

## TOWARD SUSTAINABILITY: DIGITAL BANKING

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### Abstract

The orientation towards the digital economy is based on the main pillars: Provide citizens with the opportunity to use ICT as an effective tool to serve society across the spectrum with a focus on rural and remote communities in order to bridge the digital divide between different regions in addition to developing manpower and acquiring the necessary skills to increase its competitiveness in obtaining jobs and raising its scientific efficiency, Concerted efforts to achieve inclusive economic and social development that positively reflects on citizens' lives and well-being and upgrading the business of the financial and banking sector and the nature and quality of services provided in accordance with the evolution (Financial Stability Report, 2021). - On 27/12/2019, BNM Bank of Malaysia issued special procedures and conditions outlining the basic requirements for obtaining the licence of digital banks to operate in the Malaysian market and up to five licences, in order to endeavour to keep abreast of the development of fintech, encourage innovation and introduce new financial products and services that contribute to satisfying customers' needs and desires. Digital banks can be defined as "those banks that do not have a presence in the form of branches (spatial) except for certain requirements related to public administration, and carry out their banking operations and provide their services and products to their customers remotely (without time or space constraints) using Internet platforms, mobile applications and other electronic channels based on the use of modern technology." It should be noted that these banks provide services similar to the advances of traditional banks, namely: managing accounts, bank transfers, deposits, loans, insurance and other banking services "but relying on electronic means that do not require the actual presence of the customer in any of the bank's branches.

**Keywords:** Digital Banking, Cyber Security, Digital Transition, Neo Banks, Beta Banks

### INTRODUCTION

In the light of the accelerating technological development of our time since the early 1990s through the global crisis in 2008 and in the recent circumstances confronting the entire world as a result of the coronavirus pandemic, the emergence of new technologies and innovations that touch all walks of life, especially the banking sector, which may be the sector most affected by this development. It has become imperative for economic policymakers in the world to embrace and encourage greater innovation and exploitation of modern technologies in the financial industries in order to create new financial products capable of making radical changes compared to what is in place in traditional financial and banking institutions. business ", which would help shape a new vision of the world of finance and business based on a gradual shift towards a digital and knowledge economy.

The orientation towards the digital economy is based on the main pillars: Provide citizens with the opportunity to use ICT as an effective tool to serve society across the spectrum with a focus on rural and remote communities in order to bridge the digital divide between different regions in addition to developing manpower and acquiring the necessary skills to increase its competitiveness in obtaining jobs and raising its scientific efficiency, Concerted efforts to achieve inclusive economic and social development that positively reflects on citizens' lives and well-being and upgrading the business of the financial and banking sector and the nature and quality of services provided in accordance with the evolution (Financial Stability Report, 2021).

Recently, digital transformation has become an urgent necessity that cannot be ignored in any way as a result of increased inter-bank competition and the need to satisfy customers' growing desires. This transformation is concerned not only with the application of modern technologies within the organization but is an integrated holistic program that affects the organization and the way and way it works and how it provides its services through it and its products to its customers easier and faster s behaviour, needs and desires are in line with new digital and technological trends.

Many electronic banking channels have been found, starting with the Phone Banking, which has allowed customers to access some services by contacting the Customer Service Center, then moving to the Online Banking and Mobile Banking channels, where the customer can access some available banking services without any space or time constraints. After the development of these two banking channels, the partial provision of services was moved electronically to a holistic submission without having to visit the bank or even effectively having the bank, which is called Digital Banking (Financial Stability Report, 2021).

## **Experiences of countries that have organized the establishment or launch of digital banks**

### **1) Malaysian experience**

On 27/12/2019, BNM Bank of Malaysia issued special procedures and conditions outlining the basic requirements for obtaining the licence of digital banks to operate in the Malaysian market and up to five licences, in order to endeavour to keep abreast of the development of fintech, encourage innovation and introduce new financial products and services that contribute to satisfying customers' needs and desires.

The terms require that the person obtaining the Digital Bank license must own more than 50% of the Bank's shares. or has a majority share to control the management of the bank, has a licence to operate from the Financial Supervisory Authority or the Digital Bank licence applicant is a financial holding company licensed by the Financial Supervisory Authority or a financial institution regulated by a supervisory body outside Malaysia exercising functions that correspond to the Bank's functions according to the Financial Supervisory Authority. It also requires that the supervisory authorities be provided with a comprehensive five-year action plan outlining the organizational structure, policies, accounting systems and procedures to be followed to support the continuity of these banks' work simultaneously with a focus on capital adequacy, liquidity and consumer protection issues.

The Digital Bank's capital paid upon its establishment must be RMB100 million. (\$23 million) during the establishment phase, with a minimum capital of RM300 million (\$ 69 million) at the end of the fifth year of operation, in addition to the fact that the total size of its assets may not exceed RMB 2 billion (USD 640 million) during the establishment phase but after that period there are no restrictions on the volume of assets, with a view to enhancing those banks' ability and robustness to confront risks and protect the interests of depositors and customers.

