This suggests that for Kuwaiti banks, exceeding basic privacy standards may be crucial for building trust. The Technology Acceptance Model (TAM) posits that "Perceived Ease of Use" is vital for technology adoption. In the Kuwaiti context, this concept extends beyond interface design to encompass the ease of actively managing personalization and data usage throughout the customer's relationship with the bank.

4.3 Technological Readiness and Regulatory

The Kuwaiti banking sector faces a unique set of challenges and opportunities when it comes to implementing hyper-personalization. This analysis will provide a sector-focused examination of the technological capabilities and regulatory environment within Kuwait, offering insights tailored to the specific needs of its banking industry. For hyper-personalization to succeed within this sector, banks must possess the technological capabilities to collect, analyze, and act upon customer data responsibly. Simultaneously, they need to navigate a regulatory landscape that balances customer privacy protection with the potential benefits of data-driven personalization.

4.3.1 Theme 1. Tech Capabilities

Banking sector professionals expressed a range of perspectives regarding the technological readiness of Kuwaiti banks for hyper-personalization initiatives. While some express enthusiasm, others emphasize the complexities of implementation. As one expert says:

"From a tech perspective, we see massive potential...the issue is often less about the tech itself and more about integrating it with our existing systems" (Participant 17)

This quote highlights a common theme within the sector. It reveals that core technologies might be available, but the implementation lies in aligning these tools with older systems and ensuring seamless data flow. This suggests that Kuwaiti banks may need to make strategic investments beyond just AI, focusing on infrastructure modernization and data management to realize the full potential of hyper-personalization.

Alongside realistic assessments of challenges, banking professionals also expressed a strong sense of excitement about hyper-personalization's potential to transform customer experiences within Kuwait, by saying:

"The dream is not just targeted ads. It's how your bank understands your financial anxieties and proactively offers solutions, tailored just for you" (Participant 23)

This previous statement goes beyond product promotion and reveals a deeper ambition. It suggests that some in the Kuwaiti banking sector see hyper-personalization as a way to build stronger customer relationships, shifting from a transactional focus to a genuine advisory role that supports financial wellness. This aspiration aligns with customer-centric personalization trends seen globally (Deloitte, 2024; McKinsey, 2021).

While interviews with Kuwaiti banking professionals indicate a strong foundation in certain areas, particularly mobile banking, payment innovation, cloud adoption, and open banking. This forward-thinking approach to customer-facing technologies bodes well for introducing hyper-personalization, as it suggests banks are open to innovation and have the infrastructure to support digital experiences.

Data collection and analysis capabilities appear to be a mixed landscape. Professionals expressed confidence in gathering transaction history and core demographic data. This baseline is essential but insufficient for the depth of insight needed for hyper-personalization. Banks should prioritize expanding their collection strategies, potentially including obtaining customer consent for tracking behavior across channels, gathering preference data through surveys or in-app choices, and exploring partnerships for external data enrichment, where permissible.

Interestingly, these efforts can be supported by Kuwait's advanced technological landscape. Kuwait ranks first in the world in the Information and Communication Technology (ICT) Development Index, indicating that it scored the highest total points (98.2) in the ICT Development sub-index according to the International Telecommunication Union (ITU) data for 2023. The ICT Development Index issued by the UN specialized agency for ICTs, and the index measure several indicators to assess a country's development in the field of ICT. The index typically includes factors such as: access, use, and skills (Appendix 2).

Additionally, Kuwait ranked 69rd globally and 8th among Arab countries in the Government Artificial Intelligence Readiness Index for 2023 (Oxford Insights research institute, 2023). The Government Artificial Intelligence Readiness Index (GARI) is a global ranking that measures the readiness of governments to adopt and use artificial intelligence (AI). Kuwait's ranking in the GARI 2023 reflects the country's growing commitment to AI development.

Despite this, the current use of AI within Kuwaiti banks seems focused on areas like fraud detection and risk assessment. While

this demonstrates technical aptitude, the frequent use of terms like "experimenting" by the interviewees suggests that applying AI directly to hyper-personalization may still be aspirational. Banks will likely need a combination of upskilling internal teams and strategic partnerships with technology providers to build the robust AI systems required for tailored recommendations and proactive insights. Investment in overcoming potential hurdles, such as integrating legacy systems with newer AI platforms, will also be crucial.

Importantly, the current gap in behavioral data collection presents a significant opportunity for Kuwaiti banks. By focusing on ethically and lawfully expanding data strategies to include preferences, behaviors, and goals, banks can unlock the true potential of hyper-personalization to deliver exceptional, differentiated customer experiences. However, the ability to leverage this behavioral data opportunity will depend heavily on navigating the regulatory landscape. Kuwait's evolving regulations present both guidelines for responsible data use and potential restrictions on the types of data that banks can readily collect (regulation impact will be discussed in 4.3.2 section).

The CBK's "Bank Customer Protection Guide" and "Cybersecurity Framework" set out rigorous standards for data privacy and protection. Banks can leverage their adherence to these guidelines as a trust-building point with customers, providing clear, accessible explanations of their compliance to maximize the impact. Furthermore, the CBK's recent regulations on open banking, banking-as-a-service, and cloud computing demonstrate the need for the sector to stay proactive amidst evolving technological capabilities.

4.3.2 Theme 2. Regulation impact

The evolving regulatory landscape surrounding data privacy and protection has a significant impact on how Kuwaiti banking professionals' approach hyper-personalization strategies. As one participant elaborates:

"The CBK guidelines are a good start, but for hyper-personalization features to truly work, we need clearer standards on what data is permissible to collect under specific use cases" (Participant 20)

This statement underscores a desire for more collaboration between the CBK and the banking industry. It suggests that banks seek greater clarity and specificity in regulations, which could facilitate innovation while ensuring adherence to privacy principles. This could signal that

Kuwaiti banks might respond favorably to the CBK taking a proactive role in guiding the responsible implementation of hyper-personalization practices.

A core theme echoing through both customer interviews and insights from banking professionals is the crucial importance of customer control. One banker briefly articulated this, stating:

"Customers need to feel in control, that's the key" (Participant 18)

This sentiment resonates powerfully with customer interview data. Participants repeatedly expressed a desire for accessible and customized privacy settings, emphasizing the ability to opt-in or out of specific types of data sharing.

Kuwaiti banking professionals hold mixed views on the regulatory landscape. Some believe regulations, especially those focused on cybersecurity and data protection, are essential for building customer trust. Others fear that excessive regulation could stifle innovation. However, there's a common desire for balanced regulations that protect customer privacy while allowing for the personalized services that drive innovation. Almutairi's (2024) paper highlights this need, advocating for legislative action to ensure data privacy.

The CBK's "Bank Customer Protection Guide" remains largely seen as beneficial, providing a solid framework for data privacy practices. However, some interviewees expressed concern about the "cost of compliance" potentially hindering the full implementation of personalization features. The CBK "Cybersecurity Framework" is widely viewed as vital for the sector's reputation, though concerns were voiced about the resources needed to stay up-to-date as cyber threats evolve.

