ABU DHABI GLOBAL MARKET ACADEMY RESEARCH CENTRE

2024

ADGM Academy Research Centre

DIGITAL TRANSFORMATION OF BANKING AND FINANCIAL INSTITUTIONS IN THE UAE:

UNDERSTANDING THE COMMON CHALLENGES FOR COLLECTIVE ACTION

EXECUTIVE SUMMARY

AUTHORED BY

DR. THOURAYA GHERISSI LABBEN MR. JOHAN BURGER DR. GURDAL ERTEK DR. TARIQ ELRAZAZ

جامعة الإمارات العربية المتحدة United Arab Emirates University

FOREWORD

The ADGM Academy Research Centre, in collaboration with the College of Business and Economics at the United Arab Emirates University (UAEU), undertook a research project aimed at understanding the current landscape of the digital transformation of banking and financial institutions in the UAE and the common challenges faced.

The research was supported by senior representatives from across the UAE's financial sector, who shared their insights via interviews conducted by the research team.

Digital transformation has become increasingly important in all spheres of life, including the financial sector of the UAE. The government of the UAE has embraced digital technology as an essential enabler, adopting various strategies to empower both the government and business sectors. However, it is also apparent that multiple challenges mitigate against the adoption of digital technology. The outcomes of this research will enhance future collaboration between government entities, banking and financial institutions, and the academic world to find solutions through research projects and the sharing of best practices and experiences.

The findings in the paper do not reflect the views of the research team but are the consolidated views of the industry representatives who participated in the study

Acknowledgements:

The research team, consisting of **Dr. Thouraya Gherissi Labben, Mr. Johan Burger, Dr. Gurdal Ertek, and Dr. Tariq Elrazaz,** would like to thank the following UAEU members for their contribution in designing the interview questions:

COLLEGE OF INFORMATION TECHNOLOGY:

- Prof. Abderrahmane Lakas
- Dr. Ali Ismail Awad

COLLEGE OF BUSINESS AND ECONOMICS

- Dr. Ahmed Elsayed
- Dr. Muhammad Naeem
- Dr. Nader Atawnah
- Dr. Zakaria Boulanouar

While the interviews with financial industry representatives were conducted on the principle of anonymity, some interviewees provided permission to acknowledge their contribution:

- Mr. Jamal Saleh, Director General, UAE Banks Federation (UBF)
- Mr. Sean Langton, Chief Information Officer, Abu Dhabi Commercial Bank
- Mr. Devid Jegerson, Chief Operating Officer, Invest Bank
- Dr. Ashraf Elwan, Chief Operating Officer, Gulf Regional Office, Banque Misr-UAE
- Mr. Alaa El-Shafei, Chief Risk Officer, Gulf Regional Office, Banque Misr-UAE
- Mr. Sido Bestani, Managing Director, Swift, Middle East, Africa, South & Central Asia
- Mr. Dmitry Fedotov, Head of DLT Foundations Oversight, ADGM

INTRODUCTION

The banking industry is vital to the UAE's economic growth - around **8.2%** of the GDP in 2022 and **13%** of the non-oil sector domestic product. The UAE is the most important financial hub for the Middle East and one of the world's leading financial centers. The country's Central Bank (CBUAE), in 2023, launched a program to accelerate digital transformation in the financial sector, encouraging initiatives ranging from open finance to the launch of a new digital currency.

Enhancing the position of the UAE as a hub and benchmark of digital banking and financing necessitates adopting comprehensive and sustainable digital transformation strategies. Digital transformation embeds a high level of complexity and uncertainty, engaging the entire organization in a complete change management journey to create a distinct competitive advantage appealing to a growing number of digitally savvy consumers.

The research team interviewed leaders from UBF, banks and financial institutions in the UAE to obtain their views on the impact of 1) digital transformation in general, 2) artificial intelligence (AI), 3) blockchain, 4) fintech, 5) cyber security, and 6) technology integration.

DIGITAL TRANSFORMATION OF FINANCIAL INSTITUTIONS IN THE UAE





a. Benefits of Digital Transformation

Digital transformation plays a significant role in achieving the vision set out by the CBUAE, which is about "enhancing monetary management, financial stability, and protecting consumers by adopting digital technologies."

