



Innovation in the Financial Sector of the United Arab Emirates

A Comprehensive Analysis



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INNOVATION IN THE FINANCIAL SECTOR A COMPREHENSIVE ANALYSIS

1. Foreword

The ADGM Academy Research Centre, in collaboration with a team of faculty members from the College of Business and Economics at the United Arab Emirates University (UAEU), undertook a research project to understand the innovation landscape of the banking and financial services sector in the UAE. Innovation has become increasingly important in all spheres of life, including the business sector in the UAE. It has led to the understanding that the future is global, digital, and highly competitive, and that failure to embrace innovation will have serious negative consequences. While many factors enhance opportunities to tap into innovation to be more competitive, improve service delivery, and develop sustainable sources of competitive advantage, others mitigate against embracing innovation. The outcomes of this research will enhance future collaboration among government entities, banking and financial institutions, and the academic world to find solutions through leading research projects and by sharing best practices and experiences.

The findings in the paper do not reflect the views of the research team but rather those of the interviewees from the various banks that participated in the study.

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2. Executive Summary



This paper examines innovation in the UAE banking and financial services sector, drawing on academic literature and semi-structured interviews with 13 banking and financial services institutions operating in the UAE. It explores how innovation is understood, what is driving it, how institutions are responding, and what capabilities are required to sustain innovation in a rapidly changing financial ecosystem.

The findings show that innovation in banking is no longer optional. It is being driven by technological advancement, rising customer expectations, regulatory reform, fintech competition, cybersecurity risks, sustainability priorities, globalisation, and changing geopolitical conditions. While technology is a major enabler, the paper argues that innovation should not be reduced to technology adoption alone. True innovation also depends on leadership, culture, organizational agility, customer focus, collaboration, regulatory engagement, and the ability to convert creative ideas into practical, scalable solutions.

Interviewees emphasised that innovation takes many forms, from major sector-wide initiatives to smaller process improvements. Examples include digital onboarding, instant payments, artificial intelligence-enabled fraud detection, regulatory sandboxes, open finance, digital banking platforms, cybersecurity information sharing, liquidity optimisation, and blockchain-enabled cross-border payments. These examples demonstrate that innovation can improve customer experience, reduce costs, strengthen compliance, enhance risk management,

expand financial inclusion, and support long-term competitiveness.

The research also highlights important barriers. These include legacy systems, risk-averse cultures, rigid internal processes, talent and skills gaps, fragmented data, unclear ownership of innovation, and the challenge of balancing experimentation with regulatory and operational requirements. In highly regulated financial markets, innovation must be managed carefully to protect consumers, preserve financial stability, and maintain market integrity.

The UAE context is central to the paper. The country's regulatory agenda, digital infrastructure, financial sector ambition, and collaborative ecosystem provide a strong foundation for innovation. Regulators such as the Central Bank of the UAE have played an increasingly important role not only as supervisors, but also as enablers of responsible innovation through initiatives such as open finance, fintech sandboxes, instant payments, digital onboarding, and digital currency initiatives.

Overall, the paper concludes that successful innovation in the UAE financial sector requires a balanced approach: technology must be matched with human capability, strong governance, customer insight, strategic leadership, and ecosystem collaboration. Institutions that can embed innovation into their operating model, rather than treating it as a standalone activity, will be better positioned to adapt, compete, and contribute to the UAE's wider financial sector development.



3. The Importance of Innovation: Future-Proofing Banking



Innovation is essential for corporations as it drives growth, enhances competitiveness, and adaptability (Aseem et al., 2021). Fostering the development of new products, services, and processes enables businesses to explore new markets, diversify revenue streams, and maintain profitability. It helps companies stand out in competitive industries by addressing evolving customer needs with unique solutions. Innovation also improves operational efficiency by integrating advanced technologies, reducing costs, and increasing productivity. In times of uncertainty, it supports resilience by enabling swift adaptation to challenges and seizing emerging opportunities (Du et al., 2022).

The banking sector, long associated with tradition and stability, has been experiencing a profound transformation driven by innovation. This shift is not merely a reaction to changing times but a proactive reimagining of how financial institutions operate, engage customers, and contribute to the global economy. Innovation has become the fuel that drives banks forward, reshaping not only their products and services but also their core operations, culture, and ecosystems (Bessis, 2021).

Customer Retention – Transforming the Customer Experience

Customer expectations in the digital age have evolved dramatically. Banks have been utilising the extensive impact of social media on customers and how businesses utilise social media outlets to build their brands (Tidd et al., 2019). Innovation enables banks to retain customers by continuously improving their offerings. For instance, digital loyalty programs and personalised financial recommendations based on customer behaviour enhance customer satisfaction and loyalty. Recently, banks have been leveraging technologies such as artificial intelligence (AI), machine learning, and advanced analytics to provide hyper-personalised services. Features like AI-driven chatbots, biometric authentication, and digital wallets are revolutionising customer interactions, making banking faster, safer, and more intuitive (Frost, 2020).

Driving Financial Inclusion through Technology

Innovation has made banking more inclusive, reaching underserved and unbanked populations. Mobile money platforms, simplified digital onboarding processes, and community-based financial services have expanded access to banking in remote areas.



The rise of fintech disruptors has compelled traditional banks to innovate, having a customer-centred approach to remain competitive. By developing digital-first services, banks can differentiate themselves and retain market relevance in an increasingly crowded financial landscape (Arner et al., 2020).

These advancements contribute to the Social (S) component of Environmental, Social, and Governance (ESG) frameworks by promoting financial inclusion, reducing inequalities, and enabling broader economic participation. This, in turn, fosters social cohesion and sustainable development, creating long-term positive impacts on communities and economies. In markets like the UAE, initiatives such as PayBy (now Botim Money) helped bring financial services to a broader audience (World Bank, 2023).

Green Finance and Sustainability Products

Innovation drives sustainability in banking, helping individuals and institutions reduce their carbon footprint through paperless banking, remote services, and investment in green technologies. By adopting eco-friendly initiatives, banks can meet the growing demand for sustainable financial products and services (Deloitte, 2021).

Key products include green bonds, sustainability-linked loans, and green loans, which incentivise businesses and individuals to adopt sustainable practices. Banks also offer green investment funds and loans for SMEs in renewable energy and waste management. Digital tools like carbon tracking services help clients monitor and reduce their environmental impact. These innovations position banks as key players in driving the global transition to a greener economy while aligning with ESG principles. These advancements contribute to the Environmental (E) component of Environmental, Social, and Governance (ESG) frameworks by promoting renewable energy and greener solutions.

Sustainable finance has seen remarkable growth both globally and within the region. An important initiative is the financial sector's pledge to mobilise AED1 trillion in sustainable finance by 2030, announced by the UAE Banks Federation during Finance Day at COP28 (KPMG, 2024).

Enhancing Operational Efficiency

Innovation allows banks to streamline internal processes and reduce costs. Blockchain technology, for instance, eliminates the need for intermediaries, enabling secure, transparent, and efficient transactions. Innovations in data analytics empower banks to make informed decisions. By analysing vast datasets, banks can detect fraud, assess credit risks, and predict market trends more effectively. Robotic Process Automation (RPA) automates repetitive tasks, freeing employees to focus on strategic decision-making (Deloitte, 2021).

Managing Risks and Ensuring Compliance

Technological advancements also aid in regulatory compliance and risk management. Predictive analytics, AI, and blockchain offer tools to monitor transactions, detect anomalies, and generate compliance reports efficiently (Frost, 2020). On the one hand, using predictive analytics leverages large datasets to identify potential risks before they materialise. By analysing historical data and real-time inputs, banks can detect patterns that indicate fraudulent activities or credit defaults. For instance, machine learning models can assess loan applications by predicting the likelihood of repayment, ensuring more accurate credit risk assessments (Gai et al., 2018). Moreover, predictive analytics enables scenario planning, helping banks prepare for market volatility or economic downturns (Deloitte, 2022).

On the other hand, using blockchain technology offers a decentralised and immutable ledger, ensuring transparency and accountability in financial transactions. This is particularly valuable for regulatory compliance, as blockchain records are tamper-proof and can be audited in real-time. For instance, in anti-money laundering (AML) processes, blockchain enables secure and efficient Know Your Customer (KYC) verification by providing a shared digital ledger accessible to authorised institutions (Pilkington, 2016). In addition, smart contracts powered by blockchain automate compliance checks, ensuring that contractual obligations adhere to legal and regulatory standards without manual intervention. This level of transparency fosters trust among regulators, customers, and stakeholders (Tapscott & Tapscott, 2018).



4. The Innovation Ecosystem: Driving Collective Change



At the core of the banking industry transformation lies the innovation ecosystem, a dynamic network of stakeholders, including fintech startups, technology providers, regulatory authorities, customers, financial professionals, and banks themselves (Sotiropski, 2024). This ecosystem fosters collaboration and creates the synergy needed to drive meaningful change. It is a vibrant interplay of entities working together to foster technological and operational advancements. Each participant brings unique strengths, ensuring that the ecosystem thrives on collaboration and diversity (KPMG, 2021).

Innovation can be thought of as a machine with synergies among its parts. This “machine” isn’t just one firm, but a whole network of players working together. It’s this entire ecosystem that creates valuable solutions. According to prior research, the innovation ecosystem is defined as the process by which a single firm benefits from the network. They look at the

suppliers who provide resources (upstream) and the other firms that use the final product (downstream). The focus is on how these connections work together to create value, with everyone pushing innovation forward (Adner, 2017; Adner & Kapoor, 2010; Hannah & Eisenhardt, 2018; Jacobides et al., 2018; Thomas & Autio, 2020; Autio & Thomas, 2022; Coletto et al., 2024).

In the UAE, a visionary approach, combined with robust infrastructure and collaborative ecosystems, positions the sector as a global leader in financial innovation. For instance, the Central Bank of the UAE (CBUAE) launched the Innovation Hub, comprising six thematic labs, to establish a robust innovation ecosystem (CBUAE, 2023). By fostering a culture of experimentation, collaboration, and ethical responsibility, banks can build a future that benefits not only their bottom line but also society as a whole.



5. Key Actors as Identified in the Literature



Regulatory Bodies

Regulators play a dual role as gatekeepers and enablers. Initiatives like regulatory sandboxes allow banks to test new solutions within defined parameters, striking a balance between innovation and compliance. In the UAE, the CBUAE's FinTech Office supports innovation while maintaining systemic stability (CBUAE, 2023). Overall, regulatory frameworks, cultural norms, and industry standards significantly shape ecosystem behaviour and interaction. Policy support is critical for fostering an environment conducive to innovation.

The financial industry operates within a complex and rapidly evolving regulatory environment. To stay ahead, banks must adopt a proactive approach to regulation. This involves close collaboration with regulators to develop policies that support innovation while maintaining systemic stability. Agility in regulation also requires a shift from rigid frameworks to adaptive policies that evolve with technological advancements. This approach ensures that innovation is not hindered by outdated legal structures and that customers' rights are safeguarded.

Technology Providers and Fintech Startups

Ecosystems evolve with technological advances, market trends, and regulatory frameworks. Recognising these dynamics is key to effectively leveraging innovation ecosystems (Oghazi et al., 2022). Technologies like quantum computing and 5G have the potential to redefine banking operations.

Innovation ecosystems enable banks to explore these technologies in collaboration with industry leaders. Establishing partnerships with fintech startups and technology providers enables banks to access cutting-edge tools and expertise. In the UAE, collaborations between banks and fintech startups have yielded innovations in digital payments, credit scoring, and robo-advisory services (KPMG, 2021).

Banks and the Importance of Open Banking

Banks are a cornerstone of the financial ecosystem, broadly defined as institutions that accept deposits, provide loans, and offer various financial services to individuals, businesses, and governments. They play a vital role in facilitating economic activity and can be categorised into types such as commercial banks, which serve individuals and businesses; investment banks, focusing on capital markets and corporate financing; and central banks, which oversee monetary policy and financial stability.

Open banking initiatives have redefined the innovation landscape by encouraging data-sharing between banks and third-party providers. This collaborative approach facilitates the development of innovative financial solutions, offering customers a wider range of personalised services and greater control over their financial data. By embracing open banking, banks can unlock new revenue streams, enhance customer experiences, and strengthen their competitive position (PwC, 2021).



Retail Customers and Corporate Clients

The customers of the banking sector include individuals, businesses, and governments, each engaging with banks to meet specific financial needs. Retail customers use banking services for personal finances such as savings, loans, and payments, often through digital platforms offering payments, budgeting tools, and personalised financial solutions. Innovative technologies like AI and data analytics enable banks to enhance these experiences with tailored recommendations and services.

Corporate and institutional clients, including SMEs, large enterprises, and governments, rely on banks for advanced financial solutions like trade finance and capital markets access. These customers benefit from specialised platforms that integrate banking services into their operations, supported by innovations like open banking and API-driven ecosystems. This interconnected approach helps banks deliver efficiency and value while fostering innovation across the sector (PwC, 2021).

