

## **Examining the Impact of Customer Orientation and Digital Adoption on Organizational Resilience in Indonesia's Banking Sector**

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**Abstract.** In times of rapid and unpredictable changes in the environment, having customer-oriented and digitally adopted internal capabilities is essential for maintaining company performance. It is important for the banking industry in Indonesia to recognize the significance of aligning with customer needs and implementing digital adoption in order to increase organizational resilience. However, research on organizational resilience in the banking industry in Indonesia has been limited. To address this, a study was conducted using a quantitative approach to investigate organizational resilience in the banking sector. Surveys were conducted with 75 bank respondents from commercial, regional, Islamic, and digital banks. The results showed that customer orientation and digital adoption had a statistically significant positive effect on organizational resilience, improving it by 29% and 25%, respectively. Although environmental turbulence did not significantly moderate digital adoption's impact, enhancing strategic capabilities like customer orientation and digitalization can bolster resilience for banks in Indonesia's dynamic environment. This research contributes to the limited discussion on organizational resilience in the context of Indonesian banking.

**Keywords:** customer orientation, digital adoption, environmental turbulence, Indonesian Banking

## **1. Introduction**

The banking industry in Indonesia is facing significant challenges due to rapid technological advancements and market turbulence. This includes changes in consumer preferences, as noted by Abbas & Ul Hassan (2017), Anggraini & Sudhartio (2019), Bodlaj & Čater (2019), and Gemici & Zehir (2023). One of the most critical external factors affecting the industry is the rapid development of internet technology and digital disruption, which has a significant impact on the competitive landscape (Bank Indonesia, 2022). The threat of digital disruption has been a serious concern for banks for the past five years, as it impacts the existence of traditional players (OECD, 2020). Incumbent banks must adapt to remain competitive and address changes brought about by advanced technological developments (Beck et al., 2022; McKinsey, 2021).

The banking industry in Indonesia has been greatly impacted by the rise of digital disruption in the past five years. This has posed a significant challenge to established financial institutions, as it affects their continued viability. From 2016 to 2019, the sector experienced a period of strain, with fluctuating and declining Return on Assets (ROA) for most of 2019. Additionally, the Net Interest Margin (NIM) has decreased from 5.70 percent in 2016 to 4.90 percent as of October 2019. Furthermore, operating expenses remained stable compared to income from 2016 to 2019 (OJK, 2020).

In times of instability, businesses require a clear customer-oriented approach, flexible organizational structure, digital capabilities, supportive culture, and sound governance to drive digital transformation (Siek & Rukma, 2022). According to Richter et al. (2017) and Syed et al. (2017), digitalization is crucial as financial institutions must find innovative ways to serve their clients to maintain their business performance. This viewpoint aligns with Liu et al.'s (2011) research findings, which underscore the importance of digital transformation for modern organizations to thrive and gain competitive advantage in the digital economy by enhancing banking organizational resilience. Moreover, successful technology integration can boost customer acquisition, retention, and loyalty, resulting in increased sales and overall company performance (Javalgi et al., 2005; Mehralian & Khazaei, 2022).

Indonesia's banking sector has shown remarkable resilience in the face of external challenges. This resilience is of great interest to management academics, as it involves a combination of characteristics, capacities, and capabilities that help organizations deal with unforeseeable changes in an uncertain environment. This, in turn, helps organizations proactively maintain their functionality and mitigate risks. By examining Indonesia's diverse consumer profile, outdated digital infrastructure, and the adaptability of its banks during crises, we can gain valuable insights into the study of organizational resilience.

In Indonesia, the banking industry faces a challenge due to the absence of literature on organizational resilience that is specific to the country. This has resulted in a lack of emphasis on the factors that are relevant to the banking sector in Indonesia. Consequently, leaders of banks may find it difficult to plan and strengthen their organization's resilience systematically. This study aims to offer valuable insights to bank management by introducing an organizational resilience model that is based on customer orientation and digital adoption capabilities. Furthermore, it is interesting to study how environmental turbulence affects organizational resilience in the banking sector of Indonesia.

