Improvement of Printing SMEs Performance with Maintaining Entrepreneurial Intellectual Capital Management

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Abstract: With the very fast advancement in the world of printing technology and information, demands that the printing entrepreneurs to be able to manage and utilize Entrepreurial Intellectual Capital in their business activity as an attempt to develop further the printing business to increase their competitiveness and performance. The aim of this study is to find out the effect from increasing the business performance and continuing of the business development to the printing business SME's at Medan Baru sub-district area Medan City after managing the aspects of Entrepreneurial Intellectual Capital which consist of few elements that is Social Capital, Customer Capital and Technological Capital. As much as 35 printing business SME's at Medan Baru Sub-district area participate in this research. The data collected by interviews and quettionnare which are self managed by us and analyze by using the multiple regression analysis. The results shows that present SME are slow to follows the printing business technology trends. Furthermore, the Entrepreneurial Intellectual Capital aspect plays an important role to stimulates the SME's work performance. And the most important aspect from Entrepreneurial Intellectual Capital are the Customer Capital and Technological Capital to stimulates the performance from the printing business SME's.

1 INTRODUCTION

1.1 Research Background

A very fast advancement in the world of printing technology and information demands that the printing entrepreneurs able to comprehend and utilize it in the business activities as an attempt to develop the printing business for increasing their competitiveness and performance. The 4th industrial revolution or Industry 4.0 become a giant leap for industrial sector where the ITC are being utilized to the fullest extent. Not just in the production process the mastery of this technology also being utilized in all of the industrial value chain so that it breeds a new business model with a digital basis to achieve a high efficiency rate and better products quality.

According to the annual observation, the majority of SME's in Indonesia especially in Medan still have this tendencies using conventional based and production based (traditional) in running their business so that the product that's they produce still contains technology that haven't reach full development, if this company following the recent developments which focusing at the management of intellectual capital till its maximum capabilities then the SME's will be able to compete by using their competitive advantages that were obtained through innovative creations that they get from intellectual capital owned by the company, the Innovation will encourage the products creation that appealing to the consumer and also a more effective and efficient business activities.

Micro, small and medium enterprises have an important role for Indonesian economic pace especially at job creation and household empowerment that supports their incomes, The SMEs must be one of the sectors that the government paid a lot of attention to seeing that based from the data of The Ministry Of Cooperatives and MSME that at the end of 2016 SME contributed 60,34% of product domestic bruto (PDB). This numbers increased if compared from the year before as much as 57,84%, right now the numbers of SME that has been registered in North Sumatra province are 2,5 million that's 40% of it are micro enterprises, 30% middle enterprises and 30% small enterprises. Medan are the capital city of the biggest province and the 3rd biggest in Indonesia.

SMEs are a part of the economic business group that are really important for the economy and one of the priorities in economy development work program in Medan. (http://pemkomedan.go.id).

Medan Baru Sub-distrct are one of the place that becomes a gathering place for the printing businesses that are well known in Medan. Thats because Jl. Jamin Ginting and the surroundings of Medan Baru sub district are a very strategic locations for them because it's near Universitas Sumatera Utara (USU) or North Sumatra university and a couple of offices complex. Based on the field survey in 2019 that the SME's printing entrepreneurs that they haven't run the business with the idea of knowledge based business which means that they haven't utilize the social capital and their customer capital well and optimally, With crowded visitors everyday these entrepreneurs better use this opportunity to increase social capital and customer capital of their business. For Example is that by knowing their customers characteristics so they can produce a product that suits the wish and needs of their customers so it may form some customers loyalty.This could be a stimulant for the entrepreneurship growth and SME's sustainability. By utilizing technologies that being offered that brings innovation and their own specialty compared from products elsewhere that still using traditional equipments and methods in their production process.

The printing SMEs does must have the knowledge for Entreprenual Intellectual Capital the potential of Entreprenual Intellectual Capital requires the community to understand a good management towards social capital, social capital and technological capital, therefore socialization and communication are needed to manage Entreprenual Intellectual Capital for increasing SMEs performance. This research focused on the utilization and managing Entreprenual Intellectual Capital that are hoped can provide knowledge and understanding and also can inspire the SMEs doer specially in Medan Baru sub district,Medan on utilizing Entreprenual Intellectual Capital as a tool to run their business.

2 LITERATURE REVIEW

2.1 Intellectual Capital

Intellectual capital in general can be defined as the difference between the company market value and book value from the company assets or from the financial capital. Intellectual capital by Nahapiet and Ghoshal (1998) referring to the knowledge and the skill that's the social collectivity have like an organization, intellectual community or professional practices. Intellectual Capital represents a valuable resources and an ability for some knowledge based act.

