
THE EFFECT OF THE IMPACT OF DIGITAL TRANSFORMATION STRATEGY ON FINANCIAL PERFORMANCE MODERATED BY COGNITIVE CONFLICT IN PARTNER COMPANIES OF PT. ERDIVA DAYA TECHNOLOGY SOLUTIONS

Taufik Setiawan, Chandra Wibowo Widhianto

Universitas Bunda Mulia Jakarta

Email: mijataufik5@gmail.com

Abstract

This study aims to verify whether digital transformation strategy (DTS) enhances organizational performance and to analyze the necessity of implementing DTS, considering perspectives like "Skewed conflict," "minority dissent theory," and the "too-much-of-a-good-thing" principle. This research uses a quantitative method with a descriptive and explanatory survey approach to examine the cause-and-effect relationship between variables. The research concludes that DTS significantly influences both short-term and long-term financial performance, providing insights into how cognitive conflict influences DTS effectiveness and highlighting the need for enterprises to manage such conflicts to maximize financial performance.

Keywords: Digital Transformation Strategy, Cognitive Conflict, Long-term Financial Performance, Short-term Financial Performance

INTRODUCTION

At the beginning of 2020, the world was being hit by the Covid-19 pandemic and Indonesia was not spared by this pandemic. The characteristic of Covid-19 that the process of transmission between humans occurs through droplets, making physical gatherings drastically reduced. Humans must maintain distance and avoid crowds when doing activities outside the home. Departing from these conditions, by the government, educational activities are required to be carried out online or using electronic learning facilities (e-learning). The goal is so that the younger generation is not affected by the severe Covid-19 pandemic. Other activities (business, government, organization, etc.) Inevitably, they adjust and start taking advantage of digital facilities.

When the situation changes to a situation that focuses more on the use of digital technology, digital transformation (DT) is an unavoidable phenomenon. Although the specific definition of digital transformation has not been agreed upon by researchers (Morakanyane et al., 2017), almost all activity processes carried out by humans are transferred to digital media. Digital transformation, in general, can be interpreted as a radical process that occurs in an organization in utilizing technology, human resources, and business processes that cause the business performance of the organization to change drastically (Khurniawan et al., 2022).

This has gradually become a new focus of competition between countries, industries and companies. Today, one of the most pressing challenges for companies is the integration and use of digital technologies and no sector or organization is immune to the impact of digital transformation (Hess et al., 2016). Digital transformation is a strategic response to economic trends and digital technology and is therefore a strategic priority to improve the leadership of the top management team (Fitzgerald et al., 2013; Hess et al., 2016; Singh & Hess, 2017). In addition, by using digital technologies, companies can improve the efficiency of their operations with office automation software and fundamentally refresh the company's commercial strategy with major changes in products and services, organizational frameworks

as well as business models and processes (Bharadwaj et al., 2013; Hess et al., 2016; Tumbas et al., 2018).

Therefore, in the era of the digital economy, digitalization has now become a strategic management issue for companies rather than a technical issue (Besson & Rowe, 2012; Li et al., 2018; Rogers, 2016). According to a survey of American and United Kingdom companies, 90 percent of business leaders believe that Information Technology (IT) and digital technology will increasingly contribute to the overall business development of companies in the next ten years (Bonnet et al., 2012). For pre-digital organizations, the formulation and implementation of the Digital Transformation Strategy (DTS) has become a core issue (Chanias et al., 2019). Recent studies on digitalization and digital transformation mainly focus on the fields of Technology Information / System Information (IT/IS), commercial economics and social sciences (Henriette et al., 2015), and consider digitalization and digital transformation. Transformation as a function of the Technology Information / System Information (IT/IS) department or business strategy. However, research focusing on the strategic level of firms is still rarely conducted (Hess et al., 2016), which shows a lack of dialogue between Technology Information/System Information (IT/IS) and mainstream strategic management theory.