The purpose of this research is to explore how organizational resilience in Indonesia's banking sector can be improved through strategic capabilities such as customer orientation and digital adoption. Specifically, the study will investigate whether digital adoption and customer orientation have an impact on organizational resilience, as there is limited research on this topic. The study will use statistical analysis to examine the relationship between these variables, including the influence of customer orientation and digital adoption on organizational resilience, as well as the effects of environmental turbulence on the relationship between digital adoption and organizational resilience. This research is crucial as there is currently a lack of studies on these variables in the banking industry in Indonesia.

## **2. Literature Review**

### **2.1. Digital Adoption**

Digital adoption refers to the utilization of digital technology to create new products, services, or solutions (Ananda et al., 2020). Essentially, when an individual or organization decides that implementing a particular

technological innovation can add value to their activity, digital adoption occurs (Yusif et al., 2016; Gagnon et al., 2012). It encompasses the availability and use of digital technology by all major participants in an economy, including businesses, society, and government (World Bank, 2019).

In today's digital age, companies must adapt to the new digital environment to avoid falling victim to "digital Darwinism." Established companies have the potential to lead the business, but only if they pay attention and remain flexible to digital developments (Utomo et al., 2023). Digital adoption is closely related to digital transformation, which refers to organizational change brought about by the widespread adoption of digital technology (Hanelt et al., 2021). In the banking industry, digital adoption is influenced by several factors, including perceived usefulness, ease of use, transaction cost, awareness, web features, security, privacy, and trust (Ananda et al., 2020).

When it comes to banking in Indonesia, digital adoption is a necessary aspect that banks must meet to comply with business and regulatory requirements. Despite being classified as digital native, many banks in Indonesia have yet to fully optimize their technology adoption. There are several factors that contribute to this, but overall it's important to recognize that digital adoption needs to be improved quickly to support the growth of the banking industry in Indonesia.

## **2.2. Customer Orientation**

Putting the customer first is the main focus of customer orientation. Customer orientation is defined as a set of paradigms that place the customer as a priority over other stakeholders in the organization. In other words, customer orientation means observing customer wants and needs, anticipating their behavior, and then acting accordingly (Aulia & Soetjipto, 2022; Wallin Andreassen, 1994). It is a commitment made by the organization to gather information about customer needs, find ways to satisfy them, and address any complaints they may have. This approach is based on a set of principles that prioritize the customer over other stakeholders within the organization (Lukas & Ferrell, 2000; Micheels & Gow, 2015).

Having a customer-oriented approach allows companies to swiftly gather market intelligence (Jaworski & Kohli, 1993), empowering them to develop pricing, new product development, and marketing communication skills to adapt to changes and uncertainties (Murray et al., 2011). In the banking industry, customer orientation is closely linked to strategies aimed at establishing trust in banks as institutions that manage customer finances. Accenture (2020) highlights the significance of customer orientation, stating that the combination of customer trust and loyalty can increase conventional bank revenues by nine percent, and it is positively impacting the resilience of banking organizations.

In Indonesia's banking industry, customer orientation is considered a crucial aspect of providing quality goods and services. Banks that effectively cater to customers' needs and address their concerns are typically the ones that succeed in dominating the market. It is widely agreed upon among banks that customer satisfaction is essential for achieving excellence in the financial industry.

## **2.3. Environmental Turbulence**

In the course of their existence, all industries are bound to encounter varying levels of turbulent situations. Calantone et al. (2003) suggest that a volatile environment is characterized by significant fluctuations between periods, resulting in conditions that are unpredictable, dynamic, and unstable. Such conditions are marked by sudden changes in demand and growth rates, increased competition, fluctuating profits, and obstacles that constantly alter the industry's competitive landscape.

According to Calantone et al. (2003), a turbulent environment in business is when there are ongoing and unexpected changes in market and/or technology, which can create risks and uncertainties during the strategic planning process. Market volatility can be caused by changes in customer preferences, pricing or costs, and competitive positioning that result in traditional industry boundaries being blurred. The ability to adapt quickly to a dynamic environment can give a company a competitive advantage. Recent studies (Baba, Mahmood, & Halipah, 2017) have emphasized the importance of environmental turbulence because it not only affects a company's strategic decisions but also has a significant impact on decisions related to adopting new technology.

The banking sector in Indonesia is constantly facing environmental turbulence that keeps changing. Although opinions may differ on the impact of this turbulence, it is argued that it is not always negative.

