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Analysis of Digital Transformation in The Payment Financial Services Industry in Indonesia (Case Study at Bank Mandiri)

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Abstract: *This paper covers digital transformation in general across all industries and in the payment financial services industry in particular. Studies show that digital transformation began a decade ago, but many companies fail to identify what is causing them to lose or go out of business. The key drivers of digital transformation in the payment financial services industry are the newly empowered millennial generation, significant adoption of mobile users across all generations, the rise of e-commerce, new players in the non-financial services industry, fintech companies, and the huge unbanked population for developing countries like Indonesia. This paper will discuss how new digital players are transforming banks and financial institutions to reimagine their role as trusted brokers in the new digital payment economy.*

This paper will include the author's analysis and research based on publicly available materials and in-depth discussions with key executives interviewed from the digital payment industry, namely very large bank. The paper will analyze how this industry is transforming its business to compete and stay ahead in the new digital payment economy.

Keywords: *bank, digital transformation, financial services industry, fintech, payment*

I. INTRODUCTION

Background

The fourth industrial revolution will fundamentally change the way we live, work, and relate to each other. In recent years, various industries in the world, including Indonesia, have been disrupted by digital transformation. Studies show that digital

transformation began a decade ago, but many executives of large companies do not see the importance of focusing on this area. Disruption and digital transformation in financial services have been initiated by PayPal in the United States, where they launched online money transfers in 1998 and have been widely adopted until now.

Banks perform three core functions in the financial services industry, namely: accepting deposits, offering loans, and providing services. The services offered by banks can be broadly classified into four categories, namely financial intermediaries, payment services, financial services, and ancillary services.

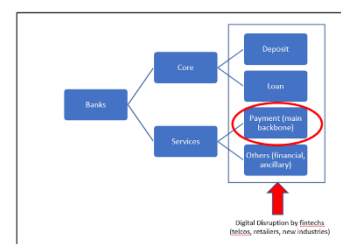


Figure 1. Banking services

Digital transformation has created a defining moment for financial services. In addition to new, large-scale challenges and threats that are very different, banks and other financial institutions have a unique opportunity to reimagine their role as trusted brokers in the new economy. A new era has begun. People will continue to bank, but they may not need banks to do so.

Globally, several key factors are driving transformation in the financial services industry: a new, empowered millennial generation, a significant increase in mobile users across all age groups, new technology companies such as PayPal, Apple, and Starbucks offering their payment platforms not only for

use in their product transactions but also for widespread use for other transaction payments, and the rise of fintech companies. Specifically for Indonesia and developing countries in general, disruption and digital transformation in the payment system are also driven by the large unbanked population for financial inclusion.

According to PwC, consumer banking and payments are the largest areas of the financial services industry that are experiencing digital transformation disruption. The reasons why consumer banking and payments are the most disrupted areas in digital transformation stem from several key drivers, including favorable demographics of the younger generation, the need for financial inclusion, customer adoption, and the rise of e-commerce.

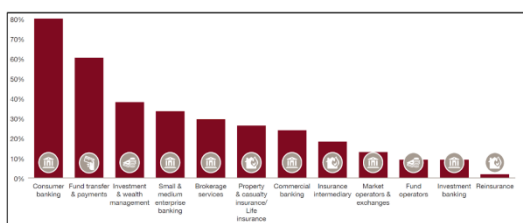


Figure 2. Parts of the financial sector most disrupted by fintech

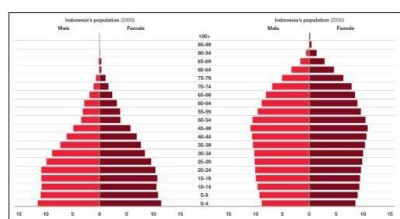


Figure 3. Age and gender pyramid in Indonesia

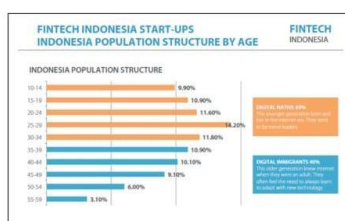


Figure 4. Digital natives in Indonesia



Figure 5. Level of banking inclusion across the world



Figure 6. Indonesia's financial inclusion profile compared to other countries

The banking industry has enjoyed an end-to-end financial services offering, from deposits, payments, lending, and other financial services offerings across consumer, commercial, and corporate segments. Many analysts predict the demise of traditional banks, as disruptive newcomers will gain share by offering better customer experiences through new products and channels. On the other hand, much of the landscape will change significantly in response to the forces of changing customer expectations, regulatory requirements, technology, demographics, new competitors, and economic shifts.

