

DRIVING DIGITAL TRANSFORMATION IN SMALL BANKS WITH VRIO ANALYSIS

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Abstract: This study evaluates a company's resources and capabilities to determine whether they can provide a sustainable competitive advantage on digital transformation. Using VRIO analysis, the study assesses the value, rarity, imitability, and organization of digital transformation in small banks. The results show that digital transformation is valuable for small banks but is familiar and relatively easy to imitate. Organizational support is critical for successful digital transformation in small banks. Small banks must leverage their strengths and adopt emerging technologies to remain competitive in the banking sector. Result of this study suggest that small banks can achieve competitive parity through a strategic focus on digital. Results on VRIO Analysis on PT. Bank XYZ that human resources, organizational structure, technology, product & services are competitively parity. However, capital resources, information systems, skills, and reputation are competitive advantages.

Keywords: digital transformation, resource-based view, VRIO analysis, small banks

Abstrak: Studi ini mengevaluasi sumber daya dan kemampuan perusahaan untuk menentukan apakah dapat memberikan keunggulan kompetitif yang berkelanjutan dalam transformasi digital. Dengan menggunakan analisis VRIO, studi ini menilai nilai, kelangkaan, ketertiruan, dan organisasi transformasi digital di bank kecil. Hasilnya menunjukkan bahwa transformasi digital bermanfaat bagi bank-bank kecil namun familiar dan relatif mudah untuk ditiru. Dukungan organisasi sangat penting untuk keberhasilan transformasi digital di bank kecil. Bank kecil harus memanfaatkan kekuatan mereka dan mengadopsi teknologi baru agar tetap kompetitif di sektor perbankan. Hasil penelitian ini menunjukkan bahwa bank kecil dapat mencapai paritas kompetitif melalui fokus strategi pada digital. Hasil analisis VRIO pada PT. Bank XYZ bahwa sumber daya manusia, struktur organisasi, teknologi, produk & layanan bersifat paritas kompetitif. Namun, sumber daya modal, sistem informasi, keterampilan, dan reputasi merupakan keunggulan kompetitif.

Kata kunci: transformasi digital, resource-based view, analisis VRIO, bank kecil

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INTRODUCTION

The development of Internet technology has brought about significant changes in various aspects of human life, including transaction activities. This development has made it easier for humans to conduct digital transactions. Digital transformation has rapidly impacted almost all aspects of line in the last decade (Magnusson et al. 2022).

It is a consequence of the era of disruption, Industry 4.0, resulting in changes in business models and the overhaul of existing business ecosystems into new, more innovative, complex, and dynamic ecosystems (Winasis and Riyanto, 2020). However, business can improve their effectiveness and efficiency through digital transformation, but it comes with a considerable investment of resources and finances. According to recent statistical data, the failure rate for companies undergoing digital transformation can be as high as 60 - 85% (Alfitro et al. 2022). In light of this, it's crucial for business to be more accountable to their stakeholders in terms of financial information, especially in the era of the Fourth Industrial Revolution, to increase their chances of success and remain relevant (Pramono and Wahyuni, 2021).

In today's business landscape, disruption is happening at all levels of industry, including the financial services industry. Corporate officials are being forced to adapt to these. As a result, companies must adapt to existing technological trends to remain competitive, especially in the banking and corporate industry (OJK, 2018). Despite challenges such as macroeconomics conditions, regulatory compliance, and changing customer preferences, companies must embrace digital transformation to survive (OJK, 2020).

To achieve their goal of increasing competitiveness and company value, a well-planned and tailored transformation strategy is crucial (Zehir et al. 2020). By meeting the demands and needs of customers, companies can foster loyalty and gain a competitive edge. Time is of the essence, and digital transformation must be carried out quickly to succeed in today's era of disruption.

Compared to neighboring countries like Malaysia and Singapore, the banking industry in Indonesia is lagging behind in digital transformation. However, this delay can be attributed to geographical and financial literacy

challenges that still need to be addressed (Das et al. 2016).

