

Digital Transformation Affects Digital Bank Performance

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ABSTRAK

Digital banking transactions have increased by 158% in the last 5 years (2018-2022). There is a phenomenon of switching transactions from the original customer coming to the bank branch to now online through a mobile phone or laptop computer. This digital transformation has made many banks adjust to create their own applications that can be installed on mobile phones or computers or laptops to satisfy the desires of their customers. This digital transformation is important to be researched considering the increasingly rapid technological changes, such as stated in VUCA (volatility, uncertainty, complexity and ambiguity). This research also conveys the relationship between digital transformation and VUCA. This research was conducted using a qualitative method by referring to several references. The results of this research require digital transformation for banks in addition to creating a new digital ecosystem and making their banks survive in the market.

Keywords: Digital Transformation, Vuca, Payment, Digital Banking

INTRODUCTION

Recently, digital transformation in the financial industry has an important role, especially in the banking world, for example there are payment innovations that can be done through mobile phones, online transfers, online loans and chat with robots. This growing innovation increases competition and customer service in the world of digital transformation (Cappa et al, 2021).

Digital innovation can drive change in the financial industry. In addition, digital technology enables banks to get their target customers more easily. Including customers who fund, or buy bonds or who will increase deposits by a larger amount. This digital transformation can serve multiple products including traditional products from financial institutions and fintechs (Feyen et al 2021)

Digital transformation has had a significant impact on the increase in digital transactions, both in terms of volume, frequency, and accessibility. Here are some of the main influences:

Ease of Access to Technology

Digital transformation allows for the development of better technological infrastructure, such as internet connectivity, mobile applications, and digital platforms. This makes it easier for users to access financial services anytime and anywhere, which in turn increases the number of digital transactions.

Increased Trust in Digital Systems

The existence of better security features, such as two-factor authentication, biometrics, and blockchain technology, has increased public confidence in using digital transactions. With increasing trust, more people are switching from conventional to digital transactions.

Platform Integration

Digital transformation supports integration with digital platforms, such as e-wallets, mobile banking, and e-commerce. This makes it possible to carry out various types of transactions digitally, ranging from bill payments to the purchase of goods and services.

Product and Service Innovation

Innovations such as contactless payments, QR codes, and digital wallets (e-wallets) have had an impact on people to try digital transactions. These innovations provide a faster, easier, and more efficient experience.

Changes in Consumer Behavior

The COVID-19 pandemic has accelerated the acceptance and use of digital technology, so that people are more accustomed to online transactions. This change is one of the effects of the increase in digital transactions.

Government and Regulatory Support

The government and regulators support the development of digital technology through regulations, such as the implementation of QRIS (Quick Response Code Indonesian Standard) standardization in Indonesia. This step encourages business actors and consumers to use digital transactions.

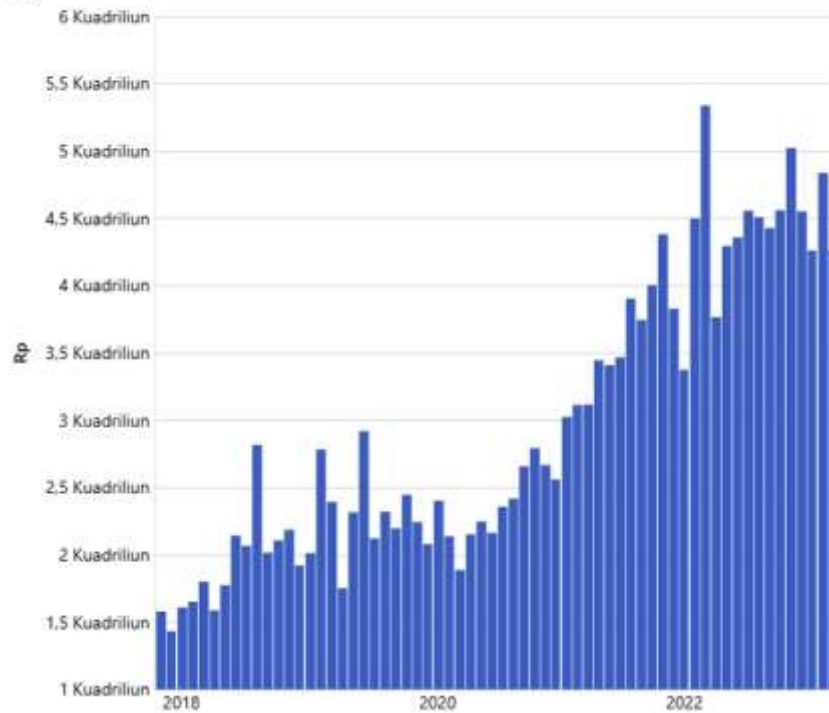
Operational Efficiency

Digital transformation helps banks and digital service providers to increase operational costs. With a faster process and lower costs, they can provide services at a more affordable price.