Over the past 30 years, this research has focused on digitalization, digital strategy, and digital transformation by considering the broad and profound influence of digital technology on the entire company. This digital trend results from the company's strategic change driven by the interaction and continuous fusion between the company's Technology Information / System Information (IT/IS) strategy and business strategy. Based on the fusion view, Chanias et al. (2019) show that a company's Technology Information (IT) strategy is equivalent to a business strategy. Bharadwaj et al. (2013) proposed that the strategic role of Information Technology (IT) should be reconsidered. Based on the alignment view, they propose a digital business strategy – an organizational strategy that is formulated and implemented using digital resources to create different values. A digital business strategy may show the prospects of a digital business model for companies, but it fails to provide practical guidance for companies to achieve digital transformation. In addition, current research and practical knowledge of Technology Information (IT) strategies have failed to inspire a new Digital Transformation Strategy (DTS) (Hess et al., 2016).

Finally, this digital transformation is described as the "total and total effect of "Digitalization in the enterprise". Khan said that digitization has enabled the process of digitalization, which encourages stronger opportunities to transform and transform existing business capital, socio-economic structure, legal and policy measures, organizational patterns, cultural barriers, etc. Digitalization (conversion), digitalization (processes) and digital transformation (effects) accelerate and illuminate what already exists and is taking place in companies and processes of global change in companies (Collin et al., 2015). Digital transformation can be seen as a socio-technical program. Adopting digital technologies can bring benefits to businesses but some company cultures can struggle with the changes required by digital transformation.

Yeow et al. (2018) showed that alignment is not enough to integrate a company's Information Technology (IT) and business strategy, therefore they integrate the two to form a digital strategy. However, digital strategy is difficult to explain clearly in a dynamic environment, which shows further clarification on similar but different definitions such as Technology Information (IT) strategy, digital strategy, and digital transformation.

Digital transformation of business models is a very complex process of change involving a series of carefully calculated and interdependent strategic companies (Aspara et al., 2013; Velu & Stiles, 2013). In fact, conflict is seen as a source of decision-making difficulties in many real-world areas, especially for decisions that include trade-offs between money vs. time (Cheng & González-Vallejo, 2017), profit vs disadvantages (Cheng & González-Vallejo, 2017)

and awards and distance (Scherbaum & Meade, 2013). As the environment becomes more complex than usual, organizational change becomes more intense, and activities become much less routine, and the impact becomes more important. Therefore, during the digital transformation of pre-digital companies, an important challenge is to resolve the discrepancy between the digital economy and the cognition of managers (Velu, 2017), while the biggest obstacle is the Top Management Team (TMT) without digitalization experience.

Keep in mind that the application of digital transformation will have both positive and negative impacts. For the positive impact, it will certainly provide many benefits for the organization, but the negative impact needs to be overcome by creating new opportunities while trying to adopt new trends in the development of organizational human resource skills (Sousa & Rocha, 2019).

This study aims to verify whether digital transformation strategy (DTS) enhances organizational performance and to analyze the necessity of implementing DTS, considering perspectives like “Skewed conflict,” “minority dissent theory,” and the “too-much-of-a-good-thing” principle. It investigates the curvilinear moderating role of cognitive conflict between DTS and performance, providing insights into how cognitive conflict influences DTS effectiveness and highlighting the need for enterprises to manage such conflicts to optimize performance.

RESEARCH METHOD

This research uses a quantitative method with a descriptive and explanatory survey approach to examine the cause-and-effect relationship between variables. The main instrument used was a questionnaire, with data collected from employees of PT Erdiva Daya Solusi Teknologi partner companies. The model applied in this research is a cause-and-effect model or path analysis, where the independent variables measured include Digital Transformation Strategy (DTS), Cognitive Conflict as a moderating variable, and Financial Performance as the dependent variable. Data was collected using a simple random sampling method with the sample size determined through the slovin formula to ensure adequate representation.