The Resource-based view of the firm (RBV) is a framework that helps companies identify their strengths and weaknesses by examining their internal resources (Wenerfelt, 1982; Barney, 1991). This approach assumes that companies possess unique and valuable resources that are difficult to imitate, such as physical and human capital (L. Wheelen et al. 2018). Companies must be proactive in embracing digital transformation to remain competitive in today's ever-changing marketplace. With a well-planned transformation strategy, companies can harness their unique resources to succeed in the digital age.

The VRIO framework is a valuable tool for assessing a company's resources and determining their strengths and weakness. This framework consists of a series of questions about a company's business activities, specifically focusing on the values, rarity, imitability, and organization of its resources (Witcher, 2020). According to Rothaermel (2021), resources and capabilities are essential for gaining and maintaining competitive advantages, and the VRIO analysis can help companies identify which resources provide sustainable advantages and how they can be leveraged to achieve their goals. The answers obtained through this analysis can help companies determine whether their resources or capabilities are strength or weaknesses (Ariwibowo et al. 2021). The results of the VRIO analysis for internal capability elements have economic implications (Suryanto et al. 2021).

The VRIO model presents a practical framework that managers can easily comprehend and utilize (Kaliannan et al. 2023). Despite its simplicity, the model offers a comprehensive approach to identifying the critical components that provide a competitive advantage. It enables companies to distinguish between resources that offer temporary benefits and those that are sustainable (Barney and Hesterly, 2012). The VRIO model is rooted in the Resource-Based View (RBV) of the firm, which underscores the importance of internal capabilities over external market orientation. This perspective is particularly valuable when the external environment is turbulent or uncertain (Yadav et al. 2023). By ascertaining which resources are valuable, rare, imitable, and well-organized, management can make informed decisions regarding investments, operational changes, and divestitures. Through VRIO,

companies can pinpoint gaps in their capabilities and develop strategies to acquire or improve necessary resources (Brewis et al. 2023). For those contemplating mergers and acquisitions, the VRIO framework is helpful in evaluating the strategic assets of potential targets (Cirjevskis, 2020). The “Organization” in VRIO highlights the significance of organizing the company’s structure to leverage the potential advantages of its resources. VRIO analysis helps firms identify barriers to imitation, which can instrumental in maintaining a competitive advantage for longer duration (Fernandes et al. 2023).

PT. Bank XYZ’s plans a digital transformation in 2023–2025. The stages of PT Bank XYZ’s digital transformation process are in 2023, namely preparation for digital transformation. Then in 2024, developing digital capabilities, and finally in 2025, namely increasing digital capabilities. Figure 1 digital transformation roadmap Bank XYZ

Therefore, Bank XYZ needs to analyze the resources, capabilities, and competencies as the source of competitive advantage. The reason why competitive advantage is obtained from core competencies is essential because, according to "Core competencies allow companies to differentiate their products and services from their rivals, creating higher value for customers or offering products; core competencies enable companies to differentiate their products and services from competitors., creating higher value for

customers or offering products and services with a value that is comparable to lower costs. Based on these reasons, the VRIO analysis was conducted to assess the readiness of the resources, capabilities, and competencies of Bank XYZ in the banking sector, as small banks (KBMI 1), in implementing digital transformation so that the core competencies of the resources owned and able to compete.

The application of the VRIO model to innovation studies presents challenges for researchers. Given the constantly evolving nature of the innovation field and the absence of a comprehensive body of knowledge or established theoretical framework in certain areas, such as strategy and human resources, interdisciplinary inquiry is often required.

According to recent research by (Cao et al. 2022), it was found that the digital transformation of cognition and organization only affects the NPL ratio through product digital transformation. Furthermore, it was discovered that digital product transformation only increases the NPL ratio of small banks but not to large banks. The reason for these findings are that digital transformation makes it easier for larger banks to discount commercial bills owned by MSMEs, thereby encouraging smaller banks to channel corporate loans to MSMEs that have a higher risk. In light of these findings, it is recommended that companies conduct an internal analysis of their available resources.