Digital transformation has many benefits for all stakeholders. This includes faster and more efficient processes such as onboarding new customers, enhancing the ease of customer interaction and experience with the bank, developing new products and services, better data analytics and management, personalizing value propositions, enhancing innovation in general, providing services on a 24/7 basis from anywhere to anywhere, and enhancing risk management by improving dealing with fraud, corruption, privacy challenges, and natural disasters.

It also enhances transparency by maintaining a complete record of transactions, audit trail, etc., allowing regulators to monitor and regulate them effectively.

UAE banks can develop better strategies to compete with global players and become more efficient with new business models and innovative products and services helping them to attract new and retain existing customers.



b. Driving Digital Transformation in the UAE

Digital transformation is an ongoing process in the UAE, and most banks, if not all, are already on a digital transformation journey. It is important to set goals and identify the areas that need to be transformed, with a clear digital transformation strategy, milestones, and an internal agreement on the road ahead. New operating models with clear decisions on the channels are also needed. A digital mindset and digital literacy are important to address business challenges, as is a future orientation to share knowledge. The process is resource-heavy, making having the requisite physical and people infrastructure, budgets, and resources important.

Embedding digital technology as a constant key agenda item will ensure awareness. It is essential to articulate the value the digital transformation process will unlock for all stakeholders to ensure customers who prefer the old model are not alienated.

Regarding data management, taking a long-term view of the data on the various stakeholders, processes, and products is crucial. Data must be secure, compliant with regulations, and accessible for analysis.

Banks need to decide whether to buy or build computer / fintech systems, and ensure they acquire technology that best serves their customers and enables digital transformation. Regardless of their choice, it is critical that systems and their data are backed up regularly. Processes should be standardized wherever possible to better manage the convergence of various technologies. This should also help to address the challenges of legacy systems.

Address security challenges with adopted security programs meeting business needs.

Manage customers carefully and reinvent the roles and responsibilities of employees with a blend of human effort and technology. Rethink the skills, tools, available data, and the nature of human roles and equip employees with the different skill sets required in the new world of digital technology.



c. Identifying and Managing Challenges Facing Digital Transformation

Many challenges face the phenomenon of digital transformation. Migrating from legacy systems takes time and effort and impedes the process, as do uncertainties about the abilities of new systems. It is also difficult to let go of the old and adopt the new, as is changing the mindsets of people when the status quo works and there are fears that the transformation will lead to job losses. Other challenges include an absence of people with the right skills, a lack of knowledge among customers, and high costs associated with the process. Banks also tend to forget the support functions (e.g. HR, Finance, etc.) and focus primarily on operations. Risk management must increase to safeguard the data when evolving to a more digital environment.

Dealing with the challenges requires senior bank management to understand digital leadership, develop and embrace a transformation vision, and convey it to stakeholders. Agile systems and mindsets are necessary, as is the need to keep customers' trust in the digital processes of organizations. A comprehensive digital transformation strategy is required, while clear communication and training programs must address the resistance to change and ensure a smooth transition.



ARTIFICIAL INTELLIGENCE (AI): THE COST-BENEFIT DILEMMA



a. The Benefits of Al

Al offers many benefits to financial services institutions and banking clients in general. It facilitates the ease of onboarding customers and improves analyses of customer interactions and data, leading to better customer understanding and support. While it reduces the scale of repetitive work, it enables banks to work 24/7 and automate product advisory and other recurring services. Productivity and cost-effectiveness are increased, as is the dependency on physical resources.

Al can detect anomalies through data management and deal with them. It also addresses fraud by lowering false positives and human error, providing better protection and support. Al enables banks to run analytics over all their digital interactions, reduce error rates, identify trends and threats, and deal with them.



b. Driving Al

Several steps must be taken to drive AI within the financial services sector. A clear strategy to deploy AI and a move from analogue to digital business models is required. It is necessary to identify the core business areas requiring automation, with automated workflows and improved operational efficiency as the first step toward using AI to benefit the financial and banking system. Banks must onboard skilled resources, define the business needs, and adopt best practices. Employees and customers must be introduced to the new technology and the benefits thereof, and care must be taken to ensure the level of education is appropriate.

To ensure transparency and compliance, the requisite governance, ethics, and risk policies and controls must be implemented. It is important to deal appropriately with legacy systems. Internal processes must ensure quality data, with data structured and personalized for product development and customer services.



c. Identifying and Managing Challenges to Adopting AI

Various challenges face the adoption of AI. The speed of growth in adopting AI technology and the pace of modernization force stakeholders to play catch-up and allocate resources to keep pace with developments. AI adoption can be expensive, and technology can become redundant quickly, placing pressure on planning and operating cycles/models. It also takes a long time to implement an AI project and achieve dependable results to justify the expenses. Customers could hesitate to adopt the technology, while human error must be managed.