Digital transformation is pushing the bar even further, with 82% of bank executives saying customer expectations are outpacing adaptation. Digital solutions can also serve the needs of underserved markets, especially in large, dispersed economies such as emerging markets. Financial services have a competitive advantage over other new players around customer data, customer relationships, and trust, which are their most valuable assets for surviving digital transformation.

According to PwC Indonesia, digital disruption is a major driver for Indonesian banks to consider digital as part of their strategy. Based on the survey, digital transformation in banking is driven by customer experience and revenue growth. There are several challenges to digital transformation, including business foundation transformation, MSME (Micro, Small, and Medium Enterprises) coverage, and changes in customer profiles and behavior.



Figure 7. Relationship between six macro themes and five business segments in banking

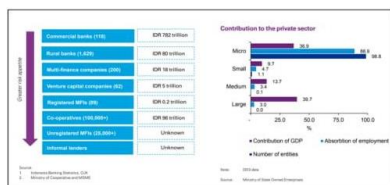


Figure 8. Coverage of financial services industry profile in Indonesia

Handling digital disruption in the banking industry in Indonesia can be divided into two main resolutions, namely: short-term resolution and long-term resolution. For the short-term resolution, the central bank formed a formal fintech task force in November 2016 to regulate fintech driven by the need for financial inclusion. For the long-term resolution, banks need to continue to transform to ensure that fintech disruption will not cannibalize the growth potential of their banking business further.

Banks in Indonesia are also very aware of this situation. Those who continue to focus on balancing their short-term and long-term efforts, especially in digital transformation, will survive, remain relevant to their customer base, and may even come back stronger. Bank Mandiri is a real-life example of this. Bank Mandiri's digital transformation has succeeded in creating new value that supports its brilliant performance in recent years (Tribun News, 2023). Furthermore, Bank Mandiri has succeeded in entering the ranks of the world's top banks thanks to its digital services and transformation (Warta Ekonomi, 2023).

As previously shared, many large banks in Indonesia have embarked on a digital transformation journey, although the revenue contribution from digital initiatives across all banks is currently in its early stages. There is still a challenge in getting a common view of digital strategies across these banks. Product teams, customer service teams, IT teams, and dedicated digital teams are creating their own digital strategies. They

need to continue to synergize across the organization to ensure their transformation is successful.

It will be interesting to see how disruption and digital transformation in the payment financial services industry will change banks to continue their success as trusted brokers in the digital era. Based on the explanation above, the author is interested in conducting a study entitled "Analysis of Digital Transformation in the Payment Financial Services Industry in Indonesia (Case Study at Bank Mandiri)".

Problem Formulation

From the background of the problems that have been described, the problems can be formulated as follows:

1. What are the opportunities and challenges faced by banking financial services companies in Indonesia through digital disruption in the past and the coming years?
2. How does digital disruption impact these financial services companies, both those from similar financial services industries and new players from different industries?
3. What strategies do these financial services companies implement to be successful in digital transformation?

Research Purposes

Based on the background and formulation of the problem that has been described previously, the objectives of this study are:

1. To analyze what opportunities and challenges are faced by banking financial services companies in Indonesia through digital disruption in the past and the coming years.
2. To analyze how digital disruption impacts these financial services companies, both those from similar financial services industries and new players from different industries.
3. To analyze what strategies these financial services companies implement to be successful in digital transformation.

Research Benefits

The benefits obtained from this research are as follows:

1. For academics: can provide information and can be used as a reference for subsequent similar research on digital transformation in the payment financial services industry in Indonesia.

2. For companies: can provide information to find out about digital transformation trends in the payment financial services industry in Indonesia.

II. METHODOLOGY

Research Object

This research will cover the analysis of digital transformation in the financial services industry in general with a focus on the payment area. This research will discuss the financial services company from one of the major incumbent banks in Indonesia, namely Bank Mandiri.

Types of Research

This research is qualitative.

Research Respondents

The respondents of this study were three Senior Vice Presidents (SVP) of IT Applications at three main branch offices of Bank Mandiri in Bandung City, namely at KC Asia Afrika Utara, KC Braga, and KC Surapati.

