

Received: 11 November 2022 Accepted: 15 March, 2023

DOI: <https://doi.org/10.33182/rr.v8i3.40>

The Effect of Dynamic Capabilities Mediated Digital Leadership on Organizational Performance

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Abstract

The researcher is intrigued by the background of this study, which focuses on the decline in performance within organizations, specifically regarding existing products such as voice and SMS. The advent of Industry 4.0 has introduced fresh challenges for established companies, as they need to prepare for the new business models introduced by emerging players. Additionally, the ongoing Covid-19 pandemic has accelerated the transition to digital in the market since April 2020, digital transformation is needed by incumbent (Telkom Indonesia) for developing business model innovation product and service based on dynamic changes to stay competitive a long time, digital transformation into movement transformation organization thorough covers change aspects other crucial like strategy, process, HR and culture, to leadership. The study was conducted at the Telkom Indonesia Group company. The sample study is leaders and leaders of child existing companies in Telkom Indonesia as many as 283 respondents. Study this test hypothesis Improving digital leadership mediated by dynamic capabilities, becomes novelty that proves influence Among variable digital leadership towards performance organizations that have not found in the study previously with use method Generalized Structures Components Analysis. Finding study this discloses that the hypothesis being tested can be accepted. Hypothesis about Improving digital leadership mediated by dynamic capabilities will able to significantly increase organizational performance. Culture company as variable moderation proven digital leadership capable moderate performance organization.

Keywords: Digital Leadership, Capability Dynamic.

Introduction

The researcher finds this background research intriguing as it examines the occurrence of performance decline within companies, particularly concerning existing products like voice and SMS. The advent of Industry 4.0 presents fresh challenges for established companies, as they must anticipate the new business models introduced by emerging players, the current Covid -19 pandemic since April 2020 has been speeding up the market shift towards digital, digital transformation is needed by *incumbent* (Telkom Indonesia) for developing business model

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innovation product and service based on dynamic changes to stay competitive a long time, digital transformation into movement transformation organization thorough covers change aspects other crucial like strategy, process, HR and culture, to leadership. Because it is necessary existence Improving digital leadership mediated by dynamic capabilities will able to significantly increase organizational performance.

Literature Review

According to Sandell (2013), digital leadership refers to the capabilities and capacities that optimize digital technologies and create an environment conducive to creativity.

It involves traits such as being a creative, inspiring, trustworthy, knowledgeable, collaborative, and interactive leader. The dynamic nature of the environment, driven by VUCA factors (volatility, uncertainty, complexity, and ambiguity), encourages leaders to think innovatively and foster capabilities through collaboration.

On the other hand, Pearl Zhu (2015) outlines five characteristics that define digital leadership criteria. Firstly, leaders must be thought leaders due to intense competition and the emergence of disruptive new competitors. Secondly, digital leaders need to be creative and possess an innovative mindset, as digital technology brings new business models and endless opportunities for innovation.

Thirdly, they should have a global visionary perspective to provide direction and orchestrate digital business transformation.

Fourthly, inquisitiveness is crucial for digital leaders in order to adapt to the complex and dynamic ecosystem shaped by VUCA factors. They need to be avid learners and have the ability to implement digital skills effectively.

Lastly, profound leaders in the digital era possess in-depth knowledge and understanding of policies. With information becoming increasingly accessible, comprehensive analysis, interpretation, and synthesis are necessary to make informed decisions.

Method

Approach Study positivist (quantitative) with survey method. Object Study: Telkom Group. Object study this is an organization at Telkom Indonesia represented by the leader as many 283 respondents Data was collected from a survey and deployment questionnaire.

The analysis used *Generalized Structures Components Analysis*. Based on *path coefficient analysis*, it is known that the path coefficient of the indirect influence of digital leadership on organizational performance through dynamic capabilities is 0.218.

This figure is greater than the coefficient of direct influence of digital leadership on organizational performance, which is 0.211, which indicates that the mediating variable has a greater indirect

effect than the exogenous variable. This shows a significant influence between digital leadership and organizational performance, which is mediated by dynamic capabilities. From these results, it can be said that hypothesis 6, namely digital leadership mediated by dynamic capabilities, has a significant effect on organizational performance.

Result and Discussion

Based on the validity and reliability of test data, it is known that each indicator can test the dimensions and variables being tested as well as between one variable and the independent variable.

Through confirmatory factor analysis (*goodness of fit* test and factor weight significance test) proves that the tested variables can describe the tested factors.

Based on the validity and reliability of test information, it is known that each indicator can assess the size and variables being tested and between one variable and another variable, which has independent characteristics.

Through confirmatory aspect analysis (*goodness of fit* test and aspect weight significance test) to ensure that the tested variables can describe the analyzed aspects.

The description of the research is the stage of the analysis of research results in determining the most dominant indicators to develop a constructed variable.