Financial Professionals

An innovative culture attracts talent, encourages continuous learning, and motivates employees to contribute to long-term success, ensuring the corporation remains relevant and forward-thinking. An innovation-friendly ecosystem depends on a workforce skilled in both technological expertise and creative problem-solving. Developing such a workforce involves significant investment in training and upskilling programs. Cross-functional collaboration, where employees from diverse departments work together on innovation projects, is equally important (Deloitte, 2021).

Leaders are crucial to cultivating a culture of innovation within banks. They should inspire teams to take calculated risks, view setbacks as valuable learning experiences, and equip employees with the necessary resources and support to spark creative thinking. By fostering an atmosphere that celebrates curiosity and encourages collaboration, banks can drive consistent growth through innovation.

Automation and AI are redefining job roles within

banks, creating opportunities for reskilling and redeployment. While innovation may displace some roles, it also generates demand for expertise in data science, cybersecurity, and customer experience design. By investing in workforce development, banks can navigate these transitions smoothly (PwC, 2021).

Collaboration and Partnerships across the Innovation Ecosystem

Through collaboration, firms can share risks, combine skills, and pool resources (Granstrand & Holgersson, 2020). Having innovation ecosystems entails coordinating all efforts between firms and stakeholders to foster open innovation, while utilising firms' internal and external knowledge to enhance products and processes (McGahan et al., 2021). The banking innovation ecosystem thrives on partnerships. Collaborations between financial institutions, academic researchers, and industry bodies generate valuable insights and create innovative solutions. For example, the DIFC FinTech Hive in Dubai connects banks with startups, encouraging co-creation and experimentation (DIFC, 2022). Similarly, Hub71 in ADGM supports Abu Dhabi's innovation ecosystem by connecting startups with investors, corporates, and government partners, enabling fintech firms and financial institutions to test and scale new solutions in a collaborative environment. Creating value requires joint efforts and fair distribution to sustain engagement among ecosystem participants.





6. Overcoming Barriers and Driving Innovation in the Banking Sector: A Literature Overview



6.1 Barriers to Innovation

Innovation in the banking sector is crucial for staying competitive and relevant in such a dynamic marketplace. Yet, the journey toward embracing new ideas and practices is often limited by significant challenges. These obstacles can be broadly categorised into cultural, structural, technological, and regulatory barriers (Das et al., 2018), all of which must be addressed strategically to cultivate a thriving innovation ecosystem within the industry.

Cultural and Organisational Resistance

A major challenge to innovation lies in the culture and organisational dynamics of banks. Resistance to change is common in many traditional institutions, where risk-averse attitudes prioritise stability over experimentation (Das et al., 2018). Employees may fear the consequences of failure, given the punitive environments that discourage risk-taking (Zhou et al 2021). This fear limits the willingness to pursue ideas and creative thinking. Employees often lack the empowerment, the benefits and resources to champion innovation, as hierarchies, misaligned incentives and insufficient delegation of authority prevent them from taking initiative or proposing transformative projects.

Structural and Process Limitations

The structural rigidity of banks poses significant challenges to innovation. Strict adherence to established processes ensures compliance and operational efficiency but discourage creativity. Employees are often confined by systems that inhibit experimentation (Das et al., 2018). Additionally, the lack of talent with the necessary skills or specialised innovation teams to navigate technological and strategic complexities exacerbates this issue (Kuratko et al., 2023). Many institutions have not sufficiently invested in cultivating a workforce equipped to drive innovation, leaving them unprepared to address emerging challenges.

Technological and Skills Gaps

The reliance on outdated technologies is another critical barrier to innovation in the banking sector. These systems are often incompatible with modern technologies, making integration and scalability challenging. The technology gap is further compounded by a shortage of skilled professionals capable of leveraging advanced tools such as artificial intelligence, blockchain, and data analytics.

This problem becomes even more pronounced over time (Criscuolo & Narula, 2008), as the widening gap makes it increasingly difficult for banks to catch up and re-establish the capabilities needed for innovation.



Without addressing these gaps promptly, banks risk falling further behind in adopting transformative technologies that could enhance operational efficiency and customer experience, potentially jeopardising their long-term competitiveness.

Regulatory Constraints and Compliance Focus

Banks operate in highly regulated environments where compliance is critical. While adherence to regulations is essential for fulfilling their role as stewards of capital, the overwhelming focus on meeting these requirements could come at the expense of innovation (Aghion et al., 2023). Resources and attention are disproportionately directed toward ensuring compliance, leaving limited resources for exploring new ideas.

6.2 Enablers of Innovation

While challenges exist, banks can overcome these barriers through strategic enablers that create an environment conducive to innovation. These enablers can be categorised into customer-centricity, organisational foundations, talent and culture, and external collaboration.

Customer-Centricity and Digital Transformation

At the heart of innovation in banking lies customer-centricity. By prioritising customer needs, banks can leverage digital tools to deliver seamless, efficient experiences that integrate into customers' daily lives (Giménez, 2018). Digital transformation initiatives, such as reimagined business models, automated processes, and enhanced service convenience, ensure sustained customer engagement and satisfaction. This customer-first approach not only drives innovation but also positions banks as integral to their customers, improving loyalty and competitive differentiation (Deloitte, 2020b).

Organisational Foundations and Strategic Leadership

Innovation thrives when supported by robust organisational foundations and committed leadership (Deloitte, 2020b). Success requires a cohesive vision championed across all levels of the organisation.

Leaders play a critical role in securing resources, embedding a digital-first mindset, and aligning teams with the firm's transformation goals. Tailored innovation strategies—whether through internal transformation, dedicated digital units, or hybrid models—ensure that efforts are targeted and impactful. Clear performance metrics and disciplined execution further enhance the likelihood of achieving meaningful outcomes.

Simplifying internal processes also facilitates innovation by enabling flexibility and empowering employees to explore new ideas without bureaucratic delays. This streamlining is particularly important in fostering agility, a key attribute for responding to market changes and customer demands.

Talent, Culture, and Agile Methodologies

A culture of experimentation and risk-taking is essential for fostering innovation (Deloitte, 2020b). Attracting and retaining talent requires creating compelling opportunities and nurturing a collaborative, agile work environment. Upskilling initiatives, combined with innovation-friendly policies (Kuratko, 2010), ensure that employees remain equipped to tackle transformation challenges.

Agile methodologies further enhance innovation by encouraging cross-functional collaboration, continuous improvement, and responsiveness to customer feedback. These practices accelerate development cycles, enabling banks to iterate quickly and deploy new solutions efficiently (Deloitte, 2020b; Kuratko, 2010). By empowering employees with the necessary authority and resources to pursue innovative projects, organisations can strengthen employee engagement and motivation, fostering a sense of ownership in driving organisational innovation.

Encouraging experimentation and reframing failure as a learning opportunity also contributes to an innovative culture (Kuratko, 2010). By creating a safe environment for trial and error, banks can unlock creative potential and identify breakthrough solutions.

External Collaboration and Ecosystem Engagement

Innovation in banking increasingly depends on external collaboration with regulators, FinTech start-ups, and



technology partners. These partnerships provide banks with access to specialised expertise, cutting-edge solutions, and shared knowledge (Deloitte, 2020b). Early engagement with regulators fosters mutual understanding and ensures compliance, allowing institutions to navigate the complexities of the digital transformation process effectively. By engaging with external stakeholders, banks can remain adaptive and responsive to evolving industry trends, ensuring sustained relevance in a competitive landscape.

Enabling innovation in the banking sector requires a multifaceted approach that prioritises customer needs, fosters a culture of experimentation, and leverages collaboration (Deloitte, 2020b). By aligning organisational strategies, empowering employees, and engaging with external stakeholders, banks can create a robust foundation for sustained innovation. These efforts ensure that institutions remain agile, competitive, and capable of meeting the demands of an increasingly dynamic financial environment.

6.3 Final Considerations

Innovation in the banking sector is not just about adopting new technologies or reimagining processes; it involves addressing complex challenges while ensuring ethical and secure practices. As banks strive to innovate, they must carefully consider critical areas that shape the future of the industry such as cybersecurity and privacy and ethical considerations. These aspects are central to building trust, enhancing customer experiences, and ensuring long-term sustainability.

Cybersecurity and Privacy

With the adoption of digital technologies, cybersecurity risks have escalated. Protecting sensitive customer data is paramount. Banks must invest in robust security frameworks, employ advanced threat detection systems, and stay informed about emerging cyber risks. The transition to Open Banking, where data is shared between banks and third-party providers, has magnified these concerns. Banks must implement advanced security protocols, such as end-to-end encryption, real-time threat monitoring, and zero-trust architectures, to mitigate risks (PwC, 2024). Moreover, the rise of biometric authentication, blockchain technology, and tokenisation in markets like the UAE is

setting benchmarks for secure financial transactions. Blockchain, for instance, offers an immutable and transparent ledger, enhancing trust and reducing fraud (Bessis, 2021). Regulatory bodies need to remain agile, updating data protection laws to reflect emerging threats and ensuring compliance with international cybersecurity standards.

Ethical Considerations

Innovation must be guided by ethical principles. Banks need to assess the social and economic implications of their innovations to ensure they enhance equality and fairness. For example, AI-powered loan approval systems must be designed to avoid biases that could disadvantage certain demographic groups (Arner et al., 2020).

Transparency in decision-making processes and the adoption of ethical AI frameworks can foster trust. Additionally, ensuring that new technologies enhance access rather than restrict it is crucial for promoting financial inclusion. Ethical banking practices are not just a moral obligation but a strategic imperative for building long-term customer loyalty.

Post-COVID Innovation and the Path Ahead

The COVID-19 pandemic was a catalyst for digital transformation in banking, accelerating the adoption of technologies such as digital onboarding, virtual consultations, and AI-driven customer service (Deloitte, 2020). These innovations have become integral to meeting customer expectations in the post-pandemic era, where convenience and personalisation are paramount (Accenture, 2021; World Bank, 2022).

To sustain this momentum, banks must continue investing in digital platforms and infrastructure while also addressing the challenges of digital literacy among customers. Strategies should include simplifying user interfaces, providing educational resources, and ensuring access for underserved populations. As the world moves toward a hybrid financial model that combines physical and digital services, banks have the opportunity to redefine their value propositions (IMF, 2020).



7. Methodology



The authors conducted 13 semi-structured interviews with banking/financial services experts operating in the UAE. The interviewees were selected in collaboration with ADGM Academy based on their expertise and interest in innovation in the UAE banking sector. The interview included the following eight questions:

- Question 1: How would you generally define innovation and, more specifically, in the financial and banking sector, and how would you differentiate innovation from creativity?
- Question 2: What are the main drivers of change in the business environment that are pushing banks and financial institutions to be more innovative?
- Question 3: Several professionals from the financial and banking sectors, associate innovation with the capacity of organisations to take advantage of technological advancement. Why would you agree or disagree with this point of view?
- Question 4: What specific goals do you believe financial and banking organisations aim to accomplish through innovation, and why are these goals a priority? So, what do they want to achieve, and why is it important that they do this?
- Question 5: Can you expand on an example of a

project or initiative where you think your institution was innovative, why do you think it was innovative in this case, and how did you measure your success?

- Question 6: What are the key characteristics of factors your institution currently has or are in place that would drive its innovation potential?
- Question 7: What key characteristics does your institution lack that are essential to driving its innovation potential? Where are the gaps?
- Question 8: How would you describe a financial institution that appears innovative? What does it look like?

Each interview lasted between 44-60 minutes. They were all recorded and then transcribed. Answers were analysed question-by-question, then coded inductively into themes (e.g., drivers, processes, barriers, enablers). The authors then reported points of agreement (shared patterns) and disagreement (competing emphases).

The definition of innovation was developed through an **inductive process of conceptualisation**, whereby recurring themes identified through thematic analysis were **abstracted and synthesised** into a coherent construct.



8. Innovation & Creativity in the Financial Sector



This section outlines the concepts of creativity and innovation while examining their interrelation. It also addresses how specific environments influence innovation and identifies who is responsible for it.

8.1 Creativity

Interviewees had varying definitions and ideas of what creativity is (and what it is not).

There are different ways to approach a task, but not always for the better. One can be creative in positive or negative ways. Creativity can involve working around existing processes, such as exploiting loopholes. This behaviour is often viewed as creative rather than innovative.

Finding new ways to provide value is essential. Being creative means thinking outside the box and delivering the same or better value in a different way. Creativity is also about experimentation; just because you try something differently does not mean you're committed to it or that it's the best approach.

Generating a new idea (e.g., product or service) that may or may not have an actual use case or demand.

Some view creativity as the ability to completely rethink and disrupt existing limitations by adopting a more innovative mindset to critically evaluate the entire

financial system. This includes exploring new ways to approach challenges and reimagining traditional concepts, such as how we think about and manage money.

8.2 Innovation

Interviewees had varying definitions and ideas of what innovation is (and what it is not).