As seen in the graph below, the development of digital transactions

Figure 1
Development of Digital Transactions

Nilai Transaksi Digital Banking di Indonesia per Bulan (Januari 2018-April 2023)



Source : Bank Indonesia

The graph above shows a phenomenon that the transaction value has increased. Previously, people used manual conservative methods, now they prefer digital platforms.

This shows the importance of this digital transformation for the world of banking and other financial industries.

The consequence in digital transformation is that hackers hack accounts or hack customer accounts or applications used by the bank. These hackers can work positively or negatively. Suppose a negative hacker will hack an account or application that is in use. Hacking or cyber hack is the activity of hacking or breaking into someone else's computer program or digital system, usually with a negative purpose. A hacker is a person who has skills in computer programs, program flows, program logic and program reading, as well as observing system security.

Positive hackers can protect data and improve company security. Negetically, hackers hack with malicious intent, such as stealing data, damaging networks, or harming systems.

Cyber hack can happen to any program application, anytime and anywhere, as long as there is an internet connection. Hackers in the financial industry usually hack customers' money balances. The banking industry needs to provide customer data protection, program protection and investment costs for this securitization.

Given the risk of cyber threats can damage the company's reputation and customer trust in the bank.

METHOD

This study uses a qualitative approach, using the literature review method. This study examines the role of digital transformation. Data were collected through previous literature derived from previous studies, journals and books related to the research problem.

According to Sugiyono (2016:9), the qualitative descriptive method is a research method by means of trigulation (combination) of descriptive and qualitative methods and has the purpose of describing existing phenomena or realities.

Techniques for Compiling Review Literature

There are several stages of data collection in the study, namely:

1. Identify Topics

By determining several topics and problems that are a phenomenon in the banking world today. Then one of them was determined.

2. Literature Search

After the topic is determined, the next stage is to look for literature related to research obtained from previous research through google scholar with the keywords digital transformation, the key to successful digital transformation of banking and digital banks.

3. Data Analysis

The data analysis technique used is qualitative descriptive analysis, which is describing the data and interpreting the data on the basis of a literature review. Then it is analyzed so that there is an image that can reveal the answer to the question of the role of digital transformation in the performance of digital banks

DISCUSSION RESULTS

The results of the research obtained throughout April 2023 show that the value of digital banking transactions in Indonesia reached around Rp. 4,264.8 trillion or almost Rp. 4.3 quadrillion.

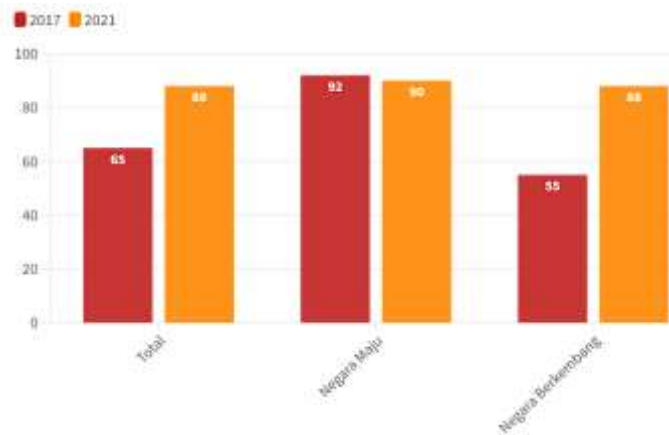
This value covers digital banking and banking transactions according to the Financial Services Authority (OJK) classification such as internet banking, mobile banking, and phone banking

The shift in transactions from conventional to digital banking is interesting to observe because this phenomenon not only changes the way people transact, but also shows the rapidly developing social, economic, and technological dynamics. Here are the in-depth and detailed reasons why this phenomenon is relevant to note:

Changes in Consumer Behavior

1. **The Need for Convenience and Speed:** Today's consumers prioritize convenience and speed. Digital banking allows transactions to be made anytime and anywhere without the need to come to the bank
2. **Effects of the COVID-19 Pandemic:** The pandemic has had the effect of accelerating digital banking because people during covid are not advised to interact with each other, so they prefer digital services.
 - **Supporting Data:** The McKinsey Study (2022) reported that developing societies recorded the most significant growth in the last 4 years.