For hypothesis testing, the data analysis technique uses the Partial Least Square (PLS) method with the SMARTPLS 3.0 program. The analysis is carried out in three stages, namely outer model analysis to test construct validity and reliability, inner model analysis to test the relationship between latent variables, and hypothesis testing which includes direct and indirect effects. The validity test was conducted by looking at convergent and discriminant validity, while the reliability test was conducted with Cronbach's alpha and composite reliability. This research also uses primary data collected through online questionnaires and secondary data from various literature sources to provide a more comprehensive understanding of the phenomenon under study.

RESULT AND DISCUSSION

F-Square

Table 1. F-Square Value

| | Cognitive Conflict | Digital Transformation Strategy | Long-term Financial Performance | Short-term Financial Performance | Cognitive Conflict x Digital Transformation Strategy |
|--|--------------------|---------------------------------|---------------------------------|----------------------------------|--|
| Cognitive Conflict | | | 0.056 | 0.077 | |
| Digital Transformation Strategy | | | 0.298 | 0.180 | |
| Long-term Financial Performance | | | | | |
| Short-term Financial Performance | | | | | |
| Cognitive Conflict x Digital Transformation Strategy | | | 0.074 | 0.035 | |

The F-Square Digital Transformation Strategy value of 0.180 indicates a moderate influence on Short-term Financial Performance, and a value of 0.298 indicates a moderate influence on Long-term Financial Performance.

Predictive Relevance (Q²) Test

The purpose of conducting predictive relevance (Q²) testing is to validate the model. The results of the Q² calculation are as follows:

$$Q^2 = 1 - (1 - R^2) (1 - R^2)$$

$$Q^2 = 1 - (1 - 0,642) (1 - 0,588)$$

$$Q^2 = 0,852$$

Based on the results of the predictive relevance (Q²) calculation above, it shows a value of 0.852. In this research model, the endogenous latent variable has a greater predictive relevance (Q²) value and 0 (zero) so that the exogenous latent variable as an explanatory variable is able to predict the endogenous variable, namely Long-term Financial Performance or in other words, proving that this model is considered to have good predictive relevance.

Validating the Overall Structural Model with the Goodness of Fit Index (GoF)

$$GoF = \sqrt{AVE \times R^2}$$

$$GoF = \sqrt{0,710 \times 0,615}$$

$$GoF = 0,661$$

Information:

$$AVE = (0.683+0.700+0.711+0.748)/4 = 0,710$$

$$R \text{ square} = (0,642 + 0,588) / 2 = 0,615$$

The results of the Goodness of Fit Index (GoF) calculation show a value of 0.661. According to Tenenhaus's (2004), the value of small GoF = 0.1, medium GoF = 0.25 and large GoF = 0.36. Based on these results, it can be concluded that the combined performance between the outer model and the structural model as a whole is large because the value of the Goodness of Fit Index (GoF) is more than 0.36 (large scale of GoF).

Hypothesis Testing

Table 2. Hypothesis Test

| | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics ((O/STDEV)) | P values |
|---|----------------------------|------------------------|-----------------------------------|---------------------------------|-----------------|
| Cognitive Conflict -> Long-term Financial Performance | -0.259 | -0.253 | 0.091 | 2.844 | 0.005 |
| Cognitive Conflict -> Short-term Financial Performance | -0.327 | -0.325 | 0.124 | 2.637 | 0.009 |
| Digital Transformation Strategy -> Long-term Financial Performance | 0.589 | 0.597 | 0.083 | 7.085 | 0.000 |
| Digital Transformation Strategy -> Short-term Financial Performance | 0.491 | 0.493 | 0.121 | 4.060 | 0.000 |
| Cognitive Conflict x Digital Transformation Strategy -> Long-term Financial Performance | -0.227 | -0.228 | 0.082 | 2.780 | 0.006 |

| | | | | | |
|---|--------|--------|-------|-------|-------|
| Cognitive Conflict x Digital Transformation Strategy -> Short-term Financial Performance | -0.168 | -0.167 | 0.072 | 2.316 | 0.021 |
|---|--------|--------|-------|-------|-------|