## 2) Taiwan experience

In June 2019, the financial authorities announced the approval of the licensing of three digital banks for three alliances led by investors from Taiwan and Japan; The licence was granted to both Line in alliance with Taipei Fubon Commercial Bank and Standard Chartered Bank, and a licence was granted to Next Commercial Bank led by Taiwanese Internet Operator (Chunghwa Telecom), in addition to the licence granted to Rakuten Global Commercial Bank (Rakuten) by luten Electronic holding Company aken.

The conditions for approving the establishment of digital banks in Taiwan require that the minimum paid-up capital be the same amount as any traditional commercial bank for an estimated 10 billion Taiwanese dollars. and that at least one of the founders of a digital bank must be a commercial bank or financial holding company, The minimum contribution owned by the bank or financial holding company should be 25%. It also requires that the supervisory authorities be provided with a comprehensive plan of action containing, inter alia, a comprehensive plan of action; Customer identity verification mechanism, IT systems, security controls, business continuity plan in exceptional circumstances and liquidity management mechanism to support the continuity and sustainability of these banks.

On the other hand, foreign companies are allowed to make a contribution to the digital bank provided that proof of approval is provided by the financial authority of their country of origin and that they meet the conditions required to be allowed to subscribe.

## 3) Singapore experience

In 2019, the Singapore Monetary Authority announced the requirements for obtaining a licence for any digital bank to operate in the Singapore market. In this regard, Andak announced the issuance of five licences, with an increase in the number of licences granted at subsequent stages; Two are licensed to full digital banks (Full Digital Banks Licenses) and three are licensed to (Digital Wholesale Licenses). With regard to local commercial banks, under these requirements, they do not need any additional licence to launch their own digital bank as they are already licensed, as this is regulated by the Banking Regulation, which was promulgated in 2000.

As for the licences granted for the establishment of Digital Wholesale Licenses, they will not be allowed to accept deposits from individuals but only from SMEs and other forms of business, and their paid capital must not be less than S \$100 million. These banks are subject to the same regulations as traditional banks.

Full Digital Banks Licenses It takes place in phases, so that the first phase is restricted and the bank can grant simple investment insurance and products. This phase begins with a paid-up capital of at least S \$15 million and the restrictions are gradually lifted until the bank fully announces its ability to manage the risks associated with the digital bank's launch. The second phase begins when the restrictions imposed on it are fully lifted, at which point the digital bank must raise its capital to S \$1.5 billion. It should be noted that licences will only be granted to companies headquartered in Singapore and administered by Singaporeans, and foreign companies can obtain the licence if they engage with a local company so that the local company is in control and control of this type of engagement.

#### 4- United Arab Emirates experience

The Financial Services Regulatory Authority of Abu Dhabi Global Market issued a guide under the Market and Financial Services Directive 2015, with the aim of identifying the key points for evaluating the launch of a digital bank and providing banking services including accepting deposits, granting credit, opening accounts, transferring money and payment services.

Digital Bank can be created through three ways:

- Through traditional banks that want to establish a digital bank or branch of a digital bank.
- Through companies that have valuable innovations.
- Through partnership between technology companies and financial service companies.

The applicant must submit a comprehensive regulatory action plan linking the target market and customers, as well as identify all activities he wishes to engage in. Besides disclosing information about all natural and legal shareholders whose contribution is more than 10%.

Under the terms and conditions issued by the Financial Services Regulatory Authority, a digital bank must be majority owned by a deposit acceptance institution with a physical presence. The Authority has also established certain requirements for qualified personnel, governance and risk management, in particular risks associated with information technology, regulations, controls, cybersecurity and financial crimes, as well as a minimum capital payment of US \$10 million.

#### What are digital banks?

Digital banks can be defined as "those banks that do not have a presence in the form of branches (spatial) except for certain requirements related to public administration, and carry out their banking operations and provide their services and products to their customers remotely (without time or space constraints) using Internet platforms, mobile applications and other electronic channels based on the use of modern technology." It should be noted that these banks provide services similar to the advances of traditional banks, namely: managing accounts, bank transfers, deposits, loans, insurance and other banking services "but relying on electronic means that do not require the actual presence of the customer in any of the bank's branches.

International attention has increased to embrace the idea of creating digital banks, and many of the world's countries have recently established many digital banks, which has clearly reflected a significant increase in digital transactions. The global trading market through digital banks reached an estimated USD 803 billion in 2019 and is expected to reach approximately USD 1610 billion in 2027. The retail banking sector also accounts for the bulk of those transactions, with an estimated US \$574 billion in 2019 and projected to reach approximately US \$1320 billion by 2027. On the other hand, digital payments constitute the largest share of the volume of transactions through digital banks, with payments in 2019 amounting to about US \$195 billion and expected to reach close to 2027 US \$403 billion. North America also has the largest volume of digital banking transactions at an estimated \$376 billion and is expected to reach approximately \$721 billion by 2027, although the share of digital bankers in the region accounts for 12% of the world's total. (Global Financial Stability Report, 2021).