Entreprenual intellectual capital are some characteristics and habit that are owned by entrepreneurs. Most of their activities that their doing are purposely for inovating and using technologies as a base tool for growing their business. Their characteristics are persistence, took up some calculated challenges and work committed (Audretsch & Keilbach 2004). So that's Entreprenual intellectual capital that's business owned refers to an employee that's innovative, willing taking risk and contributes in their business growth.

2.2 Social Capital

Coleman in Fukuyama (2002:12) defines that *social capital* are an organization capabilities to work together to achieve their common goals in various groups and organizations. Theory about *social capital* states that networks of communication are a resources that can be used for daily activities.The members of the "capital" networks, for example in a special forms that can be used for various needs, access, supplies, opportunities and social status.

2.3 Customer Capital

Customer capital also called relations capital, is a knowledge that's being embedded through skills and being used by individual interactions or a knowledge that's embedded in the business networks (Nahapiet and Ghosal, 1998 in Bataineh and Zoaby, 2011). Customer capital covers growth, customer knowledge, stockholder, supplier, industrial association (government) and also the community. So that's this capital as a comprehensive knowledge for marketing and customer relations fields. The quality of the relationship and an ability to find or attracts new customer are a key factor for thr companies success (Montequin et al., 2006 in Alipout,2012).

2.4 Technological Capital

Adeosun, et al (2009) conclude that the use of technology gives a positive feedback for management strategies that's related with

communication,informatio, decision making, data management and knowledge managements aspects in an organization. Technologies can become a strategic power and as a tool for the organization profitable at promotion and competitive aspects (Buhalis, 2003)

3 RESEARCH METHOD

3.1 Research Time

This research being held at Medan from March till July 2019

3.2 Participant

The population are all of the printing SMEs at Medan Baru sub district that have been operated at least 5 years. We found as much as 35 SMEs with the exact criteria. The sample being used are the saturation sample at the whole population.

3.3 Data Collection Procedures

In this research data was collected to answer the problems from the primary data that has been gathered and being processed by certain organization or peoples straight from the object (Supranto, 2011). The data collection technique with the survey done through interviews with related party and answers through a questionare filleb by respondents, besides that it will also be done a literature review related to the growth of SMEs work performance and Entrepreneurial Intellectual Capital consisted of Social Capital, Customer Capital and Technological Capital.

3.4 Validity and Reliability of Questionnaire

This research using a questionnare that's arranged by the research team based on the theoritical studies that's being adjusted with the condition and language that suits The entrepreneurs. The validity and questionnaire reliability test carried out to 30 printing entrepreneurs that are in Jalan Mesjid and Jalan Ampel Area in Medan. Those who have been following the research as a sample in the Validity and reliability test are not chosen as a sample for the research. The results have been summarized in Table 1.

Table 1.

Variables	Number of Statements	Cronbach's Alpha	Conclusion
Social Capital	8	0.942	Reliable
Customer Capital	8	0.940	Reliable
Technological Capital	6	0.939	Reliable
SME Performance	7	0.939	Reliable

Table 5.1 shows that all the items are valid, which can be seen from the calculated r that's greater than r table (0,361) at every variables. So that's it can be concluded that's 29 valid questions to use in this research.Table 5.1 shows that the value of Cronbach Alfa > 0,80. Based from the Table above confirms that's our questionnare are reliable.

3.5 Data Processing and Analysis Method

The data are analyzed using multiple linear regression methods and analysis descriptive methods, using SPSS. Analysis decriptive methods by giving 35 question are for the SMEs in Medan Baru sub district.The Descriptive statistics explains about the respondents characteristics and the variabel being used.

We used multiple linear regression methods to analyze and find out the relationship between the variables with the purpose to know the direct nor indirect effects a bunch of variables to bound variables.
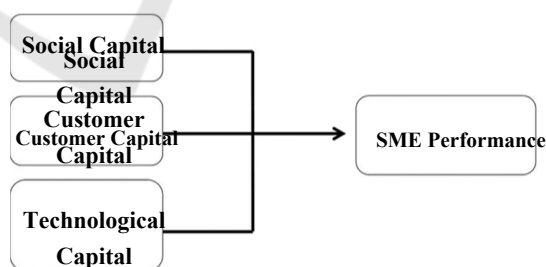

Figure 1. Research Model

3.6 Hypothesis

We are using multiple linear regression methods to evaluates the effects of each aspects of Entreprenurial Intellectual Capital towards The printing MSMEs performance in Medan.Our Hypothesis covers this question

- Hypothesis 1 social capital have a positive effect and significant towards the performance

- Hypothesis 2 customer capital have a positive effect and significant towards the performance
- Hypothesis 3 technological capital have a positive effect and significant towards the performance

4 FINDINGS

4.1 SMEs Owner Characteristics

The owners characteristics described to see the character spreading or general characteristics from the respondents. There are 4 characteristics consisting of age, gender, education attainment, and years of operations for the samples in Table 2 to summarize our findings from the 35 respondents.