Digital Transformation Strategy has a significant influence on Short-term Financial Performance

The table above shows that the influence of Digital Transformation Strategy on Short-term Financial Performance is significant with a p-value < 0.05, which is 0.000. The original sample estimate value is positive, which is 0.491, which shows that the direction of the influence of the Digital Transformation Strategy on Short-term Financial Performance is positive. Thus, hypothesis 1 in this study is accepted. Digital Transformation Strategy has a significant positive effect on Short-term Financial Performance.

Digital Transformation Strategy has a significant influence on Long-term Financial Performance

The table above shows that the influence of Digital Transformation Strategy on Long-term Financial Performance is significant with a p-value < 0.05, which is 0.000. The original sample estimate value is positive, which is 0.589, which indicates that the direction of the influence of the Digital Transformation Strategy on Long-term Financial Performance is positive. Thus, hypothesis 2 in this study is accepted. Digital Transformation Strategy has a significant positive effect on Long-term Financial Performance.

Digital Transformation Strategy has a significant effect on Short-term Financial Performance moderated by Cognitive Conflict

The table above shows that the Digital Transformation Strategy has a significant effect on Short-term Financial Performance moderated by Cognitive Conflict, with a p-value < 0.05 which is 0.021. The original sample estimate value is negative, which is -0.168, which indicates that the direction of moderation influence is negative or weakening. Thus, hypothesis 3 in this study is accepted. Digital Transformation Strategy has a significant effect on Short-term Financial Performance moderated by Cognitive Conflict

Digital Transformation Strategy has a significant effect on Long-term Financial Performance moderated by Cognitive Conflict

The table above shows that Digital Transformation Strategy has a significant effect on Long-term Financial Performance moderated by Cognitive Conflict, with a p-value < 0.05 which is 0.006. The original sample estimate value is negative, which is -0.227, which indicates that the direction of moderation influence is negative or weakening. Thus, hypothesis 4 in this study is accepted. Digital Transformation Strategy has a significant effect on Long-term Financial Performance moderated by Cognitive Conflict.

CONCLUSION

The research concludes that Digital Transformation Strategy significantly influences both short-term and long-term financial performance. In the short term, digitalization enhances operational efficiency, reduces costs, and increases revenue, but these positive effects can be weakened by cognitive conflict within the organization. This conflict hampers decision-making, delays implementation, and reduces coordination, diminishing the short-term financial gains from digital transformation. In the long term, while digital strategies can create new revenue streams and improve customer experiences, cognitive conflict can similarly weaken these benefits, making it essential for organizations to manage and mitigate such conflicts to

maximize financial performance. The research suggests that companies should carefully monitor their digital transformation processes and consider the potential impacts of cognitive conflict, employing strategies like open dialogue and contingency planning to navigate these challenges effectively. Further research is recommended to explore more complex models and different variables to enhance understanding in this area.