Having faced turbulence before, such as during the financial crisis, the industry understands the importance of being prepared to handle future challenges (Financial Service Authority, 2017).

## **2.4. Organizational Resilience**

Companies are often faced with unexpected challenges and sudden changes that they are not prepared for. Different types of disasters, such as natural calamities, terrorist attacks, industrial mishaps, and economic instability, can greatly affect the entire supply chain. Fiksel et al. (2015) found that some organizations are better at responding to extreme situations than others, and therefore they are considered more resilient.

The concept of "resilience" is often used to describe businesses that are able to respond quickly, recover rapidly, or innovate during times of difficulty (Vogus and Sutcliffe, 2012). According to academics, resilience refers to a mindset of adaptability in the face of adversity, as well as proactive preparation within an organization's capabilities. Essentially, organizational resilience is the ability to flexibly reconstruct company models and strategies in response to a changing environment, instead of merely maintaining existing advantages (Tengblad, 2018). After overcoming difficult situations, organizations not only regain their ability to function but also develop new skills that fit their changed environment (Lengnick-Hall et al., 2011). This means that companies can actively adjust to new and unfamiliar circumstances (Vogus and Sutcliffe, 2007; Lengnick-Hall et al., 2011).

## **3. Hypothesis Development**

This section discusses the relationship between each construct in the suggested model (see Figure 1).

### **3.1. Customers Orientation and Digital Adoption**

According to Kopalle et al. (2020), customer orientation refers to the approach of providing personalized and enhanced customer experiences, made possible by embracing the digital ecosystem. This strategy has a significant impact on digital adoption because the business environment is shifting towards a digital ecosystem, where digital connectivity increasingly affects the traditional interdependence of companies (Kopalle et al., 2020; Wang et al., 2022). For companies that have not integrated this technology into their business models, these changes offer new opportunities for value creation through new capabilities (Nurfaida et al., 2021). Furthermore, when consumer behavior changes, such as customer orientation, can also influence digital adoption (Quinton et al., 2018). Therefore, we have developed the following hypotheses:

**Hypothesis 1:** customer orientation has a positive and significant impact on digital adoption

### **3.2. Customer Orientation and Organizational Resilience**

In modern era, it is crucial for businesses to prioritize customer satisfaction. Customer orientation is a business strategy centered around meeting the needs of customers. Essentially, a customer-oriented company recognizes that its success depends on how well it caters to customers (Gil Saura et al., 2005). Key characteristics of a customer-oriented business include prioritizing customer needs, displaying empathy, providing effective follow-up, and striving to make things easier for customers (Smith, 2023). By adopting a customer-oriented mindset, a company can align its business goals with the needs and desires of its customers. This approach is grounded in the belief that to endure and prosper, businesses must prioritize customer satisfaction (Pelham, 1999). Based on statement, the following hypotheses are formulated:

**Hypothesis 2:** Customer Orientation has a positive and significant effect on Organizational Resilience.

### **3.3. Digital Adoption and Organizational Resilience**

According to Tanrivardi & Lim (2017), companies can succeed in complex and competitive environments by developing adaptive capabilities through their systems. With the rise of Industry 4.0, traditional companies are facing new threats and are adopting digital technologies to remain competitive (Richter et al., 2017; Rizvi et al., 2020; Syed et al., 2017). Hanafiah & Soomro (2021) further emphasize the importance of digital adoption for companies to achieve organizational resilience and readiness for the 4.0 Industrial Revolution. Kachali et al. (2012) suggest that strategic investments in digitization can lead to new opportunities for future business activities. As a result, this study proposes the hypothesis:

**Hypothesis 3:** Digital adoption has a positive and significant effect on organizational resilience.

### 3.4. Environmental Turbulence, Digital Adoption, and Organizational Resilience

According to a study conducted by Oh dan Teo in 2006, most of all industry is constantly evolving and experiencing significant changes in its structure. To remain competitive in this volatile environment, the companies need to reassess their organizational strategies, structures, and processes (Müller et al., 2018). In the digital age of industry 4.0, companies must adopt digital technologies to survive as net generation consumers expect it. Organizational resilience is a promising concept that can help companies survive and thrive even during challenging times (Clément & Rivera, 2017; Luthar et al., 2008). Companies will experience both stable and unstable periods due to various changes, and technological advancements have a significant impact on social and economic restructuring (Dervitsiotis, 2012; Hillmann & Guenther, 2021). Therefore, the fourth hypothesis can be stated as follows:

**Hypothesis 4:** Environmental Turbulence has a positive and significant effect on moderating digital adoption and organizational resilience.