Then the indicator is declared as forming the variable. This is based on the highest temporary *loading factor* value as a comparison, and also includes the average value (*mean*) that describes the respondents' perceptions of the research indicators.

The loading factor scores are taken from the calculation of the loading factor of each indicator in the basic model with *Standardized Conclusion estimation* using the Lisrel SC syntax.

In this test, the variable profile in question is to find the strongest or dominant indicator (weight of the biggest factor) and compare it with real or actual conditions in the field (average).

From table 5.22 below, it can be seen that respondents' perceptions of the research variable indicators are taken from the factor weights and the average (*mean*). It has been applied to 5 variables, namely:

- (1) digital leadership,
- (2) dynamic capabilities,
- (3) organizational performance.

The research variable profile was analyzed from the relationship between factor weights (*loading factor*) and the average value (*mean*) can be seen in the following table:

Table 1.(A) Profile of Research Variables reviewed from the Relationship between Loading Factor Values, Completely Standardized Solution Estimates, and Average Values (Mean)

Variables, Dimensions, and Indicators		Loading Factor	Mean	Information
Digital Leadership: Ambidextrous (X11)				
X111	Can do business development	0.751	4,595	
X112	Can synergize between new business exploration units and existing business exploitation units	0.779	4,581	Biggest LF
X113	Can perform inter orchestration so that a common goal is achieved	0.755	4,577	
Digital Leadership: Vision (X12)				
X121	Able to see the future vision of the organization	0.764	4.722	Biggest Mean
X122	Can solve multidisciplinary problems	0.739	4,519	
X123	Has a global mindset to provide direction in transforming digital business transformation	0.762	4,557	
Digital Leadership: Digital Knowledge and Literacy (X13)				
X131	Can cope with the changing digital environment	0.769	4,588	
X132	Have the will to continue learning in pursuit of digital knowledge	0.743	4,608	
X133	Can utilize digital media in achieving organizational goals	0.753	4,495	
Digital Leadership: Agile (X14)				
X141	Can be agile in anticipating change	0.778	4,505	
X142	Can anticipate change flexibly	0.758	4,519	
X143	Can be adaptive to a rapidly changing environment	0.773	4,536	
Digital Leadership: Understanding Customers (X15)				
X151	Understanding customer needs	0.752	4,622	
X152	Anticipating customer changes	0.758	4,550	

Table 1.(B)

Variables, Dimensions, and Indicators	Loading Factor	Mean	Information
X153 Understanding the impact of transformation on customers	0.772	4,577	
Dynamic Capabilities: Absorptive Capabilities (Z11)			
Z111 Able to manage informative knowledge	0.772	4,598*	Biggest Mean
Z112 Able to utilize informative knowledge for commercial purposes	0.772	4.491	Biggest LF
Dynamic Capabilities: Adaptive Capabilities (Z12)			
Z121 Able to identify emerging market opportunities	0.758	4,564	
Z123 Able to take advantage of emerging market opportunities	0.741	4.467	
Dynamic Capabilities: Innovation Capabilities (Z13)			
Z131 Able to turn new ideas into good products that benefit the company	0.750	4.471	
Z132 Able to develop products through adjustment of innovative strategy orientation in the process of innovative behavior.	0.734	4.440	
Organizational Performance: Profitability (Y11)			
Y111 Able to increase profit	0.756	4.615	
Y112 Able to increase profit margin	0.763	4,595	
Y113 Able to achieve payback	0.753	4,591	
Organizational Performance: Market Response (Y12)			
Y121 Able to increase the number of consumer requests	0.801	4,515	
Y122 Able to increase the sales volume	0.808	4,536	
Y123 Able to achieve sales growth	0.819	4,543	Biggest LF
Y124 Able to increase market share	0.817	4,577	
Organizational Performance: Market Position Value (Y13)			
Y131 Able to increase consumer perception of the product	0.803	4,570	
Y132 Our products are better than competitors	0.748	4,598	
Y133 Able to improve the company's product reputation	0.773	4.622	
Y134 Able to create customer satisfaction	0.807	4.615	
Y135 Able to improve company image	0.802	4,632	Biggest Mean
Organizational Performance: New Product Success (Y14)			
Y141 Able to create a product that is accepted by the market	0.764	4,567	
Y142 Successfully developing new product	0.744	4,533	
Y143 Our products are ahead of the competition in the market	0.777	4,543	

The results of the study prove that digital leadership has a direct significant effect on dynamic capabilities. In another section, it is explained that there is a significant influence of dynamic capabilities on organizational performance. The test results on these two things are connected by the dynamic capability variable, which is located as a mediating variable. The test results of these two significant path coefficients in connecting the three variables conclude that dynamic capability is proven as a mediating variable. This can be interpreted that the high and low organizational performance is directly related to the high and low dynamic capabilities. In addition, a strong digital leadership character will further enhance dynamic capabilities in carrying out their duties better, more competent, and more capable to improve organizational performance. The results show that digital leadership is one of the determining factors for high dynamic capabilities. Dynamic capabilities can occur because of the strong influence of determining factors, in this case, one of which is the contribution of digital leadership that is carried out. Dynamic capabilities can increase or decrease according to the accompanying factors at that time.

