سمينار شباب الباحثين

موجز السياسات Policy Brief

"الرقمنة" مفتاح التحول نحو التميز المستدام في قطاعي البنوك والبريد المصري

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Introduction

Digitization is a global phenomenon that involves converting analogue objects into digital ones, with texts and images being the primary focus. This process involves scanning, image capture, hardware and software selection, and is crucial for achieving institutional excellence. Organizations operate in a complex environment influenced by external factors such as economic, political, technological, and social forces. Thus, Digitization provides effective instruments to improve sustainability in several ways, improving processes to have an environmental impact, and have better insights into how we use organization's resources. Artificial intelligence (AI) and the Internet of Things (IoT) are examples of smart technologies that may automate procedures, reduce waste, and promote energy efficiency. Furthermore, digital platforms speed up the creation and uptake of sustainable practices by facilitating cooperation and knowledge exchange.

Overview of Egyptian Banking and Postal Services

- **Egyptian Banking Sector**
  In recent years, the banking industry in Egypt has experienced tremendous change, with digital banking being a key factor. The following are important developments in Egyptian banking digitization:

  1. **E-Banking Services:** Customers may now easily perform transactions to the widespread use of e-wallets, mobile applications, and internet banking.
  2. **Fintech Growth:** Blockchain-based solutions, digital payment gateways, and alternative lending platforms have all been made possible by advancements in financial technology.
  3. **Regulatory Support:** To encourage digital banking and financial inclusion, the Central Bank of Egypt (CBE) has implemented a set of measures.

- **Egyptian Postal Services**
  Although Egypt's postal system has always been crucial for logistics and communication, it has gradually changed to meet the demands of the digital age. Important changes consist of:

  1. **Digital Postal Services:** The Egyptian Post has started offering online services such digital identity cards, electronic money transfers, and e-commerce solutions.

2. **Financial Services**: By facilitating postal savings accounts, bill payment, and money transfers, the postal service has been instrumental in giving underprivileged communities, particularly those in rural areas, access to financial services.
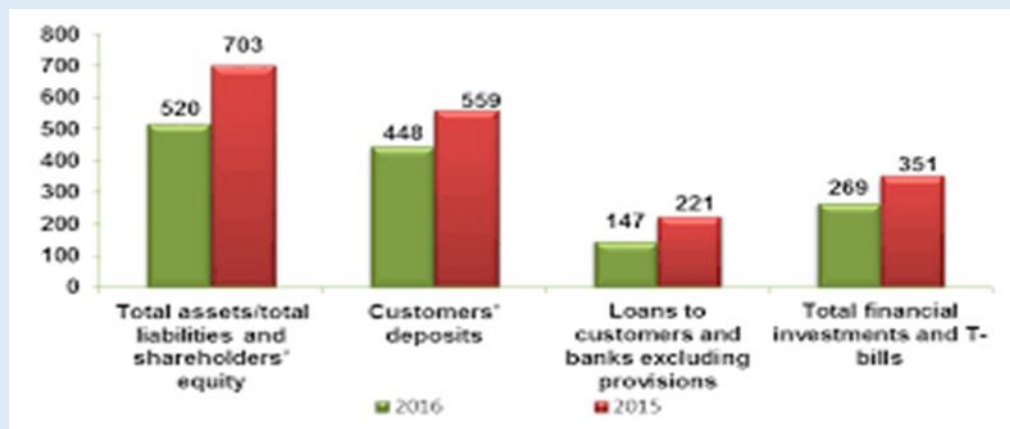
*National Bank of Egypt functions during 2015 - 2016*
Source National Bank of Egypt annual report 2015/2016

Impact of Digitization on Sustainable Excellence in Banking & Post Office Sectors