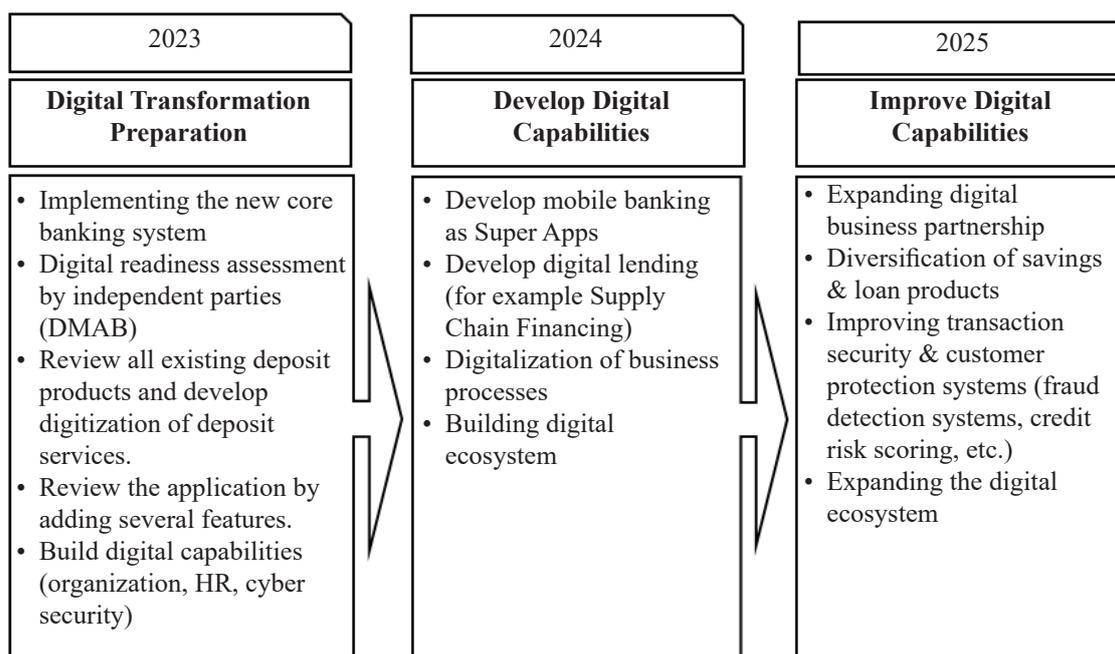


Figure 1. Digital transformation roadmap Bank XYZ

While Xie and Wang (2023) suggest that digital transformation can enhance bank performance, reduce the negative impact of the new technology entrants, and promote the exit of offline channels, Khattak et al. (2023) argue that investing in technology and diversification can make banks riskier and more fragile. Moreover, their research indicates that digital transformation and diversification have similar impacts on stability. Essentially, digital transformation is more advantageous for small banks with lower-income diversification. Therefore, the aim of this paper is to assess the competitive advantage of PT Bank XYZ using VRIO analysis, which enable it to successfully implement its digital transformation strategy.

METHODS

PT Bank XYZ stood out as a beacon of interest in our scholarly pursuit to decode the digital transformation dynamics within the banking sector. Guided by the principles of qualitative research, our methodology was designed to delve deep, capturing the intricate nuances of the bank's digital evolutions.

This study uses the literature study method, which starts by collecting and searching for information data through written and electronic documents. The collection will also be more credible, supported by academic writing in the form of books and notes from previous authors (Sugiyono, 2017). One of the documents used as a reference is the Bank Business Plan (RBB). Referring to SEOJK No. 12/POJK.03/2021 date March 31, 2021, regarding Plans Commercial Bank Business and POJK No. 51/POJK.03/2017, dated July 18, 2017, concerning the implementation of sustainable finance for financial service institution, issuers, and public company.

