Conference Paper

The Effect of Intellectual Capital on Business Performance in Micro-, Small-, and Medium Enterprise (MSME) in Medan City

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Abstract

The Ministry of Cooperative and SME discloses currently the number of SME is 56.5 million units and 98.9% is micro, one of which is fashion business that is needed by the people (HTTPS://www.antaranews.com). The phenomenon of people's demand for clothing has become an opportunity for the creative industry community to develop a business in the fashion industry by presenting the fulfillment ground for clothing shopping. The objectives of this research are to analyze the influence of Intellectual Capital on Business Performance and to analyze the influence of Human Capital, Technological Capital, Customer Capital, and Social Capital partially on Business Performance. The sample of this study is 76 MSME in fashion industry that have operated for more than two years and specifically along Universitas Sumatera Utara. Result shows that intellectual capital has a positive and significant effect on business performance. Human capital, technological capital, and social capital partially have positive and significant effect on business performance. While customer capital has insignificant effect on business performance. In general, MSMEs owner and manager should focus in improving intellectual capital strategy in order to improve the business performance.

Keywords: intellectual capital, business performance, human capital, technological capital, customer capital, and social capital

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1. Introduction

SME is the most common types of business in Indonesia. Medan is the third largest city in Indonesia with plenty number of SME. Department of Industry and Trade Medan reveals the number of SME in Medan City until 2015 is 222.133 entrepreneurs, the number of SME is almost 500 times the number of large businesses. The growth of Small and Medium-sized Enterprises (SME) is continue to increase by the year. The Ministry of Cooperative and SME discloses currently the number of SME is 56.5 million

units and 98.9% is micro, one of which is fashion business that is needed by the people (https://www.antaranews.com).

The phenomenon of people's demand of clothing has become an opportunity for the creative industry community to develop a business in the fashion industry by presenting the fulfillment ground for clothing shopping. The customer base for this business is mainly come from the youngsters, who concern highly on the latest trend of fashion. Especially around the area of university which is a strategic location for the densely populated area of youngsters.

To improve the performance through competitive advantage, entrepreneurs have to make use of several factors, such as human capital, entrepreneurs can choose the skilled employees, so as to improve the performance of the company. Next factor is technological capital, entrepreneurs can advertise their products through social media to improve the performance of the business. Moreover, customer capital, entrepreneurs can find out whether the quality of service from the business is good or not through the customers, so the entrepreneurs can improve their performance. Following that is social capital, entrepreneurs can build an adequate relationship with their suppliers (clothing company) and other entrepreneurs within the same field. With such implementation, then entrepreneurs can excel in the competition so as to improve the performance of their business with the resources owned.

The objectives of this research are:

1. To analyze the influence of Intellectual Capital on Business Performance
2. To analyze the influence of Human Capital, Technological Capital, Customer Capital, and Social Capital partially on Business Performance

2. Literature Review

2.1. Intellectual capital and business performance

Intellectual Capital classifies as non-physical assets owned by SMEs. Therefore, IC becomes the focus in creating the values of a company and making IC one of strategic assets owned by a SME [3].

Performance is a quantitative and qualitative measure to describe the level of achievement from a goal set by the organization [13]. Man et al. (2002) discloses performance is the main indicator in viewing the success. In other words, performance in an organization is the answer to success or failure of organizational goal establishes.

In accordance with a research performed by Khalique et al. (2014) and Supeno et al. (2015), Performance has a positive and significant effect on Business Performance.

Hypothesis 1: Intellectual Capital has a positive and significant effect on Business Performance

2.2. Human capital and business performance

The definition of human capital is the combination of skill, the innovativeness in completing the task involving the firm value, culture, and philosophy [2]. In accord to a study by Khalique and Isa (2014), Human Capital is positively and significantly affecting Business Performance.

Hypothesis 2A: Human Capital has a positive and significant effect on Business Performance

2.3. Technological capital and business performance

In the knowledge-based economy system, the role of technological capital is very essential. Fernandez et al. (2000) states the component of technological capital is the innovation of the product and the technology product. Bueno et al. (2004) postulates technological capital is an intangible asset based on innovation and technique process. Technological Capital has a positive and significant effect on Business Performance [9].