1. **Operational Efficiency:** By automating repetitive jobs, cutting down on paperwork, and simplifying customer service procedures, digitization has increased operational efficiency at Egyptian banks. For example, core banking systems have sped up transaction processing, while the use of AI-powered chatbots has drastically decreased client wait times.
2. **Cutting Costs:** digitization has allowed banks to save operating expenses by requiring fewer physical branches and employees for regular operations.
3. **Quicker Transactions:** E-wallets, mobile payments, and real-time processing have all sped up transaction times, increasing customer satisfaction.
4. **Faster Transactions:** Real-time processing, mobile payments, and e-wallets have accelerated transaction times, leading to greater customer satisfaction.
5. **Achieving Sustainable Excellence:** Understanding the factors behind the digital revolution is essential. The ability to adapt, low resistance to change and the integration, construction, and creation of resources both internally and outside to adapt to a fast-changing environment are positive influencers for digitization. On the other hand, there are two barriers to digitization, which are lack of funding and the cost of introducing new technology. Therefore, before examining the problem of a lack of

resources, it is crucial to concentrate on the expense of integrating the new technology. Also, by reducing banks' reliance on paper-based transactions, digitization has helped Egyptian banks lessen their environmental negative impact.

6. **Financial Inclusion:** The Egyptian Post & banking sectors have long been instrumental in providing financial services to population without access to conventional banking, particularly in rural areas. Digitization has extended these services further by enabling digital money transfers, e-wallets, and online banking services.
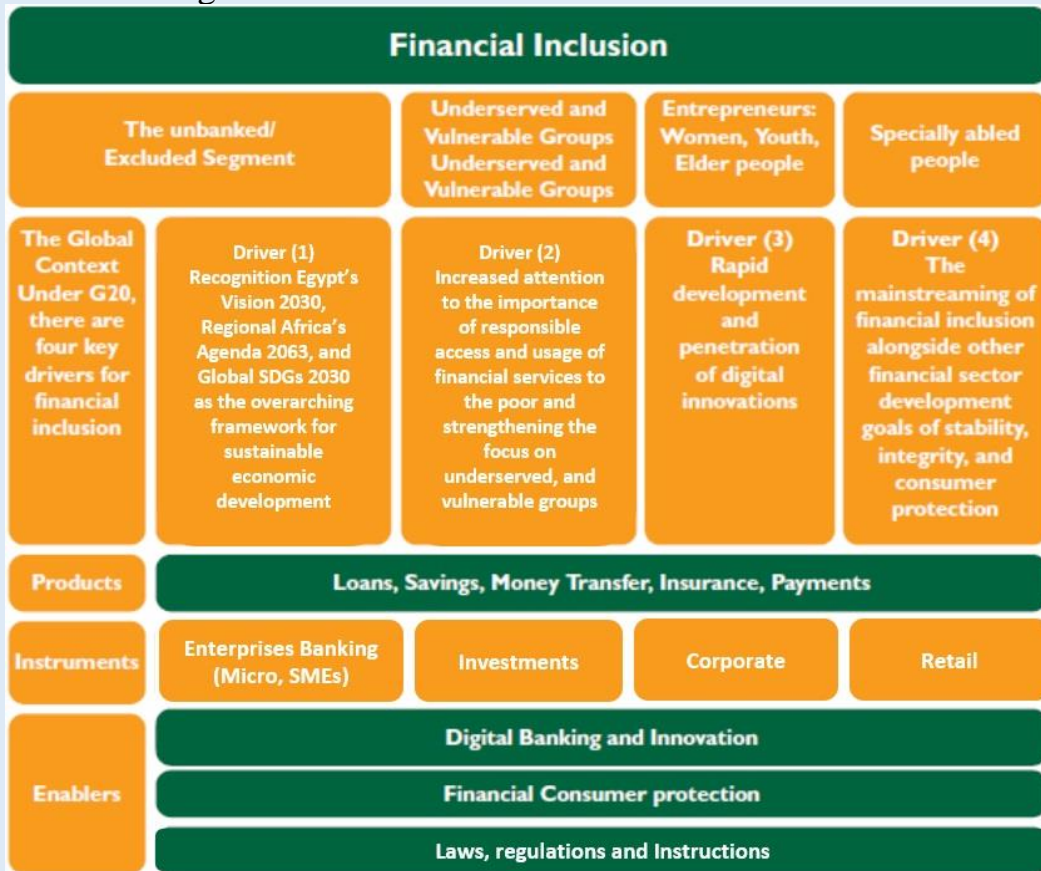
Challenges and Barriers to Digitization

Although there have been notable advancements due to the digitization of Egyptian postal and banking systems, several obstacles still exist:

1. **Cybersecurity Risks:** Fraud, data breaches, and hacking are among the cyberthreats that can affect digital platforms. Strong cybersecurity procedures are required in both industries to safeguard client information and financial resources.