Central to our inquiry were in-depth interviews. These dialogues, both structured and exploratory, aimed to harness the insights of those at the forefront of PT Bank XYZ's digital transformation. The Director offered strategic vantage points, shedding light on the overarching vision and goals. The Head of the Digital Division and the Digital Department Head peeled back the layers, revealing the strategies, challenges, and milestone of the specific digital endeavors. The digital Staff, our eyes, and ears on the ground, narrated the day-to-day triumphs and tribulations of the transformative journey. Each of these dialogues, typically lasting between 30-45 minutes, was diligently recorded (with

the participants' consent) and subsequently transcribed, preserving the richness of the insights shared.

Our analytical compass was firmly set on the VRIO framework (Figure 2). This framework, emphasizing the Value, Rarity, Inimitability, and Organization of resources, became our tool to discern PT Bank XYZ's competitive positioning in the digital arena. Through VRIO analysis, we assessed each of the bank's digital resources and capabilities, determining their potential to offer sustainable competitive advantage. This analysis illuminated not only the strengths of PT Bank XYZ but also areas of potential growth and improvement.

To ensure the robustness and authenticity of our findings, we employed a dual-pronged validation approach. First, through triangulation, we cross-referenced our interview-derived insights with available organizational documents and reports, ensuring a multi-faceted understanding. Furthermore, member checking played a pivotal role. By sharing our preliminary interpretations with a subset of our informants, we ensured that our insights were both accurate and resonant with the lived experiences of those at PT Bank XYZ. In summation, our methodological journey, anchored in the VRIO framework and analysis, painted a comprehensive and detailed portrait of the PT Bank XYZ's digital transformation odyssey.

RESULTS

Digital transformation has become a crucial aspect of modern business operations across various industries, including banking. Small banks are increasingly adopting digital transformation to remain competitive and meet customer expectations. Therefore, VRIO can be used as an additional framework to dig deeper into factors related to strengths and weakness in SWOT analysis.

Analysis of Bank Position in Facing Business Competition

Referring to POJK 12/POJK.03/2021 concerning Commercial Banks, the position of the banking industry is divided and grouped based on the core capital it has, which is grouped into 4 (four) Core Capital Bank Groups (KBMI), namely: KBMI 1 (core capital up to IDR 6 trillion); KBMI 2 (core capital IDR 6 trillion to IDR 14 trillion); KBMI 3 (core capital IDR 14 trillion

to IDR 70 trillion); KBMI 4 (core capital above IDR 70 trillion).

Based on this grouping, Bank XYZ is included in KBMI 1 with plans to increase the bank's core capital by IDR 3 trillion by the end of 2022. Technological developments have also made the banking sector adapt to innovate through digital banking services to the needs of customers who increasingly carry out transactions digitally.

The Bank XYZ carries out a SWOT analysis to determine the direction of development business and company strategy going forward, the strength and weakness of Bank XYZ are as follows:

Strength:

1. As a Public Company, it has implemented information disclosure and good corporate governance.
2. The Bank XYZ Health level is Healthy.
3. High commitment from shareholders.
4. Loyal customer base
5. Minimum capital adequacy as KBMI 1 has been met according to regulations.

Weakness:

1. Information technology still needs to be improved, mainly digital technology.

2. The quantity and quality of human resources still need to be improved.
3. The financial intermediary function carried out by banks still need to be improved (the LDR ratio is still relatively low).
4. The business scope is still limited.
5. Expensive funds still dominated the funding structure.

VRIO Analysis of Bank XYZ

Table 1, it can be seen how the respondents chose the resources owned by Bank XYZ to enter into the VRIO framework model. Regarding human resources, organizational structure, technology, and product services, the respondents agreed these resources were not rare. Whereas on the resources of Bank XYZ, namely organizational structure, technology, and product services, all respondent's 100 percent agreed, including on Imitability.