Data Types and Sources

The data used in this study are primary and secondary. Primary data were obtained from several key executives of Bank Mandiri mentioned above, while secondary data were obtained from publicly available materials on the Internet.

Data Collection Technique

This research will use an in-depth interview approach with several key executives from Bank Mandiri who have experience, expertise and have been involved in digital disruption and transformation in the financial services industry in Indonesia. The interview approach will be an open discussion to ask for their advice on the phenomenon of digital transformation globally and in Indonesia, and how it varies over time. The interview process will follow research ethics where the interviewer will respect the autonomy of the interviewees and their rights to individual well-being, fairness, and respect for their community.

Data Analysis Method

To analyze and understand the digital transformation that is happening in the payment financial services industry, the author uses several

digital transformation approach frameworks, namely: Porter's five forces strategic decision-making framework, David L. Rogers' five domains of digital transformation strategy, and Microsoft's four pillars of digital transformation. To analyze the digital transformation strategy at Bank Mandiri, the author also uses the digital transformation approach frameworks to find out how they can survive and even become stronger in the market.

III. ANALYSIS AND RESULTS

Analysis of Digital Transformation in the Payment Financial Services Industry Based on Porter's Five Forces Strategic Decision-Making Framework

- First Force: Threat of New Entrants

The threat of new entrants in the financial services industry is currently very high because the barriers to entry into digital payment platforms are very minimal.

- Second Force: Threat of Substitute Products or Services

The threat of substitute products or services is also very high because customers in the payment sector can now easily switch from one service to another competitor.

- Third Force: Customer Bargaining Power

Customer bargaining power in the digital era is the most pressing factor that is of concern to all digital players such as fintech.

- Fourth Force: Supplier Bargaining Power

Supplier bargaining power is much lower in the digital world because the disruption coming from new fintech is very massive.

- Fifth Force: Competition Among Existing Competitors

Competition among existing competitors is much more in the financial services industry in the era of payment disruption because competitors can come not only from the current industry but also from various industries and new industries.

Analysis of Digital Transformation in the Payment Financial Services Industry Based on David L. Rogers' Five Digital Transformation Domains

- First Domain: Customers

Leveraging customer networks is very important for all payment financial services industry players in the era of digital transformation.

- Second Domain: Competition

In the competition domain, incumbent banks must be comfortable opening their current product APIs (Application Programming Interfaces) to other payments or merchants, so that the payment system will become a big platform, not just a product.

- Third Domain: Data

In the area of turning data into assets, this is an area that incumbent banks must have to have broader insights compared to new fintech companies.

- Fourth Domain: Innovation

Innovation with rapid experimentation is also very important for banks to continue to compete with new fintech players in the era of digital disruption.

- Fifth Domain: Value

Finally, to survive in the era of digital disruption, every business needs to continue to adjust its value proposition.

Analysis of Digital Transformation in the Payments Financial Services Industry Based on Microsoft's Four Pillars of Digital Transformation

- Pillar One: Engaging Customers

Engaging customers is critical for payment players in the era of digital transformation.

- Pillar Two: Empowering Employees

One of the main challenges of digital transformation in companies, especially incumbents, is cultural transformation because the way organizations operate and engage internally and externally is very different in the digital era and requires very different skills.

- Pillar Three: Optimizing Operations

Incumbents in the financial services industry are among those with large legacy operations compared to other industries.

- Pillar Four: Product Transformation

This is the area where financial services companies use big data with cognitive capabilities and machine learning to transform their products and their engagement with their customers, so they can drive more value, enable new business models, and disrupt established markets.

Root Cause Analysis in the Payments Financial Services Industry

- Legacy and disruption of the banking business

The banking industry has long enjoyed a situation where it was very difficult for other players to enter their

business because they were protected by strong regulators and extensive capital requirements for branches, ATMs, and merchant infrastructure requirements. This significant change is that the barriers to entry have become very easy for new digital fintech players, eliminating the advantages of incumbent banks.

- Data as insight

Today, many banks globally are still facing challenges in digital transformation. Mostly because they have big data, but the insights are still poor.

- Regulation

The task of consumer protection requires regulators. Regulators are changing themselves to keep up with market changes. However, the speed of regulators' ability to keep up with rapid market changes during digital transformation will be a key factor for banks' success in competing in digital transformation.