Innovation is more tangible and actionable than creativity. It is a process of combining distinct ideas or themes to create something entirely new or to reimagine and enhance existing concepts. In the context of digital transformation, particularly in banking, innovation involves institutions, individuals, and teams working together to develop fresh solutions. It reflects the ability to adapt, reshape, and refine ideas to meet evolving needs and challenges.

Innovation involves defining new ideas as products or improvements to existing services. In the finance sector, this means leveraging technology to enhance financial products and services, including their delivery, or creating entirely new services that were previously impossible. This distinction is also evident in improved regulatory compliance, where one begins with a regulatory expectation and then uses innovation to achieve it more efficiently.



Innovation can be defined as implementing novel solutions to address problems, meet new requirements, and exponentially enhance performance.

Innovation means developing new products, services, processes, or business models. It is perceived as the strategic use of creative expression, knowledge, and emerging technologies. This could include improving products and services, increasing the organisation's efficiency and productivity, decreasing costs, and enhancing the organisation's overall performance.

Innovation should be forward-thinking, long-term, and guided by a clear strategy. It involves exploring how an organisation can successfully achieve its vision. By redefining or enhancing processes, particularly those involving customers, innovation can drive meaningful change. This can be achieved through technological advancements, automation, process reengineering, benchmarking against competitors, or optimising organisational technology structures.

Innovation can take many forms, one of which is product innovation. This involves creating new or significantly improved products that introduce entirely new features or enhance functionality, thereby transforming existing processes.

Business model innovation focuses on creating new approaches that redefine how value is delivered to customers and transform operational processes. This innovation has the potential to disrupt many financial institutions in the future.

When the financial sector and large legacy organisations consider innovation, they often focus solely on technology. However, innovation can take many forms—it might involve improving processes, restructuring organisations, leveraging technology, or introducing enhancements that create significant impact.

8.3 Nexus Between Creativity & Innovation

Interviewees had varying thoughts on the intersection of creativity and innovation.

While creativity and innovation are often interrelated, they are distinct concepts. Creativity involves generating new ideas and approaches, while innovation

focuses on implementing these ideas to deliver value.

It is essential to implement creative ideas to achieve innovation.

Innovation is about achieving what was previously impossible or improving efficiency in existing processes. It should be driven by specific goals and focused on solving problems, rather than pursuing innovation for its own sake. True innovation involves creating new capabilities, accomplishing tasks in more cost-effective ways, or unlocking new sources of revenue.

8.4 Regulatory Environment

Regulators are critical in evaluating new ideas and granting the necessary approvals. To move forward, innovative concepts must first be presented to regulators for consideration. If they find the idea feasible, they may approve its progression, allowing for the development of suitable products and services based on the proposed innovation. However, depending on their assessment of the idea's compliance and impact, regulators may sometimes request modifications, delay implementation, or withhold approval entirely.

More broadly, the regulatory environment shapes the pathway through which creativity becomes implementable innovation. In financial services, new ideas must be assessed not only for commercial value, but also for their implications for financial stability, consumer protection, anti-money laundering controls, data privacy, cybersecurity, and operational resilience. For this reason, regulatory engagement should not be treated as a final approval step, but as an integral part of the innovation process. Early dialogue with regulators can help institutions clarify risks, refine business models, and develop products that are compliant, scalable, and trusted by customers.

In the UAE, regulators have increasingly acted as both supervisors and enablers of innovation. Examples include regulatory sandboxes, open finance initiatives, instant payment infrastructure such as Aani, digital onboarding frameworks, and emerging regulation for virtual assets and digital finance. These mechanisms allow banks, fintechs, and technology providers to test new solutions within defined parameters while protecting market integrity. The challenge is to maintain



the right balance: regulation must be flexible enough to encourage experimentation, but robust enough to prevent consumer harm, financial crime, cyber vulnerabilities, or systemic risk.

8.5 Technology and Innovation

Technological innovation is about applying new technologies to create something entirely new or improve an existing process. For instance, implementing AI-driven fraud detection systems exemplifies how innovation can reduce risk and enhance operational efficiency.

Many banks, particularly larger ones, struggle with organisational behaviour because their people and processes are not well-aligned. While technology enables innovative processes and the use of smart machines to improve efficiency, the human aspect often gets overlooked. True innovation is not just about leveraging new technologies; it must also encompass organisational transformation. This includes adopting new structures, management practices, and approaches that support both the workforce and the evolving business environment.

Digitisation includes converting paper-based records into digital files. Digitalisation includes automating

workflows, using enterprise resource planning (ERP) systems, or implementing online customer portals. Digital transformation is the process of creating digital-first business models, using advanced technologies to revolutionise products and customer experiences.¹

8.6 Mini-innovations

Mini-innovations aim to improve or reduce time to market. They are small improvements or optimisations within an existing sector or technology. For example, lending has existed for millennia. BNPL (buy-now-pay-later) is an innovation in how lending is offered to customers. It does not shift the whole paradigm of lending itself. These small improvements are as valuable as a big shift, but both go hand in hand.

The major innovations, whether creating a whole new sector or sub-sector that did not exist before, require greater effort and a change in customer behaviour to drive adoption. However, if there is no real use case or market, or if the timing between the product and the market is not right, even the greatest idea will not succeed.

8.7 Whose job is innovation?

One interviewee expressed concern about certain



¹ <https://www.channelinsider.com/business-management/digitization-vs-digitalization/#:~:text=Digitalization%20includes%20automating%20workflows%2C%20using,revolutionize%20products%20and%20customer%20experiences.>



individuals or teams claiming to be “doing innovation” or establishing an Innovation Hub.

They argued that treating innovation as a separate, siloed activity is misguided. Instead, innovation should be seamlessly integrated across all departments within an organisation. It is not the responsibility of a single person or team but a collective effort.

Many banks, however, rely on external consultants for innovation, despite these consultants often lacking a deep understanding of the internal challenges

and processes. True innovation lies in empowering employees to freely share their opinions, feedback, and ideas. In this context, no idea should be dismissed as unworthy—every contribution has potential.

Although some interviewees found it difficult to distinguish between innovation and creativity, most emphasised that innovation is vital for meeting evolving customer expectations. These include demands for greater convenience, personalised experiences, and informed financial guidance.





9. The Main Change Drivers in the Business Environment Pushing the Financial Sector to Innovate



The interviewees identified 10 categories of change drivers that compelled banks to embrace innovation.

9.1 Technology

Rapid technological developments, such as artificial intelligence (AI), blockchain, data analytics, and the cloud, can disrupt industries and drive change. The data-driven revolution in the financial sector is transforming the types of products and opportunities available, the way firms offer services and interact with customers, the way risks are assessed, and how decisions are made. Innovations like digital lending platforms and AI-driven financial advisory services are streamlining processes, reducing costs, and increasing accessibility for businesses of all sizes.

Blockchain technology has the potential to revolutionise traditional financial systems by enhancing transaction speed and efficiency. Its evolving applications are opening new opportunities for businesses to access capital and manage finances more effectively. Innovations such as digital lending platforms and AI-powered financial advisory services are simplifying processes, lowering costs, and improving financial accessibility for businesses across

various industries and scales.

Generative AI (Gen AI) has rapidly gained attention, particularly among business customers who see its potential to transform industries. For banks, Gen AI offers opportunities to innovate and modernise their value propositions, streamline operating models, and explore new routes to market.

Large incumbent financial institutions are well-positioned to invest in and experiment with emerging technologies, given their significant resources. However, these institutions often face challenges related to integrating new technologies into their complex legacy systems, which can drive up costs and delay implementation. Moreover, the return on investment (ROI) for such innovations often materialises only after several years.

One industry expert noted that traditional banks, being highly compliance-driven and risk-averse, tend to adopt new technologies more slowly than fintech startups. Fintechs, by contrast, are typically more agile and faster to implement technological advancements.

Technology is fundamentally altering customer



behaviour, forcing banks to rethink their products and how they engage with customers. Physical cash is rapidly declining in favour of digital solutions, such as online banking, mobile wallets, and peer-to-peer payment platforms.

Meanwhile, distributed ledger technologies (DLT) are driving a wave of innovation across the financial sector. By enabling automation through smart contracts and fostering decentralisation, DLT is being explored for applications ranging from service automation to sustainable finance, further pushing the boundaries of how financial services are delivered.

9.2 Customer Expectations

Customer expectations are a significant force driving change in the financial sector. With widespread access to the internet via mobile devices, customers now demand seamless, personalised, and instant experiences. This shift has fuelled a surge in demand for mobile banking services. When customers cannot access these features, they often switch to banks that can meet their needs. As a result, consumers have become more discerning, expecting personalised, efficient, and faster services at a lower cost. This growing demand compels financial institutions to innovate to stay competitive and relevant.

A demographic shift is also reshaping the industry. Younger generations, accustomed to remote work, digital banking, and other technology-driven trends, are emerging as key decision-makers and leaders. This tech-savvy, upwardly mobile, and risk-tolerant group not only embraces innovation but actively drives it. They are questioning the relevance of traditional banking tools like cash and physical cards, increasingly opting for virtual alternatives. This openness to new ideas is pushing the boundaries of financial services.

Meanwhile, affluent customers, such as private banking clients and ultra-high-net-worth individuals, are also raising the bar. These clients are increasingly tech-savvy and have high expectations for personalised, sophisticated solutions. They demand that financial institutions understand their unique needs and offer tailored products to address them effectively.

Additionally, expanding the customer base to drive

revenue growth is a critical priority for financial institutions. This objective motivates organisations to adopt innovative approaches, foster organic growth, and ensure they remain competitive in an evolving market.

9.3 Regulatory Pressure

Regulators play a pivotal role in driving innovation by updating and introducing new regulations that either mandate or enable financial institutions to adapt and innovate.

The Central Bank of the UAE (CBUAE) is at the forefront of this transformation, positioning the nation as a global leader in financial innovation. This ambition aligns with the “We the UAE 2031” vision and the National Digital Economy Strategy. The CBUAE is advancing regulatory frameworks and implementing forward-looking reforms to encourage safe and sustainable innovation. Key initiatives include enhancing anti-money laundering and countering the financing of terrorism (AML/CFT) measures and introducing the Sandbox Regulation for fintech.² Its Open Finance Vision and Financial Infrastructure Transformation (FIT) Programme further reflects its commitment to fostering data-driven, customer-centric financial ecosystems.

The CBUAE has also spearheaded innovative projects such as the Instant Payments Platform (Aani), which enables real-time digital payments (operated by Al Etihad Payments (AEP)), and the Digital Dirham, which serves as a blockchain-based digital version of physical cash.

Data governance, encompassing laws and regulations, remains a critical aspect of innovation. Issues such as privacy, transparency, compliance, and risk management are central to creating a secure and trustworthy digital financial ecosystem.

9.4 Competition

Competition is a key driver of change and innovation, particularly as companies focus on attracting and retaining customers. In the financial sector, fintech companies are challenging traditional banks, which are responding by undergoing a process of digital transformation and innovation of their products and

² <https://www.centralbank.ae/en/our-operations/fintech-digital-transformation/sandbox-initiatives/>



services. This often involves either partnering with or acquiring fintech firms.

Tech giants like Apple and Google, along with fintechs and startups, are increasingly meeting customers' needs in ways that traditional banks must match. This competitive pressure is pushing banks to adopt new technologies and innovate more quickly. Many fintech firms operate at the edges of regulatory frameworks, as they are not always licensed as banks. Their introduction of novel capabilities forces banks to reevaluate how they interact with these disruptors and adapt to the evolving financial ecosystem.

The broader transformation of the banking industry extends beyond fintech. Innovations in payment services, the adoption of open banking frameworks, and the rise of virtual assets like cryptocurrencies are reshaping the landscape. These developments create opportunities and challenges for traditional banks.

Historically, banks have been more inclined to innovate when their profitability is under threat or when they notice customers leaving for competitors who offer better technologies or services. The rise of cross-border competition has further widened the scope of these challenges, compelling financial institutions to stay ahead of both local and global disruptors.

However, increased competition also brings risks. Some organisations may attempt unethical practices to gain an advantage, prompting regulators to remain vigilant. To stay relevant and avoid becoming obsolete — what some refer to as a “Kodak moment” — large financial institutions are focused on identifying threats to their business models and leveraging innovation to secure their future.

9.5 Sustainability

A significant driver of change in the financial sector is the growing emphasis on climate finance and addressing climate change. This shift has been influenced by the region's recent hosting of COP conferences — Egypt in 2022 and the UAE in 2023 — and increasing government pressure. The UAE's commitment to climate action is underscored by its pledge to invest \$30 billion (the ALTÉRRRA fund) in climate finance across the region, reflecting a strong focus on Environmental, Social, and Governance (ESG) priorities.

Sustainability, corporate social responsibility (CSR), and corporate environmental responsibility are key factors driving banks and financial institutions to adopt sustainable practices. This transformation includes advancing green finance and fostering innovations in sustainable financial products. Many see climate change as a catalyst for innovation, compelling the financial sector to adapt. Although these developments will take time to mature, banks are being driven to proactively address the challenges posed by climate change while seeking to mitigate its long-term effects.