The regulatory landscape is shifting. Law No. 20 of 2014 on Electronic Transactions initially addressed data and privacy protection in its seventh chapter. However, the recent Communication and Information Technology Regulatory Authority (CITRA) Data Privacy Protection Regulations (especially issue No.26/2024) introduce uncertainty for the banking sector. These regulations focus on data privacy and regulating user consent for personal data processing. While not specifically aimed at banks, their

provisions could significantly impact banks' hyper-personalization strategies, particularly those relying on data partnerships. The full extent of CITRA's DPPR impact on banks engaging in heavy hyper-personalization remains to be seen.

Looking ahead, banking professionals expressed a desire for more collaboration between the CBK and the industry in shaping future regulations. They believe proactive participation will help ensure that rules facilitate responsible personalization without hindering the adoption of customer-beneficial technologies. Additionally, there's a strong interest in learning from international best practices, especially from markets with a longer history of balancing personalization with privacy. This indicates a forward-thinking approach within the Kuwaiti banking sector, with a desire to adapt regulations proactively rather than merely reacting to them.

4.4 Case Studies and Best Practices

Analyzing case studies of banks that have successfully implemented hyper-personalization initiatives provides a rich source of insights and lessons for others looking to follow this path, particularly when examining banks operating in similar markets. This study will carefully analyze two successful cases of hyper-personalization implementation by international banks operating in markets similar to Kuwait. These markets will share characteristics such as demographics, technological development, regional customer expectations, and evolving regulatory landscapes. This focus will provide a strong basis for transferring insights, given the similarities and the growing adoption of digital banking practices across the GCC.

While leading international banks offer valuable case studies on the implementation of hyper-personalization strategies, it's essential to recognize that successful hyper-personalization ultimately requires strategies tailored to a bank's specific market, technological capabilities, and unique customer base. This study will carefully analyze two successful cases of hyper-personalization implementation by international banks operating in markets with similarities to Kuwait in terms of demographics, technological development, regional customer expectations, and regulatory frameworks. This analysis will provide actionable insights directly applicable to the Kuwaiti context, supporting the customization of strategies and ultimately driving the success of hyper-personalization initiatives within the GCC's growing digital banking landscape. At the end of analyzing the two cases, a comparison table will be created to highlight the main personalization tactics, technological tools, and reported outcomes for each bank (Table 2).

4.4.1 Case Study 1: Emirates NBD (Dubai, UAE)

Emirates NBD is a prominent banking group within the Middle East and North Africa (MENA) region. Based in the UAE, the bank has made significant investments in digital transformation, with hyper-personalization at the forefront of their efforts to enhance customer experiences.

Emirates NBD focuses heavily on advanced data analytics to gain a deep understanding of customer spending patterns, financial goals, and individual preferences. This rich customer insight fuels their personalization initiatives (Poma et al., 2020). The bank utilizes AI-powered recommendation engines to suggest tailored financial products, services, and offers aligned with specific customer needs. These recommendations frequently appear within their digital channels (Emirates NBD, 2022; Ojha et al., 2024). Furthermore, Emirates NBD leverages AI and predictive analytics to provide proactive, real-time financial guidance. This includes alerts about potential savings opportunities, reminders for upcoming bill payments, or contextual investment suggestions (Aloulou et al., 2023).

Emirates NBD reports positive outcomes from their hyper-personalization efforts. The bank highlights increased engagement levels on their digital platforms, attributed to personalized content and relevant recommendations (Emirates NBD, 2022). It's likely that customer satisfaction scores have improved due to the convenience and relevance offered by hyper-personalized banking experiences. Additionally, while not always explicitly stated, data-driven targeted offers and personalized product recommendations likely contribute to increased customer acquisition and cross-selling opportunities (McKinsey, 2022).

Emirates NBD ensures its data privacy practices comply with both the UAE's federal law 45 Of 2021 regarding the Protection of Personal Data, and the Central Bank of the UAE's guidelines for the financial sector. The UAE's regulations draw heavily from the European Union's General Data Protection Regulation (GDPR), incorporating key principles like the distinction between personal and sensitive personal data, the roles of data controllers and processors, the importance of consent, data processing guidelines, data protection officer requirements, and individual data rights (UAE Ministry of Justice, 2024).

Emirates NBD prioritizes transparency with a detailed privacy policy on its website. This policy outlines how they collect, use, and protect customer data, ensuring clear communication. The bank also emphasizes

a consent-based approach, seeking clear customer consent before data processing and offering choices about how data can be used (Emirates NBD, 2023).

To safeguard customer information, Emirates NBD invests in robust cybersecurity measures. This likely includes the use of encryption, secure data storage, and regular security audits (El Khatib et al., 2022; Shuhaiber et al., 2023). Furthermore, Emirates NBD may actively educate customers on data privacy best practices and how to protect their financial information through campaigns or dedicated resources.

Central to Emirates NBD's hyper-personalization strategy is their "Liv" digital banking platform. This platform targets a younger, tech-savvy demographic, offering highly personalized experiences with an emphasis on financial wellness and tailored insights (Emirates NBD, 2024). Liv offers several features designed to personalize the banking experience. Goal-based planning tools help users set financial goals and receive tailored recommendations and budgeting support. The platform analyzes spending habits to provide insights, savings opportunities, and proactive bill reminders. Liv also incorporates gamification elements like challenges, rewards, and progress tracking, which resonate particularly well with younger users. It offers personalized discounts and offers based on location and spending preferences, and even has lifestyle "tribes" that provide curated content for users with specific interests. Finally, an AI-powered chatbot, supplemented by human support when needed, provides real-time personalized assistance (Banerjee et al., 2022; Emirates NBD, 2024).

Emirates NBD took an early adopter approach to personalization and digital banking with the launch of its Liv platform. This headstart in collecting customer data and iterating on their personalization approach likely offers a competitive advantage. Liv sets itself apart from traditional banking apps with a focus on goal setting, gamification, and lifestyle-oriented features, catering specifically to younger customers (Hanafi et al., 2021; Popelo et al., 2021).

Emirates NBD remains a recognized leader in regional personalization despite growing competition. Liv has won numerous awards for innovation and customer experience, demonstrating industry recognition of their efforts (Emirates NBD, 2024). Furthermore, Emirates NBD is often cited in industry reports as a benchmark for other Middle Eastern banks aiming to enhance their own personalization strategies (McKinsey, 2024; Zawya, 2023).

4.4.2 Case Study 2: Mashreq Bank (Dubai, UAE)

Mashreq Bank leverages the power of customer segmentation to deliver tailored financial experiences. To achieve this, they begin with data aggregation. Customer information is compiled from sources such as transactions, demographics, website interactions, and app usage. Additionally, external data sources may be integrated with customer consent to enhance the datasets (Al Aina & Faisal, 2024; Flötotto et al., 2023).

