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The Analysis Effect of Adaptive Leadership, Digital Adoption, and Organization Agility on the Resilience of Indonesian Banks**Basaria Martha Juliana^{1*}, Harjanto Prabowo¹, Firdaus Alamsjah¹, Mohammad Hamsal¹**¹Universitas Bina Nusantara

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Email: basariamarta@gmail.com**ABSTRACT**

The purpose of this study was to test whether there is a significant effect between adaptive leadership, digital adoption, and organizational agility on organizational resilience. This study used a cross-sectional quantitative method. The sample of this research is 75 Indonesian banking respondents according to KBMI I-IV. Based on the results of hypothesis testing, shows that there is an effect between adaptive leadership, digital adoption, and organizational agility variables on organizational resilience. This research produces a strategic model for the banking industry in dealing with rapid and unexpected changes through the formation of organizational resilience capabilities formed by a series of dynamic capabilities; they are adaptive leadership, digital adoption, and organizational agility. Various concepts are put forward to ensure that companies must be agile in innovating their business models and finding new ways of doing business in this complex and dynamic digital environment to achieve organizational resilience.

Keywords: Adaptive leadership, Digital adoption, Organization agility, Organizational resilience, Indonesian Banks

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INTRODUCTION

The banking industry has a very important role in the movement of a country's economy. Banks act as financial intermediary institutions which play a very important role in driving the real sector and the economy. Banking is a channel that will determine the smooth circulation of funds as "blood" for the continuity of economic development activities. The banking industry is experiencing various challenges such as the global financial crisis, rapid technological changes and changing consumer preferences, increasingly severe levels of competition, and stringent regulations.

One of the external factors that are very crucial for the banking industry is the rapid technological change triggered by the development of internet technology and digital disruption which then affects the competitive landscape in the banking industry. The acceleration of digital transformation, the existence of open banking, instant payments, and other sophisticated applications create enormous value for companies that can move fast (agile) and will weaken the position of slow companies (PwC, 2019). The threat of digital disruption has been felt by banks for the past 5 years and this has become a serious problem because it is related to the existence of banks as incumbent players. Banking performance in Indonesia during 2016 - 2019 tended to experience pressure, where banking Return on Assets (ROA) moved fluctuated and experienced a decline throughout most of 2019. Meanwhile, the Net Interest Margin (NIM) has tended to be eroded since 2016 from 5.70 percent to 4.90 percent as of October 2019. On the side of a comparison of operating expenses compared to income (operational efficiency ratio), from 2016 to 2019 the numbers tended to be stagnant, and there was even a significant increase (88%) in the final period of 2018 to the first quarter of 2019. The movement of profitability, which consists of a revenue component interest, operating income other than interest, and non-operating income where from 2016 to 2019 interest income has been stagnant while the other two components of income have fluctuated over the past 3 years.

Changes in competition triggered by technological developments make banks become more vulnerable to failure. Guo and Wang (2014) argue that organizations need certain capacities to create and maintain their core capabilities. Ruiz-Martin et al (2018) define organizational resilience as a measurable combination of characteristics, abilities, capacities, or capabilities that enable an organization to withstand both predictable and unforeseen disruptions in a volatile environment.

In general, the practice of organizational resilience requires the central role of company leaders at every level of the organization. Furthermore, Andersson (2018) states that adaptive leadership is an important milestone in which it empowers teams throughout the organization to work together to find innovative ways to respond and adapt to conditions of digital disruption. OJK also encourages Indonesian banks to be more adaptive in terms of digitalization. Banking is emphasized to place digital transformation as a priority and as one of the strategies in efforts to increase bank competitiveness. In addition, the study of Mahmood, Faris, and Wadi (2019) explained that adaptive leadership will respond to rapidly changing environmental changes through an agility strategy.