Many institutions still rely on legacy systems incompatible with AI, making integration a significant challenge. Leadership buy-in is not necessarily a given. A general lack of expertise and capabilities and hiring staff with suitable skills is challenging and expensive.

Managing the challenges requires financial and banking institutions to invest in training and hiring skilled professionals to overcome these challenges. Banks must redesign their operational processes to make them safe and effective and stop unwanted side effects. Finding the correct models and algorithms to implement within the banks and the availability of good-quality data is imperative.

Stakeholder collaboration is required to improve understanding of the nature of the challenges and potential solutions. Generating quick wins is essential to keep the transformation project rolling.



d. Emerging Trends and Future Directions in AI

Generative AI is at the forefront of the new wave of AI innovation, addressing key concerns such as protecting personal information, accuracy of responses, customizability, and legal compliance issues. Integrating generative AI into banking platforms is necessary to stay relevant and competitive in the rapidly evolving sector. AI models enhance customer experiences and decision-making processes and democratize financial services by offering users unbiased and well-informed financial advice.

» Mitigating Risks and Leveraging AI's Potential

The advent of AI has inadvertently empowered fraudsters, enabling the creation of sophisticated 'deep fakes' and other forms of digital deception. Financial institutions, therefore, not only have to harness the potential of AI to improve customer service and operational efficiency but also to safeguard the ecosystem against these enhanced risks.

» The Road Ahead: AI-Driven Transformation in Banking

Integrating AI in the banking sector will redefine the landscape of financial services. Financial institutions increasingly focus on deploying private large language models (LLM) like Kai-GPT in employee-facing scenarios to drive productivity and efficiency. With generative AI, the future of banking is poised to be more inclusive. AI-powered systems foster a more financially literate and empowered customer base. Dealing with the challenges and risks on the journey requires collective action and a global commitment to embrace AI responsibly.



BLOCKCHAIN: ADOPTING THE UNKNOWN



a. Benefits and Impact of Streamlining Operations

Blockchain technology facilitates the recording and verifying of transactions and their authentication, increasing the confidentiality of and trust in reported transactions and facilitating the tracking of assets. It streamlines the provisioning process faster, more efficiently, and more securely. It reduces operational costs, increases the efficiency of a sharing service, improves decision-making, and ensures a common understanding of the transactions. Blockchain also facilitates information storage and ensures that quality and authentic data are exchanged with a clear audit trail, in addition to reducing fraud opportunities and risks associated with moving funds.



b. How Ready is the UAE to Adopt Blockchain?

The UAE government adopted blockchain very early and drove the overall adoption of the technology in the country. The CBUAE supports this initiative, although the technology is only utilized across some functions in the financial services sector. The CBUAE has reportedly explored the use of blockchain to improve financial transactions, reduce fraud, and enhance efficiency in the banking sector. The CBUAE, the Securities and Commodities Authority (SCA), the Dubai Financial Services Authority (DFSA), and the Financial Services Regulatory Authority (FSRA) of Abu Dhabi Global Market (ADGM) jointly issued guidelines to help financial institutions to adopt enabling technologies safely. The Dubai International Financial Center (DIFC) recently established a blockchain consortium that includes 14 leading banks and financial institutions in the region to explore and develop blockchain-based solutions for financial services, showcasing the UAE's commitment to innovation in the sector. In November 2023, ADGM released the Distributed Ledger Technology (DLT) Foundations Regulations 2023 "to provide a comprehensive framework for DLT Foundations and Decentralized Autonomous Organizations (DAOs), enabling them to operate and issue tokens recognizing the unique needs of the Blockchain industry."

Although some banks use blockchain in functions such as KYC, smart contracts, and keeping track of the ownership of assets, most banks have not adopted blockchain due to the technology's challenges and the absence of a standard protocol among different financial institutions on how to use it. Some see blockchain as a solution looking for a problem to solve.



c. Central Bank Digital Currencies (CBDCs)

A significant development resulting from blockchain technologies are digital currencies, and most prominently CBDCs. These are digital or electronic forms of national currencies issued and regulated by a country's central bank. They represent a sovereign currency in a digital form and are similar to traditional fiat currencies. CBDCs are centralized and regulated, providing the advantages of digital currencies without relinquishing state control over the monetary system.