Next, AI-powered clustering algorithms analyze this rich data to identify patterns and segment customers based on shared characteristics (El Khatib & Al Falasi, 2021). Potential segments could include high-income earners, frequent travelers, savers, and small business owners. To ensure adaptability, Mashreq Bank likely employs dynamic segmentation, where customer groups are updated in real-time based on evolving behaviors (Mashreqbank, 2023).

The results of this segmentation drive tailored customer experiences. Targeted product recommendations ensure that offers align with a customer's segment-based needs. Personalized website and app content surfaces relevant articles, tools, and calculators. AI-driven next-best-action suggestions enable proactive product and service recommendations. Even chatbot interactions can be enhanced through training on segment-specific data, providing more focused support (Ashfaq & Ayub, 2021; MashreqBank.2024).

Several types of AI models are likely in use at Mashreq Bank to leverage its vast array of customer data for predictive analytics. Propensity models predict a customer's likelihood to purchase certain products or services (Mkhaiber & Werner, 2021). Churn prediction models identify customers at risk of leaving the bank, enabling proactive retention strategies (Tran & Nguyen, 2023). Behavioral models analyze spending patterns and other actions to forecast future needs or potential actions (Internationalbanker, 2023; Setiawan et al., 2022).

These predictive models drive personalized next-best-offer recommendations. The recommendations go beyond basic demographics, analyzing real-time financial activity. For example, a customer frequently browsing travel booking websites might receive offers for travel credit cards, pre-approved travel loans, and relevant currency exchange alerts (Forbes, 2023; Mdallal et al., 2023). Predictive models also enable proactive financial alerts. This helps prevent unpleasant surprises for customers (Chen, 2023).

Mashreq Bank, like its prominent peer Emirates NBD, prioritizes customer data protection by adhering to the robust privacy standards set by the UAE's federal law 45 of 2021. These regulations ensuring transparency in data handling, emphasizing consent-based data processing, and outlining robust individual data rights. Mashreq Bank's commitment to this framework fosters trust and aligns with the data privacy best practices. The bank demonstrates transparency by providing a detailed explanation of their policies on their website (Mashreqbank, 2024).

Table 2. Case Studies Comparison

Bank Name	Main Personalization Tactics	Technological Tools	Reported Outcomes
Emirates NBD	Advanced data analytics for customer insights, AI-powered recommendation engines, AI and predictive analytics for proactive guidance.	AI, Recommendation engines, Predictive analytics.	Increased engagement on digital platforms, Improved customer satisfaction, Increased customer acquisition and cross-selling.
Mashreq Bank	Customer segmentation with data aggregation, AI-powered clustering and dynamic segmentation, Targeted product recommendations and personalized content, Predictive analytics for next-best-offer recommendations and proactive alerts.	AI-powered clustering algorithms, Predictive analytics models (propensity, churn, behavioral), Customer segmentation tools.	Tailored customer experiences, Improved customer satisfaction and retention, Increased sales and revenue.

4.5 Comparative Case Studies: Applying Insights to the Kuwaiti Context

Emirates NBD and Mashreq Bank (discussed in section 2.6) both operate within the UAE. Their success with hyper-personalization offers valuable lessons for Kuwaiti banks, as the GCC region shares similarities in demographics, culture, economy, technology, customer expectations, and evolving regulations landscape. These shared factors make it easier to apply insights from these case studies in a Kuwaiti banking context.

Kuwaiti banks can draw inspiration from Mashreq Bank's emphasis on data-driven personalization. Their strategic use of customer segmentation and extensive data sources fuels their predictive analytics capabilities. Kuwait's strong ICTs infrastructure, high smartphone penetration, and increasing digital banking usage provide a solid foundation for Kuwaiti banks to adopt similar data collection efforts. However, given the heightened sensitivity around data privacy expressed by Kuwaiti customers, banks should prioritize clearly articulating the tangible benefits of data sharing in order to secure the necessary levels of customer consent.

Emirates NBD's success with their "Liv." platform highlights the potential for hyper-personalized experiences targeted towards younger, tech-savvy Kuwaitis. Kuwaiti banks would be wise to investigate if a similar demographic exists within their customer base. If so, the "Liv." model offers a blueprint for gamification, lifestyle integration, and tailored banking services that could strongly resonate with this segment.

A core lesson from both case studies, which echoes the findings of the Kuwaiti customer interviews, is the paramount importance of trust-building through transparent data practices. Emirates NBD's detailed privacy policies, emphasis on consent, and robust cybersecurity align directly with the desire for control articulated by Kuwaiti banking customers. Kuwaiti banks can leverage this insight by proactively positioning themselves as champions of responsible data use, exceeding mere regulatory compliance to foster a deep, long-lasting trust within their customer base.

Additionally, the proactive guidance offered by both Emirate NBD and Mashreq Bank through AI-driven alerts and recommendations is an area where Kuwaiti banks could differentiate themselves. This directly aligns with the desire for convenience and financial insights expressed by Kuwaiti customers. By offering proactive support, Kuwaiti banks have the opportunity to set themselves apart and enhance customer satisfaction.

To deepen this analysis further, it's worth considering how the competitive landscape within Kuwait aligns with what the case studies reveal. Are Kuwaiti customers voicing dissatisfaction with existing banking options, indicating an opening for new players offering hyper-personalized experiences? Additionally, if permissible within Kuwait's regulatory framework, exploring potential external data partnerships similar to Mashreq's approach could be a valuable strategy. Finally, banks should carefully consider the unique nuances of Kuwaiti culture when designing personalization features, ensuring they resonate with local preferences, social norms, and communication channels.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This research study aimed to illuminate the significant potential for hyper-personalization within the Kuwaiti banking sector. A qualitative approach focused on customer interviews and insights from banking professionals explored attitudes toward personalized banking experiences, the sector's readiness, and the influence of Kuwait's specific regulatory landscape. This in-depth investigation revealed that while Kuwaiti banking customers strongly recognize the convenience and value that hyper-personalization could offer, their willingness to embrace such technologies is directly dependent on banks demonstrating transparent data practices, offering customized control over data usage, and implementing rigorous cybersecurity measures.

5.2 Summary of Key Findings

This study revealed several key insights into the potential for hyper-personalization within the Kuwaiti banking sector. These findings offer a comprehensive perspective, integrating customer expectations, banking professional perspectives, and the evolving technological and regulatory landscape.

5.2.1 The Primacy of Trust and Control

Kuwaiti banking customers are open to the potential benefits of hyper-personalization, including greater convenience, proactive financial insights, and tailored product recommendations. However, their willingness to share personal data is deeply intertwined with expectations of transparency, customized control over data usage, and demonstrably robust cybersecurity. This emphasis aligns with broader trends in data privacy concerns (McKinsey, 2022, 2023; Deloitte, 2024), but appears particularly pronounced within the Kuwaiti context, perhaps influenced by cultural norms around privacy.