Companies that demonstrate strong agility are able to maintain their strategic supremacy despite market fluctuations (D'Aveni, 1999). Organizational agility can ensure the company's existence through its role which aims to accelerate the company's business progress through the ability to catch changes in market orientation. Customer orientation plays an important role because overall it aligns the company's business goals with customer goals (Nurfarida, Iva Nurdiana, Sarwoko, & Mohammad, 2021).

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Based on the explanation above, the contribution of various studies in the field of organizational resilience has been carried out a lot, the extent to which technology adoption and organizational agility affect organizational resilience, but the existing research related to organizational resilience has not discussed much adaptive leadership as a measurement variable, so that in this study seeks to find a relationship between adaptive leadership and organizational resilience determinants, such as digital adoption and organizational agility, especially in the banking industry in Indonesia. Apart from that, this research also wants to see how digital adoption and organizational agility mediate the relationship between adaptive leadership and organizational resilience in banking in Indonesia.

METHOD

This study used a cross-sectional quantitative method using SEM (Structural Equation Modeling)-PLS. The data in this study were obtained by sending structured questionnaires to participants who served as leaders in the Indonesian banking industry which cover all banks at KBMI I-IV. The data collection period was carried out from June-August 2022. The questionnaire used in this study refers to the Likert scale. During the data collection period, the number of returned questionnaires was 75 respondents (banks) from a total of 107 banks in Indonesia (80.25% of the population), which consist of commercial banks (48%), regional development banks (BPD) (31%), digital banks (12%), and Islamic banks (9%).

This study consists of two types of latent variables: exogenous latent variables and endogenous latent variables. Exogenous variables, namely adaptive leadership, digital adoption, and organizational agility, while organizational resilience is an endogenous variable in this study. Meanwhile, digital adoption and organizational agility also act as endogenous mediation variables.

According to Heifetz et al. (2009), adaptive leadership is a leadership model that is carried of involvement of leaders in complex challenges, which needs new solutions for the organization to deal with. Hoerudin's research (2020) states that when companies want to adopt technology, companies need to adopt adaptive leadership that is able to be catalysator within the organization and build innovation by means of digital adoption. Adaptive leadership in pursuing digital adoption can also overcome many internal and external problems to gain a competitive advantage during volatile environmental conditions (Coloumbe, 2015). The following bellow is the formulation of the hypothesis:

Hipotesis 1 (H1): Adaptive leadership influences digital adoption in the banking industry in Indonesia.

Referring to research conducted by Raney (2014) adaptive leaders who adopt an agility strategy in overcoming difficulties will lead companies to organizational resilience. Based on existing research, this study seeks to see the relationship between adaptive leadership and organizational agility. The following bellow is the formulation of the hypothesis (H2):

Hipotesis 2 (H2): Adaptive leadership influences organizational agility in the banking industry in Indonesia.

The formulation and implementation of digital transformation strategies are critical issues for many pre-digital organizations. Digital adoption refers to achieving a state within an organization/company where all digital tools and assets within the organization are fully utilized. During the Covid-19 pandemic crisis, digitalization played a more central role as

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banks had to come up with innovative ways to serve their customers in order to sustain their companies (Richter, Vodanovich, Steinhüser, & Hannola, 2017). The following bellow is the formulation of the hypothesis:

Hipotesis 3 (H3): digital adoption has an effect on organizational resilience in the banking industry in Indonesia.

As described in the previous section, McCann (2004) adds that agility helps companies manage rapid change and resilience will manage disruptive change. The need for resilience is critical for companies that provide goods and services in managing disruptive changes. This confirms that successful organizations must continue to adapt and have many ways to prevent and overcome turbulent environmental processes, one of which is agility and adaptive leader strategies (Aliji, Nwuche, & Anyanwu, 2016). The link between organizational agility and organizational resilience is then formulated in the hypothesis as follows:

Hipotesis 4 (H4): Organizational agility affects organizational resilience in the banking industry in Indonesia.