The rising importance of ESG principles as core business pillars, combined with increasing demand from individuals and businesses for green financing options, is prompting financial institutions to create new products and services. These include green loans, impact investing, and climate risk management tools.

Climate change presents both physical and transition risks for the financial industry. Physical risks, such as floods, storms, and wildfires, have made some areas uninsurable — and by extension, un-bankable — necessitating innovative risk management solutions. Transition risks pose a different challenge: how can banks deliver financial services in a more sustainable manner? Remote access to banking services, for example, reduces the need for customers to travel, lowering carbon emissions.

Additionally, banks are beginning to integrate climate and sustainability metrics into their lending criteria. Borrowers are being assessed based on the environmental performance of their assets. For instance, banks may charge higher rates for non-sustainable buildings while offering incentives, such as lower interest rates, for properties that incorporate renewable energy, improved insulation, or energy-efficient designs.

9.6 Cybersecurity

Cybersecurity threats are significant drivers of innovation and transformation in the financial sector. As the industry becomes increasingly digital, the rise in cyber threats necessitates advanced measures to safeguard sensitive information and maintain trust.

To detect and respond to threats in real-time, financial institutions utilise the latest technologies and techniques, including AI and machine learning,



biometric security, encryption, and tokenisation. Many banks are transitioning to a zero-trust architecture, and ISACs (Information Sharing and Analysis Centers) exist within many countries and for the financial services sector generally (FS-ISAC).

9.7 Globalisation

Globalisation is a key driver of change in the banking sector. Banks must account for the increasing interconnectedness and accessibility of international markets, as well as the transformative impact of digital assets on cross-border transactions and payments. Additionally, they need to integrate traditional considerations of international banking with the advancements brought by the evolving digital ecosystem.

9.8 COVID-19

The COVID-19 pandemic was a pivotal moment in human history, driving significant change across the globe. It forced individuals and organisations to adapt rapidly, innovate, and embrace a “fail fast, succeed fast” mindset to stay relevant. With access largely limited to mobile phones and laptops, people had to find creative ways to conduct business and navigate a transformed environment, turning necessity into a catalyst for innovation and resilience.

9.9 Geopolitical Considerations

Geopolitical factors play a significant role, particularly in the UAE, sometimes likened to Switzerland due to its strong diplomatic relationships both regionally and globally. The uncertainty inherent in geopolitics also fosters innovation, as financial institutions must adopt creative approaches to hedge risks and develop sustainable value propositions. For example, geopolitical blocs are increasingly investing in domestic payment systems, such as national debit card networks, to reduce reliance on international or regional alternatives. Similar trends are evident in cloud infrastructure and data management, with a growing focus on establishing local data centres to address jurisdictional concerns and enhance control over critical digital assets.

9.10 Other Factors

Several factors are driving innovation in the sector, including economic downturns, prolonged periods of low interest rates, and the pressing need for survival. Faced with challenges in generating revenue and maintaining income, banks have been compelled to find ways to reduce costs effectively while ensuring compliance with regulatory requirements.

Cost consciousness has also emerged as a significant driver of change. This involves re-evaluating existing processes and cost structures to enhance efficiency and productivity across operations.





10. Innovation and Technology in the Financial Sector: A Balanced Perspective



The financial sector often associates innovation with an organisation's ability to leverage technological advancements. While this perspective has merit, it is essential to consider both the supporting arguments and the counterpoints to fully understand the interplay between technology, strategy, and human ingenuity in driving innovation.

10.1 Arguments Supporting the Role of Technology in Innovation

Technology as a Key Driver of Innovation

Many interviewees highlighted the pivotal role of technology in fostering innovation within financial institutions. Technology enables organisations to enhance efficiency, boost productivity, reduce costs, and deliver superior customer experiences. For example:

- **Operational Efficiency:** Chief Operating Officers and business leaders use technology to optimise processes and improve the customer experience.
- **Data-Driven Decision-Making:** Advanced

analytics, AI, and machine learning (ML) empower banks to analyse vast datasets, improving decision-making in compliance, finance, and investment.

- **Retail Banking Transformation:** Digital channels and data processing capabilities enable banks to offer new, customer-centric products and services.

Meeting Evolving Customer Expectations

Customers increasingly demand 24/7 banking services and seamless digital experiences. Technological advancements allow banks to handle large volumes of transactions with precision, providing reliability and convenience.

Innovation Beyond Banking

By adopting technologies such as automation, robotics, cloud computing, and blockchain, banks lead innovation in financial services, inspiring other sectors to follow suit. These tools enhance security, mitigate risks, and support the development of personalised products.



Technology and the Fintech Revolution

The rise of fintech and embedded finance has transformed the financial ecosystem. Innovations such as robo-advisors, digital banking platforms, and peer-to-peer (P2P) lending redefine how banks serve customers. Fintech advancements also challenge traditional boundaries, prompting banks to rethink their service delivery models.

Blurring Boundaries Between Finance and Technology

As technology firms increasingly adopt financial services and financial institutions integrate technology into their operations, the lines between these domains are dissolving. This convergence heralds a new era of collaboration and innovation.

10.2 Arguments Against Overemphasising Technology

Innovation Goes Beyond Technology

Innovation is not solely about technological adoption. It starts with a strategic vision and a cultural shift within the organisation:

- **Holistic Transformation:** Banks must first address structural mindsets, processes, and organisational culture before implementing technology-driven solutions.
- **People-Driven Innovation:** Individuals play a central role in ideating, strategising, and implementing change. A creative mindset, willingness to experiment, and capacity to learn from failure are crucial for innovation to thrive.

Strategic Alignment Before Technology Adoption

Banks risk inefficiency when they adopt technology without a clear strategy. A problem-first approach ensures that technology serves as a solution rather than an end in itself.

- **Avoiding Technology for Technology's Sake:** Some banks implement tools like AI without fully understanding the problems they aim to solve, leading to suboptimal outcomes.
- **Process Improvement Without Technology:** Not all challenges require high-tech solutions; simple adjustments to non-technical processes can often achieve significant results.

10.3 Potential Pitfalls of Over-Reliance on Technology

Excessive dependence on technology may lead to unintended consequences:

- **Customer Frustration:** Overuse of automated messaging can alienate clients, increase operational costs and reduce trust.
- **Short-Term Focus:** A technology-first mindset may prioritise quick fixes over sustainable, long-term solutions.
- **Missed Opportunities in Human Interaction:** While technology facilitates efficiency, it cannot replace the empathy and creativity that human interactions provide.
- **Sustainability and Policy Innovation:** Addressing issues like climate change may require policy decisions, such as reallocating investments, rather than technological interventions. A balanced approach ensures that innovation aligns with broader societal goals.

10.4 Balancing Technology and People in Innovation

- **The Role of Technology:** Technology enhances operational efficiency, strengthens risk management, and supports scalability. Tools like AI and cloud computing process vast amounts of data with speed and precision, enabling institutions to deliver secure, personalised services.
- **The Role of People:** Human creativity, problem-solving, and empathy remain irreplaceable, particularly in building trust and addressing



complex challenges. Innovation thrives when technology complements these human strengths rather than replacing them.

- **The Interplay Between Technology and Culture:** A culture of experimentation and agility requires the right technological infrastructure, but technology alone cannot drive meaningful innovation. Success depends on integrating both elements effectively.

10.5 Rethinking Innovation in the Financial Sector

Innovation is not synonymous with technology. While technology is an essential enabler, it must align with

a broader vision and organisational goals. Financial institutions must adopt a balanced approach that integrates human ingenuity and technological advancements to meet evolving customer needs and drive sustainable growth.

Ultimately, true innovation lies in reimagining possibilities, addressing challenges holistically, and cultivating a culture of continuous improvement. Technology is a powerful tool in this journey, but it is the people who utilise it that make innovation possible.





11. Goals and Priorities of Innovation in the Financial Sector

Interviewees identified 17 goals and priorities they aim to achieve through innovation.



11.1 Customer Experience

Customers increasingly expect higher quality and faster services from financial institutions. To meet these demands, banks focus on creating user experiences that align more closely with customer expectations. By leveraging innovation, they can shift from product-centric to customer-centric approaches, designing interfaces and services that prioritise the needs and preferences of their users.

Banks aim to offer seamless, agile, personalised, and convenient services. Digital banks are rapidly advancing and challenging traditional institutions to deliver superior customer experiences. Addressing evolving customer expectations and unmet needs has become a critical priority. Some banks are even developing ecosystems where third-party service providers can offer tailored solutions to customers. These shared marketplace platforms, often open to multiple banks, give customers greater flexibility and choice in selecting services.

To succeed, innovation must place the customer at the core of business and operational strategies. Banks need a comprehensive, unified view of each customer to effectively engage with them, enhancing metrics like Net Promoter Score (NPS). By meeting customer needs, banks can build loyalty, capture a larger share of the customer's financial activities, and maximise their lifetime value.

Advanced technologies are playing a key role in transforming the customer experience. For instance, AI-driven chatbots provide highly personalised interactions, while blockchain technology enables near-instant, cost-effective remittances compared to traditional methods, which were slower and more expensive.

Furthermore, technology supports financial inclusion by broadening access to essential financial services. Innovations such as crypto wallets and blockchain technology offer new ways for banks to serve diverse customer needs, driving both enhanced customer satisfaction and operational efficiency.



11.2 Cost Reductions

Banks strive to reduce costs by improving operational efficiency. While processes can be streamlined to some extent, there is a limit to how much this approach can achieve. Beyond that point, banks must turn to innovation, leveraging new technologies, data analytics, and artificial intelligence. These innovations are designed to enhance efficiency across the organisation, optimise internal operating models, and strengthen competitiveness.

By adopting advanced technologies and rethinking infrastructure and processes, banks aim to not only cut costs but also boost productivity and operational effectiveness, ultimately enabling their teams to work more efficiently and effectively.

11.3 Fraud Detection

Innovation has become increasingly important in fraud detection systems. While banks began using machine learning to combat fraud years ago, only a small number have adopted it to monitor transactions for money laundering. Additionally, various other advanced technologies, such as artificial intelligence (AI), are now widely employed to enhance fraud detection efforts.

11.4 Digital Performance

In the digital economy, banks often do not achieve full digital transformation. Organisations that identify as digital leaders but are underperforming need to reassess their strategies. They must either innovate and stay ahead of the competition or risk being outpaced by emerging startups, which could lead to their eventual closure.

11.5 New Products and Services

Banks are focusing on creating innovative products and services, supported by dedicated product and service divisions. As the digital financial industry continues to evolve, this innovation is particularly critical in areas such as digital wallets, cryptocurrencies, green finance, and other emerging trends. Traditional offerings like phone banking, ATMs, internet banking, and mobile banking remain integral, but the emphasis is shifting toward adapting to modern customer needs.

Additionally, banks are prioritising faster speed-to-market for these new products and services to stay competitive and meet evolving consumer expectations.

11.6 Financial Inclusion

Financial inclusion is a key innovation goal, with AI playing a transformative role in expanding access to financial services in largely unbanked markets.

11.7 Compliance and Governance

Compliance is critical for preventing disruptions and effectively addressing regulatory requirements. Governance, particularly in fostering innovation to enhance financial inclusion in emerging markets, is equally important to ensure equitable access to financial services and maintain regulatory satisfaction.

The CBUAE has launched numerous initiatives to elevate standards and build a robust, competitive, and secure financial sector. These efforts empower businesses and individuals while prioritising consumer protection and financial stability. Consequently, the UAE has emerged as one of the region's largest economies and a leader in technology adoption, achieving a 100% increase in customer use of digital financial services. With its forward-thinking, well-regulated financial sector aligned with the "Principles of the 50³," the UAE is poised to play a pivotal role in the global financial system, attracting international institutions and driving innovation.

Compliance departments in banks are essential to address concerns such as money laundering, cyber threats, and other risks. However, banks must strike a balance — overly rigid compliance processes can create bottlenecks in customer relationships, while insufficient compliance is no longer acceptable in today's environment. The challenge lies in ensuring compliance supports business operations without hindering efficiency or customer experience.

11.8 Data-driven decision-making

Data-driven decision-making significantly increases the likelihood of success by providing actionable

3 <https://u.ae/en/about-the-uae/uae-in-the-future/the-principles-of-the-50>



insights. Innovation empowers banks to improve decision-making by transforming how data is collected and organised. For instance, risk dashboards can now integrate automated data compilation, powered by AI, to streamline processes. AI systems gather, format, and present data in a simplified manner, enabling quicker and more informed decisions. This enhances organisational efficiency and responsiveness, as decision-makers receive accurate data faster. However, the effectiveness of technologies like data analytics depends on the availability and quality of underlying data.

11.9 Competition

If banks fail to adopt innovative strategies to stand out, their survival will be at risk. In the UAE, the top five banks dominate 60% of market share, highlighting the importance of scale in this competitive landscape. To remain relevant, banks must prioritise and heavily invest in differentiation. This not only helps them stand out but also fosters the development of new business and operating models.