The highest loading dynamic capability factor is 0.772 which is indicated by the ability to process and utilize knowledge and information for commercial purposes, part of the characteristics of absorptive capabilities. While the average value of the largest respondents' answers is 4,598, namely the ability to manage knowledge or information. This shows that the ability to utilize knowledge and information for commercial purposes is one of the determinants of achieving high dynamic capabilities. In other words, dynamic capabilities are largely determined by one of the most important, namely the ability to utilize such knowledge and information to achieve these commercial goals. While the mean score of this indicator is smaller than the ability to manage knowledge and information, it shows that the existing knowledge and information has focused more on its management aspects than the use of both for commercial purposes, even though both of them get a very high mean score category.

While the smallest average value is on the indicator of product development capability (4,440) which is part of the characteristics of innovation capability. This shows that the knowledge and information that is managed and utilized has not yet touched on the development of both optimal and optimal products, even though digital leadership styles have been used as the basis for helping to improve organizational performance.

This study provides support for the research conducted by Miharjo et al. (2019), which suggests that digital leadership has a direct and significant impact on dynamic capabilities. Additionally, Sasmoko et al. (2019) found that digital leadership has both a strong direct and indirect relationship with dynamic capabilities. However, the development of innovation capabilities driven by market-oriented digital leadership plays a crucial role in fostering dynamic capabilities. These findings emphasize the importance of digital leadership in the development of dynamic

capabilities.

Furthermore, Jagadisen et al. (2022) demonstrate that digital leadership positively influences dynamic capabilities, innovation capabilities, and alliance capabilities. Dynamic capabilities, which reflect a company's ability to gain a competitive advantage, exhibit a close relationship with organizational performance. The results of this study also confirm the findings of Dean Jerry Pratama (2019), who concluded that dynamic capabilities, comprising adaptive capabilities, absorptive capabilities, and innovative capabilities, have a positive impact on innovation performance in the batik industry in Yogyakarta. To enhance innovation performance in the batik industry, factors such as organizational culture, employee training, and information system development should be considered alongside the influence of dynamic capabilities. Griffith, Noble, and Chen's (2006) studies further support the notion that building dynamic capabilities within a company leads to improved company performance.

The results of research on the indirect effect of digital leadership on organizational performance also show a positive and significant direction with dynamic capabilities as a mediator. The nature of mediation in this study shows that dynamic capabilities partially mediate digital leadership on organizational performance. This means that digital leadership either directly or indirectly affects organizational performance. The existence of dynamic capabilities that mediate partially shows that dynamic capabilities can act as mediators in certain circumstances in determining organizational performance. For this mediation role to be full, a strategy is needed to increase the existing dynamic capabilities.

Dynamic capabilities play a crucial role in surpassing short-term profits and establishing sustainable competitive advantages. To achieve this, key capabilities such as proactive environmental scanning, focusing on market demand, incorporating consumer feedback and continuous improvement, effectively managing business technology, and being prepared to reconfigure company structures, resources, and competencies in innovative ways are vital.

For a company to sustain its profits, it must maintain a dynamic relationship between internal forces and the external environment. This entails adapting the company's internal resource base in response to changes in the external environment. The objective is to develop resources, capabilities, and competencies that align strategically with the company's environment. The company's internal strengths must dynamically evolve alongside the external environment. Dynamic capabilities not only enable companies to adapt to shifting market conditions but also empower them to initiate market changes that strengthen their strategic position. Proactive companies that introduce fluctuating circumstances bring about these market changes.

The findings of this study align with previous research conducted by Ferreire et al. (2020), which demonstrated that dynamic capabilities, specifically exploration and exploitation, indirectly influence performance and competitiveness by means of innovation capabilities. These capabilities serve as tools within the framework of dynamic capabilities, enabling companies to

enhance their competitiveness and achieve better performance. Additionally, the presence of an organizational learning culture significantly and positively moderates both competitiveness and performance, reinforcing the impact of dynamic capabilities on innovation capabilities. Similarly, the research conducted by Pundziene et al. (2022) shows that the dynamic capabilities of the company significantly affect the performance of open innovation and as a consequence open innovation has an impact on the company's competitive performance.

Conclusion

Based on the results of the research and discussion of the research results that have been described in the previous chapter, the following conclusions can be drawn: The results show that the digital leadership variable has a direct effect on dynamic capabilities and organizational performance. With the increasing aspects of digital leadership, it can directly increase the dynamic capabilities, innovation, and organizational performance of the company.



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