2. **Infrastructure Restrictions:** Although Egypt's cities have comparatively robust digital infrastructure, rural areas continue to struggle with cell phone and internet connectivity.
3. **High Implementation Costs:** Transitioning to digital systems involves substantial financial resources for infrastructure, technology upgrades, and staff training, which can strain budgets.
4. **Customer Adoption**: Many customers, especially those less tech-savvy, may resist using digital banking services, creating a gap in user adoption.

Key Drivers of Digitization in the Egyptian Post & the Egyptian Banking Sector

As digitization offers useful tools to enhance sustainability in a variety of ways, including enhancing procedures to have an influence on the environment and gaining a better understanding of how we use our resources. Smart technologies like artificial intelligence (AI) and the Internet of Things (IoT) have the potential to automate processes, cut waste, and increase energy efficiency. Additionally, through promoting collaboration and information sharing, digital platforms hasten the development and adoption of sustainable practices.

Therefore, the key drivers of digitization in the Egyptian Post & banking sector are;

1. **Customer Expectations:** Today's customers want banking services that are simple, convenient, and customized. Digital channels can assist banks in meeting these expectations.
2. **Regulatory Reforms:** The Egyptian government has put in place several regulatory reforms to promote financial inclusion and innovation. Digitization is a key component of these efforts.
3. **Competition:** The emergence of fin-tech companies and digital-only banks has increased competition in the banking sector. Traditional banks must adopt contemporary technologies if they want to stay relevant.
4. **Efficiency and Cost Savings:** Digitization can streamline processes, reduce operational expenses, and boost efficiency.

Since digitalization offers numerous benefits, including improved customer experience, enhanced operational efficiency, new revenue streams, and risk mitigation, Egyptian banks are investing in mobile banking, digital payments, and AI and machine learning for customer care, credit scoring, and fraud detection.

Leading Banks in Egypt as of 2021, by Tier 1 Capital (in million U.S. dollars)

According to Statista 2023 the leading banks in Egypt are:

Bank	Tier 1 capital in million U.S. dollars
National Bank of Egypt (NBE)	7,276
Banque Misr	7,235
Commercial International Bank (CIB)	3,566

Source (Statista 2023)

Policy Options

Recommendations	Activities	Responsibility	KPI	Time
1. Fostering an online culture	Select the appropriate channels that would best help your business reach its goals. -Follow up and keep an eye on content to make sure it's current and useful. Using a new technology, and well training to employees.	Human resources IT, and R&D departments.	Customer-accessible information can be updated. -Quick reaction to evaluations and comments from clients	6-12 months.
2. New technological developments.	Through the explanation of basic natural phenomena by use of observation, logic, and experimentation	IT & top management commitment	Reducing friction in providing service and close the digital divide in order to create a seamless society that will be enabled by technological disruption.	From 1 to 3 years.
3. Boosting cybersecurity protections.	The company has to determine its business strategies at the same time new technology must be aligned with high protection and security.	IT developers, Database officials.	Increasing Customer satisfaction,	continuous monitoring of security

4.issuing bonds for sustainable development	Bonds for sustainable development are being issued and increasing the customer awareness for its importance.	Sustainability department	Providing funding for projects that will help the global capital markets in terms of development, social impact, and the environment.	1-3 Months
5.Laws Governing Electronic Banking	Increasing the customer awareness and culture towards electronic banking.	IT ,marketing ,and R&D departments	Electronic records are given legal legitimacy under the Information Technology Act, making them admissible as evidence in courts. Banks are expected to keep accurate records of all online banking transactions in order to prove the validity and authenticity of electronic data as needed.	6-12 Months