In addition to staying competitive, banks are focusing on two critical objectives: attracting new customer segments and expanding into new markets. These efforts are essential for ensuring long-term growth and sustainability in a rapidly evolving financial environment.

11.10 Dealing with Increasing Convergence

The banking and insurance industries in the UAE operate independently but share some overlaps. While they have not merged into a single sector, the CBUAE serves as the regulator for both. Given this unified regulatory framework, it makes practical sense to deliver these services through a single integrated platform.

11.11 Dealing with Changing Environments

People's openness to innovation has significantly evolved over time. Ten years ago, many concepts we now take for granted were considered radical or even unimaginable. For instance, a decade ago, the idea of storing data in the cloud was met with scepticism

and surprise; today, it is shocking if data is not stored in the cloud. Similarly, outsourcing has undergone a transformation. Fifteen years ago, it was primarily a cost-saving measure. Now, it serves multiple purposes, such as addressing skill shortages, gaining access to specialised expertise, and adopting best practices from global markets. As a result, outsourcing is no longer just about cutting costs but also about strategic value and growth.

11.12 Risk Management

Implementing AI-driven fraud detection systems is a prime example of how innovation can mitigate risks while improving operational efficiency. These systems leverage machine learning algorithms to analyse large volumes of data in real-time, identifying anomalies and potentially fraudulent activities far more quickly and accurately than traditional methods. By automating this process, organisations can significantly reduce the time and resources required for manual reviews, allowing teams to focus on more strategic tasks.

For instance, financial institutions use AI to monitor transactions for unusual patterns that may indicate credit card fraud. A system might flag a series of high-value purchases made in quick succession from different locations, prompting an immediate alert to the cardholder and temporary suspension of the account. This not only helps to prevent significant financial losses but also builds customer trust by demonstrating a proactive approach to security. Over time, the continuous learning capabilities of AI further enhance its effectiveness, ensuring that the system adapts to evolving fraud techniques.

11.13 Stakeholder Management

Banks increasingly focus on innovation to enhance their relationships with partners and shareholders. By leveraging cutting-edge technologies such as artificial intelligence, blockchain, and data analytics, banks are creating more efficient, secure, and personalised solutions. For partners, these innovations streamline operations, improve transparency, and foster collaborative ecosystems that drive mutual growth. For instance, open banking platforms enable seamless integration with fintech firms, offering customers enhanced services while fostering trust and collaboration between the bank and its partners.



11.14 Wealth Management

Banks serve as the guardians of humanity's financial assets, safeguarding money and wealth. Innovation in banking focuses on ensuring these institutions can sustainably protect and grow wealth, fostering stability and long-term prosperity.

11.15 FOMO

Banks innovate partly due to the “Fear of Missing Out” (FOMO), driven by rapid technological advancements and evolving customer expectations. As fintech disruptors introduce cutting-edge solutions like digital wallets, blockchain technology, and AI-driven financial services, banks face pressure to keep up or risk losing market share and relevance. FOMO pushes banks to adopt new technologies, streamline operations, and enhance customer experiences to remain competitive. This urgency compels them to invest in innovation labs, partner with tech companies, and embrace emerging trends like open banking, ensuring they stay at the forefront of financial services and meet the demands of a digitally savvy clientele.

11.16 Problem-solving

The most significant challenges causing frustration for users stem from the 10% of specific issues they encounter daily, for which they lack clear solutions from their banks. Additionally, obtaining responses

from banks is often a slow and time-consuming process. To address this, banks are leveraging innovative technologies to resolve these critical issues effectively. The focus has shifted from simply alleviating pain points to driving transformative, game-changing solutions.

11.17 Dealing with Environment, Social, and Governance (ESG)

Banks must leverage innovation to address ESG goals as tangible priorities. While cloud computing is widely adopted across financial institutions, it has been shown to significantly impact carbon emissions. As customer bases grow, so does the volume of data — and, consequently, the carbon footprint. This makes addressing sustainability challenges critical for banks.

To achieve this, banks should avoid beginning with specific technologies, such as cloud platforms or generative AI. Instead, the focus should start with identifying the underlying problem or opportunity and assessing the expected value that any innovation could deliver.

Prioritising these goals is essential, as they support the long-term sustainability and resilience of banks and financial institutions in an ever-evolving market landscape.





12. Showcasing Innovation: Key Projects, Success Factors, and Impact Measurement



The interviewees identified and expanded on several examples of innovation projects, either within their organisation or at the wider financial sector level.

Example 1: Sanctions Screening

The financial sector maintains zero tolerance for errors in sanctions screening, as regulators and international watchdogs have no risk appetite for non-compliance. This challenge is particularly pronounced in countries like the UAE, where variations in name spellings can complicate the process. For instance, the name “Mohamed” can be spelt in approximately 34 different ways, leading to a high number of false positives.

To address this, a tokenisation system was introduced. Regardless of spelling, all variations of “Mohamed” were consolidated into a single token. This innovation significantly reduced delays for customers, who previously had to wait for errors caused by misspelled names to be resolved.

By leveraging technology, the screening process became more efficient, improving compliance while potentially increasing revenue. A key performance indicator (KPI) of this initiative was the reduction in

false positives, which demonstrated its effectiveness.

Example 2: Developing a New Competitive Ecosystem

A bank is developing an innovative ecosystem that goes beyond the traditional marketplace model. Unlike other banks that offer limited marketplaces, this ecosystem will host a wide range of services catering to diverse customer needs. The bank conducted comprehensive research to understand customer requirements holistically, extending its focus beyond conventional banking services.

In 2024, the bank launched its minimum viable product (MVP), which will primarily cover the core banking functionalities. By June 2025, it will expand to include a suite of banking-related services and introduce a fintech onboarding portal. This portal will enable fintech and banking service providers from around the world to register, self-certify, and begin offering their services within the ecosystem. The onboarding process includes rigorous validation to ensure providers meet strict quality standards before their services become available. The complete ecosystem was operational by the end of 2025, as expected.



Success will be measured by the number of customers using the platform to open accounts and the adoption of additional services offered. In mid-2024, the bank managed approximately 2,000 accounts. By 2026, it aimed to increase this number to 13,500 accounts, representing a sixfold growth. Although the exact number of accounts it has is not public information, the bank did report it had opened more than 1,000 business accounts in the first six months of operation. The platform has been specifically designed to cater to a wider range of customers, making it more accessible and appealing. This approach is expected to boost sign-ups and streamline onboarding, helping the bank achieve its growth targets.

Example 3: Developing a Regulatory Sandbox – “The Reg Lab”

The project not only helped the organisation but also assisted the banking industry in being more innovative. In 2018, the organisation adopted a project to develop an infrastructure enabling fintechs to test their innovations in a controlled environment.

It also enables regulators to engage more closely with these fintechs and understand their business model, risks, and risk-mitigating actions. They can use the insights to develop new and enhanced regulatory frameworks.

From the fintech perspective, the Reg Lab can help them improve the ease of entering a regulated market and build something without an existing regulatory framework. It enables fintechs to introduce the project to the regulator so that the firm and the regulator can collaborate on understanding the risks and implementing risk treatment plans.

The following progress has been noted:

- New regulatory frameworks were issued because of The Reg Lab.
- The project drives for diversity, bringing in very different versions of operating models.

It could be for payment processing or decentralised finance. For each of these, the project comprehensively tests the product complexity so that a developed

regulatory framework is relevant, comprehensive, and able to provide the certainty that firms in that area can implement well.

This will facilitate firms’ business operations and enable regulators to ensure that market integrity remains intact. Additionally, it will protect the market against abuse and meet the expectations for regulated financial activities.

Success was measured in several ways, including:

- Very clear entry criteria were set in advance, so not just anyone could join. The developers wanted to know why an entity wanted to join Reg Lab and what it aimed to achieve.
- Did the firm graduate from the Reg Lab, and after graduating, did they get licensed? Are they continuing to operate?

The success measure is ultimately to determine if the Reg Lab has a positive impact.

Example 4: Gen AI Engine to Improve Internal/External Customer Service

Banks serve both internal and external customers. To enhance decision-making and service delivery, a Generative AI (Gen AI) engine has been developed. This tool supports relationship managers by enabling them to make well-informed decisions for their clients. The engine allows them to analyse macroeconomic trends, political scenarios, and client-specific historical investments. By identifying patterns and forecasting potential outcomes, it provides actionable insights. The Gen AI engine synthesises complex data into clear, practical advice, driving more efficient and informed interactions. The push towards digitising advisory services is a key driver behind the bank’s innovative approach.

For internal customers, navigating hundreds of HR policies — many outdated or irrelevant — can be challenging, especially for new employees. A one-stop digital platform addresses this by enabling staff to ask simple, intuitive questions and receive comprehensive, traceable answers. This solution enhances the employee experience and equips frontline staff with



digitised, reliable, and easily accessible information.

Robotic Process Automation (RPA) further improves the customer experience by significantly reducing the time required for customer-facing processes. For example, tasks like issuing a liability letter, which previously took up to a week, can now be completed within a day through intelligent automation — a combination of RPA and AI.

Success is measured through several key metrics, including:

- Time efficiency: A notable reduction in the time required to issue key documents.
- Hit rate improvement: Enhanced accuracy and relevance of advice provided through digital tools.
- Productivity gains: Relationship managers can dedicate more time to client interactions and value-added activities.
- Impact analysis: Evaluating the scale and effectiveness of digitised advisory services.

Traceability is another critical benefit, ensuring transparency and clarity in processes and outcomes. This allows the bank to monitor, assess, and continuously improve its innovative solutions.

Example 5: Launching a Fully Digital Bank

In the UAE, a leading bank launched a platform and digital bank, claimed to be the country's first fully digital bank. Since its inception, the digital bank has achieved

remarkable success, onboarding up to 20,000 new customers monthly, growing its customer base from fewer than 450,000 to over one million.

Before the introduction of its digital bank, the bank operated 50 to 70 physical branches across the UAE. Today, only about 10 branches remain, as the fully digital platform has rendered many physical locations unnecessary. Most customers now rely on the digital bank's mobile application to open accounts and manage banking activities.

This innovation paved the way for other banks in the UAE, inspiring them to develop their own digital banking solutions.

The banks' success can be seen in several key areas:

- Customer Growth: A significant increase in the number of customers.
- Financial Performance: A rise in deposit volumes and overall bank revenue.
- Customer Experience: Enhanced ease of use and satisfaction, thanks to streamlined processes.

One of the digital banks' groundbreaking advancements has been simplifying the account opening and identity verification process, a regulatory necessity.

Previously, opening an account involved several steps, including requiring a bank agent to physically visit the potential customer with a biometric device to collect a thumbprint. The thumbprint was verified through the UAE's ICP (Federal Authority for Identity, Citizenship, Customs & Ports Security), which





manages identification records. After verification, the account was activated.

The process was revolutionised with the integration of Electronic Facial Recognition (EFR), a five-second live video feed that authenticates the user by leveraging the UAE Ministry of Interior database. The new system reduced onboarding time to just a few minutes for up to 90% of new customers.

Example 6: Information Sharing and Analysis Center (ISAC)

In 2017, the UAE Banks Federation (UBF) launched TASHARUK, the UAE's — and the region's — first cybersecurity Information Sharing and Analysis Center (ISAC). TASHARUK serves as a hub for aggregating, correlating, and analysing threat data from multiple sources in real time to support proactive defensive measures. This initiative strengthens threat intelligence, highlights the value of collaboration, and offers ongoing training to its participants.

Through TASHARUK, banks are equipped with advanced tools and intelligence to effectively identify, detect, and respond to cyberattacks. Its success is reflected in user adoption: currently, more than 20 banks and over 100 users are actively registered on the cyber threat intelligence sharing platform.

Example 7: Electronic Know-Your-Customer (E-KYC)

E-KYC (Electronic Know Your Customer) streamlines the process of sharing customer data between financial institutions, eliminating the need for individuals to undergo repeated onboarding procedures. It acts as a secure, digital “file cabinet” that institutions can access with the customer's permission when needed.

This concept is closely linked to Federated Machine Learning (FML), a transformative technology in the fight against financial crime. FML operates at a global level, analysing behavioural patterns across institutions while maintaining customer privacy. Instead of focusing on individual customers, FML evaluates behaviours—connecting insights from, for instance, a customer's activities in Dubai, London, and São Paulo. The system consolidates these learnings to enhance global understanding, without identifying specific individuals.

FML is particularly effective in reducing false positives in suspicious activity reports, which are a significant burden for financial institutions. By leveraging machine learning and artificial intelligence, banks can eliminate many of the time-consuming tasks that human teams traditionally handle. FML can reduce false positives by up to 50%, enabling faster operations and more accurate detection of financial crimes.

A key measure of success for FML includes the reduction in false positives, improved operational speed, and its global reach. Data privacy laws typically prevent banks from sharing customer-specific insights, such as linking findings from a Dubai branch to a London branch. However, FML circumvents these restrictions by focusing solely on behaviours rather than customer identities, enabling institutions to share valuable insights without violating privacy regulations.