Figure 2
Digital Bank Users



Source: McKinsey from the website

<https://tirto.id/bank-digital-jadi-primadona-bank-konvensional-tak-merana-gS7A>

- From the graph above, it can be seen that digital bank users are 55% (2017) to 88% (2021) compared to developed countries have experienced a decrease in their use from 92% (2017) to a slight decrease of 90% (2021)

Operational Efficiency

- **Administration fees** are cheaper for transactions. Customers do not need to go to the bank office for transactions that require waiting time for transactions or time to drive to the bank, only with a computer or mobile phone to complete the transaction.
- **Process Automation:** The influence of artificial intelligence (AI) technology and big data analytics helps banks process transactions faster and more accurately than manual methods.
- **Supporting Data:** Customers can more easily and quickly view their own transaction history with supporting data in their account, making it easier for customers to make other payment transactions.

Better Accessibility

- **Financial Inclusion:** Digital banking allows customers in remote areas where there are no bank branches to access financial services that were previously unreachable, such as account opening and fund transfers.
- **Wider Internet Connectivity:** Equitable distribution of 4G/5G networks and high mobile phone users make digital banking services more accessible to various groups.

Service Innovation and Personalization

- **Diversified Service Products:** Digital banking offers more complete features such as investment, insurance, and wealth management that are not easily accessible through conventional methods.
- **Integrated product services:** By using internet banking or mobile banking, customers can make transactions from electricity payments, mobile phone payments, payment transfers to other banks, view account balances, account mutations to open new accounts.

Increased Security and Trust

- **Modern Security Technology:** Digital banking services use technologies such as data encryption, biometrics, and two-factor authentication to increase transaction security so that hackers cannot easily enter customer records and steal customer data or damage the bank's applications.

Push for Government Regulations and Policies

- **Policy Support:** The government through Indonesian banks and financial services authorities encourages digital transformation through supportive policies, such as the implementation of QRIS, BI-FAST, and standardization of digital banking services.

Globalization Trends and Digital Economy

- **Integration with the Digital Ecosystem:** Digital banking is integrated with the ecosystem of e-commerce, fintech, and other digital payment platforms, thereby expanding functionality and usage.
- **Consumer Adaptation to Change:** Educating customers and prospective customers with promotional programs through social media so that they prefer digital payments that are easy, fast, and integrated with daily services.

Competitive Impact on the Banking Industry

- **Pressure on Conventional Banks:** Conventional banks are rushing to make their banks have internet applications and mobile apps to survive in this changing industry.
- **Competitive Advantage:** Banks that already have digital platforms find it easier to acquire new customers, especially from the younger generation who are more familiar with technology.

Data from Bank Indonesia shows that national digital transformation is developing or accelerating rapidly. Post-pandemic, digital acceptance is becoming more widespread, and encouraging the business world to adjust by developing its transactions using mobile banking, which makes the development of new digital-based business models. Digital transformation plays a role in supporting inclusivity and strengthening the local economy and regional MSMEs. The results of this study also obtained findings that the existing payment system in Indonesia continues to develop with digitalization such as payments using QRIS (Quick Response Code Indonesian Standard) which is the QR code standard for payments in Indonesia. This QRIS was developed by Bank Indonesia with the Indonesian Payment System Association (ASPI). The goal is cashless. Payments no longer use cash. Digital transformation for the payment system also extends to tax payments with the Coretax application which can represent all tax payments from value-added tax to income tax. Development of digital transformation According to research from Jayadatta et al, the role of digital transformation in VUCA is influential. VUCA can be briefly described as follows:

Volatility (from Ketidakstabilizan)

Digital Transformation and Instability:

- **Rapid Technology Change:** Digital transformation is accompanied by faster technological updates, such as cloud computing, artificial intelligence (AI), blockchain, and IoT. It is necessary for the company to adapt to new developments.
Example: Digital payment platforms such as QRIS in Indonesia continue to grow with new features.

- **Unstable Market:** Digitalization is accelerating consumers to choose products from e-commerce, creating uncertainty on market trends.

Example: E-commerce replaces the conventional model of buying products. This, causes instability in the retail industry.

Impact of Volatility: Organizations face challenges in long-term planning due to rapid and unpredictable changes.

Uncertainty (Ketidakpastian)

Digital Transformation and Uncertainty:

- **Immature Regulation:** Digital transformation often outpaces regulatory developments, creating uncertainty for companies looking to capitalize on these innovations.

Example: The use of blockchain and cryptocurrencies in Indonesia still needs adjustment due to changing regulations.

- **Competitive Uncertainty:** Digital transformation allows the emergence of new competitors (such as fintech) to enter the market quickly, creating uncertainty for incumbent players.

Example: Conventional banks compete with digital banks and fintech startups.