Table 1. Results of respondents questionnaire

Resource	V	R	I	O
Human Resources	75%	0%	75%	75%
Capital	75%	25%	25%	75%
Information System	50%	25%	75%	75%
Organizational structure	50%	0%	100%	75%
Technology	75%	0%	100%	50%
Products & services	75%	0%	100%	25%
Skills	75%	25%	75%	75%
Reputation	75%	25%	25%	50%

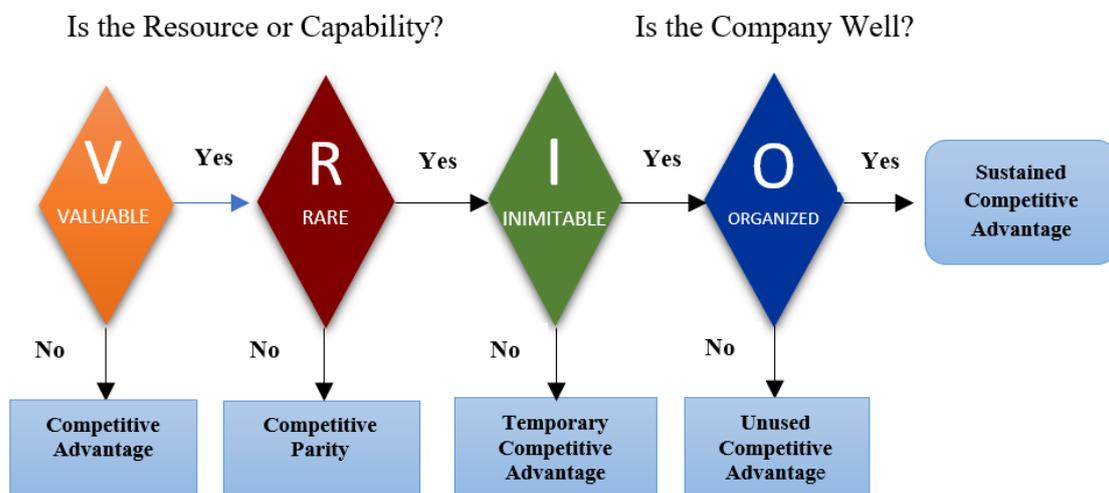


Figure 2. The VRIO Framework (Barney and Hesterly, 2012)

Based on the research background of the problem formulation, as well as the research objectives, The aim of this paper is to assess the competitive advantage of small banks using VRIO analysis (assessment results at PT Bank XYZ can be seen in Table 2), which include:

Valuable

The ability to capitalize on opportunities and mitigate threats from the external environment is one of the criteria for resources to serve as a competitive advantage. For small banks, it is crucial to have resources that enable them to handle digital transformation. By embracing digital transformation, small banks can enjoy several benefits such as enhanced efficiency, reduced costs, and improved customer experience. Digital transformation allows small banks to simplify their operations, minimize manual processes, and offer customers more accessible banking services. Overall, digital transformation is highly valuable for small banks.

Rare

When evaluating the scarcity of resources in the e-business sector, it is important to consider the presence of competitors who possess the required resources. If only a small number of competitors possess these resources, they may be considered rare. However, it should be noted that digital transformation is not limited to small banks. Larger banks have been implementing digital transformation for some time, and digital banks and fintech companies are also disrupting the traditional banking industry. Therefore, digital transformation cannot be considered a rare occurrence for small banks.

Imitate / Costly to Imitate

Recent research has explored the challenges small banks face when it comes to digital transformation. One key issue is the cost of acquiring and developing resources that can give a company a competitive edge. If small banks don't have the resources to keep up with digital transformation, they may suffer losses. However, the research also suggests that digital transformation is relatively easy to imitate. Small banks can adopt similar digital banking services as larger banks have done. This raises the question of whether other banks have policies and procedures in place that support the exploitation of valuable, rare, and expensive resources to replicate. If so, small banks to achieve a competitive advantage. Overall, the findings suggest that small banks can successfully compete in the field of digital transformation if they adopt similar strategies as their larger counterparts.

