

The Impact of Environmental Turbulence and Dynamic Capabilities Toward Business Unit Performance (Case Study at Communication Organization Industries)

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Abstract— Superior business performance is determined by the ability of business units to create competitive advantage. However, the rapid development of technology and market make uncertain condition on business environment. This condition is known as environmental turbulence. This research aims to investigate the impact of environmental turbulence and dynamic capabilities on business unit performance in communication industry in Indonesia. The methods used were descriptive survey method and explanatory survey method. The population was telecommunication operator business unit in Indonesia. The data was taken from The Ministry of Communication and Information. The result showed that the direct impact of environmental turbulence on business unit performance was 0.104. The direct impact of dynamic capabilities on business unit performance was 0.220. Meanwhile, the score of (impact from unknown variables) was 0.214. This result implied that: 1) environmental turbulence had more significant influence on business unit performance compared to dynamic capabilities and 2) dynamic capability was the key factor in improving business unit performance.

Keywords—*Environmental Turbulence; Dynamic Capabilities; Business Unit Performance*

I. INTRODUCTION

In this innovation era, telecommunication industry becomes more dynamic. This condition demands the player of the industry to be more competitive. Telecommunication company managements do various actions to get the large market share and to become the market leader. They also want to have a competitive advantages. By having the superior goods or services, the companies will dominate the market both domestic and global market. This competition of course will be impacted to the economic growth. The research done by [1] in over 120 countries from 1980 to 2006 showed the positive impact of enhancing of telecommunication services on the growth of economics.

II. LITERATURE REVIEW

Regarding the performance of telecommunication in Indonesia, it still considered as low. In the South Asia level, its telephone density (teledensity) still stays under neighboring countries, such Singapore, Malaysia, Thailand, Philippine etc.

The data ICT in southeast asia 2016 per 100 citizens can be seen below:

1. Singapore:	35.04
2. Malaysia:	14.50
3. Thailand:	6.97
4. Vietnam:	5.94
5. Brunei:	17.11
6. Philippine:	3.71
7. Laos:	17.72
8. Cambodia:	1.43
9. Myanmar:	0.94
10. Indonesia:	4.01

The low performance of telecommunication industry in Indonesia is caused by the uncertainty condition of business environment. Turbulent environment occurs due to several factors, such as technology, regulation, competition, and market. The causes of environmental turbulence in telecommunication industry. To maintain the company performance in the middle of uncertainty condition, [2] suggest the company to adapt the organizational structure with the environment condition in which the organization carries out its activity. Thus, organizational performance will be optimal.

The causes of telecommunication environmental turbulence in Indonesia, can be seen below:

1. Enhancing digital convergence trend by consolidating the data processing technology impact on technology turbulence.
2. Privatization telecommunication sector Privatization as a consequence of WTO ratification (UU No. 7 / 94) which encourages opening market impact on regulation turbulence.
3. The change of telecommunication authority paradigm from monopolistic approach to market-based approach (UU No. 36 / 99) impact on regulation turbulence.

4. The occurrence of hyper competition phenomenon caused by a great number of new players and more advanced technology impact on competition turbulence.
5. Developing disruptive innovation that causes market turbulence in the form of services models business changes impact on market turbulence.

Some efforts done by telecommunication operators to renew their capabilities in Indonesia.

1. TELKOM
 - To face the challenges, Telkom focuses in three programs, namely: Mahakarya Telkom 2014, Revenue Telkomsel Double Digit Growth, Indonesia Digital Network (IDN) and International Expansion.
2. INTI
 - Developing the improvement and correction of genuine products.
 - Enhancing collaboration with research institutions and/or other departments to support commercialization of product.
 - Supporting account team to track new customers.
3. LEN Industry
 - To Collaborate with both other local and international companies to expand market and projects.
 - To track market over invest projects (capex) from other Government Companies.

Furthermore, [3] state that companies have to consistently reconfigure their internal resources and capabilities to achieve superior performance. The telecommunication service in Indonesia basically have done various efforts to improve its capability to overcome the turbulence in business industry. Unfortunately, it does not optimally work.

Based on the above explanation, this study aims to investigate the effect of environmental turbulence.

On dynamic capability on business unit performance. The result is expected to give valuable information and solution for telecommunication industries, so that good performance can be achieved.

A strategic management is a set of managerial decisions and actions that help determine the long-term performance of an organization [4]. To be successful in the long-run, companies must not only be able to execute current activities to satisfy an existing market, but they must also adapt those activities to satisfy new and changing markets.

Environmental turbulence refers to the amount of change and complexity in the environment of a company. The greater the amount of change in environmental factors, the greater the number of environmental factors that must be considered, and the higher the level of environmental turbulence. (www.planningskills.com). Turbulence is one elements of general environmental models that constrains organizational behavior and performance. The origin of this models can be found in [5] work on the "causal texture" of organizational

environments. Previous studies divide environment into various dimensions. These dimension are then categorized into three main categories: munificence, complexity, and dynamism [6].

Capabilities refer to a company's skills to organize its resources and put them in productive use. This skill represents in company's rules, routines, and procedures. For example, it can be seen through decision-making process and internal management process [7]. [8] describe capability as the capacity of a firm to perform some internal activities competently. A dynamic capability is an ongoing capacity of a company to modify its existing resources and capabilities or create new ones [8].