Hypothesis 2B: Technological Capital has a positive and significant effect on Business Performance

2.4. Customer capital and business performance

Customer capital is a resource which links the external relationship of the company with the customers, suppliers, or partners [14]. There are 4 dimensions of customer capital according to Starovic and Marr (2004), namely: (1) Customer Profile, (2) Customer Duration, (3) Customer Role, and (4) Customer Support. According to Khalique dan Isa (2014), Customer Capital is positively and significantly affecting Business Performance.

Hypothesis 2C: Customer Capital has a positive and significant effect on Business Performance

2.5. Social capital and business performance

Social capital includes relationship, attitude, and value that maintain the interaction between the people and contribute to the economic and social development of the society [16]. According to Fukuyama (2002), social capital is the community's ability to work together in order to achieve the common goals in various groups and organizations. Social Capital has a positive and significant effect on Business Performance [10].

Hypothesis 2D : Social Capital has a positive and significant effect on Business Performance

3. Methods

Descriptive statistical analysis is used in this study to give out a description on the variables, which are entrepreneurial orientation, business performance, and external business environment. The hypothesis testing consists of *t*-test (Partial Test), moreover, Determination Coefficient (R2) are also used in this study. Path analysis and Sobel test are used to analyze the data.

The sample of this study is 76 MSME in fashion industry which have operated more than two years and specifically along Universitas Sumatera Utara. In this study, the sampling technique used is purposive or accidental sampling method with saturated sampling. Data collection technique used in this study is Data Collection Technique with survey conducted through interview with related parties and questionnaire filled by the respondents.

Table 1: Validity test.

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
P1	169.3667	290.447	0.866	0.963
P2	169.4333	289.909	0.733	0.963
P3	169.5667	291.771	0.779	0.963
P4	169.5000	295.569	0.581	0.964
P5	169.3000	294.217	0.694	0.963
P6	169.4333	294.116	0.659	0.964
P7	169.3667	291.895	0.714	963
P8	169.4667	294.051	0.626	0.964
P9	169.4000	297.697	0.510	0.964

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
P10	169.4667	294.947	0.740	0.963
P11	169.7000	294.424	0.560	0.964
P12	169.6000	297.490	0.425	0.965
P13	169.3000	292.424	0.791	0.963
P14	169.5333	295.223	0.521	0.964
P15	169.3333	293.816	0.604	0.964
P16	1694667	290.809	0.623	0.964
P17	169.4667	295.982	0.593	0.964
P18	169.6333	294.102	0.519	0.964
P19	169.6333	293.137	0.559	0.964
P20	169.3667	294.309	0.663	0.964
P21	169.5333	289.637	0.669	0.963
P22	169.5000	291.086	0.631	0.964
P23	169.6333	295.826	0.528	0.964
P24	169.3667	291.275	0.684	0.963
P25	169.5333	295.016	0.580	0.964
P26	169.4667	294.947	0.740	0.963
P27	169.7000	294.424	0.560	0.964
P28	169.4333	296.461	0.489	0.964
P29	169.3000	292.424	0.791	0.963
P30	169.4333	297.564	0.484	0.964
P31	169.3667	295.964	0.577	0.964
P32	169.3333	294.161	0.646	0.964
P33	169.5333	295.223	0.521	0.964
P34	169.2333	293.082	0.646	0.964
P35	169.4000	293.145	0.574	0.964
P36	169.4333	297.220	0.454	0.964
P37	169.6000	294.869	0.543	0.964
P38	169.6333	290.585	0.622	0.964
P39	169.4000	293.007	0.686	0.963
P40	169.4667	288.533	0.672	0.963
P41	169.5000	290.879	0.640	0.964
P42	169.5667	297.289	0.451	0.964
P43	169.3000	292.010	0.669	0.963

Source: Processed data (2018).

In Table 1, it can be seen all the statements are valid, due to Corrected Item-Total Correlation value on each statement is above 0.361, hence it can be concluded 43 (forty three) statements in the questionnaire of this study are valid.

Table 2: Reliability statistics.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.965	0.966	43

Source: Processed data (2018).