Example 8: Tabby Physical/Digital Card

One interviewee, while not directly involved with Tabby, referred to Tabby as an example of innovation in the financial services sector. Tabby has established itself as the leading Buy Now, Pay Later (BNPL) provider in the region by adapting and innovating upon an existing concept. While BNPL originated in markets like Australia, Europe, and North America, Tabby successfully introduced and localised the model for the Middle East. In 2022, Tabby took a significant step forward by launching its own debit card, expanding the reach of BNPL beyond online purchases.

Traditionally, BNPL services were limited to online shopping. However, Tabby's card revolutionised the concept by enabling BNPL for offline transactions, a critical move in a region where 75-80% of retail activity still occurs in physical stores. Recognising this untapped opportunity, Tabby partnered with Visa to create a physical and digital card that works seamlessly for both online and offline purchases. Users can simply tap the card at a point-of-sale terminal, and their payment is split into four manageable instalments.

Although Tabby was not the first globally to implement a BNPL card, it was the first to execute this concept successfully in the MENA region. This innovation quickly gained traction, and the card now contributes over 20% of Tabby's revenue, generating millions of dollars monthly.



Success in this initiative is measured through KPI's specific to card usage, including:

- Customer Acquisition Cost (CAC): A critical metric for evaluating efficiency in attracting new users.
- Adoption and Usage: The number of active cardholders and the frequency of their transactions.
- Transaction Volume: The total spend facilitated by the cards.
- Merchant Partnerships: The number of merchants and partners accepting the Tabby card.

Example 9: Liquidity Optimisation

This project focuses on managing the intraday liquidity of banks—the cash they require to meet their payment obligations throughout the day. The organisation behind the initiative has extensive experience optimising large-value payment systems to enhance their efficiency. More recently, it has expanded its efforts to collaborate with major global banks.

The concept is straightforward: the organisation's technology determines the optimal sequence for a bank's payments, minimising the amount of cash required. Banks typically operate within a complex web

of payment flows, where payments to one entity often trigger subsequent payments to others. Identifying the ideal sequence for these transactions is a challenging task. For example, even with just 30 payments, the number of possible combinations to evaluate is astronomical.

The organisation developed an advanced algorithm capable of rapidly identifying the optimal payment sequence. This innovation is now being implemented at banks, with some of the largest institutions projected to save as much as USD \$50 million annually. It addresses a challenge that many banks had not previously considered and delivers measurable financial benefits, making the solution a clear win for the industry.

Example 10: Fraud Alerts

The bank employs 400 staff members to handle transaction monitoring alerts. A project was implemented to optimise this process by hibernating or automatically closing low-risk alerts. The system assigns risk scores to alerts and closes those with the lowest risk. The primary objective of this initiative was to reduce operational costs and headcount. The project's success was evaluated based on the savings in full-time employee (FTE) resources.





Example 11: Blockchain-based Cross-border Payment System

The utilisation of a blockchain-based system was designed to enhance customer experience and improve operational efficiency by significantly reducing transaction times and cutting costs for cross-border payments. Leveraging blockchain technology, the bank successfully addressed long-standing issues of unsatisfactory customer service and operational bottlenecks. The project achieved remarkable results, reducing transaction times from days to just minutes.

The success of the initiative was evaluated based on the following criteria:

- Customer satisfaction scores.
- Alignment with the project's initial objectives.
- The potential to increase transaction volumes.

By saving time and optimising operational space, the bank positioned itself to handle higher transaction volumes more efficiently and cost-effectively. This approach became a key metric for measuring the project's overall success.

Example 12: Global Payment Innovation

In 2017, the organisation introduced a product called Global Payment Innovation (GPI), designed to enhance the cross-border payment experience for financial institutions and their customers. This innovation focused on three key pillars:

- **Payment Tracking:** Providing end-to-end visibility of transactions.
- **Transparency:** Clearly outlining fees for customers.
- **Speed:** Accelerating payment processing times.

The success of GPI relied on both advanced technology and a collaborative approach. While technology played a central role, the organisation emphasised the importance of cooperation among its members, as it could not achieve this transformation alone. Through this initiative, the organisation shifted from merely delivering payment messages to providing complete transaction services, enabling users to track the entire

payment process from start to finish.

Several factors motivated the development and adoption of GPI:

- **Evolving Customer Expectations:** Customers demanded faster, cheaper, and more transparent payment solutions.
- **Competitive Pressure:** Rival organisations pushed for advancements, accelerating innovation.
- **External Conditions:** Broader micro and macroeconomic trends influenced the need for enhanced payment systems.

Financial institutions have widely embraced GPI, recognising it as the future of cross-border payments. Its impact is measurable through various metrics:

- The organisation processes more than 20 million payments messages daily over its network, with the majority enabled by GPI.
- A significant majority of financial institutions in each participating country utilise the service.
- Nearly 50% of GPI payments are credited to end beneficiaries within 30 minutes, 40% in under 5 minutes, and almost 100% are credited within 24 hours.





13. Key Characteristics Driving Innovation Potential in the Institution



When asked about the key characteristics or factors driving innovation within financial institutions, interviewees highlighted the intersection of leadership, culture and strategy. By aligning these elements, organisations can create an environment where ideas flourish, collaboration drives progress, and technology unlocks new possibilities. Whether through structured initiatives like centres of excellence or fostering a mindset of lifelong learning and adaptability, the key is a sustained commitment to innovation as a core organisational value.

13.1 Leadership as a Catalyst for Innovation

Strong leadership and a clear vision are vital assets for driving innovation within organisations. Effective leaders recognise the importance of innovation and actively support it. While understanding the “what” and “why” of innovation is often straightforward, the “how” can be challenging due to various complexities. Senior management must genuinely embrace technology and innovation, setting an example for the organisation. Encouraging employees to explore solutions beyond traditional approaches fosters a culture of creativity.

One interviewee emphasised that the CEO should function as the Chief Innovation Officer, underscoring the importance of leadership commitment to fostering innovation. Without top-down support, even the most creative ideas struggle to take root. A lack of leadership sponsorship complicates innovation efforts significantly.

13.2 Creating an Environment for Innovation

Establishing an environment conducive to creativity and innovation is essential, especially in the financial sector. This requires balancing regulatory frameworks with flexibility to explore new ideas. The UAE exemplifies this by promoting a knowledge-based economy and fostering a culture where “nothing is impossible.” Collaborative efforts across organisational divisions encourage growth mindsets and help address challenges with innovative solutions.

However, culture—often seen as the most critical driver of innovation—is also the hardest to change. A multifaceted approach is necessary to shift organisational culture, including:



- **Reskilling and Retraining:** Equip existing employees with both technical and interpersonal skills to better channel their expertise.
- **Hiring Experienced Innovators:** Bring in industry veterans with a proven track record in innovation.
- **Recruiting Fresh Talent:** Attract recent graduates who bring new perspectives and enthusiasm.
- **Leveraging Consultants:** In some cases, engage external experts to provide targeted insights.

13.3 A Shift Towards a Unified Culture

One bank transitioned from having multiple subcultures to fostering a single, high-performance culture centred on customer service, collaboration, and transparent communication. Psychological safety and trust within teams were key to this transformation. The bank also prioritised strategic partnerships, recognising that “collaboration over competition” accelerates innovation by combining resources and expertise.

13.4 Strategic Vision and Technology Integration

A clear strategic vision supports decision-making and aligns organisational efforts toward innovation. Data-driven decision-making is paramount, and investing in technology plays a crucial role. AI and automation are now central to process redesign, moving beyond traditional streamlining methods to incorporate bots, algorithms, and AI-driven solutions. For example, one bank established an AI Academy to align staff with emerging technological possibilities.

Organisations are also increasingly partnering with experts in fields such as federated machine learning, cybersecurity, and blockchain, leveraging external expertise to drive innovation. Transparency and sincerity in these partnerships, particularly with startups and fintech firms, are crucial for success.

13.5 Innovation in Practice: Structure and Focus

To embed innovation in organisational DNA, many firms have established specialised roles or departments, such as Transformation and Innovation Offices. These structures ensure that innovation is not treated as a side task but as a core organisational objective. For example, some banks have created technology and innovation teams within every function and established centres of excellence, such as FinTech, Advanced Analytics, and digital hubs.

13.6 Balancing Innovation and Scalability

Innovation is not just about generating new ideas but also about scaling successful initiatives efficiently. One organisation realised that excessive experimentation was inflating R&D costs. By balancing innovation and scalability, they redirected focus toward sustainable growth strategies.

13.7 Empowering Employees and Encouraging Lifelong Learning

Employee empowerment is central to fostering a culture of innovation. This includes providing the time, freedom, and psychological safety to experiment and even fail—encouraging a “fail fast, learn faster” mentality. Incentives such as recognition and reward schemes further motivate employees to contribute ideas. Additionally, organisations must invest in lifelong learning opportunities, drawing inspiration from countries like Singapore, where continuous education uplifts both individuals and the economy.

13.8 Listening to Internal and External Stakeholders

To think “outside the box,” organisations must actively listen to both internal and external stakeholders. Internal teams often refine existing solutions, while external perspectives can introduce entirely new approaches. Striking this balance enables organisations to remain innovative and adaptable in dynamic markets.



14. Identifying Gaps in Capabilities for Unlocking Innovation Potential



Interviewees identified various characteristics and capabilities lacking in the financial sector that inhibit achieving the full potential of innovation.

One bank identified the absence of a dedicated innovation team as a significant obstacle. Innovation is often perceived as an abstract activity—akin to values or ethics—undertaken only when other priorities are addressed. Organisations struggling with innovation frequently fail to recognise the importance of assigning it the credibility and focus it deserves. Establishing a dedicated team with a deep understanding of innovation and the tools required to foster it is essential.

Many organisations also lack a well-defined innovation strategy. Innovation cannot thrive as a reaction to external or internal pressures. Instead, it must be a proactive, ongoing priority. Yet, few companies' approach innovation as a continuous and structured process.

Disparities within organisations exacerbate the challenge. Different departments often operate at varying stages of development, with diverse

strategies, structures, and planning approaches, making alignment difficult. As one interviewee noted, traditional financial institutions often focus on incremental improvements, such as optimising loans or reducing costs, rather than addressing consumer needs. Shifting the focus from products to consumers can drive growth and profitability, as a broader customer base typically yields better results than increasing sales to existing clients. This difference often separates market leaders from those merely surviving.

Collaboration, another critical driver of innovation, is frequently underutilised. Effective mechanisms for partnering with startups, academic institutions, and other external entities are lacking. Large organisations may overcome this challenge through resources and networks, but smaller firms often lack the means to capitalise on promising ideas. Without collaboration or funding, innovative concepts may either remain unrealised or be sold prematurely.

Incentives and accountability for innovation are often misaligned. Innovators need clear objectives, measurable outcomes, and rewards to drive results.



Innovation is a specialised discipline requiring knowledge, structure, and proper recognition, yet many organisations fail to provide these. A lack of accountability for unmet innovation goals further undermines progress.

Resource constraints also hinder innovation. Smaller organisations struggle with high costs, limited profits, and a lack of skilled talent. Competitive compensation packages from larger institutions make it challenging for smaller firms to attract top talent with expertise in cutting-edge technologies. Additionally, building a business case for innovation, securing funding, and overcoming legacy technology constraints remain persistent issues. Migrating from outdated systems is time-intensive and complex, while uncertainty about new technologies further slows progress.

Regulation adds another layer of complexity. Regulatory frameworks often lag behind technological advancements, creating misalignment between requirements and innovation goals. Regulators must adapt to the demands of a digital and technological future, bridging the gap between policy intentions and practical implementation.

The rapid adoption of AI technology presents both opportunities and challenges. While AI can drive modernisation, its high costs and fast-paced advancements place pressure on organisations. Concerns about job displacement highlight the importance of continuous learning to equip individuals with the skills necessary for an evolving workforce.

Cultural barriers within organisations also impede innovation. While some organisations demand relentless innovation, they often compromise employee well-being and sustainability. Resistance

to change is deeply ingrained, with employees perceiving new initiatives as threats. To foster a culture of innovation, organisations must balance ambition with psychological safety and sustainability.

Partnerships with external entities, such as academic institutions and research organisations, can fill internal capability gaps. However, collaboration is often underdeveloped. A lack of knowledge and prioritisation can result in vague innovation efforts that fail to materialise. Furthermore, testing innovations in controlled environments—particularly with real data—can be challenging due to security, compliance, and risk considerations.

Cybersecurity is another critical area needing improvement. The rapid advancement of quantum computing has exposed vulnerabilities in financial systems, both in MENA and globally. Developing quantum-resistant cybersecurity solutions requires more resources, expertise, and investment.

Resistance to change remains deeply embedded. Employees' fear of stepping outside their comfort zones often triggers defensive reactions, limiting progress. Organisational inefficiencies also persist, with siloed teams duplicating efforts instead of collaborating effectively. Insufficient risk appetite further constrains innovation, as many institutions prefer to follow rather than lead, waiting for competitors to validate new ideas.

