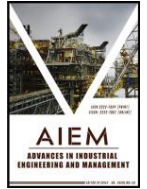


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ARTICLE

THE EFFECT OF RESOURCES ON OPERATIONAL PERFORMANCE THROUGH INNOVATION STRATEGY AND BUSINESS ENVIRONMENT AS MODERATOR (RATTAN SMES IN PALU CITY)Asngadi^{1*}, Chusnul Abadi², Saharuddin Kaseng¹, Muh Riswandi Palawa¹, Moh Ega Nugraha¹¹Management Department, Faculty of Economic and Business, Tadulako University, Palu, Indonesia²Management Department, Bhayangkara University, Surabaya, Indonesia^{*}Corresponding Author E-mail: asngady@yahoo.com

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ARTICLE DETAILS

ABSTRACT

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The general purpose of this study is to examine the determinants of the operating performance of rattan SMEs in Palu. Specifically, it intends to: (1) test the effect of resources on operating performance, (2) test the effect of resources on innovation strategies, (3) test the effect of innovation strategies on operating performance, (4) test the uncertainty of the business environment as moderating the effect of innovation strategy on performance of the Palu City rattan SMEs. This study involves 15 rattan SMEs in Palu City by means of census method. Smart PLS is considered appropriate for data analysis. The results confirm that (1) resources have a significant effect on the performance of rattan SMEs in Palu city, (2) Resources significantly influences their innovation strategy, (3) the innovation strategy has a significant effect on their operational performance, (4) the business environment moderates the effect of innovation strategy on their operational performance.

KEYWORDS

Resources, Operating Strategy, Business Environment, Operating Performance.

1. INTRODUCTION

Business performance has been hot topic in diverse discussions from various points of views [1]. In practice the achievement of business performance involves various aspects, either internal aspects like management functions and external factors that include business environment [2]. Internal factor mapping determines performance as it supports management decision makers, and enables for organizational strength and weakness identification. It is in turn useful for clustering that help government to orient financial or technical support [3].

Operational performance refers to the final outcome of the organization's strategic resources management [4]. It implies that resource exploitation is one of the important factors in operational performance achievement. For this reason, a company must be able to identify its strategic resources that are instrumental to high operational performance.

The availability of strategic resources [5], allows companies to design and implement effective strategies [6]. Abundant resources both tangibles and intangibles will provide space for companies to design innovation strategies [7]. Conceptually, innovation is a creative force that contains a process of continuous improvement covering organization's management, process and products [8,9].

In a competitive environment, innovation is a necessity [10], although the final results that innovation brings can have a negative or good impact on the achievement of success. This is partly due to condition that innovation springs from new processes that may involve an element of trial and error [5].

However the innovation strategy must have compatibility with existing resources, challenges and business environment. In this context, the right choice of strategy will determine the degree of success to business performance [11-13].

The business environment will always be in dynamic turmoil that lead to the emergence of new opportunities and obstacles [14]. A constantly evolving business environment makes innovation always unavoidably urgent [5], especially for SMEs which are commonly weak in various aspects [11,13]. These findings are in line with the major constraints SMEs in Indonesia commonly suffer, consisting of 33.3% financial constraints, 32.1% marketing constraint, 22.6 raw material constraint [15].

The above reality exactly reflects currently faced by rattan SMEs in Palu City. As the largest raw rattan producer in Indonesia, Palu City has not shown a strong rattan cluster. While government support to strengthen the growth of the rattan industry in raw material-producing regions has been sound, starting from the establishment of the Palu City Rattan Innovation Center (PIRNAS), to the existence of a regulations from 3 different ministers regarding the ban on unprocessed rattan exports.

Thus, the efforts to develop SMEs are not easy and challenging. That is way the role of external institutions, especially educational institutions, governmental and non-governmental organizations, are required to buffer the growth of the SME business cluster [16].