- Culture

Culture has always been one of the biggest challenges in any transformation, not only in the banking financial services industry but also in all industries, especially for large organizations. The digital transformation that has occurred in recent years has involved a lot of digital technologies, influenced by cloud computing, big data, machine learning, and artificial intelligence. But above all these technologies, culture is the key that allows these technologies to accelerate innovation.

Bank Mandiri Business Analysis

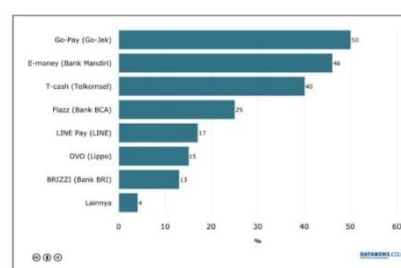


Figure 9. Electronic payments in Indonesia

Table 1.
Bank Mandiri Business Landscape

Main industry	Bank
Number of customers	21.7 million
Number of transactions	30.94 million (total), 3.067 million (e-channel)

Years of operation in Indonesia	Since 1998 (merger of 4 state-owned banks), the original state-owned bank since 1960
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Digital Transformation Analysis at Bank Mandiri



Figure 10. Bank mandiri's strategic initiatives

Table 2.
Digital Transformation In The Payment Financial
Services Industry At Bank Mandiri

Aspect	
Engaging customers	Continuously improving, focusing on mobile and online banking experiences that fintech payments cannot cover
Empowering employees	Empowerment, transparency, and structural transformation focused on the millennial workforce
Optimizing operations	Transform, streamline, and optimize operations to be more agile without compromising risk and compliance
Transforming products	Launching digital product offerings using big data and machine learning capabilities, investing through digital venture firms for new fintech solutions to complement the bank's offerings (i.e. software-based teller, transaction gateways), and building an ecosystem to strengthen the bank's digital presence
Big data	Big data is an important asset for banks, which comes from the engagement of many customers across the bank's businesses (corporate, retail, wealth management, insurance, and many others)
Cyber security	Cybersecurity is one of the most important focuses in the digital world for banks because the core

	business of banks is trust. Compared to fintech companies, the cybersecurity posture in banks is much higher because the attack rate is also very high.
Regulation	Regulators become partners for banks to continue transforming in the digital era without compromising their compliance posture.
Culture	Culture is a significant success factor for large organizations to transform. Cultural transformation comes from top management to all levels in the bank to create more collaboration, fewer silos and hierarchies, and more agility and adaptability.
Future	Banks will continue to transform into more agile organizations so they can respond more quickly to market disruptions. Banks will continue to focus on trust as their core business while transforming the market.

IV. CONCLUSION

Conclusion

1. Based on the analysis, the transformation of digital payments in the financial services industry is disrupting the banking industry, especially small banks or banks whose main business is retail banking. For large banks with a balanced portfolio between corporate and retail banking, there is coopetition and they continue to partner with fintech.
2. Banks will continue to strengthen their core business as a payment instrument with trust as their core competency, and cybersecurity will be a very important step for banks to continue to build their credibility to be trusted by customers in the digital era. Banks will continue to transform to be more agile externally and internally with significant cultural transformation to successfully respond to market changes and disruptions in the digital

era.

3. The most important basic foundation for digital transformation and any transformation in a large organization such as a bank is cultural transformation. Cultural transformation from a higher level in the organization through various levels of management is the key to change/transformation to ensure that the organization continues to learn and develop through disruption and market changes.

Suggestion

1. Banks are not marketing expansion companies like fintech. Banks do not compete fully in all areas with fintech. Banks must continue to focus on becoming trusted institutions in the financial services industry. Trust must always be the number one reputation that will not be compromised.
2. Banks must continue to strengthen their digital channels, especially in the payment transaction limits that cannot be served by fintech.
3. Cybersecurity is a very important posture for banks to succeed in digital payments and the like. With trust as the number one reputation and priority, cybersecurity becomes very important for banks to focus on digital transformation.
4. Cultural transformation is a strong foundation for banks and other large companies to succeed in digital transformation. This must come from the top, covering all aspects of the business. It is not just about technology, but most importantly how people change their mindset, customer obsession, policies, workplaces, collaboration, and many other aspects of transformation.

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