It can be seen from Table 2 all statements in the questionnaire are reliable due to the *Cronbach's Alpha* value of 0.965 is higher than 0.80.

4. Results

4.1. Multiple linear regression analysis

Table 3: The result of Multiple Linear Regression analysis.

No.	Variables	Coefficients	t-Values	Significance
1	Constant	−1.089	−0.483	0.631
2	Human Capital	0.289	3.368	0.001
3	Technological Capital	0.343	2.122	0.037
4	Customer Capital	0.146	1.294	0.200
5	Social Capital	0.270	2.106	0.039
6	R^2 = 0.865			
7	Intellectual Capital (F-Statistic = 41.565)			0.000

Source: Processed data (2018).

It is found the Multiple Regression Analysis Model is:

$$Y = -1.098 + 0.289HC + 0.343TC + 0.146CC + 0.270SC + e.$$

Table 3 shows the four predictor variables, partially HC (Sig. = 0.001), Technological Capital (Sig. = 0.037), and Social Capital (Sig. = 0.039) are significantly affecting Business Performance. On the other hand, the remaining one variable, which is Customer Capital (Sig. = 0.200) is insignificantly contributing to Business Performance. Moreover, Intellectual Capital is a significant contributor to Business Performance with Sig. value of 0.000.

The coefficient determination of this research is 0.86, which means that Human Capital, Technological Capital, Customer Capital, and Social Capital contributed 86% to

explain Business Performance. Meanwhile, the remaining 24% is explained by other variables.

4.2. Hypothesis testing

Table 4: Summary of hypothesis tests.

Hypothesis No.	Statement	Decision
H_1	Intellectual Capital has a positive and significant effect on Business Performance	**Supported**
H_{2A}	Human Capital has a positive and significant effect on Business Performance	**Supported**
H_{2B}	Technological Capital has a positive and significant effect on Business Performance	**Supported**
H_{2C}	Customer Capital has a positive and significant effect on Business Performance	**Not Supported**
H_{2D}	Social Capital has a positive and significant effect on Business Performance	**Supported**

Source: Processed data (2018).

Based on the hypothesis thesis, it is found that only customer capital does not support the hypothesis. Customer capital has insignificant effect on business performance. Meanwhile the rest supported the hypothesis.

5. Discussion

This study examined the impact on intellectual capital on the organizational performance of 76 MSMEs in fashion industry as proposed by Khalique and Isa (2014). The results reveal that intellectual capital has significant and positive relationship with organizational performance of MSMEs. Thus, it can be inferred that intellectual capital plays an important role in enhancing the performance on MSMEs. This result supports the findings of earlier studies like Khalique et al. (2014), Supeno et al. (2015), Khalique and Isa (2014), and Khalique et al., 2015, while to some extent it contradicts the findings of Khalique and Isa (2014). Khalique, in their study using IICM in electrical and electronics SMEs operating in manufacturing sector of Malaysia and Pakistan, found that customer capital is a significant contributor in Malaysia, while in this study on 76 MSMEs in fashion industry, customer capital is found to be an insignificant contributor.

Intellectual capital has been confirmed as a contributor variable for business performance in this study. This indicates that better intellectual capital will result in better MSME performance. Hence, the owner or manager should focus on improving the intellectual capital components as the intangible assets of company. As Barney (1991) posted that a company can accomplish competitive advantages and superior financial performance by utilizing, controlling, and managing its strategic assets both tangible and intangible. In this sense, business owner or manager ought to improve the employees' competencies, product innovation, process and social relationship in order to create a success for the business.

Interestingly, customer capital is not a contributor to business performance in this research. It is different from the result from Khalique and Isa (2014). Customer capital of an organization consists of its brand value, strong client network, customer loyalty, which have a positive association with performance [7, 11]. The fact that customer capital is insignificant on business performance may suggest that customer of this business focus on other aspect than customer capital.

6. Conclusion

The conclusion of this research are intellectual capital has a positive and significant effect on business performance. Human capital, technological capital, and social capital partially have positive and significant effect on business performance. Meanwhile customer capital has insignificant effect on business performance. In general, MSMEs owner and manager should focus in improving intellectual capital strategy in order to improve the business performance.

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