CBDCs offer a secure, efficient, and inclusive payment system that enhances monetary policy effectiveness and financial stability. Central banks worldwide are exploring their potential to facilitate retail and wholesale transactions, with several pilot projects and research initiatives underway.

» Potential Impact on the Banking and Financial Sector

CBDCs have the potential to impact the banking and financial sector in various ways significantly:

- Increased Efficiency and Reduced Costs: Using blockchain technology or other digital ledger technologies, CBDCs enable real-time, peer-to-peer transactions, eliminating intermediaries and reducing inefficiencies.
- Enhanced Financial Inclusion: CBDCs can reach underserved or unbanked populations and extend financial services to those currently excluded from the traditional banking system.
- Improved Monetary Policy Transmission: CBDCs enable central banks to more directly implement monetary policy, more effectively manage economic variables such as inflation and interest rates, and enhance the precision and responsiveness of monetary policy interventions.
- Strengthened Financial Stability: CBDCs can contribute to financial system stability by offering a risk-free, digital alternative to bank deposits, reducing the likelihood of bank runs and increasing trust in the financial system.
- » Challenges and Considerations in CBDC Implementation

CBDCs also present challenges and considerations:

- Technological Infrastructure: Deploying the technological infrastructure for CBDCs requires robust, secure, and scalable systems while ensuring user privacy and security.
- Regulatory and Legal Frameworks: Implementing CBDCs requires comprehensive regulatory and legal frameworks to address issues such as digital identity, cybersecurity, and cross-border transactions.
- Financial System Integration: Integrating CBDCs into the existing financial ecosystem requires significant coordination among stakeholders to ensure interoperability and compatibility with current financial infrastructures.
- Public Trust and Acceptance: Public trust and acceptance are essential for successfully adopting CBDCs. To encourage their use, transparent communication, education initiatives, and user-friendly interfaces are involved.

• The successful implementation of CBDCs requires a collaborative approach involving policymakers, financial institutions, technology providers, and end-users to harness their full potential and navigate the complexities and challenges they present.

The successful implementation of CBDCs requires a collaborative approach involving policymakers, financial institutions, technology providers, and end-users to harness their full potential and navigate the complexities and challenges they present.



d. Programmable Payments

» Emergence and Impact

Programmable payments automate financial processes, thereby enhancing operational efficiency and minimizing human error. They empower financial institutions to craft innovative products and services, offering tailored solutions like dynamic pricing models and automated royalty distributions.

» Challenges and Path Forward

Adoption challenges include ensuring interoperability between diverse blockchain platforms and traditional financial systems, navigating the evolving regulatory landscape, and addressing security and privacy concerns inherent in handling sensitive financial data.

They are setting the stage for the transformation of financial services and will become integral to the digital financial ecosystem, offering unmatched efficiency and customization in financial transactions.



e. Identifying and Managing the Challenges Facing the Adoption of Blockchain

Blockchain technology has its challenges, such as the high costs and long time to transform the existing system, phasing out legacy systems, while a standard operating protocol is also lacking. A culture of resistance to change increases adoption time, as do fears that newer technology could make blockchain irrelevant while a skills gap increases the challenge of the complexity of blockchain. Different regulatory and legal regimes in other countries make cross-border transactions difficult. Risk management is still a potential challenge despite the stated benefits of blockchain to inhibit fraud and corruption.

As for managing the challenges, a digital mindset is required to identify needs and propose innovative solutions. Getting the required skills set on board is essential, and regulatory frameworks must provide clarity and certainty. Security concerns must be addressed. Cooperation between financial institutions and technology providers will support the management of the challenges.



FINTECH: AN OPPORTUNITY OR A THREAT?



a. The Response of Banks to the Rise of Fintech Organizations

UAE banks have contrasting opinions on the role of fintech organizations. Some see fintech organizations as merely a disturbance and sometimes as threats. Some believe that as fintech organizations tap into bank markets, banks must tap into the market of fintech organizations, i.e., typically the unbanked at the bottom-of-the-pyramid. Some consider fintech organizations as an opportunity to collaborate, investing in them as a source of innovation and R&D to improve their business models.