Organize

The successful digital transformation of small banks heavily relies on their ability to effectively organize their resources. This includes receiving proper organizational support, such as financial investment, employee training, and supportive culture. Without these resources in place, small banks may struggle to keep up with the digital demands of their customers. Therefore, it is imperative for small banks to prioritize organizational support in order to achieve competitive parity.

Table 2. Findings from the VRIO Analysis in PT Bank XYZ

Resource	V	R	I	O	Competitive Implication
Human Resources	+		+	+	Competitive Parity
Capital	+	+	+	+	Competitive Advantage
Information System	+	+	+	+	Competitive Advantage
Organizational structure	+		+	+	Competitive Parity
Technology	+		+	+	Competitive Parity
Products & services	+		+	+	Competitive Parity
Skills	+	+	+	+	Competitive Advantage
Reputation	+	+	+	+	Competitive Advantage

Human Resources

Valuable:

Human Resources emerge as a cornerstone for small banks. Their value lies in the unique skills and knowledge they bring, which are essential for tasks such as customer service, risk management, and compliance. In the era of digitalization, banks that have employees with digital skills, such as software developers, data analyst, cybersecurity experts, and IT specialists, are highly valuable. Beyond task execution, human resources play a pivotal role in shaping the bank's culture. This, in turn, influences employee satisfaction, retention rates, and overall organizational morale. Implication: Banks should prioritize continuous training and development programs to ensure their human resources are equipped with the latest skills and knowledge. Additionally, fostering a positive organizational culture can enhance employee productivity and loyalty. Bank must ensure that their HR possesses relevant skills in technology and digitalization to support innovation and better customer service.

Rare:

Employees with rare qualifications in financial technology (fintech) or cybersecurity, which can help the bank compete in the competitive digital bank industry are a rare resource. Implication: banks need to attract and retain employees with unique expertise and develop employee development programs that focus on technology.

Inimitable:

A work culture that supports innovation and adaptation to technological changes is a hard to copy element by competitors. Implication: Banks XYZ should create a work culture that encourages creativity, continuous learning, and flexibility to compete effectively in the rapidly changing digital environment.

Organized:

A bank's ability to manage multidisciplinary teams consisting of technology, finance, and customer service professionals is the key to achieving successful digital

transformation. Implications: Bank XZY should have an effective HR management system, including career development, performance management, and knowledge management, to ensure that teams are well-organized and can collaborate efficiently.

Figure 3 explains that PT. Bank XYZ can makes 3 main strategies in human resources namely HR Competence, remuneration, and digital culture. Building Bank HR competencies that are ready to enter the digitalization of Bank services, improving a more competitive remuneration system against industry standards and develop digital culture to support digital business. The internal strength that is the key to the success of traditional to digital transformation is digital transformation in Human Resources (HR) (Hartono and Atmaja, 2021)

Organizational Support

Value:

The success of digital transformation in small banks is intricately linked to the level of organizational support they receive. This encompasses financial investments, employee training initiatives, and cultivating a culture that embraces digital change. Implication: Banks should allocate adequate resources, both financial and non-financial, to support their digital transformation endeavors. This includes investing in technology, training programs, and change management initiatives. Rare:

Strong organizational support in resource and capability management can be rare if not all competitors have similar capabilities in managing their resources. Implication: Bank XYZ should maintain and develop its organizational support to remain a rare resource.

Inimitable:

Small banks can build a culture that is hard to imitate, encouraging employees to have personal relationships with customers or innovate in how they serve customers. Implication: small banks should maintain a culture that supports their uniqueness and makes it difficult to be copied by competitors.

Organized:

Good organization is key to the success of small banks in managing resources and providing efficient services. This involves HR management, the technology used and well-organized business processes. Implications: small banks must have well-organized processes and systems to compete efficiently in a competitive market.