Banks and financial institutions unwilling to embrace risk and agility are less likely to lead the market. Innovation demands boldness, collaboration, and a commitment to continuous learning—qualities that distinguish true leaders from those content to follow.





15. Characteristics of Successful Innovation in Banking



When asked to describe what a financial institution would look like that is innovative, interviewees had several characteristics in mind. By embedding these principles, a bank transforms into a forward-thinking, adaptive, and customer-centric institution, positioned to lead in an ever-changing financial landscape.

Innovation Begins at the Boardroom Level: One key indicator of successful innovation is the clarity and precision with which key performance indicators (KPIs) are identified during board and governance meetings. These metrics reflect what the bank measures, ensuring that leadership understands what is working and where improvements are needed.

Organisation-Wide Commitment to Innovation: Innovative banks embed a culture of innovation at every level, from the boardroom to shareholders, ensuring alignment across the organisation. They form strategic partnerships focusing on innovation, customer experience, and evolving customer needs.

Customer-Centric Approach: An innovative bank places the customer at the centre of its operations, offering highly personalised and tailored products. While technology and AI play a role, the human touch remains critical in addressing customer needs. Such banks also prioritise employee satisfaction and

proactively manage risk and fraud. Additionally, they leverage external ecosystems to fuel innovation.

Risk-Taking and Bold Leadership: Innovation requires boldness. Successful banks take calculated risks, act as thought leaders, and create novel products and services. They organise events, engage with their industry, and push boundaries to stand out.

Prioritising Solutions Based on Customer Needs: While regulations and technological advancements are important, innovative banks prioritise solution designs driven by customer requirements. They balance compliance and tech integration with efficiency, responsiveness, and a commitment to customer satisfaction.

Engaging Customer Interfaces: A hallmark of innovation is seamless and engaging customer interfaces, including websites, mobile apps, and online banking tools like AI chatbots. These tools simplify interactions and enhance customer experiences.

Redefining the Rules: Innovative banks disrupt traditional practices by creating unique offerings that bridge customer gaps. They leverage technology to boost satisfaction, ensuring customers no longer feel burdened by their financial issues.



Social and Ecosystem Integration: Leading banks actively interact with social dynamics and are deeply involved in collaborative ecosystems at local and global levels. They don't passively collect ideas but actively drive innovation by forming partnerships and joint ventures to develop cutting-edge solutions.

Technology Integration: True innovation lies in how well a bank integrates new technologies with its existing infrastructure. This involves:

- Collaborating within ecosystems to develop technologies.
- Seamlessly embedding these technologies into their operations.

Democratising Innovation: In innovative organisations, ideas flow freely. Decision-making is not dominated by the highest-paid individuals but is inclusive of employees at all levels. This democratisation fosters creativity and broad participation in innovation.

Data-Driven Decision-Making: Innovative banks excel in leveraging data to gain insights, reduce costs, and increase revenues. They use advanced analytics, AI, and quantum computing to identify trends before they materialise, giving them a competitive edge. Data-driven strategies are integral to continuous improvement and adapting to market dynamics.

Agility and Adaptability: The ability to embrace change quickly is critical. Innovative banks adopt new practices, technologies, and products swiftly to

remain competitive. Staying ahead requires constant evolution and readiness to disrupt their own models before competitors do.

Attracting and Nurturing Talent: Talent is at the core of innovation. Banks must attract, retain, and empower skilled individuals with a winning mindset. Employees thrive in an environment where they can grow, challenge norms, and contribute meaningfully. Opportunities for professional development are directly tied to organisational growth.

Encouraging Creativity and Experimentation: An innovative culture fosters out-of-the-box thinking and rewards employees who seek faster, cost-effective, and productive solutions. Experimentation, even in the face of failure, is encouraged as it builds resilience and fosters groundbreaking ideas.

Operationalising Innovation: A bank's structure must support innovation through processes and systems that operationalise creative ideas. This includes aligning internal operations to execute innovative solutions effectively.

Broadening Ecosystem Roles: Innovative banks evolve from traditional service providers to becoming integral players in diverse ecosystems. They build networks and partnerships that extend beyond direct customers, creating value for all stakeholders.

Learning from Failure: Innovation often involves risks, including financial losses. Successful banks view these as learning opportunities, using setbacks to refine their strategies and improve.





16. Innovation in the UAE Banking Sector: Convergence and Divergence Aspects



16.1 Defining Innovation and Creativity in the Financial Services and Banking Sector

Convergence: Interviewees broadly agree that creativity and innovation are closely related but not the same. Creativity is described as the generation of ideas, new ways of thinking, or novel concepts, which may be abstract or exploratory. Innovation, by contrast, is consistently defined as the implementation, execution, and embedding of those ideas into banking products, services, processes, technologies, or organisational practices that create tangible value. Innovation is therefore seen as structured, goal-oriented, and measurable, while creativity is an essential input rather than an end result.

Divergence: Some interviewees see a clear boundary between creativity (ideas) and innovation (execution), while others argue that the two overlap and that innovation cannot exist without creativity. There is also disagreement on whether innovation must involve something entirely new or whether significant improvements to existing banking activities should equally qualify as innovation.

16.2 Innovation as a Capacity to Take Advantage of Technological Advancement

Convergence: Many interviewees partially agree with the view that innovation in banking is closely linked to an organisation's ability to **leverage technological advancements**. Technology, such as AI, data analytics, automation, and digital platforms, is widely seen as a **powerful enabler** that allows banks to improve efficiency, enhance customer experience, and create new services. Several respondents noted that without the capability to absorb and apply new technologies, banks would struggle to remain competitive in a rapidly evolving environment.

Divergence: Despite this broad agreement, interviewees consistently caution against **equating innovation with technology alone**. A significant number argue that technology is **not innovation in itself**, but rather a **tool** that must be guided by clear business objectives, customer needs, and organisational readiness. Some respondents explicitly disagreed with a technology-centric view, emphasising that innovation also involves **process redesign, cultural change, leadership, and new ways of working**. Others warned that banks sometimes adopt new technologies simply because they are available, rather than because they solve a clearly defined problem.



16.3 The Main Drivers Pushing Banks to Be More Innovative

Convergence: Respondents agree that banks are pushed to innovate by a combination of technological change, evolving customer expectations, cost and efficiency pressures, and regulatory requirements. Competition from fintech firms and new market entrants further intensifies this pressure.

Divergence: Some interviewees view technology as the primary driver of innovation, while others argue that technology is merely an enabler, with cost control or customer demand being the real underlying forces. Regulation is also seen both as a stimulus and a constraint.

16.4 Banks' Response to These Drivers in Practice

Convergence: Interviewees describe banks dealing with multiple pressures at the same time, including adopting new technologies, managing budgets, and complying with regulatory mandates. Customer expectations for speed, convenience, and personalisation remain a constant influence on decision-making.

Divergence: Some respondents emphasise cost efficiency as the dominant practical concern, particularly in compliance-heavy areas. Others highlight a tendency toward technology-led initiatives, where solutions are pursued before the underlying business problem is fully articulated.

16.5 Expected Achievements Through Innovation

Convergence: Interviewees consistently identify three main outcomes of innovation: enhanced customer experience, improved operational efficiency, and the creation of new capabilities or revenue streams. Timely delivery is seen as critical for customers to perceive value.

Divergence: Banks differ in how they prioritise these outcomes. Some focus more on cost reduction and efficiency, while others emphasise growth and new revenue opportunities, although all agree that innovation outcomes must be measurable.

16.6 Organisation and Management of Innovation

Convergence: Innovation is widely described as a disciplined and structured process, involving problem identification, experimentation, evaluation, and scaling. Interviewees agree that innovation should be embedded within core business functions, supported by leadership, and aligned early with risk and compliance requirements.

Divergence: Views differ on the role of centralised innovation hubs. Some see them as effective spaces for experimentation, while others warn they may become disconnected from core business priorities if not tightly integrated.





16.7 Key Organisational Factors That Drive an Institution's Innovation Potential

Convergence: Interviewees consistently identify a set of internal organisational characteristics that enable innovation. These include **strong leadership commitment and clear vision**, the availability of **skilled talent** (particularly in digital, data, and specialised domains), and a **supportive organisational culture** that encourages experimentation and learning. Respondents also point to **structured processes**, such as dedicated teams, centres of excellence, and defined governance mechanisms, as important foundations that allow innovation initiatives to move forward rather than remain ad hoc.

Divergence: While there is broad agreement on the importance of these factors, interviewees differ in emphasis. Some place greatest weight on **leadership and strategic direction** as the primary drivers of innovation potential, whereas others argue that **talent availability and cultural openness** are more critical than formal structures. There is also variation in views on whether innovation potential is best supported through **centralised units** (e.g., innovation teams or centres of excellence) or through **capabilities distributed across the organisation**, embedded within core business functions.

16.8 Key Missing Characteristics Limiting Innovation Potential in the Banking Sector

Convergence: Interviewees broadly agree that many banks lack several critical enablers needed to fully realise their innovation potential. Commonly identified gaps include **insufficient innovation-ready cultures**, where risk aversion and fear of failure discourage experimentation; **limited availability of specialised talent**, particularly in advanced digital, data, and emerging technologies; and **weak internal alignment**, where innovation efforts are not well integrated with core business units. Several respondents also highlighted the absence of **clear prioritisation and decision-making mechanisms**, resulting in initiatives that stop making progress or fail to scale.

Divergence: While there is agreement on the existence of gaps, interviewees differ on **where the most significant shortfall lies**. Some argue that the primary gap is **cultural**, pointing to conservative mindsets and lack of empowerment. Others emphasise **structural and process-related gaps**, such as unclear ownership, fragmented governance, or insufficient funding for experimentation. A smaller group points to **leadership capability**, not in terms of lack of intent, but in terms of lack of experience in driving innovation at scale as the key missing element.





16.9 Main Barriers and Risks to Innovation

Convergence: Interviewees agree that the main barriers are organisational rather than conceptual, including legacy systems, slow decision-making, and misalignment between people, processes, and technology. Regulatory complexity often pushes innovation toward efficiency-driven solutions.

Divergence: Some respondents see regulation as the primary obstacle, while others argue that organisational culture, skills gaps, and resistance to change are more significant barriers.

16.10 Enablers of Successful Innovation in Banks

Convergence: Interviewees agree that successful innovation requires strong leadership sponsorship, clear priorities, appropriate skills and talent, and a culture that supports collaboration and experimentation. External partnerships are also viewed as important accelerators.

Divergence: There is disagreement over the extent to which banks should build capabilities internally versus rely on external partners, particularly for advanced digital and analytical capabilities.

16.11 What does an Innovative Financial Institution Look Like?

Convergence: Interviewees describe an innovative financial institution as one that is **clearly customer-focused, adaptive, and able to translate ideas into action**. Such organisations are seen as proactive rather than reactive: they continuously improve how services are delivered, make effective use of data and technology, and are willing to rethink existing processes and products. Respondents also emphasised that innovative institutions demonstrate **strong leadership intent**, visible commitment from senior management, and an organisational culture that encourages learning, experimentation, and collaboration across functions. Importantly, innovation is recognised not by isolated initiatives, but by **consistent behaviors and outcomes** across the organisation.

Divergence: While there is broad agreement on these characteristics, interviewees differ in emphasis. Some associate innovation primarily with **visible technological sophistication**, such as advanced digital platforms or AI-driven services. Others caution that technology alone is insufficient and argue that an innovative institution is better identified through its **mindset, culture, and decision-making practices**, even if the technologies used are not cutting-edge. There are also differing views related to risk aversion: some respondents associate innovation with **frequent experimentation and rapid change**, while others emphasise **disciplined innovation**, where risks are carefully managed and aligned with regulatory and strategic priorities.





17. A Workable Definition of Innovation in the UAE Banking Sector



Based on the interviewees' responses, the research team was able to propose a definition considering the most repetitive themes (highlighted in bold), integrating nuances from the same interviews when relevant. The proposed definition is the following:

Innovation in the UAE banking sector is a **disciplined and goal-oriented process** that **implements novel ideas into tangible products, services, processes, business models, and organisational practices**. Unlike creativity, which focuses on **idea generation**, innovation is concerned with execution and scale and is forward-looking with a clear strategic direction. It is assessed through measurable value, including **better and more timely customer experiences, greater operational efficiency and compliance effectiveness, and the creation of new capabilities or revenue streams**. **Technology**—such as AI, data, and real-time payment infrastructures—is treated as a **means rather than an end**. Innovation is most effective when it is **embedded across the organisation**, aligned with **risk and regulatory requirements**, and supported by **systematic testing, evaluation, and informed decisions** to expand successful initiatives and discontinue those that do not deliver value.

Innovation has been defined by academics and industry actors. One of the most popular academic definitions of innovation is that of Schumpeter (1934). According to him, innovation consists of carrying out new combinations consisting of the following five: new product, new method of production, new market, new source of supply, and new form of organisation. Schumpeter also introduced the idea of “creative destruction”, which means that when new innovations appear, they do not just add to what already exists. They often replace or destroy older ways of doing things. The similarity between the latter and the one proposed by the authors is that they both agree that innovation changes the real economy by introducing new offerings, methods, markets, inputs, or organisational forms. However, Schumpeter explains what counts as new, while the proposed definition explains how banks make it happen and how they judge success (customer impact, efficiency, and revenue). Consequently, the latter adds execution discipline, timeliness for customers, and regulatory feasibility, which are essential in banking.