5.2.2 Technological Readiness and the Need for Strategic Focus

Kuwaiti banks possess a strong foundation in areas like mobile banking and digital payments. However, interviews with banking professionals revealed a mixed landscape in terms of AI expertise and the ability to seamlessly integrate advanced personalization features with legacy systems. This suggests an opportunity for Kuwaiti banks to gain a competitive edge through targeted investments in data analytics, AI capabilities, and modernization initiatives that prioritize smooth integration of personalization technologies.

5.2.3 Balancing Regulations and Innovation

The CBK's guidelines on data privacy and cybersecurity provide essential ground rules for responsible personalization. Yet, both customers and banking professionals expressed a desire for further collaboration between the CBK and the banks to establish clearer standards for data collection and usage under specific hyper-personalization use-cases. This proactive approach could foster trust and facilitate the adoption of customer-beneficial technologies within a framework that proactively addresses potential risks.

5.3 Recommendations

Informed by the core findings of this study, the following recommendations are proposed to strategically guide Kuwaiti banks in their implementation of hyper-personalization initiatives while prioritizing customer trust and ethical practices:

5.3.1 Pilot Opt-In Personalization Features with a Focus on Transparency

The paramount importance of customer control and clear communication suggests that Kuwaiti banks should consider piloting specific hyper-personalization features on a strictly opt-in basis. This could involve proactive financial alerts, tailored product recommendations, or other features identified as having potential resonance with Kuwaiti customers. Transparent communication regarding data use, customized control settings, and close monitoring of participation rates and user feedback are

crucial for this pilot's success. This approach will yield valuable insights into Kuwaiti customer comfort levels with personalization and inform broader implementation strategies.

5.3.2 Establish an Education and Outreach Campaign Focused on Personalization Benefits and Privacy

This study revealed that Kuwaiti banking customers express openness to hyper-personalization but may have concerns or knowledge gaps regarding data privacy and security. To proactively address these concerns, a dedicated education campaign is recommended. This campaign should utilize bank websites, social media, and other relevant channels to provide clear, accessible explanations of hyper-personalization, emphasizing the potential benefits, data security measures, and a commitment to customer privacy choices. Involvement of the CBK or industry associations in this campaign would lend additional credibility and encourage widespread engagement.

5.3.3 Form a Collaborative Working Group on Hyper-Personalization Standards

To facilitate the responsible development of hyper-personalization in Kuwait's banking sector, both customers and professionals call for greater regulatory clarity and collaboration. A dedicated working group, led by the CBK or an industry association, should be formed with representatives from diverse banks, technology experts, and potentially consumer protection advocates. This group's focus would be to establish best practices for hyper-personalization, including informed consent, transparent data use, and robust security measures tailored to Kuwait's context. Alongside this, Kuwait would benefit from a comprehensive data privacy law modeled after the European Union's General Data Protection Regulation (GDPR) to provide a strong foundation for protecting consumer data rights.

5.4 Limitations

While this study provides a valuable foundation for understanding the complexities of hyper-personalization within the Kuwaiti banking sector, certain limitations should be acknowledged.

Despite efforts to recruit a diverse participant pool, specific demographic groups, or various income segments, may have been underrepresented in the data collection process.

Obtaining in-depth qualitative data directly from Kuwaiti banks proved challenging due to confidentiality concerns. This reliance on customer perspectives and insights from banking professionals could potentially result in an incomplete understanding of the sector's readiness, internal hurdles, and strategic approaches towards hyper-personalization implementation.

The technological capabilities of Kuwaiti banks, along with the regulatory environment governing data privacy, are continuously evolving. This study offers insights reflective of a specific point in time, highlighting the need for ongoing research to monitor these changes and ensure adaptability.

The qualitative insights garnered from the interviews have illuminated several key themes, yet it's important to acknowledge that the limited sample size may restrict the broader applicability of these findings. The nuanced perspectives on data privacy and cultural sensitivities, while valuable, might not fully represent the diverse views of the entire Kuwaiti population. Future research with a more extensive and varied sample could offer a deeper understanding of these complexities and their implications for the successful implementation of hyper-personalization strategies within the Kuwaiti banking sector.

5.5 Future Research Directions

This study necessitates further investigation in several key areas to achieve a comprehensive understanding of hyper-personalization within the Kuwaiti context:

To gain a truly comprehensive understanding of hyper-personalization within the Kuwaiti banking sector, future research should complement the qualitative insights derived from interviews with quantitative data on a broader scale. This could involve sector-wide surveys of IT specialists, decision-makers, and those involved in personalization projects, potentially employing a comparative design to further investigate the distinctions between Islamic and conventional banks in the context of hyper-personalization in Kuwait. Such surveys would provide quantifiable data on technological readiness, the prevalence of specific AI implementations, perceived regulatory hurdles, and prioritization of personalization initiatives among Kuwaiti banks. This mixed-methods approach would offer a more statistically robust picture of the sector's landscape.

Investigating the potential of hyper-personalization to address the distinct needs and preferences of specific demographic groups within Kuwait is essential. Future research could focus on tailoring personalization strategies for young adults, women, or various income segments.

Research exploring the potential for hyper-personalization to promote positive social outcomes within Kuwait is warranted. This could include investigating whether tailored banking experiences have the capacity to reduce financial stress, enhance financial literacy across age groups, or increase access to financial services for underserved populations.

5.6 Conclusion

This research illuminated the significant potential for hyper-personalization to transform the Kuwaiti banking experience. However, it also underscored that the success of such initiatives is intimately connected to a proactive focus on building deep customer trust. Kuwaiti customers, while recognizing the potential benefits of personalization, expressed profound expectations for transparency, control over their data, and robust cybersecurity measures. As participant 13 stated: "I'm not against sharing some data, but I need to know exactly what they're using it for and be able to change my mind if I want to". By strategically addressing these concerns, prioritizing ethical data practices, and investing in a customer-centric approach, Kuwaiti banks have a unique opportunity to become regional leaders in the responsible implementation of hyper-personalization.

This study reveals that the path forward requires a collaborative approach. Kuwaiti banks must embrace pilot programs, invest in customer education, and actively engage with the CBK and industry associations to shape clear, proactive standards for personalization within the evolving regulatory landscape. Through this commitment to both customer empowerment and technological innovation, the Kuwaiti banking sector has the potential to create a model for hyper-personalization that places the needs, values, and trust of their customers at the very forefront.

REFERENCES

Abdallah, W., Harraf, A., Mosusa, O., & Sartawi, A. (2022). Investigating factors impacting customer acceptance of artificial intelligence chatbot: banking sector of Kuwait. *International Journal of Applied Research in Management and Economics*, 5(4), 45-58.