Policy options (for the Egyptian postal office sector)

Recommendations	Activities	Responsibility	KPI	Time
1. Applying training courses	Increase the amount of time that employees spend learning about technology, managing excellence, sustainability standards through forums, workshops, and seminars.	Human resources IT, and R&D departments.	Conform to the training prerequisites. Prioritize the wellbeing of your staff. Ascertain the correctness of training materials.	6-12 months.
2. Continue to explore new technologies that can help the post	The rate of change is accelerating due to the rapid evolution of technology, which makes development and change possible more quickly. IT professionals now understand that their position will alter in the contactless world of tomorrow since a lot more has changed than	IT department.	It makes tasks more efficient, modern technology increases productivity by enabling humans to complete tasks in less time. Meanwhile, judgements may be made more effectively and human error can be decreased because of the abundance of	Day by day

	just technology trends and developing technologies.		information available.	
3. **Optimize and Improve**	**Optimize for more effectiveness quicker turnaround times, more output, reduced use of machines and people, or lower costs. Enhancing can encompass a broader range of aspects, such as effectiveness and efficiency.**	**Top management commitment &coordination between departments**	**Cost reduction and waste elimination are two of process optimization's main objectives. Organizations can save time and money by identifying inefficiencies in their current processes and putting improvements into place. They are able to function more effectively and distribute resources more wisely as a result.**	**1-3 years**
4. **Build a sustainable goal through digital benefits in the Egyptian post**	**Digital transformation is the capacity of an organization to leverage digital technology to achieve the sustainable goals.**	**Operations, IT&R&D departments**	**Achieving sustainable goals**	**12-18 months**
5. **Take responsibility for data ownership and achieving excellence.**	**Data generation is an inevitable byproduct of dealing with digitalized products and digitalized business models, not the primary characteristic that defines digital transformation. With millions or even thousands of linked items, companies have a fantastic chance to not only offer connectivity solutions but also to take a larger share of a market where services based on data collection**	**IT& top management commitment.**	**Businesses have a great chance to develop win-win solutions that satisfy both parties and provide a variety of value since digital goods and services may be used for both corporate and consumer needs at the same time. Where to draw the line in digital transformation is one of the unsolved challenges.**	**1-4 years.**

	are becoming a growing source of revenue.			

Possible challenges of adapting fully digital transformation

1. Downsizing of Jobs: Automation and AI systems may replace roles that involve repetitive or manual tasks, leading to job losses.
2. Reskilling Needs: Employees may need to acquire new skills to remain relevant, but not all workers may adapt successfully.
3. Cultural Barriers: Employees and management may resist digital transformation due to fear of change or job insecurity.
4. Ethical and Legal Challenges Privacy Concerns: Increased use of digital tools can lead to concerns about employee and customer data privacy.
5. Workplace Monitoring: Advanced technologies used for productivity tracking may raise ethical questions and reduce employee morale.
6. Increased Pressure: Employees might face pressure to adapt to new technologies quickly. Blurring of Boundaries: Remote work enabled by digital tools can blur the lines between personal and professional life, leading to burnout.
7. Risk of Cybersecurity Threats Data Breaches: Increased reliance on digital systems can make organizations vulnerable to cyberattacks.

Conclusion

Digitization has had a profound impact on both the Egyptian banking and postal sectors, contributing to significant improvements in operational

efficiency, customer satisfaction, financial inclusion, and environmental sustainability. The move towards digitalization aligns with Egypt's broader objectives of fostering sustainable development and economic modernization. However, challenges such as cybersecurity risks, digital literacy gaps, and infrastructural constraints must be addressed.

It can be concluded that the Egyptian postal and banking sectors face challenges related to cybersecurity, data privacy protection, and addressing the digital divide. On the other hand, they have significant opportunities to achieve innovation, enhance operational efficiency, and improve risk management.

Therefore, Organizations must thus prioritize energy efficiency in digital operations and make investments in renewable energy sources if they want digitization to support sustainable excellence.