[7] proposes that a business unit is a self-contained division (with its own function, for example, finance, purchasing, production, and marketing departments) that provides a product or service for a particular market. Performance is the accomplishment of a given task measured against preset known standards of accuracy, completeness, cost, and speed. (www.businessdictionary.com). [9] state that performance is the result of activities, including the outcome of strategic management process. The practice of strategic management is justified in terms of its ability to improve an organization's performance, which is typically measured in term of profits and return in investment. Meanwhile, business unit performance is a concept used to appraise the activities in a business unit.

III. RESEARCH METHODOLOGY

This research was descriptive and verificative. Descriptive research aimed to obtain an overview of environmental turbulence, dynamic capabilities, and business unit performance. Meanwhile, verification research aimed to test the relationship between these three variables.

Related to the method, this research used descriptive survey method and explanatory survey method. The first method was used to describe systematically and accurately the facts and characteristics of certain fields, while the second one was conducted to perform hypothesis testing procedures to answer the research problem. This research also used causality as the types of investigation. It was selected as it was able to investigate the relationship between variables based on the construction research model. In addition, cross-sectional or one shoot observation was also used. In this types of observation, the data was obtained in one particular time.

The population of this research was telecommunication operator business unit in Indonesia. The data was taken from The Ministry of Communication and Information. The population was taken by using the following formula:

$$n = N / (1 + Ne^2)$$

Notes:

- n = numbers of sample
- N = numbers of population
- e = critical points

There were two types of data in this research: primer and secondary data. These two data were collected by using several techniques, such as interview, observation, questionnaire, and documentation. In analyzing the data, construct validity and Alpha Cronbach Reliability test were used.

IV. RESULTS

A. Descriptive Statistics

The result of managers' opinion toward three variable is provided below:

Table 1 descriptive analysis

Variable	N	Mean	Interpretation
X ₁ Environmental Turbulence	19	3,78	Good
X ₂ Dynamic Capabilities	18	3,92	Good
Y Business Unit Performance	13	3,33	Fair

Source: data procced 2018

B. Correlation Analysis

Correlation was included into multivariate analysis as it investigated the relationship among two or more variables simultaneously. The purpose of correlation analysis was to test the significant relationship among variables. The result of correlation among the variable of this research can be seen in the following table:

Table 2. Correlation among variables.

		Environmen t Turb	Dynami c Cap	BU Performanc e
Environm ental Turb	Pearson Correlatio n	1	.617**	.642**
	Sig (2- tailed)		.000	.000
	N	30	30	30
Dynamic Cap	Pearson Correlatio n	.617**	1	.593**
	Sig (2- tailed)	.000		.000
	N	30	30	30
BU Performa nce	Pearson Correlatio n	.642**	.539	1
	Sig (2- tailed)	.000	.000	
	N	30	30	30

Source: data procced 2018

Table 2 shows that the correlation score between environmental turbulence and dynamic capabilities was 0.617. It also reveals that the correlation score between environmental turbulence and business unit performance was 0.642. Meanwhile, the correlation score between dynamic capabilities and business unit performances was 0.593. Based on the r-value, it can be concluded that all variables had strong enough correlation with positive value. Moreover, as the significance score (0.000) was less than 0.05, this indicated that the correlation was significant. In short, environmental turbulence increases dynamic capabilities (0.617) and business unit performance (0.642), while dynamic capability increases business unit performance (0.593).

C. Path Analysis

When listing facts use either the style tag List signs or the style tag List numbers.

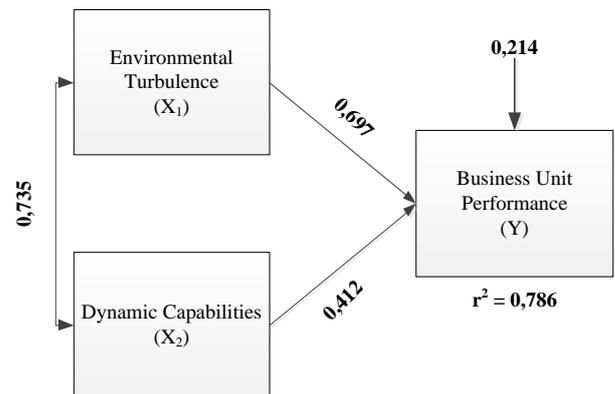


Figure 1. Result of Path Analysis

The result of path analysis is described in the following:

$$Y = 0,697X_1 + 0,412X_2 + \epsilon$$

Table 3. Direct and Indirect Impact (in %)

Variable	Direct Impact to Y	Indirect Impact		Σ Impact
		X ₁	X ₂	
X ₁	0,104	-	0,231	0,335
X ₂	0,220	0,231	-	0,451
ε	0,214			0,786

Source: data procced 2018.

V. CONCLUSION

The telecommunication industry in Indonesia is experiencing a high environmental turbulence. This is mainly caused by turbulence in market and technological environment. The dynamic capabilities of the business unit are

still unable to respond to environmental turbulence. This is mainly due to the lack of optimal coordination capability and inadequate integration capability. The performance of business units achieved by telecommunication organizations in Indonesia is not optimal yet. Some of them cannot gain the market share, investment returns and profit growth target. They also cannot produce innovative product that can attract new customers.

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