Alabdullah, Y., & Tawfeeq, T. (2023). THE IMPACT OF FINANCIAL TECHNOLOGY AND RISK MANAGEMENT PRACTICES ON CORPORATE FINANCIAL SYSTEM PROFITABILITY: EVIDENCE FROM KUWAIT. *SocioEconomic Challenges (SEC)*, 7(3).

Al Aina, R., & Faisal, R. (2024). Evaluating the Role of Sustainable Leadership and Technology Integration in Enhancing the Environmental and Social Responsibility of the UAE Banking Sector. *Archives of Business Research*, 12(3).

AL-Dosari, K., Fetais, N., & Kucukvar, M. (2024). Artificial intelligence and cyber defense system for banking industry: A qualitative study of AI applications and challenges. *Cybernetics and systems*, 55(2), 302-330.

Alenizi, A. S. (2023). Understanding the subjective realities of social proof and usability for mobile banking adoption: using triangulation of qualitative methods. *Journal of Islamic Marketing*, 14(8), 2027-2044.

Alexander, T. (2024). Proactive Customer Support: Re-Architecting a Customer Support/Relationship Management Software System Leveraging Predictive Analysis/AI and Machine Learning. *Engineering: Open Access*, 2(1), 39-50.

Alghareeb, S. (2022). Mobile Banking Adoption among Undergraduate Students in Kuwait University. *Open Access Library Journal*, 9(6), 1-13.

Almassri, H., Ozdeser, H., & Saliminezhad, A. (2020). Does financial development promote growth in Kuwait? time-and frequency-domain causality testing. *The Journal of International Trade & Economic Development*, 29(8), 952-972.

Almourad, M. B., Alrobai, A., Skinner, T., Hussain, M., & Ali, R. (2021). Digital wellbeing tools through users lens. *Technology in Society*, 67, 101778.

Almutairi, N. H. (2024). Shedding Light on the Inadequate Protection of Internet Users' Right to Privacy under Kuwaiti Law. *Yearbook of Islamic and Middle Eastern Law Online*, 1(aop), 1-44.

Aloulou, M., Grati, R., Al-Qudah, A. A., & Al-Okaily, M. (2023). Does FinTech adoption increase the diffusion rate of digital financial inclusion? A study of the banking industry sector. *Journal of Financial Reporting and Accounting*.

Arora, M., Chaudhary, N., Bhandwal, M., Baig, T., & Patil, P. (2023, November). AI-Driven Personalized Travel Planning: Enhancing Tourist Experiences in Uzbekistan. In *2023 3rd International Conference on Technological Advancements in Computational Sciences (ICTACS)* (pp. 1317-1322). IEEE.

Ashfaq, M., & Ayub, U. (2021). Knowledge, attitude, and perceptions of financial industry employees towards AI in the GCC region. *Artificial Intelligence in the Gulf: Challenges and Opportunities*, 95-115.

Babina, T., Bahaj, S. A., Buchak, G., De Marco, F., Foulis, A. K., Gornall, W., ... & Yu, T. (2024). *Customer data access and fintech entry: Early evidence from open banking* (No. w32089). National Bureau of Economic Research.

Banerjee, R., Majumdar, S., & Albastaki, M. (2022). Ideal self-congruence: Neobanking by traditional banks and the impact on market share-A case of UAE banks. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, 7(4), 30.

BBVA. (2022). How BBVA uses data to look after its customers' financial health. <https://www.bbva.com/en/financial-health/how-bbva-uses-data-to-look-after-its-customers-financial-health/>

Bioumy, M. M. A. M. (2024). The Effect of Competitiveness of Kuwaiti Banks on Risk Profile and Profitability.

Bodemer, O. (2024). Revolutionizing Finance: The Impact of AI and Cloud Computing in the Banking Sector. *Authorea Preprints*.

Cao, L. (2021). Artificial intelligence in retail: applications and value creation logics. *International Journal of Retail & Distribution Management*, 49(7), 958-976.

Chen, D. T. (2023). *Development of Financial Distress Prediction Model for the Watchlist Classification of Wholesale Banking Clients at ING* (Master's thesis, University of Twente).

Cilesiz, S. (2011). A phenomenological approach to experiences with technology: Current state, promise, and future directions for research. *Educational Technology Research and Development*, 59, 487-510.

Coelho, L., & Cachola, G. (2023). Hyper-personalisation: Inducing behaviours through data—how machine learning and automation can help customers make valuable and informed decisions. *Journal of Digital Banking*, 8(3), 198-209.

Das, S. S., Manohar, A., Jawajala, R. P., Dhanalakshmi, K., Jadhav, M., & Sisodia, D. R. (2024). AI Applications in Personalized Marketing and Customer Engagement in the Retail Banking Industry. *Academy of Marketing Studies Journal*, 28(2).

Davis, F. D., Granić, A., & Marangunić, N. (2024). The technology acceptance model 30 years of TAM. *Technology*, 1(1), 1-150.

Deloitte. (2022). *Data Protection & Privacy Laws 2022*. <https://www.deloitte.com/ie/en/services/risk-advisory/research/data-protection---privacy-laws-2022---deloitte-ireland-.html>

Deloitte. (2023). *2024 banking and Capital Markets Outlook*. <https://www2.deloitte.com/us/en/insights/industry/financial-services/financial-services-industry-outlooks/banking-industry-outlook.html>

Deloitte. (2024). *Connecting with meaning*. <https://www2.deloitte.com/ca/en/pages/deloitte-analytics/articles/connecting-with-meaning.html>

El Khatib, M., & Al Falasi, A. (2021). Effects of artificial intelligence on decision making in project management. *American Journal of Industrial and Business Management*, 11(3), 251-260.

El Khatib, M., Al Mulla, A., & Al Ketbi, W. (2022). The role of blockchain in e-governance and decision-making in project and program management. *Advances in Internet of Things*, 12(3), 88-109.

Emirates NBD. (2022). Annual Report 2022. Retrieved January 19, 2024 https://www.emiratesnbd.com/-/media/enbd/files/investor-relations/financial-information/annual-reports/emiratesnbd_annualreport_2022.pdf

Emirates NBD. (last updated on 17 January 2024). Liv. by Emirates NBD. Retrieved January 12, 2024. <https://www.liv.me/>

Emirates NBD. (last updated on August 18, 2023). Privacy Policy. Retrieved January 20, 2024. <https://www.emiratesnbd.com/en/data-privacy-notice>

Fehrenbach, D., & Herrando, C. (2021). The effect of customer-perceived value when paying for a product with personal data: A real-life experimental study. *Journal of business research*, 137, 222-232.