Adaptive leadership is also an opportunity that offers a set of guiding principles that help guide organizational resilience through the ability to build trust and creativity among staff and divisions during times of crisis. Research by Arthur & Zimmerman (2017) develops effective methods for dealing with organizational environments that require change, improvement, and uncertainty through adaptive leadership. At the individual level, adaptive leadership encourages changes that benefit patients and employees in organizational leadership (Lentenbrink, 2017). It can be concluded that there is an influence between adaptive leadership and organizational resilience as hypothesized as follows:

Hipotesis 5 (H5): Adaptive leadership influences organizational resilience in the banking industry in Indonesia

RESULT AND DISCUSSION

Validity and Reliability Test

Based on the results of the factor loadings test on 51 indicators, it is known that all indicators meet the validity test with factor loadings < 0.7 and have an AVE value above 0.5, thus all variables are valid. The reliability test uses Cronbach's Alpha and Composite Reliability (CR) methods which are presented in Table 1 below:

Table 1. Validity and Reliability Test

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Adaptive leadership (AL)	0.941	0.951	0.685
Digital adoption (DA)	0.916	0.933	0.667
Organizational agility (OA)	0.923	0.937	0.654
Organizational resilience (OR)	0.926	0.939	0.661

Based on the test results shown in the table above, it is known that Cronbach's alpha value is > 0.6 . The composite reliability test results show that all variables have a composite reliability value of ≥ 0.7 . In addition, all research variables have a composite reliability value

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greater than Cronbach's alpha. Thus, all variables have fulfilled Cronbach's alpha and composite reliability tests.

Path Model Analysis

Based on the results of the analysis of the model path coefficient test (table 2), it is known that adaptive leadership, digital adoption, and organization agility variables have a significant effect on organizational resilience variables as shown by the T statistic > 1.96 and p-Value < 0.05 (95 percent significance).

Table 2. Path Model Analysis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
(H1) AL -> DA	0.314	0.317	0.084	3,718	0.000
(H2) AL -> OA	0.264	0.261	0.092	2,860	0.004
(H3) DA -> OR	0.250	0.262	0.122	2,051	0.041
(H4) OA -> OR	0.283	0.287	0.127	2,220	0.027
(H5) AL -> OR	0.275	0.273	0.081	3,395	0.001

DISCUSSION

Hypothesis 1

Hypothesis 1 examines the influence of adaptive leadership (AL) variables on digital adoption (DA) variables. Testing the first hypothesis according to the table above obtained a T-statistic value of $3.78 \geq 1.96$ and a regression coefficient of 0.314 which means that adaptive leadership has a positive and significant effect on digital adoption.

This research has succeeded in proving that there is a positive and significant influence of adaptive leadership directly on digital adoption and indirectly on organizational resilience. These results are consistent with the results of previous studies such as those of Coulombe (2015) and Hoerudin (2020) explaining that adaptive leadership will act as a catalyst for all elements of the organization to encourage technology adoption and build innovation as a dynamic capability.

This was also confirmed by He et al. (2021) in their research which confirms the irreplaceable role of leadership in driving digitalization and empowering capable individuals and providing systematic support to deal with crises. In other words, the success of digital adoption is not only about investment in technology but also about the role of leaders who are able to encourage the digitalization process to be used by all elements of the organization.

Hypothesis 2

Hypothesis 2 examines the effect of adaptive leadership (AL) variables on organizational agility (OA) variables. Testing the second hypothesis according to the table above obtained a T-statistic value of $2.860 \geq 1.96$ and a regression coefficient of 0.264 which means that AL has a positive and significant effect on OA.

This research has succeeded in proving a positive and significant influence on AL directly on OA and indirectly on organizational resilience. This is in accordance with the results of research by Mahmood, Faris, and Wadi (2019) which shows that adaptive leadership will respond quickly to volatile environmental changes through an agility strategy. The main barriers to increasing business agility are slow decision-making, conflicting departmental goals and priorities, risk-averse culture, and silo-based information (report of The Economist magazine, 2010).