Competitive Positioning

Value:

The VRIO analysis highlighted several areas where PT Bank XYZ has a competitive advantage, such as capital, information system, skills, and reputation. Conversely, areas like human resources, organizational structure, technology, products, and services were identified as having competitive parity. Implication: While areas of competitive advantage should be leveraged and strengthened, areas of competitive parity require strategic attention. Banks should explore ways to innovate and differentiate themselves in these areas to gain a competitive edge.

Rare:

Uniqueness for small banks can be found in their in-depth knowledge of the local community, strong relationships with customers, or the ability to provide unique financial solutions. Implication: Bank XYZ should maintain and leverage this uniqueness, which may not be possessed by larger banks or other competitors in the market.

Inimitability:

Small banks can create a culture that is difficult to replicate, encouraging relationships with customers, or the ability to provide unique ways of delivering services. Implication: Bank XYZ should preserve a culture and processes that are hard to imitate by competitors, which may include developing a unique work culture or efficient customer service processes.

Organized:

Operational efficiency and effective human resource management can help small banks compete in terms of cost and service. Implication: Bank XYZ should have well-organized management systems and processes to ensure efficiency in managing their resources, such as HR and technology.

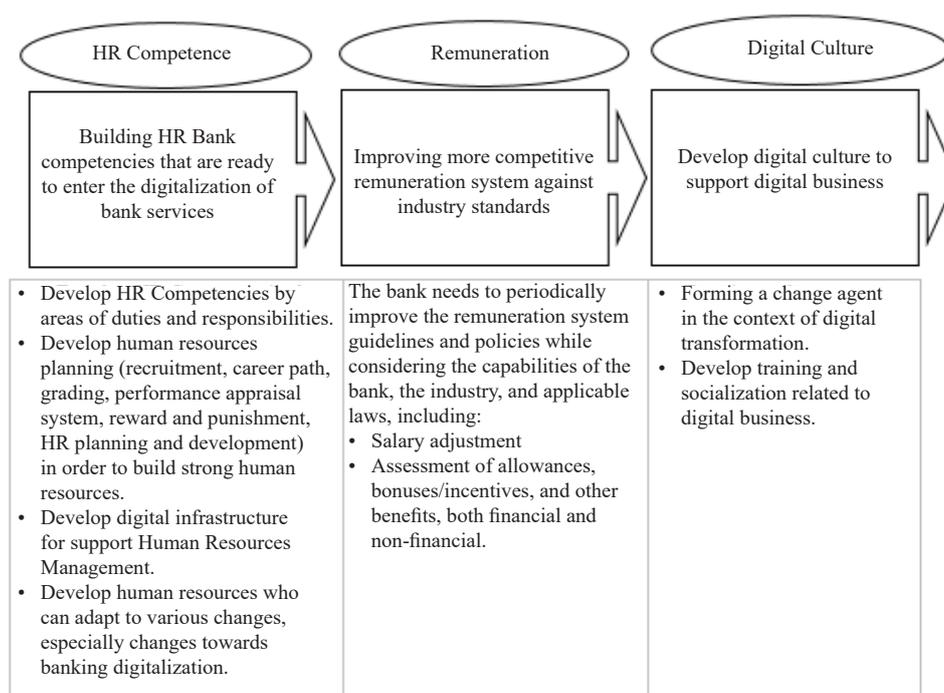


Figure 3. Human Resource Strategy

Customer-Centric Approach

Value:

Digital transformation is not just about technology adoption but also about meeting the evolving expectations of customers. Implications: banks should adopt a customer-centric approach in their digital transformation journey. This involves understanding customer needs, preferences, and pain points, and designing digital solutions that address them effectively.

Rare:

A deep integrated customer-centric approach within a bank's processes can be rare among small banks. Many small banks may lack the resources or culture to support such an approach. Implication: Bank XYZ should maintain and leverage the uniqueness of their customer-centric approach, which may not be possessed by most of their competitors in the small bank segment.