Fitch Ratings: Credit Ratings & Analysis for Financial Markets. (2024, March 15). <https://www.fitchratings.com/research/sovereigns/fitch-affirms-kuwait-at-aa-outlook-stable-15-03-2024>

Flötotto, M., Jayantilal, S., Shah, S., Singhvi, R., & Wedrychowicz, S. (2023). *Fintech in Menap: A solid foundation for growth*. McKinsey & Company. <https://www.mckinsey.com/industries/financial-services/our-insights/fintech-in-menap-a-solid-foundation-for-growth>

Forbes. (2022). DBS Leads In Using AI And ML While Maintaining Human Touch. <https://www.forbes.com/sites/tomgroenfeldt/2022/12/06/dbs-leads-in-using-ai-and-ml-while-maintaining-human-touch/?sh=2e8c14fe4354>

Forbes. (2022). JPMorgan Chase To Spend \$12 Billion On Technology... And Why Other Banks Can't Keep Up. <https://www.forbes.com/sites/ronshevlm/2022/01/18/jpmorgan-chase-to-spend-12-billion-on-technology-and-why-other-banks-cant-keep-up/?sh=7040d8334677>

Forbes. (2023). Council post: How a data-driven "next best action" approach Can Boost Pharma Sales. <https://www.forbes.com/sites/forbestechcouncil/2023/12/05/how-a-data-driven-next-best-action-approach-can-boost-pharma-sales/?sh=44c141ff71a7>

Ghelani, D., Hua, T. K., & Koduru, S. K. R. (2022). Cyber security threats, vulnerabilities, and security solutions models in banking. *Authorea Preprints*.

Hanafi, M. M., Kshetri, N., & Sharma, R. (2021). Economics of Artificial Intelligence in the Gulf Cooperation Council Countries. *Computer*, 54(12), 92-98.

IBM. (2021). Escalating competition for banking and Financial Markets. <https://www.ibm.com/thought-leadership/institute-business-value/en-us/blog/escalating-competition-banking-financial-markets>

International Banker. (2023, December 7). *Mashreq Bank: Disrupting the status quo through innovation*. <https://internationalbanker.com/banking/mashreq-bank-disrupting-the-status-quo-through-innovation/>

International Telecommunication Union (ITU). (2023). *ICT Development Index*. Find the direct URL for the 2023 report on the ITU website. <https://www.itu.int/>

Kaabachi, S., Ben Mrad, S., & Barreto, T. (2022). Reshaping the bank experience for GEN Z in France. *Journal of Marketing Analytics*, 10(3), 219-231.

Kacar, M. (2023). Application of AI in Customer Experience Management. In *Marketing and Sales Automation: Basics, Implementation, and Applications* (pp. 409-430). Cham: Springer International Publishing.

Karkošková, S. (2023). Data governance model to enhance data quality in financial institutions. *Information Systems Management*, 40(1), 90-110.

Ke, T. T., & Sudhir, K. (2023). Privacy rights and data security: GDPR and personal data markets. *Management Science*, 69(8), 4389-4412.

Kordzadeh, N., & Ghasemaghaei, M. (2022). Algorithmic bias: review, synthesis, and future research directions. *European Journal of Information Systems*, 31(3), 388-409.

Kotios, D., Makridis, G., Walser, S., Kyriazis, D., & Monferrino, V. (2022). Personalized finance management for smes. *Big Data and Artificial Intelligence in Digital Finance*. Springer, 215-232.

Kowalska-Pyzalska, A. (2024). *Diffusion of Innovative Energy Services: Consumers' Acceptance and Willingness to Pay*. Elsevier Science & Technology.

LaLonde, J., & Hoffmann, J. (2021). Accenture Jumpstart: The Enterprise Journey to Privacy-First Personalization. Accenture. <https://www.accenture.com/content/dam/accenture/final/a-com-migration/r3-3/pdf/pdf-168/accenture-jumpstart-the-enterprise-journey-to-privacy-first-personalization.pdf#zoom=50>

Lee, V. V., Vijayakumar, S., Ng, W. Y., Lau, N. Y., Leong, Q. Y., Ooi, D. S. Q., ... & Ho, D. (2023). Personalization and localization as key expectations of digital health intervention in women pre-to post-pregnancy. *NPI Digital Medicine*, 6(1), 183.

MashreqBank. (2023). Management Analysis & Discussion Report. Retrieved January 19, 2024. <https://www.mashreqbank.com/-/jssmedia/pdfs/multimedia/MDA-First-Half-2023-En.ashx>

MashreqBank. (2024). Advanced analytics. Retrieved January 14, 2024. <https://www.mashreq.com/en/uae/corporate/advanced-analytics/>

Mashreqbank. (2024). Privacy notice - Mashreq. Retrieved January 16, 2024, from <https://www.mashreq.com/en/uae/neo/transparency/privacy-notice/>

McKinsey. (2021). The value of getting personalization right—or wrong—is multiplying. McKinsey & Company. <https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/the-value-of-getting-personalization-right-or-wrong-is-multiplying>

McKinsey. (2022). Apis: The secret ingredient for one company's massive Tech Leap. McKinsey & Company. <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/apis-the-secret-ingredient-for-one-companys-massive-tech-leap>

McKinsey. (2023). What is personalization?. McKinsey & Company. <https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-personalization>

McKinsey. (2024). What is Fintech?. McKinsey & Company. <https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-fintech>

Mdallal, R., Alsawalmeh, D., Jarad, D., & Odeh, A. (2023, September). AI-Powered Conceptual Model for Scrum Framework. In *2023 3rd International Conference on Computing and Information Technology (ICCIIT)* (pp. 597-604). IEEE.

Mithra, A. S., Duddukuru, V. C., & Manu, K. S. (2023). How artificial intelligence is revolutionizing the banking sector: The applications and challenges. *Asian Journal of Management*, 14(3), 166-170.

Mkhaiber, A., & Werner, R. A. (2021). The relationship between bank size and the propensity to lend to small firms: New empirical evidence from a large sample. *Journal of international money and finance*, 110, 102281.

Morton, F., Benavides, T. T., & González-Treviño, E. (2024). Taking Customer-Centricity to New Heights: Exploring the Intersection of AI, Hyper-Personalization, and Customer-Centricity in Organizations. In *Smart Engineering Management* (pp. 23-41). Cham: Springer International Publishing.

Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspectives on medical education*, 8, 90-97.

Ojha, N. K., Pandita, A., Nikhil, V. P., & Senyurek, E. (2024). Applications and Use of AI in e-Commerce: Opportunities and Challenges in Society 5.0. *Artificial Intelligence and Society* 5.0, 69-95.

Ooi, K. B., Tan, G. W. H., Al-Emran, M., Al-Sharafi, M. A., Capatina, A., Chakraborty, A., ... & Wong, L. W. (2023). The potential of generative artificial intelligence across disciplines: Perspectives and future directions. *Journal of Computer Information Systems*, 1-32.

Oxford Business Group. (2022). The report: Kuwait 2022. <https://oxfordbusinessgroup.com/reports/kuwait/2022-report/>

Oxford Insights. (2023). Government AI Readiness Index 2023. <https://oxfordinsights.com/ai-readiness/ai-readiness-index/>

Poma, L., Shawwa, H. A., & Maini, E. (2020). Industry 4.0 and big data: role of government in the advancement of enterprises in Italy and UAE. *International Journal of Business Performance Management*, 21(3), 261-289.