Some believed inaccurately that fintech organizations were not competing with traditional banks and could not survive independently (e.g. they must collaborate with banks). Others believe that Big Tech will collaborate and partner with fintech organizations, using them as a basis to attack banks. This further drives some banks to invest heavily in working with fintech organizations.

UAE banks are taking the lead in the Middle East and Africa (MEA) in digitization and fintech adoption, with the CBUAE launching the FinTech Office in 2020 to develop a mature fintech ecosystem and position the UAE as the foremost fintech hub regionally and globally.

Fintech organizations provide opportunities to banks such as enhanced customer experience with user-friendly interfaces and customer-centric approaches, cost savings, new technologies and services, new revenue streams, and access to new customers. Banks should create trust with the fintech organizations' market and the fintech organizations themselves by offering small and startup fintech organizations the opportunity to access their banking products.

Fintech organizations also present several threats, e.g., disrupting traditional banking models that can disintermediate and compete with banks for market share by offering cheaper products and services. Fintech organizations are forcing banks to move from traditional banking to digital banking platforms to meet increasing customer demand and improve operational costs.

In conclusion, fintech organizations can be both an opportunity and a threat to the banking sector. Fintech organizations can help banks achieve simplicity, integration, and embeddedness in consumers' daily lives in a seamless, frictionless, and ultimately successful way.



b. Managing Challenges Hindering Banks from Developing Fintech

Banks interested in developing their fintech divisions or collaborating with fintech organizations face several challenges. Banks do not always understand the fundamental nature of fintech and cannot create the technology like fintech organizations can. Banks also need the operating model to implement their business model should they embrace fintech. Trust is also an issue, as are concerns about a potentially higher probability of defaults because fintech organizations typically attract customers with a lower credit quality/rating. Legacy systems, a lack of digital literacy and digital leadership, and a failure to consider increasing customer demands and new business models constrain banks from developing fintech services in the UAE financial and banking system.

To overcome these challenges, banks must continuously explore new business models, meet customers' increasing demands, and improve operational efficiency. They could also partner with or acquire a fintech organization and deploy new technologies to meet changing consumer expectations. Banks can use automation to improve customer experience, reduce time to market, increase productivity, improve security, decrease human errors, mitigate the risk of manual intervention, and improve regulatory compliance.



c. How Will Fintech Affect Consumers?

Banks are optimistic about how fintech would affect consumers. Fintech organizations provide personalized advice to customers as they can better understand customers, prevent mis-selling, and improve fraud management. They provide cheaper and better options, operational excellence, increased efficiency, enhanced customer experience, improved access to products and services (24/7), and greater comfort in interacting with financial institutions.



CYBER SECURITY: AWARENESS OF CUSTOMERS IS KEY

Digital technology has also opened the door for criminals aiming to benefit from illegally accessing banking clients' bank databases and financial accounts.



a. Primary Cyber Security Threats

The threat of cyber security is continuously evolving and includes loss of data and data theft, Distributed Denial of Service Attacks (DDoS), ransomware hacking, deep fakes, trojans, malware, and adware, phishing attempts, threats against banking infrastructure, and man-in-the-middle attacks. Cyber criminals target all the financial services and banking sector segments, with smaller banks who do not have adequate investment in cyber security systems being particularly at risk.



b. Main Defense Strategies

Defense strategies include ongoing threat and vulnerability assessments and longterm contingency plans to deal with threats, with in-depth defense mechanisms and monitoring systems. Partnerships with external experts and using dedicated teams to deal with cyber security support defense efforts, as does proactive monitoring and control. It is crucial to use the latest standardized protection security measures, such as real-time monitoring of internal and external traffic, continuously upgrading security measures, using biometric systems that are run with the MOI (UAE's Ministry of Interior) database, etc. Customers and staff must be educated about cyber security.

Challenges to improving cyber security include insufficient awareness among victims of cybercrime, insufficient education and digital literacy among customers and employees, gullible stakeholders, lack of resources among smaller banks, and a lack of skilled people. The continuously evolving cyber security environment creates a constant need for adapting countermeasures.



TECHNOLOGY INTEGRATION: LEGACY SYSTEMS ARE THE MAIN CHALLENGE

There are several challenges to the integration of new technological systems, with legacy systems being the most significant. Although legacy systems reduce interfacing speed, many banks must maintain and upgrade legacy systems due to a lack of resources as they cannot upgrade all systems simultaneously. Implementing new systems takes time, is expensive, and brings new security risks. A lack of skills is problematic, while complacency and resistance to change aggravate this. The fast pace of technology development and redundancy is challenging. The integration process itself is complex.