For Drucker (1985) innovation is “... the specific instrument of entrepreneurship. It is the act that endows resources with a new capacity to create



wealth. Innovation, indeed, creates a resource. There is no such thing as a “resource” until man finds a use for something in nature and thus endows it with economic value.” Similarly, to the proposed definition, innovation is a purposeful managerial task that improves performance, rather than a random accident. While Drucker places the emphasis on entrepreneurial discovery and opportunity, the proposed definition places the emphasis on institutional execution inside large, regulated organisations. In this sense, the proposed definition clarifies roles, decision points, and evaluation criteria that banks can actually use.

Finally, Rogers (1962) defines innovation as “an idea, practice, or object that is perceived as new by an individual or other unit of adoption.” The proposed definition in this document aligns with the latter as they both involve novel ideas that are put into practice. However, Rogers focuses primarily on how innovations spread in a social system while the proposed definition emphasises the aspect of how a bank creates and implements an innovation inside the firm. Accordingly, the suggested definition by this research work contributes through adding elements related to internal delivery discipline and bank-specific constraints.

When we compare the proposed definition to more recent academic ones, for example to the one of Damanpour (1996) stating that “Innovation is conceived as a means of changing an organisation, either as a response to changes in the external environment or as a pre-emptive action to influence the environment” or the one of Birkinshaw et al. (2008) presenting innovation as “the invention and implementation of a management practice, process, structure, or technique that is new to the state of the art and is intended to further organisational goals”, we observe that they all regard innovation as organisational change linked to the external environment (customer expectations, competition, regulation) and accept reactive (response) and proactive (shaping) roles for innovation. Additionally, the three definitions emphasise the alignment on implementation and on innovation that furthers organisational goals.

They also recognise that innovation includes management and organisational practices, not just products and technology. However, there are a few divergences. While Damanpour is analytical and focuses on why organisations innovate, the proposed

definition is rather managerial as it emphasises how banks should innovate and how to assess results, in addition to the embeddedness of the regulatory perspective and bank-specific performance metrics. Additionally, Birkinshaw et al. focus on management innovation that is new to the field, but the suggested definition spans products, services, operations, business models, and organisation but is less explicit about requiring field-level novelty. As such, it is framed around impact and feasibility rather than novelty to the entire industry. However, it is important to mention that this paper’s authors included in the definition a practical route from need identification to tested, scaled solutions that move key banking metrics as well as a balanced view of novelty and feasibility for regulated banking, with clear criteria for scaling or stopping, in addition to customer-moment timeliness and compliance as performance constraints.

From a business perspective, it is interesting to compare the proposed definition in this paper to the definition of the OECD (2018): “An innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations.” This definition stresses implementation and recognises multiple domains of innovation (product, process, organisation) as the one proposed in this document. Obviously, the OECD’s definition is sector-neutral, while the proposed definition is banking-specific and includes compliance, risk considerations, and fast customer delivery as standard elements. Furthermore, the proposed definition brings governance and pacing into focus by emphasising clearly defined needs, focused testing, decision criteria, and scale-up.

ISO 56000 proposes a universal definition of innovation that considers it as the creation and realisation of a new or changed entity that adds value. Similarly, to the proposed definition, it makes value realisation central and links innovation to organisational change, not just ideas. What the proposed definition adds is that it makes the **measurement of value concrete and puts regulatory feasibility** at the core.

Despite the similarities of the suggested definition and what it adds to understanding innovation within the banking sector, it also presents several gaps when compared to the established definitions. Here are the most important ones:



- It places less emphasis on **radical, disruptive change**, the “creative destruction” Schumpeter highlighted, than on improvements that can be implemented and scaled safely.
- It could **reinforce the aspect related to opportunity discovery**, where new ideas come from, and how to search for them systematically, rather than focusing mainly on solving already-identified problems.
- It pays **less attention to external diffusion**, for example, how a new banking service spreads across markets, partners, and customer segments after launch.
- It could make the **environment-shaping** aspect more explicit (e.g., when a bank aims to **anticipate markets** with new pricing models).
- It could specify when the bank seeks **field-level novelty** (not just firm-level newness) and how it will measure that ambition.
- It is **less explicit** about the **marketing dimension** of innovation than the Oslo taxonomy that classifies the four main types of innovations, even though it implies business-model and customer-experience change.
- It may seem to give **less attention** to long-term strategic options that are valuable but harder to quantify immediately, as it is focusing on **what can be measured soon**.





18. Conclusion



This study provides a comprehensive understanding of how innovation is defined, driven, and operationalised within the UAE banking sector, based on expert insights. A central finding is that innovation is not viewed as an abstract or purely conceptual notion, but as a practical, execution-driven process focused on delivering measurable value.

Consistent with established perspectives in innovation research, the findings confirm that innovation goes beyond idea generation and is fundamentally about implementation and value creation. However, this study extends that understanding by showing that, in the banking sector, innovation must also operate within the constraints of regulation, risk management, and organisational complexity. As a result, innovation is shaped not only by opportunity, but also by feasibility.

From an industry perspective, innovation is driven by a combination of technological advancements, customer expectations, cost pressures, and regulatory requirements. While technology is a key enabler, it is not considered innovation in itself. Instead, successful institutions are those that apply technology with a clear business purpose, aligning it with customer needs and operational goals. This reinforces the view that innovation should be problem-driven rather than technology-driven.

The findings also highlight that innovation in UAE banking is expected to deliver value across three main dimensions: enhanced customer experience, improved efficiency, and the development of new capabilities or revenue streams. This reflects a balance between maintaining competitiveness in existing operations and exploring new growth opportunities. In contrast to some theoretical perspectives that emphasise disruptive change, the results suggest that innovation in this sector is often incremental, controlled, and closely aligned with risk considerations.

A key contribution of this study is the identification of innovation as a structured organisational process. Innovation is not ad hoc; it involves clearly defining problems, testing solutions, evaluating outcomes, and scaling successful initiatives. This aligns with process-oriented views of innovation, while also emphasising the importance of embedding innovation within core business functions, rather than isolating it in dedicated units.

Importantly, the study finds that the main barriers to innovation are internal rather than external. While regulation plays a dual role as both a driver and constraint, the most significant challenges relate to organisational culture, legacy systems, lack of alignment, and limited scaling capabilities. This



supports the broader insight that innovation failure is often due to execution challenges rather than lack of ideas.

At the same time, several critical enablers were identified, including leadership commitment, availability of skilled talent, supportive organisational culture, and engagement with external ecosystems. These factors collectively determine whether institutions can move from innovation intent to tangible outcomes.

Overall, this research shows that innovation in the

UAE banking sector is best understood as a context-dependent, execution-focused capability. It is shaped by the interaction between internal organisational factors and external pressures, and its success depends on an institution's ability to align strategy, people, processes, and technology.

By integrating both academic and industry perspectives, this study demonstrates that innovation is not only a conceptual construct, but also a manageable and operational discipline, particularly in complex and regulated environments such as banking.

19. Practical Recommendations



The findings of this paper suggest that innovation in the UAE banking and financial services sector should be treated as a strategic capability rather than a series of isolated technology projects. To sustain progress, institutions should focus on building the governance, skills, partnerships, and operating models required to convert ideas into measurable outcomes.



19.1 Embed Innovation into Core Strategy

Banks and financial institutions should ensure that innovation is directly linked to business strategy, customer needs, regulatory expectations, and long-term competitiveness. Innovation should not sit only within a separate team or lab; it should be embedded across business units, operations, compliance, technology, risk, and customer-facing functions. This requires clear ownership, senior leadership sponsorship, and measurable objectives.

Practical actions include:

- Define priority innovation themes, such as customer experience, operational efficiency, fraud detection, financial inclusion, sustainable finance, and digital payments.
- Link innovation initiatives to clear business outcomes, such as reduced processing time, improved customer satisfaction, lower compliance costs, or increased product adoption.
- Establish senior-level governance to prioritise, fund, and monitor innovation projects.
- Avoid pursuing technology for its own sake; start with the problem, customer need, or market opportunity.

19.2 Build a Culture that Supports Experimentation

Innovation depends on culture as much as technology. Financial institutions should create environments where employees are encouraged to identify problems, propose improvements, test ideas, and learn from controlled failure. This is particularly important in banks, where risk aversion and compliance requirements can discourage experimentation.

Practical actions include:

- Encourage cross-functional teams that bring together business, compliance, risk, technology, legal, and customer-facing staff.
- Create safe channels for employees to propose process improvements and new ideas.
- Use pilots, prototypes, and minimum viable

products to test ideas before full-scale implementation.

- Recognise both major innovations and smaller “mini-innovations” that improve customer experience, reduce cost, or strengthen controls.

19.3 Strengthen Skills and Talent Development

The sector’s ability to innovate will depend heavily on whether institutions can build the right skills. Technical capabilities are important, but so are problem-solving, customer insight, regulatory awareness, data literacy, change management, and ethical judgement.

Practical actions include:

- Invest in upskilling employees in areas such as artificial intelligence, data analytics, cybersecurity, digital assets, sustainable finance, and open finance.
- Develop innovation training for non-technical staff so that innovation is not limited to technology teams.
- Build stronger links with universities, training providers, and industry bodies to address emerging skills gaps.
- Support leadership development focused on innovation governance, digital transformation, and responsible risk-taking.

19.4 Engage Regulators Early and Constructively

The regulatory environment is a defining feature of financial innovation. Institutions should treat regulatory engagement as part of the innovation process, not as a final approval step. Early dialogue can help clarify risks, reduce uncertainty, and support the design of compliant and scalable solutions.

Practical actions include:

- Involve compliance, legal, and risk teams at the start of innovation projects.
- Engage regulators early when testing products involving open finance, digital assets, artificial intelligence, data sharing, or new payment models.



- Use regulatory sandboxes and controlled testing environments where appropriate.
- Build internal processes to assess consumer protection, financial crime, data privacy, cybersecurity, and operational resilience risks before launch.

19.5 Focus on Measurable Impact

Innovation should be assessed by outcomes rather than activity. Launching a new platform, tool, or product is not sufficient unless it creates measurable value for customers, institutions, regulators, or the wider economy.

Practical actions include:

- Define success measures before launching innovation projects.
- Track indicators such as customer adoption, processing time, cost reduction, fraud reduction, false positive reduction, customer satisfaction, revenue impact, and operational resilience.
- Review whether pilots should be scaled, redesigned, or stopped based on evidence.
- Share lessons learned across the organisation to avoid duplication and accelerate learning.

19.6 Deepen Ecosystem Collaboration

Innovation in financial services increasingly depends on collaboration across banks, fintechs, regulators, technology providers, academia, and industry associations. No single institution can address the full range of technological, regulatory, customer, and skills challenges alone.

Practical actions include:

- Build structured partnerships with fintechs, technology providers, universities, and research centres.
- Use industry platforms to share knowledge on

cybersecurity, fraud, compliance, and emerging technologies.

- Support responsible experimentation through shared initiatives, sandboxes, and proof-of-concept projects.
- Encourage collaboration between banks and academic institutions to generate applied research and practical training programmes.

19.7 Prioritise Responsible and Inclusive Innovation

Innovation should support trust, inclusion, transparency, and long-term sustainability. As banks adopt artificial intelligence, digital assets, open finance, and advanced analytics, they must ensure that innovation does not create new risks for customers or widen existing gaps in access to finance.

Practical actions include:

- Assess the ethical and social impact of new technologies, especially artificial intelligence and automated decision-making.
- Ensure digital products are accessible, understandable, and secure for different customer groups.
- Strengthen safeguards around data privacy, cybersecurity, and customer consent.
- Align innovation with financial inclusion, sustainable finance, and broader UAE economic development priorities.

19.8 Convert Research into a Sector Action Agenda

The insights from this paper can be used as the basis for a practical sector-level action agenda. This would help move the discussion from identifying innovation drivers and barriers to coordinated implementation.



Practical actions include:

- Develop a UAE financial innovation skills roadmap.
- Convene banks, regulators, fintechs, and training providers to identify priority capability gaps.
- Produce practical toolkits on innovation governance, responsible AI, open finance readiness, and regulatory engagement.
- Track sector progress through periodic research, industry surveys, and case studies of successful implementation.



CLOSING RECOMMENDATION

The UAE financial sector has many of the conditions required for successful innovation: strong regulatory ambition, advanced digital infrastructure, active financial institutions, a growing fintech ecosystem, and national commitment to economic transformation. The next stage should focus on execution. Banks and financial institutions should move from innovation as a concept to innovation as a disciplined capability — one that is strategically governed, properly resourced, responsibly managed, and measured by its practical impact on customers, institutions, and the wider economy.



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