Popelo, O., Dubyna, M., & Kholiavko, N. (2021). World experience in the introduction of modern innovation and information technologies in the functioning of financial institutions. *Baltic Journal of Economic Studies*, 7(2), 188-199.

Pringle, J., Hendry, C., & McLafferty, E. (2011). Phenomenological approaches: Challenges and choices. *Nurse researcher*, 18(2).

Rane, N. (2023). Enhancing customer loyalty through Artificial Intelligence (AI), Internet of Things (IoT), and Big Data technologies: improving customer satisfaction, engagement, relationship, and experience. *Internet of Things (IoT), and Big Data Technologies: Improving Customer Satisfaction, Engagement, Relationship, and Experience*.

Rane, N. (2023). Role and challenges of ChatGPT and similar generative artificial intelligence in business management. *Available at SSRN 4603227*.

Rane, N., Choudhary, S., & Rane, J. (2023). Hyper-personalization for enhancing customer loyalty and satisfaction in Customer Relationship Management (CRM) systems. *Available at SSRN 4641044*.

Roethke, K., Klumpe, J., Adam, M., & Benlian, A. (2020). Social influence tactics in e-commerce onboarding: The role of social proof and reciprocity in affecting user registrations. *Decision Support Systems*, 131, 113268.

Rooij, S. V. (2022). Taking it personally? A study on the effects of trust and privacy in the context of AI-enabled personalization.

Setiawan, M., Effendi, N., Santoso, T., Dewi, V. I., & Sapulette, M. S. (2022). Digital financial literacy, current behavior of saving and spending and its future foresight. *Economics of Innovation and New Technology*, 31(4), 320-338.

Shuhaiber, A., Nizamuddin, N., & Amer, A. (2023, October). Breaking Boundaries: Exploring Blockchain's Impact on UAE Organizations. In *2023 Fifth International Conference on Blockchain Computing and Applications (BCCA)* (pp. 12-21). IEEE.

St-Onge, S., Magnan, M., & Vincent, C. (2022). The digital revolution in financial services: New business models and talent challenges. In *Handbook of Banking and Finance in Emerging Markets* (pp. 464-478). Edward Elgar Publishing.

Tran, G. A., Ketron, S., Tran, T. P., & Fabrize, R. (2023). Personalization, value co-creation, and brand loyalty in branded apps: an application of TAM theory. *Journal of strategic marketing*, 1-20.

Tran, H., Le, N., & Nguyen, V. H. (2023). CUSTOMER CHURN PREDICTION IN THE BANKING SECTOR USING MACHINE LEARNING-BASED CLASSIFICATION MODELS. *Interdisciplinary Journal of Information, Knowledge & Management*, 18.

UAE Ministry of Justice. (2024). Data Protection Laws. <https://u.ae/en/about-the-uae/digital-uae/data/data-protection-laws>

Uche, D. B., Osuagwu, O. B., Nwosu, S. N., & Otika, U. S. (2021). Integrating trust into technology acceptance model (TAM), the conceptual framework for e-payment platform acceptance. *British Journal of Management and Marketing Studies*, 4(4), 34-56.

Valdez Mendia, J. M., & Flores-Cuautle, J. D. J. A. (2022). Toward customer hyper-personalization experience—A data-driven approach. *Cogent Business & Management*, 9(1), 2041384.

Waupsh, J. (2022). How hyper-personalisation is fuelling digital banking's second wave. *Journal of Digital Banking*, 7(2), 122-128.

Zawya. (2023) Emirates NBD to transform business operations and enhance productivity with generative AI. <https://www.zawya.com/en/press-release/companies-news/emirates-nbd-to-transform-business-operations-and-enhance-productivity-with-generative-ai-j4mk4lcs>

Zawya. (2024, February 5). *Commercial Bank of Kuwait enters strategic partnership with Network International to Transform Digital Banking*. <https://www.zawya.com/en/press-release/companies-news/commercial-bank-of-kuwait-enters-strategic-partnership-with-network-international-to-transform-digital-banking-twhvgjam>

Zeitlin, J., & Rangoni, B. (2023). EU regulation between uniformity, differentiation, and experimentalism: Electricity and banking compared. *European union politics*, 24(1), 121-142.

APPENDIX

Figure 1: Snapshot of the coding process generated by NVivo 14 software

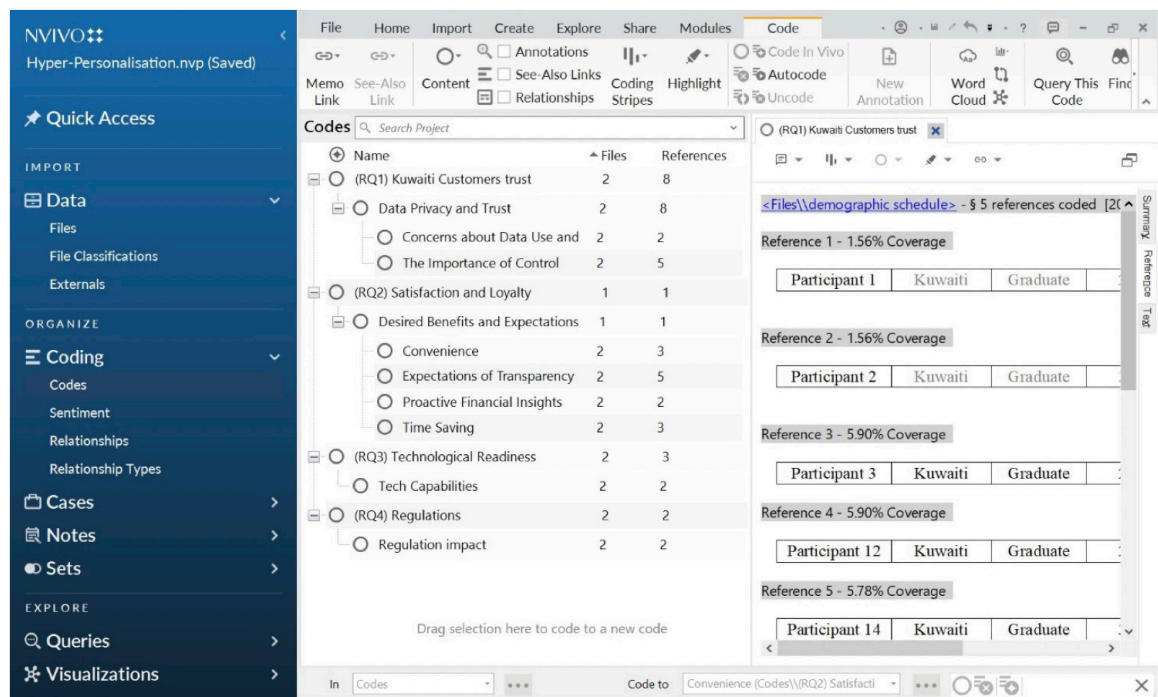









Figure 2. Kuwait ranked highest in the ICT Development sub-index (ITU, 2023) with a score of 98.2