Dealing with integration requires solid and strategic leadership, with a clear vision of the direction and strategy, while new business models are frequently required. Banks must reprioritize investments from the old technology systems to the latest ones. The different parts of the organization must be aligned and synced, which may require creating a middle layer where new applications and fintech organizations can integrate and standardize the language between the various systems. Constant feedback about the progress is also a requirement.



CONCLUSION: AREAS OF COLLABORATION AND RESEARCH TO ENHANCE KNOWLEDGE ABOUT DIGITAL TRANSFORMATION

Collaboration between banks and financial institutions is a necessity to learn from mistakes and develop common practices to enhance the pace and efficiency of digital transformation. UAE governmental authorities, financial institutions, and academics can collaborate to create a community of knowledge through sharing of best practices and leading applied research projects around the following topics:

- **Digital Customer Experience:** Identify key features in the digital journey in creating a distinctive customized experience, and how these features would improve customer loyalty and enhance customer trust in digital financial services.
- Artificial Intelligence, Machine Learning, Data Analytics, and Big Data: The contribution of new technologies to the performance of financial institutions through predictive analytics, accurate risk assessment, fraud detection, automated decision-making, real-time information about customers for better segmentation and customer insights, minimizing errors, and operational optimization.
- Fintech: The most effective partnership and collaboration models between brick-and-mortar financial institutions and fintech start-ups for a win-win strategy.
- Blockchain: Practical applications and acceptance of blockchain in financial services, including improving transparency, reducing fraud, and streamlining operations.
- Cybersecurity and Data Privacy: The most effective and advanced cybersecurity measures, data privacy solutions, and mechanisms to identify potential cyber threats.
- **Digital Payments:** The impact of emerging payment currencies and central bank digital currencies on traditional banking systems and how the latter could cope with these new products.
- IT Infrastructure: Benchmark IT infrastructure solutions to identify the best ones to support the continuously evolving demand for and innovation in digital technology.

- Ethical Matters, Sustainability, and Regulatory Compliance: Increase privacy and promote customer trust, including the ethical and social implications of digital transformation. Promote ESG values and responsible financial practices. Develop an agile regulatory framework for digital transformation to adapt to the fast pace of innovation.
- Change Management and Employee Training: Identify common practices for successful digital transformation strategies, understand how financial organizations collaborate and learn from mistakes, instill a digital culture, attract and retain talent, and develop digital leadership.
- Strategic Management of Digital Transformation: Assess how financial institutions form and deploy digital transformation strategies to differentiate themselves from direct competition, fintech organizations, and Big Tech companies.

14



ABOUTADGM ACADEMY

ADGM Academy is part of Abu Dhabi Global Market (ADGM), an International Financial Centre (IFC) located in the capital city of the United Arab Emirates. The Academy has been established with the vision of becoming one of the leading academies in the region, providing world-class financial research and training services.

Delivering world-class financial education and literacy, ADGM Academy will help to position Abu Dhabi as a leading global financial centre. This will be achieved through globally recognised educational and experiential programmes on a range of topics and qualifications in banking, finance, leadership, entrepreneurship, technical and soft skills.

ABOUT RESEARCH CENTRE

The ADGM Academy Research Centre brings together an ecosystem of academics, financial industry practitioners, government and technology experts to unlock the shared potential to improve the financial environment in MENA and beyond.

The financial industry continues to transform at a rapid pace with new technologies, disruptors, threats and opportunities appearing all the time. Independent research is crucial to be able to understand and utilise this transformation for the benefit of your business, your customers and society in general.

The Research Centre provides that understanding through insights developed in collaboration with the academic community.

STAY UP TO DATE WITH ADGM ACADEMY RESEARCH CENTRE.

▶ adgmacademy.com 🛛 research@adgm.com





ADGM Academy Research Centre ABU DHABI GLOBAL MARKET ACADEMY RESEARCH CENTRE

2024

5

 \bigcirc



ADGM Academy Abu Dhabi Global Market Level 20, Al Maqam Tower ADGM Square, Al Maryah Island PO Box 111999 - Abu Dhabi, UAE

T : +971 2 333 8500