## Types of digital banks

While digital banks are becoming more widespread in different countries of the world, several models of these banks have emerged with their unique characteristics and advantages, as follows (Nguyen, 2020; Levy, 2022):

New banks (New banks/Challenger) are existing banks with independent licenses that provide services similar to traditional banks but have no headquarters or branches to be frequented by customers and provide their services remotely through electronic communication. Examples include Monzo, which has approximately 2.5 million customers and a Starling bank in the UK.

Neo banks, a type of digital bank, has no visible branches and no licence from its own regulators. These banks, in partnership with other licensed banks, offer their banking services via mobile apps and Digital Brand without any fees. These banks rely on customers who have accounts in traditional banks. Examples include Yolt Bank, a partnership project with ING Bank in Britain, and Webank, China's first licensed digital bank in 2014; It was launched by Tencent Holding, a leader in the development of Internet services and video games.

(Beta Banks) is the least common bank of licensed banks but has independent management that leads and controls their decision and products and are created to enter new or external markets and target a limited category of customers such as the SME sector to enable them to access the necessary sources of finance and benefit from financial services and products; It constantly seeks to develop its digital financial services to meet the desires and needs of its customers. Examples include AiBank, an alliance between China's most powerful search engine (Baidu) and Bank City, as well as Simple, a partnership between BBVA and Bancorp.

(Non-Banks) is called non-bank digital banks where they do not have any connection to private licences granted to traditional banks; It provides its services by other non-traditional means. One example is Monese, which provides services by obtaining an electronic money source licence; This bank enables the customer to open a bank account for him without having to prove the residential address or verify his credit record.

## Advantages and pros of shifting towards digital banks

Despite the diversity of digital banking business models, they all offer similar benefits, including (Chauhan et Al., 2022; Haralayya, 2021):

Digital banks help reduce the operational costs associated with the provision of financial services as well as the ability to reduce the time and effort needed to access these services, which will reflect increased competitiveness and attract the largest number of customers. According to experts in this area, digital banks can contribute to reducing operational costs by between 20-40%. A notable example is Lease Plan Bank, which has reduced its operating costs by 60%.

Digital banks can react at high speed and adapt to changes in the market, modern technology and new legislation because of their high flexibility as well as their great ability to quickly and streamline their operations and launch their products faster than those of traditional banks. for example; Digital banks can take advantage of modern technologies and enable customers to open accounts electronically without the need to actually visit the bank or branch by recording video and uploading photos of their

documentation. In addition to the ability to verify the customer's identity in daily operations performed through the application of tight authentication procedures (Strong Customer Authentication) using vital characteristics: finger, eye or sound.

Digital banks offer their customers easy-to-use banking services because they do not rely on paper processes and provide easy access to financial data compared to what is applied in traditional banks.

Digital banks allow banking operations to be conducted quickly and accurately, thereby reducing errors associated with traditional banking operations caused by human intervention, which would enhance the level and quality of financial statements.

Digital banks are slowly moving towards a cashless society, especially by providing new digital payment solutions such as CLICK, which allow instant transfers through mobile phones between individuals, and cashless payments in shops through QR Code technology.

Digital banks play a major role in achieving financial inclusion by enabling disadvantaged groups and women to increase access to various banking and financial products at convenient and affordable prices for customers without spatial or time constraints and has a significant role to play in enhancing the financial empowerment of these groups, increasing their ability to manage their financial resources optimally and increasing savings rates, This would be positively reflected in individuals' financial health.

### **Risk of shifting towards digital banks**

Digital banks, like traditional banks, may be exposed to risks affecting their operations and financial stability. Economic policymakers in many countries of the world must take ways to address and prevent these risks. These include (Revathi, 2019; Dagada, 2013):

Cybersecurity risks; Due to the large volume of personal data handled by these banks, which may be the target of cyber attacks and hacks, it is necessary to improve the mechanisms for the protection of such data and to apply strict security measures due to the evolution of hackers' methods and skills, which presently poses a major challenge.

reputational risk; One of the biggest challenges to the idea of creating digital banks is how to build a close relationship with customers, especially in the light of the accelerated development of technology and the emergence of new financial products and increased competitiveness, which requires these banks to keep abreast of all developments in order to continue to meet their customers' needs and satisfy their desires and maintain them.

Operational risks; With digital banks relying on modern technology to provide their services, this will sometimes cause a failure in working systems and lead to delays in the completion of the business, necessitating the development and maintenance of working systems and software used periodically in order to avoid any interruption that may occur.

Credit and liquidity risks; Digital banks, like traditional banks, may face credit and liquidity risks as a result of customers' exposure to conditions that prevent them from paying their debts and liabilities as well as unexpected market conditions that can occur at any time. Customers' sudden withdrawal of their deposits and the increasing

use of modern applications such as digital bank services via mobile phones and the Internet can cause confusion and high demand for liquidity. This requires adopting risk management strategies that mimic new realities and tighter credit policies, as well as maintaining adequate reserves to meet sudden liquidity demand.

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