The role of the government in creating a climate for the development of SMEs at least includes three aspects namely financial, technical

assistance, protection and support of sub-contract programs between SMEs and large companies [17]. In addition, the strengthening of SMEs can be done through business incubation [18]. Business incubators are directed to: (1) develop new businesses and potential small businesses to become independent businesses, so that they can successfully face local or international competition, (2) develop entrepreneurial promotion by including private companies that can contribute to the market economy system, (3) means of technology transfer and the commercialization process of the results of business and technology development research from experts and universities, (4) creating opportunities through the development of new companies, (5) commercial application of technology in industry through studies and studies that take time and are relatively inexpensive.

Weaknesses that plague most SMEs in managerial capability, market access, and technology sophistication should be offset by stronger external institutions. Their involvement is expected to be able to boost the performance of SMEs, especially SMEs that provides employment and have stability in economic turbulence [15].

2. METHOD

The study applies quantitative approach with hypotheses testing as its objective. The population consists of 15 rattan entrepreneurs in Palu City. It applies SPSS and Smart PLS for data analysis.

3. RESULT

3.1 R square (R²)

R square is a coefficient that refers to the proportion of the independent variables' contribution to dependent variable. The analysis results by means of Smart PLS is represented as follows:

From the R square above it is obvious that contribution of resources and innovation on operational performance is 70.83%, implying that the remaining 29.17% comes from other factors not analyzed in the model.

Table 1: R square.

Variables	R square
Operational performance	0.708
Innovation	0.705
Resources	-

3.2 Parameter coefficient

The parameter coefficient refers to the effect of each exogenous variable on its endogenous variable. Each of these coefficients can be seen in the following table:

Table 2: Parameter coefficient.

	Operational performance	Innovation	Resources
Operational performance			
Innovation	0.404		
Resources	0.161	0.305	

Table 2 shows that all coefficients have a positive relationship, even with different coefficient magnitudes. It is also noticeable that the relationship between resource variables and operating performance is quite low. In order to test the significance of the coefficient magnitude, it is necessary to carry out T Statistic test.

3.3 T statistic

It refers to the degree of relationship significance between variables hypothesized in the model. The following table provide complete results.

Table 3: T statistik.

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	Standard error (STERR)	T statistics (O/STERR)	Meanings
Innovation-> Operational performance	0.826	0.829	0.043	0.043	18.936	Significant
Resources-> Operational performance	0.257	0.126	0.126	2.285	0.264	Significant
Resources-> Innovation	0.738	0.738	0.075	0.075	9.739	Significant

Table 3 reveals T statistic test results on each relationship between variables. Based 15 sample alpha 5%, magnitude of t table is 2.13. By comparing T stat to T table, the degree of all variable relationships to operational performance can be calculated.

Regarding to moderation analysis, the following table clarifies the nature of variable relationship of which the significance of moderating variable can be confirmed:

Table 4: Predictor of moderating variable (coefficientsa).

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.	
	B	Std. error	Beta			
1	(Constant)	0.233	1.696		0.491	0.009
I	0.328	0.328	0.350	0.224	5.037	0.002
L	0.893	0.893	0.443	0.647	8.015	0.000
XL	0.320	0.320	0.375	0.302	3.112	0.005

a. Dependent Variable: K

b. Independen Innovation: I

c. Independent Environmental: L

d. Independen Innovation *Environmental: XL

From the above data we can form equation $K = 0.233 + 0.329 I + 0.893 L + 0.320 XL$.

It appears that the coefficients of L and XL are positive and significant. Thus the environmental variable moderates the relationship between innovation variable and operational performance of the rattan SMEs in Palu City. The same signs on the coefficients I and XL means that environmental conditions strengthen the relationship of innovation to performance.

4. DISCUSSION

4.1 Resources effect on operational performance

Resources are the main strength for the company to be able to perform as expected. The management of valuable strategic resources will make organization have special competencies [19,20]. For this reason, it is important for organizations to be able to identify their resources in order to obtain superior performance. Organization should be able to mold core competency based on the specific resources available in the organization. Resources based view theory confirms various findings that competitive advantage is created because the company's ability to uniquely use strategic value resources [21,22].

The study's result indicates that organization's resources have a positive influence on performance. However, its effect is smaller than its indirect influence through the innovation strategy. This provides information that organizational resources will have an impact on the achievement of high operational performance if coupled with the organization's innovation power.