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According to Highsmith (2011), adaptive leadership carries out two dimensions of agility, namely doing agile and being agile. The leader is required to act as a facilitator to encourage collaboration among team members so in this condition the leader must be more actively involved in the process of completing a business process.

Hypothesis 3

Hypothesis 3 examines the effect of digital adoption (DA) on organizational resilience (OR). The results of the analysis show that the DA variable has a positive (0.250) and significant effect on the OR variable. These results are in accordance with the opinion that companies can survive and thrive in complex situations, excessive competition, and disruptive ecosystems by developing adaptability enabling systems and must adopt digital technologies to compete again to sustain their companies (Richter, Vodanovich, Steinhüser, & Hannola, 2017)

Kachali et al (2012) said that digital initiatives driven by leadership and investment support enable organizations to monitor situations, communicate information, obtain resources, and adapt to changing circumstances. Furthermore, when companies make strategic investments in digitalization processes, organizations can seize new opportunities to support business activities. Investing in digital technology can help organizations (especially service organizations) build infrastructure and support systems that enable organizations to increase their resilience to crisis situations they face and maintain their business operations.

Hypothesis 4

The results of the analysis show that the OA variable has a positive (0.283) and significant effect on the OR variable. Research by Sharifi and Zhang (2001) states that organizational agility is the main indicator in dealing with environmental turbulence because it is a vital ability in revolutionary changes in the business environment.

These results are consistent with the opinion of Tengblad & Oudhuis (2018) which states that organizational agility is one of the most concrete levels of organizational resilience, which is the capacity to act as needed to anticipate or stop unwanted events (Andersson, T, Cäker, M, Tengblad, S, & Wickelgren, M, 2019). This is in line with McCann's research (2004) which confirms that agility is needed by organizations to be able to move flexibly and be responsive to opportunities and challenges that arise, but still maintain the stability and reliability of work processes, especially when facing crisis conditions.

Hypothesis 5

The results of the analysis show that the Adaptive Leadership (AL) variable has a positive (0.275) and significant effect on the OR variable. As discussed by Buzzanell (2018), resilience is the most important and crucial concept of adaptive leadership practice, because leaders must be aware of the crisis. They are facing the possibility of new trends that will emerge. In addition, to build organizational resilience, leaders need to encourage collaboration with external parties, such as suppliers and competitors, to jointly utilize critical external resources to help deal with unexpected crises and continue business (Ignatiadis, I & Nandhakumar, J, 2009).

Moreover, this study also concludes how the roles of digital adoption dan organization agility as mediating variables have a positive effect on the relationship between adaptive leadership and organizational resilience. This means that the role of adaptive leadership in increasing organizational resilience will be more effective when bank leaders play a role in encouraging companies to carry out digital adoption. As for organizational agility, this study

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provides additional insight into how organizational agility mediates the role of adaptive leadership on organizational resilience. That is, organizational agility has succeeded in increasing the role of adaptive leadership to increase organizational resilience. In this context, the role of adaptive leadership is to challenge the status quo by encouraging adaptive change by quickly intervening and overcoming current problems to reduce company losses (Aghina, W, De Smet, A, & Weerda, K, 2015).

IMPLICATIONS

Based on the perspective of organizational resilience theory, this research provides the concept of organizational resilience in a proactive context in daily organizational activities. Various concepts are put forward to ensure that companies must be agile in innovating their business models and finding new ways of doing business in this complex and dynamic digital environment to achieve organizational resilience. Thus, this study supports the opinion of Tengblad and Oudhuis (2018) which states that organizational resilience must be viewed as a concept of how organizations can manage and deal with uncertainty in a proactive way, even before a crisis occurs.