Based on the four hypotheses, a research model was developed and shown in Figure 1.

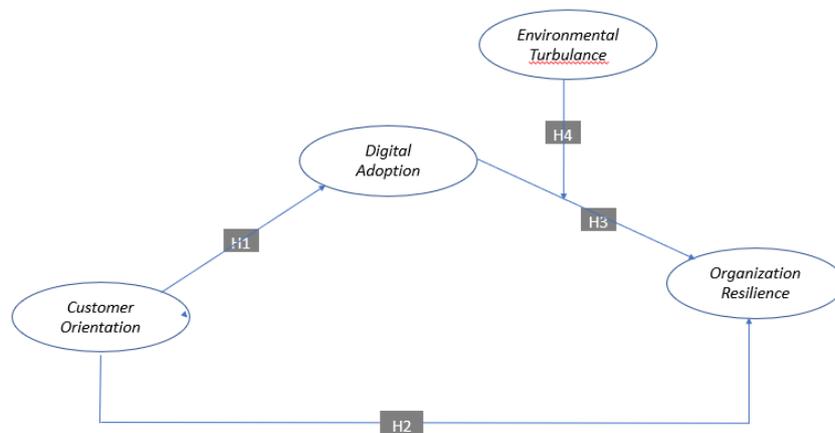


Fig.1: Research model

## 4. Research Methodology

For this study, a cross-sectional quantitative method was employed, utilizing SEM-PLS analysis. This type of analysis was selected as it can effectively depict relationships between latent variables simultaneously. Structured interviews using a questionnaire with four answer options on a Likert scale were conducted to gather data. The data was collected using the Google Form application during the period of June-August 2022. A census technique was utilized, with a population of 107 banks included in the non-probabilistic sampling.

During the data collection period until the questionnaire deadline, 75 banks out of 107 in Indonesia (80.25% of the population) participated. These banks included commercial banks (48%), Regional Development Banks (31%), digital banks (12%), and Islamic banks (9%), representing all four types KBMI (Group of banks based on core capital). The research questionnaire was completed by bank employees who held leadership positions, such as Directors, Senior Vice Presidents, Vice Presidents, and Senior Management. They followed the guidelines provided by the researchers for filling out the questionnaire.

Based on the KBMI analysis of respondents, it was found that the majority (57%) were in KBMI 1 category. Regional Development Banks dominated this group with 43 respondents. KBMI 2 had 15 respondents (20%) with digital banks being the dominant type. KBMI 3 and 4 had 12 respondents (16%) dominated by foreign banks and 5 respondents (7%) dominated by state banks.

In this study, two types of latent variables were utilized: exogenous latent variables and endogenous latent variables. Exogenous variables included digital adoption (DA), which consisted of two indicators -

appropriateness and effectiveness (Ananda et al., 2020); customer orientation (CO), which consisted of three indicators - satisfaction, loyalty, and reputation (Wallin Andreassen, 1994); and environmental turbulence (ET), which consisted of technology turbulence and market turbulence as indicators (Andersson et al., 2019; Arifin, 2017; Kaur et al., 2019). On the other hand, organizational resilience (OR) as an endogenous latent variable consisted of two indicators - financial resilience and strategic resilience (Chen, R, et al., 2021).

In this study, we use variable analysis with SEM techniques. This method expands on path analysis, which is an extension of multiple regression in various regression models. The SEM approach has two main components: the measurement component and the structural component. The measurement component examines the relationship between latent variables, constructs, and real factors with indicators, also known as Confirmation Factor Analysis (CFA). Meanwhile, the structural component analyzes the relationship between the latent variables, construction, or the factor itself.

### 5. Result and Discussion

In order to ensure the internal consistency of the items, factor loading was computed for each variable. All components were included in the analysis since their factor loading above the threshold of 0.7, as indicated in Table 1.