Inimitable:

Strengthening a customer-centric culture and integrating it into small bank's processes may be difficult for competitors to replicate, especially if it requires deep cultural changes. Implication: Bank XYZ should protect their customer-centric culture and systems to remain difficult to imitate by competitors.

Organized:

Implementing a customer-centric approach requires a well-organized organizational structure, efficient business processes, and technology that supports better customer understanding. Implication: Bank XYZ should have well-organized management systems to ensure that their customer-centric approach can be efficiently executed.

Risk Management and Compliance

Value:

As banks embark on their digital journey, they must also be cognizant of the associated risks. This includes cybersecurity threats, data breaches, and compliance challenges. Implications: Bank should invest in robust

risk management and compliance mechanisms. Regular audits, cybersecurity measures, and employee training can help mitigate potential risks. Bank XYZ reviewing and enhancing risk management and compliance towards digital services can be seen at Figure 4.

Rare:

Robust digital transformation strategies and capabilities can be relatively rare among small banks, particularly if many of them have yet to fully embrace digital technologies. Implication: Bank XYZ can leverage their rarity in having effective digital transformation initiatives as a competitive differentiator in the market.

Inimitable:

Developing and implementing a successful digital transformation strategy can be challenging for competitors to replicate, especially if it involves changes to the organizational culture, legacy systems, and workflows. Implication: Small banks should work on continuously improving their digital transformation efforts to make it difficult for competitors to imitate effectively.

Organized:

Digital transformation requires a well-organized approach, including clear objectives, dedicated teams, and technology infrastructure. Implication: Bank XYZ must have organized digital transformation initiatives to successfully adopt and integrate digital technologies into their operations.

Figure 4, some policies can be implemented to ensure the digital transformation process is implemented appropriately with the applicable provisions and the level of risk measurable and controllable, evaluate strategy, organizational structure, policies, and procedures, as well risk management infrastructure, to ensure that all risk faced by the bank can be identified, measured, monitored, and controlled correctly, adapt policies, systems, and procedures to support improving digital business services, ensure Basel III reforms are implemented accurately and consistently, improve the implementation of compliance and culture function; compliance goes hand in hand with the digital transformation.



Figure 4. Risk Management & Compliance

CONCLUSIONS AND RECOMENDATIONS

Conclusions

The VRIO analysis provides insights into the digital transformation in small banks. Digital transformation has value for small banks, but it is not rare and is easy to imitate. Organizational support is critical for successful digital transformation in small banks. Small banks need to leverage their strengths and adopt emerging technologies to remain competitive in the banking sector. Results on VRIO Analysis on PT. Bank XYZ Tbk, that human resources, organizational structure, technology, product & services are competitive parity. However capital resources, information system, skills and reputation are competitive advantages.

Recommendations

To ensure PT Bank XYZ's digital transformation remains competitive, it is recommended to continuously monitor and analyze industry trends. Investing in research and analytics can help identify emerging technologies, customer needs, and competitive threats to stay ahead of the curve. These efforts can be documented and published in an academic journal to contribute to the broader knowledge base of the banking sector. Second, invest in emerging technologies: small banks should continue investing in AI, blockchain, and data analytics technologies to improve their operations and customer experience. Adopting these technologies can help small banks streamline their processes, personalize their services, and improve decision-making. Third, foster a culture of innovation: A culture of innovation is essential for successful digital transformation. Small banks should encourage employees to experiment with

new ideas, share knowledge, and embrace change. PT Bank XYZ should also invest in employee training and development to build digital skills. Fourth, focus on customer experience: Providing a superior customer experience is critical for small banks to compete with larger and fintech companies. Small banks should invest in customer service and personalize their services to meet customer needs. Collaborate with fintech companies: PT. Bank XYZ can collaborate to access new technologies, expand their customer base, and improve their competitive position. Collaboration can also help small banks reduce costs and improve operational efficiency.

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