Leadership is an organizational process that is rarely reviewed in organizational resilience research because the studies carried out are more often associated with specific leaders than leaders in the context of organizational processes (Tengblad & Oudhuis, 2018). This research provides insight into the role of leadership in maintaining and developing resilience in organizations. We found that adaptive leadership is a form of dynamic capability required by companies when facing changing conditions. Adaptive leadership has the ability to sense what is the vulnerability of the organization and efforts to identify new opportunities that sometimes imitate successful competitors or continue to develop the legacy and insights that the company already has (Teece, D & Leih, S, 2016).

Besides that, Indonesian Banks need to realize the importance of digital adoption as a powerful lever to increase profits, change the customer experience in transactions and comply with regulatory rules. Indonesian consumers are very open to digital banking and according to data from the last three years, the usage of digital banking channels in Indonesia has grown twice as fast as in other Asian markets. The resulting study found that seizing correlates with the ability to carry out digital adoption and form an agile organization in the process of developing current products and services. Competence to digitize or form organizational agility allows companies to produce higher quality products, solutions, and services with faster time to market and more competitive pricing, all of which can create a competitive advantage for companies (Warner & Wäger, 2019).

Furthermore, the ability of banks to overcome crises quickly and effectively becomes a very important aspect, especially in the digital landscape and environmental uncertainty. Therefore, banks must become more agile, flexible, and dynamic in responding to changes in technology and customer behavior. In an effort to maintain a competitive advantage through an agile process approach, banks are advised to innovate products iteratively with a shorter process and based on organizational learning that results in superior value attribution and greater customer satisfaction (Rogers, 2016). Companies that show strong agility will be able to maintain their strategic supremacy despite market fluctuations (D'Aveni, 1999).

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CONCLUSION

This study seeks to explore the influence of adaptive leadership, digital adoption, and organizational agility on the resilience of banks in Indonesia. The analysis results show that adoptive leadership, digital adoption, and organizational agility have a significant and positive impact on the organizational resilience of banks in Indonesia. In addition, the effect of adaptive leadership is greater on organizational resilience through digital adoption and organization agility mediation. Thus, this research produces a strategic model for the banking industry in dealing with rapid and unpredictable changes. Moreover, this research found that: first, this study also seeks to fill in the gaps in the lack of research related to bank resilience by offering a variety of research variables and indicators. In particular, the adaptive leadership variable is rarely discussed, if there are some, they tend to be a concept of leadership at a certain level, for example, the C/C-suite level (Tengblad & Oudhuis, 2018). This research looks at the concept of leadership from a broader perspective, whereby a leader in the context of an organizational process is not limited to a particular leader's role but is more of an organizational capability across the board.

Second, in regard to digital adoption, the strategic question is no longer when companies need to make the digital transformation as a strategic priority since this critical point has passed but how organizations immediately adopt digitalization, then make it a competitive advantage. In a survey conducted by SAP Consultants (2017) it was concluded that in the next five years, 84 percent of global companies consider digital transformation as an important strategy for their survival, but only 3 percent have adopted digital throughout the organization. Banks in Indonesia are aware of the importance of digital adoption as a powerful lever to increase profits, change the customer experience as well as comply with regulatory rules. Finally, organization agility is growing significantly as one of the main tools to gain and maintain a competitive advantage in a fast-changing market environment. Agility will be one of the key organizational characteristics for banks in Indonesia to remain adaptive and competitive in a volatile environment.

Certain limitations of the study require specific attention during the interpretation of results. First, in the context of banks in Indonesia, regional development banks (BPD) have differences from conventional banks in general, so the role and participation of these banks in further research need paid more attention to and compared with the proposed model. This is very important to see whether there are differences in the resilience of regional development banks which have different policies than other types of banks. Thus, future research should analyze this issue. Second, in the context of this study, it does not discuss the role of regulation, even though banks in Indonesia are highly regulated and must comply with applicable policies. By analyzing the role of regulation, further research will get an overview of how the role of regulation affects the performance and resilience of Indonesian banks.

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