Table 1. Factor Loading (Outer Loading)

Variable	Indicator	Loading Factor	Variable	Indicator	Loading Factor	
CO	CO1	0.795	ET	ET1	0.894	
	CO10	0.778		ET2	0.875	
	CO11	0.85		ET3	0.769	
	CO2	0.75		ET4	0.75	
	CO3	0.725		ET5	0.899	
	CO4	0.707		ET6	0.738	
	CO5	0.772		ET7	0.838	
	CO6	0.722		ET8	0.928	
	DA	CO7	0.74	OR	OR1	0.804
		CO8	0.765		OR2	0.791
CO9		0.896	OR3		0.832	
DA1		0.776	OR4		0.746	
DA2		0.746	OR5		0.735	
DA3		0.798	OR6		0.939	
DA4		0.793	OR7		0.84	
DA5		0.844	OR8		0.8	
	DA6	0.872	Moderating Effect	DA * ET	0.986	
	DA7	0.878				

Based on the validity test results, it is shown that the variables analyzed in this study have loading factors greater than 0.7. Additionally, the obtained results indicate that the average variance extracted (AVE) value exceeds the threshold of 0.5, confirming the model's validity as presented in table 2.

Table 2. Average Variance Extracted (AVE)

	Average Variance Extracted (AVE)
Customer Orientation	0.600
Digital Adoption	0.667
Environmental Turbulence	0.704
Organizational Resilience	0.661
Moderating effect ET->DA->OR	1.000

In order to determine discriminant validity, we used the Fornell and Larcker technique by calculating the square root of the AVE and comparing it to the correlations between latent variables. The results of the Fornell and Larcker test showed that they comply with the established criteria, as shown in Table 3.

Table 3. Fornell & Larcker Criterion

	Customer Orientation	Digital Adoption	Environmental Turbulence	Moderating effect ET->DA->OR	Organizational Resilience
Customer Orientation	0.775				
Digital Adoption	0.710	0.817			
Environmental Turbulence	0.362	0.347	0.839		
Moderating effect ET->DA->OR	-0.071	-0.053	-0.392	1.000	
Organizational Resilience	0.798	0.797	0.304	-0.081	0.813

In the evaluating reliability, there are two methods used: Composite Reliability and Cronbach's Alpha. The data presented shows that both approaches produced test results above 0.7. Therefore, it can be concluded that the questionnaire used has passed the reliability test (refer to table 4).

Table 4. Composite Reliability and Cronbach's Alpha

	Composite Reliability (CR)	Cronbach's Alpha
Customer Orientation	0.933	0.943
Digital Adoption	0.916	0.933
Environmental Turbulence	0.940	0.950
Organizational Resilience	0.926	0.939
Moderating effect ET->DA->OR	1.000	1.000

The table below shows the R square values for digital adoption (0.567) and organizational resilience (0.846), both falling in the accepted category (table 5).

Table 5. R squared

	R square	R square adjusted
Digital Adoption	0.567	0.558
Organizational Resilience	0.846	0.830

In addition, table 6 displays that the model used had a good compatibility test with an SRMR score of 0.081 and an NFI of 0.589.

Table 6. Goodness of Fit

GOFI	Calculated Value	Standard Value	Conclusion
SRMR	0.081	< 0.100	Good fit
NFI	0.589	Closer to 1 the better	Good fit

Based on the results presented in Table 7, it is evident that customer orientation has a notable and positive effect on both digital adoption ( $\beta=0.519$ ,  $\rho=0.000$ ) and organizational resilience ( $\beta=0.293$ ,  $\rho=0.001$ ).

Additionally, digital adoption also has a positive and significant impact on organizational resilience ( $\beta=0.250$ ,  $\rho=0.041$ ). However, the results indicate that environmental turbulence does not have a significant moderating effect on the relationship between digital adoption and organizational resilience ( $\beta=-0.135$ ,  $\rho=0.287$ ).