Impact of Uncertainty: Companies struggle to predict risks and opportunities, making strategic planning more complex.

Complexity (Kompleksitas)

Digital Transformation and Complexity:

- **Technology Interconnection:** Digital transformation makes integrated systems intertwined with many components, such as digital platforms, APIs, and cloud systems.

Example: Digital payment systems are integrated with banks, fintech, e-commerce, and government tax systems, creating complexity in management.

- **Data Overload:** Digital transformation can store and process large volumes of data, creating challenges in managing, analyzing, and protecting that data.

Example: Perr company; u uses big data analytics to extract insights from consumer transaction data.

Impact of Complexity: Organizations face challenges in aligning various components of technology and business processes.

Ambiguity

Digital Transformation and Ambiguity:

- **Different Interpretations:** Digital transformation can create situations where available information can be perceived in different ways.

Example: the metaverse still has different meanings for companies in different industries, creating ambiguity in strategic investments.

- **Lack of Clarity on Results:** The returns from digital technology investments are often not immediately visible, which can make it ambiguous in assessing success.

Example: The implementation of AI in customer service takes time to produce clear benefits.

Impact of Ambiguity: Ambiguity makes organizations hesitant in making decisions due to a lack of clarity about the right outcome or direction.

According to the Chief Executive of Banking Supervision, Mr. Heru Kristiyana, the blueprint for banking digital transformation consists of data, technology, risk management, collaboration, and institutional order that need to be considered in the banking digital transformation process.

The banking digital transformation blueprint is a strategic guide that covers various important aspects to ensure the success of digital transformation in the banking industry. Its elements include:

1. **Data:** Effective data management, including big data analysis and data security, to support information-driven decision-making.
2. **Technology:** Implementation of the latest technologies such as artificial intelligence, blockchain, and cloud computing to improve operational efficiency and customer experience.
3. **Risk Management:** Addressing risks arising from digital transformation, including cyber risk, privacy, and regulatory compliance.
4. **Collaboration:** Partnerships with fintechs, tech companies, and regulators to create a mutually supportive ecosystem.
5. **Institutional Order:** Adjustment of organizational structure, work culture, and governance to support the effective implementation of new technologies and processes.

All of these elements must be designed in an integrated manner to guarantee a sustainable and competitive transformation.

Banking performance measurement is carried out with various indicators to assess operational effectiveness, financial stability, and profitability. Here are the main indicators used:

1. **Financial Indicators**
 - **Return on Assets (ROA):** Measures the efficiency of a bank in generating profits from its assets.
 - **Return on Equity (ROE):** Assesses the profit that a bank earns from its own capital.
 - **Net Interest Margin (NIM):** Measures the difference between interest income received and interest expense paid, relative to the interest-bearing asset.
 - **Cost to Income Ratio (CIR):** Assesses the bank's operational efficiency, by comparing operational costs with operating income.
2. **Bank Health Indicators (Regulation)**
 - **Capital Adequacy Ratio (CAR):** Indicates the adequacy of a bank's capital to absorb losses and support growth.
 - **Non-Performing Loans (NPLs):** Measures the quality of loans provided, by looking at the percentage of non-performing loans to total loans.
 - **Loan to Deposit Ratio (LDR):** Assesses the level of liquidity by comparing the disbursed credit with the third-party funds raised.
3. **Digital Innovation Indicators**
 - **Digital Adoption Rate:** Measures the rate of adoption of digital services by customers.
 - **Transaction Volume and Value in Digital Channels:** Assessing the growth in the use of digital platforms in transactions.
4. **Indikator ESG (Environment, Social, Governance)**
 - **Green Financing:** The proportion of credit disbursed for sustainable projects.
 - **Social Impact Metrics:** The social impact of the bank's CSR program.
 - **Governance Score:** Corporate governance performance in supporting transparent and accountable operations.

These measurements provide a comprehensive picture of the performance and health of digital banks from various perspectives, both internal and external.

CONCLUSION

1. The influence of digital transformation has made banking customers who usually have conservative manual transactions to branches switch to internet banking or m-Banking mobile phones
2. Digital transformation has an impact on vuca (volatility, uncertainty, complexity and ambiguity)
3. The influence of digital transformation on volatility will make changes faster, banks need to be more agile in order to survive in the market
4. The influence of digital transformation on uncertainty, banks need to make a more mature strategy to face challenges, opportunities, and threats in the future.
5. The influence of digital transformation on complexity will integrate various ecosystems from various industries to be able to communicate digitally.
6. The influence of digital transformation on ambiguity makes leadership decisions faster and more certain because it eliminates doubts.
7. With the influence of digital on the increase in banking transactions, the company's revenue will increase.

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