Resources within organization will be unique when they are accompanied with a variety of creative efforts that are able to create value that will

uplift the organization competitiveness [19, 23, 24] and in the long-term can usher organization to corporate performance achievement [25].

The organization's ability to use all available resources will have a direct or indirect impact on its performance achievement [26].

It is in line with the findings of Purwohandoko that optimal use of resources can improve organization performance with the right choice of strategies. Thus the aspect of resources must be accompanied by innovations based on the environmental conditions organization faces [25]. Integration of resources with strategy, especially the innovation strategy will provide a superior performance achievement as resort-based view concept hold [23,27].

4.2 Resources effect on innovation

Resources serve as a driver of business activity. The organization's ability to create its resources will make the organization stand out from competitors. In this context, organization creativeness should be supported by resources it owns [14,19].

Creativity as "new thinking", will become a real work if combined with other resources. By this way, creative ideas will become "creative works" which have an impact to boost competitiveness and solve practical and strategic problems [20].

The study's result indicates that resources have a positive and significant influence on innovation strategies. This confirms the idea that the organization's resources will trigger it to innovate more [14,28].

Organizations with large structural structures have the opportunity to build development research on products and processes that directly leads to organization's increased performance [29].

Innovation strategies that include a leadership orientation towards innovation [30], types of innovation [29], sources of innovation and investments required in innovation [31], require the support of organization's resources. Support from adequate resources enables the organization to carry out an effective innovation strategy to achieve its goals [4].

4.3 Innovation strategy effect to operational performance

The study's result indicate that the innovation strategy has a positive effect on operational performance. This implies that the innovations made by rattan organizations in Palu city will increase their competitiveness, through improved operational organization.

It is in line with the findings [5] that innovation can be a foundation for SMEs to be able to increase competitiveness. Innovation is also a breakthrough from various deadlocks that causes companies to stagnate [32-33]. So it is undeniable that that innovation made by organization will lead to higher performance [11,27,34].

It means that the performance achievement is only possible when there is scheme installed in management in in facilitation provision for the development of knowledge, which is the basis for competitive advantage[35].

At this point, information and knowledge development are keys to success attainment in the future [16,36].

4.4 Environmental as moderation of innovation strategy to operational performance

Environmental uncertainty arises because of increasingly fierce business competition, and the emergence of new technologies and regulations that have a direct or indirect impact on the organization's business climate [37]. The organization can be in an environment with low environmental conjuncture by implementing the blue ocean strategy [38]. However, in reality this strategy is hard to pursue, especially in the current conditions.

Environmental insecurity will be related to product, government and economic uncertainty. The study conducted by Elbanna and Alhwarai shows that environmental uncertainty has no impact on the performance of the industry in Egypt. Elbanna and Alhwarai's findings contradict the findings of Lee and Miller [39] that the perception of environmental uncertainty will have an impact on performance achievement.

The present study's result indicates that uncertainty of the business environment moderates the relationship between rattan SMEs' innovation strategies and their operational performance. It is inline with the findings of Lee and Miller (1996) and also of Raju and Lonial [40].

It emphasizes the importance of government as a regulator to create conditions that allows Palu City rattan SMEs to innovate well, and in turn to boost their operational performance. Conducive environment that supports business innovation is very important to grow rattan SMEs in Palu City [41] especially with the support of the central government to create a national rattan industry cluster based on 2012 government regulations.

Environment that allows SMEs to innovate is very important, since innovation activities can't be forced and monitored, they only occur voluntarily with conducive conditions or supporting environments [38]. Government policy is one of the instruments that can be used to create an atmosphere that supports the rise of innovation.

5. CONCLUSION

1. The availability of resources in organization will have an impact on the achievement of the rattan SMEs' operational performance in Palu City.

2. The availability of resources enables SMEs to be better able to build innovation strategies.

3. The company's innovation strategy has an impact on operational performance achievement in the rattan SMEs in Palu City.

4. Environmental conditions moderate the relationship between innovation strategies and operational performance.

LIMITATION

This research population is very limited, so generalizations will only apply in the study area.

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