Table 7. Hypothesis Results

	<b>Path coefficient</b>	<b>T-statistic</b>	<b>P-values</b>	<b>Notes</b>
Customer orientation -> digital adoption	0.519	5,954	0.000	supported
Customer orientation -> Organizational resilience	0.293	3,296	0.001	supported
Digital adoption -> Organizational resilience	0.250	2,051	0.041	supported
Environmental Turbulence -> digital adoption -> Organizational resilience	-0.135	1,066	0.287	Not supported

The purpose of this study is to investigate the correlation between customer orientation and digital adoption in Indonesia's banking sector. The study findings confirm hypothesis 1, which states that customer orientation positively and significantly impacts digital adoption. This aligns with previous research indicating that customer orientation is fundamental to enhancing customer value and achieving competitive advantage through digital adoption strategies (Blocker et al., 2011). Customer orientation refers to a company's dynamic capability to identify customer needs and new opportunities for development. This capability can help organizations in implementing digital transformation processes that align with customer preferences (Duerr et al., 2018). This is also consistent with research by Park and Mithas (2020), which emphasizes the importance of customer orientation as a capability that affects an organization's digital maturity. Digital maturity is measured by how well an organization can address changing customer demands.

The study shows that having a strong focus on the customers has a direct and positive impact on the resilience of an organization. This finding is consistent with previous studies conducted by Frambach et al. (2016), Kaya (2006), and Mallak (1998). In order to be a strong player in the banking industry in Indonesia, it is important for organizations to prioritize customer orientation.

Businesses that prioritize customer satisfaction will consistently gather feedback and address complaints through multiple channels in order to create innovative products and solutions that meet customer needs. In Indonesia, all banks have demonstrated strong customer orientation skills, as evidenced by high scores on customer satisfaction surveys. Therefore, having a customer-centric approach is crucial for banking sector.

In addition, the adoption of digital technology has a significant and positive impact on an organization's resilience ( $\beta=0.250$ ). These findings align with prior studies conducted by Kachali et al. (2012), Richter et al. (2017), and Tanrivardi & Lim (2017). Essentially, this means that when the Indonesian banking industry embraces technology to a greater extent, it leads to improved organizational resilience during periods of instability. Moreover, if banks in Indonesia invest strategically in digitalization, they can capitalize on new opportunities to support their future business activities. However, the survey results indicate that technology adoption in Indonesia's banking industry is still suboptimal, according to respondents' scores. Banks with higher core capital tend to have better adoption capabilities.

The study found that environmental turbulence has a negative and insignificant effect on the relationship between digital adoption and organizational resilience. The research suggests that Indonesian banks are improving their efforts to anticipate turbulent environmental conditions as respondents' answer scores on environmental turbulence variable questions are getting higher. This study also highlights how environmental turbulence, despite being associated with market and technological uncertainty, has less significant impact on banks' strategies for digital adoption or agile strategies to increase their resilience. These results align with previous research that also found that environmental turbulence did not significantly moderate the relationship of construct variables (Bizotto et al., 2018; Lee & Tang, 2018; Turulja & Bajgoric, 2019).

## 6. Conclusion

Research conducted on the banking industry in Indonesia has revealed that corporate organizational resilience is impacted by a range of factors, including customer orientation and digital adoption. To enhance organizational resilience, it is crucial to develop flexible capabilities, such as customer-centric practices and technology adoption that facilitate optimal company performance. Additionally, it has been established that environmental turbulence does not moderate the relationship between customer orientation, digital adoption, and organizational resilience in the Indonesian banking sector. Therefore, it can be inferred that environmental turbulence does not significantly influence company performance in this context.

This study highlights the importance for banks in Indonesia to increase their internal dynamic capacity in order to improve organizational resilience, which directly impacts company performance. This can be achieved through customer orientation and technological adoption that align with customer needs and preferences. Regulators should also encourage the bank industry, especially in terms of technological adoption, to enhance company performance. The results of this research are valuable in enhancing management theory and its practical implementation. The study concludes that incorporating the concept of organizational resilience into daily operations is a proactive strategy for the banking industry. However, this discussion is limited to the Indonesian banking context, and further research can enrich the related study.

This particular study has a few limitations, as is the case with most research. Firstly, the data collected was cross-sectional and based on self-reported measures, and only from one country. Secondly, not all indicators were included to describe the research variables, making it difficult to generalize the findings. Therefore, future research could benefit from including a wider range of indicators. Finally, the study looked at all types of banks without considering their specific characteristics, so it is suggested that further analysis could be conducted based on digital banks versus conventional banks.

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