Country/Territory	Aggregate Scores (0-100)			IDI 2023 Indicator values (2021)										Normalized Progress Scores (0-100)									
	ICT Development Index (IDI)	Universal Connectivity Pillar	Meaningful Connectivity Pillar	Universal Connectivity indicators			Meaningful Connectivity indicators							Universal Connectivity indicators			Meaningful Connectivity indicators						
				Individuals using the Internet (%)	Households with Internet access at home (%)	Active mobile-broadband subscriptions per 100 inhabitants	Population covered by at least a 3G mobile network (%)	Population covered by at least a 4G/LTE mobile network (%)	Mobile broadband Internet traffic per subscription (GB)	Fixed broadband Internet traffic per subscription (GB)	Mobile data and voice high-consumption basket price (as % of GNI per capita)	Fixed-broadband Internet basket price (as % of GNI per capita)	Individuals who own a mobile phone (%)	Individuals using the Internet (%)	Households with Internet access at home (%)	Active mobile-broadband subscriptions per 100 inhabitants	3G and 4G/LTE Network Coverage	Mobile broadband Internet traffic per subscription (GB)	Fixed broadband Internet traffic per subscription (GB)	Mobile data and voice high-consumption basket price (as % of GNI per capita)	Fixed-broadband Internet basket price (as % of GNI per capita)	Individuals who own a mobile phone (%)	
1  Kuwait	98.2	97.0	99.3	99.7	99.4	136.6	100.0	100.0	657.8	8 205.6	0.8	1.6	99.2	100.0	100.0	91.1	100.0	100.0	97.9	100.0	98.1	100.0	
2  Singapore	97.4	99.4	95.4	96.9	99.3	147.5	100.0	100.0	87.9	N/A	0.3	0.8	98.5	100.0	100.0	98.3	100.0	72.2	N/A	100.0	96.3	100.0	
3  Qatar	97.3	98.7	96.0	99.7	95.0	144.0	100.0	99.8	140.2	10 484.5	0.4	2.2	99.6	100.0	100.0	96.0	99.9	79.6	100.0	100.0	96.3	100.0	
4  Denmark	96.9	98.2	95.6	98.9	96.1	141.8	100.0	100.0	176.8	4 132.5	0.5	0.8	96.3	100.0	100.0	94.5	100.0	83.3	90.4	100.0	100.0	100.0	
5  Estonia	96.9	97.5	96.4	91.0	91.8	180.1	100.0	99.0	222.8	N/A	0.5	1.0	98.2	95.8	96.6	100.0	99.4	87.0	N/A	100.0	100.0	100.0	
6  Finland	96.7	98.1	95.2	92.8	91.7	157.2	99.9	99.9	398.9	1 013.9	0.7	1.0	98.2	97.7	96.5	100.0	99.9	96.4	75.2	100.0	100.0	100.0	
7  United States	96.6	99.1	94.1	96.8	92.5	165.8	99.9	99.9	101.5	N/A	0.7	1.0	95.9	100.0	97.4	100.0	99.9	74.5	N/A	100.0	100.0	100.0	
8  Bahrain	96.5	96.7	96.2	100.0	100.0	135.2	100.0	100.0	294.5	4 773.3	1.4	2.4	100.0	100.0	100.0	90.1	100.0	91.5	92.0	98.2	95.6	100.0	
9  Hong Kong	96.5	99.1	93.8	93.1	94.4	160.3	99.0	99.0	99.1	3 853.0	0.3	0.5	97.3	98.0	99.4	100.0	99.0	74.1	89.6	100.0	100.0	100.0	
10  United Arab Emirates	96.4	100.0	92.8	100.0	99.9	241.2	100.0	99.8	52.7	5 183.2	0.9	0.6	100.0	100.0	100.0	100.0	99.9	64.1	92.9	100.0	100.0	100.0	
11  Saudi Arabia	94.9	93.2	96.5	100.0	99.8	119.5	100.0	100.0	335.5	6 246.5	1.4	3.6	100.0	100.0	100.0	79.7	100.0	93.6	95.1	98.3	92.0	100.0	
12  Brunei	94.8	95.7	94.0	95.6	91.0	136.8	96.6	96.6	610.0	508.5	0.6	1.1	96.3	100.0	95.8	91.2	96.6	100.0	67.7	100.0	99.8	100.0	
13  Iceland	94.8	93.2	96.4	99.7	98.4	119.5	100.0	100.0	232.8	4 793.0	0.4	1.5	98.4	100.0	100.0	79.6	100.0	87.7	92.0	100.0	98.6	100.0	
14  Poland	94.6	95.7	93.4	85.4	92.4	205.8	100.0	100.0	70.0	5 147.1	0.5	1.2	95.5	89.9	97.3	100.0	100.0	68.6	92.8	100.0	99.3	100.0	
15  Malaysia	94.5	94.5	94.5	96.8	94.9	125.1	95.4	95.4	251.6	3 371.6	1.3	2.3	97.4	100.0	96.9	83.4	99.0	89.0	88.2	98.7	95.9	100.0	
16  Australia	94.0	93.8	94.2	95.0	97.3	122.2	99.5	99.5	121.3	3 750.3	0.5	1.3	97.3	100.0	100.0	81.4	99.5	77.3	89.4	100.0	99.2	100.0	
17  Sweden	93.9	93.2	94.6	94.7	90.7	126.6	100.0	100.0	177.3	N/A	0.5	1.1	87.6	99.7	95.5	84.4	100.0	83.4	N/A	100.0	99.8	92.3	
18  South Korea	93.8	92.7	94.9	97.6	99.9	117.2	99.9	99.9	146.1	3 889.0	0.9	1.1	97.6	100.0	100.0	78.1	99.9	80.3	89.7	100.0	99.7	100.0	
19  Latvia	93.8	90.2	97.5	91.2	91.1	117.9	99.0	95.0	461.8	4 409.9	1.0	1.5	96.6	96.0	95.9	78.6	96.6	96.7	91.1	100.0	98.4	100.0	
20  Netherlands	93.5	96.5	90.5	92.1	96.0	138.7	99.0	99.0	51.8	N/A	0.5	1.4	87.4	96.9	100.0	92.5	99.0	63.8	N/A	100.0	98.7	92.0	
21  Macao	93.3	95.9	90.7	88.5	89.9	185.7	99.8	99.7	42.4	N/A	0.2	0.5	94.2	93.1	94.7	100.0	99.7	80.6	N/A	100.0	100.0	99.2	



بيت التمويل الكويتي
Kuwait Finance House



BURGAN BANK
driven by you