REFERENCES

- Aspara, J., Lamberg, J. A., Laukia, A., & Tikkanen, H. (2013). Corporate business model transformation and inter-organizational cognition: The case of nokia. *Long Range Planning*, 46(6). <https://doi.org/10.1016/j.lrp.2011.06.001>
- Besson, P., & Rowe, F. (2012). Strategizing information systems-enabled organizational transformation: A transdisciplinary review and new directions. *Journal of Strategic Information Systems*, 21(2). <https://doi.org/10.1016/j.jsis.2012.05.001>
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. *MIS Quarterly: Management Information Systems*, 37(2). <https://doi.org/10.25300/MISQ/2013/37:2.3>
- Chanias, S., Myers, M. D., & Hess, T. (2019). Digital transformation strategy making in pre-digital organizations: The case of a financial services provider. *Journal of Strategic Information Systems*, 28(1). <https://doi.org/10.1016/j.jsis.2018.11.003>
- Cheng, J., & González-Vallejo, C. (2017). Action Dynamics in Intertemporal Choice Reveal Different Facets of Decision Process. *Journal of Behavioral Decision Making*, 30(1). <https://doi.org/10.1002/bdm.1923>
- Collin, J., Hiekkanen, K., Korhonen, J. J., Halén, M., Itälä, T., & Helenius, M. (2015). Leadership in Transition: The Impact of Digitalization on Finnish Organizations. *Science And Technology*, 7.
- Fitzgerald, M., Kruschwitz, N., Bonnet, D., & Welch, M. (2013). Embracing Digital Technology: A New Strategic Imperative. *MIT Sloan Management Review*.
- Henriette, E., Feki, M., & Boughzala, I. (2015). The Shape of Digital Transformation: A Systematic Literature Review. *Mediterranean Conference on Information Systems (MCIS) Proceedings*.
- Hess, T., Benlian, A., Matt, C., & Wiesböck, F. (2016). Options for formulating a digital transformation strategy. *MIS Quarterly Executive*, 15(2). <https://doi.org/10.4324/9780429286797-7>
- Khurniawan, A. W., Irmawaty, & Erda, G. (2022). A SECOND ORDER CONFIRMATORY FACTOR ANALYSIS OF THE DIGITAL TRANSFORMATION FOR A DISTANCE EDUCATION INSTITUTION. *International Journal of Education and Practice*, 10(4). <https://doi.org/10.18488/61.v10i4.3224>
- Li, L., Su, F., Zhang, W., & Mao, J. Y. (2018). Digital transformation by SME entrepreneurs: A capability perspective. *Information Systems Journal*, 28(6). <https://doi.org/10.1111/isj.12153>
- Morakanyane, R., Grace, A., & O'Reilly, P. (2017). Conceptualizing digital transformation in business organizations: A systematic review of literature. *30th Bled EConference: Digital Transformation - From Connecting Things to Transforming Our Lives, BLED 2017*. <https://doi.org/10.18690/978-961-286-043-1.30>
- Rogers, D. (2016). The digital transformation playbook: Rethink your business for the digital age. In *Columbia Business School*. Columbia Business School.
- Scherbaum, C. A., & Meade, A. W. (2013). New directions for measurement in management research. *International Journal of Management Reviews*, 15(2). <https://doi.org/10.1111/ijmr.12003>

- Singh, A., & Hess, T. (2017). How chief digital officers promote the digital transformation of their companies. *MIS Quarterly Executive*, 16(1). <https://doi.org/10.4324/9780429286797-9>
- Sousa, M. J., & Rocha, Á. (2019). Digital learning: Developing skills for digital transformation of organizations. *Future Generation Computer Systems*, 91. <https://doi.org/10.1016/j.future.2018.08.048>
- Tumbas, S., Berente, N., & Vom Brocke, J. (2018). Born Digital: Growth Trajectories of Entrepreneurial Organizations Spanning Institutional Fields. *ICIS 2017: Transforming Society with Digital Innovation*.
- Velu, C. (2017). A Systems Perspective on Business Model Evolution: The Case of an Agricultural Information Service Provider in India. *Long Range Planning*, 50(5). <https://doi.org/10.1016/j.lrp.2016.10.003>
- Velu, C., & Stiles, P. (2013). Managing decision-making and cannibalization for parallel business models. *Long Range Planning*, 46(6). <https://doi.org/10.1016/j.lrp.2013.08.003>
- Yeow, A., Soh, C., & Hansen, R. (2018). Aligning with new digital strategy: A dynamic capabilities approach. *Journal of Strategic Information Systems*, 27(1). <https://doi.org/10.1016/j.jsis.2017.09.001>

Copyright holders:

Taufik Setiawan, Chandra Wibowo Widhianto (2024)

First publication right:

Injurity - Interdisciplinary Journal and Humanity



This article is licensed under a Creative Commons Attribution-ShareAlike 4.0 International