Table 2. Printing SMEs characteristics

Charactersitics	N	Percentage
Age	**35**	
21-30	4	11,43%
31-40	7	20%
41-50	14	40%
> 50	10	28,57%
Sex	**35**	
Male	26	74,28%
Female	9	25,72%
Educational Attainment	**35**	
Junior high school	7	20%
Senior High School	15	42,90%
Diploma	7	20%
Bachelor	5	14,25%
> Bachelor	1	2,85%
Years of operation	**35**	
5-10 years	16	45,71%
10-15 years	9	25,71%
>15 years	10	28,58%

Table 2 shows that the majority SMEs are male with the percentage of 74,28% so these only 25,72% are females. The comparison are 3:1 shows that the female have a good presence in the business. This results also show that the females in Medan are getting more independent in their household. The majorities are high school graduates and most of them aged 41-50 years old and most of them already have 5-10 years of experience.

4.2 Regression Analysis

We use multiple linear regression to evaluate the effects from every aspect Entrepreneurial Intellectual Capital towards the SMEs performance in Medan. The R value and the adjusted R value are used to evaluate the relation between the predictor variabel and bound variable. The summary gives us information related to the determine coefficient that Table 3 shows. Coefficient of correlation (R) explains about the strength of the Variables with the Bounded variables while the adjusted R-squared explains the varians through the research models.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.806[a]	.650	.617	3.33113

a. Predictors: (Constant), Social Capital, Customer Capital, Technological Capital
b. Dependent Variable: SME Performance

Table 3 shows that the model have a correlation or a very strong bond between Entrepreneurial Intellectual Capital towards the SMEs performance for 80,6% (R=0,806). All of the aspects that have been applied to shows as much as 61,7% varians towards the performance. While the rest are 38,3% can be explained by other factors that's not covered in this research. The Regression coefficients and level of significance showed in Table 4.

Table 4: Koefisien Regresi

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1 (Constant)	1.758	5.500		.320	.751
Social	.128	.189	.092	.675	.505
Customer	.168	.214	.147	.786	.048
Technological	.684	.205	.621	3.338	.002

a. Dependent Variable: SME Performance

Table 4 shows that the aspects of Entrepreneurial Intellectual Capital that have been applied by the

SMEs significantly effects their performance, except the social aspect although it has a positive effect but it's not really significant. The Technological Aspect have the highest coefficient rate. This results shows that the most important aspect to push the performance are by doing investment and development on Technology Capital that suits the customer needs. Theres enough evidence to say that the Technology Capital and Customer Capital will effect the SMEs performance.

5 DISCUSSION

The results of this study support the previous research, that the management activities of intellectual capital in SMEs will have a positive impact on performance achieved, such as increased business profits and customer retention (Zuliyanti and Delima 2017). Other than that the results shos that the Technological Capital in Entrepreneurial Intellectual Capital, have the most significant effect towards increasing the performance. The appliance and use of this technology that crates the process,method and worktool that's effective and efficient become the key to increase SMEs performance. The results also supports the previous research that also stated that technology have a positive effect towards the outcome.

Customer Capital or can also be called as Relations capital also significantly effects the SMEs performance. The business doers must evaluates their Customer Capital including their knowledge about their customers. Most of the SMEs doesn't have a clue about their customers characteristics and profile as long as they sell their product they feel that these "things" doesn't really effect their business sustainability. But in fact by knowing their customers are one of the foundation and capital for the marketing and customer relations aspects. To maintain and gain a new customers are key factors for their success. If some specific organization are focusing on their customers and became the markets leader then they will create some routinity and an efficient ways to serve the customers well

The research also discussed it further about Social Capital SMEs detailed, Descriptively this aspect have lowest score from the Entrepreneurial Intellectual Capital. Previous studies shows that SMEs have a problem in managing their Social Capital. For example is that they have a high Turnover ratio in the business.Its difficult for the SMEs to find an experienced operator to operate the machines smoothly. Some of the SMEs doesn't have

a good relationship to the employment bureau and eventually they have to recruits regular people and give them enough training and it leads to some of the workers are not doing their job nicely because they don't have the set of skills.

6 CONCLUSION

Referring to the purpose of this rearch it can be concluded that:

1. Technological Capital are the most important aspect for increasing the SMEs performance in Medan.The development and utilization of the technologies have an important role in increasing the performance and must always be done so their products able to fulfill the market demands.
2. Customer Capital effects the SMEs performance in Medan. A good understanding of the customers is a knowledge capital for the marketing and customer relations. Their skills to maintain and find new customers are key factors for success. And its important to maintain and understanding customer capital so they may create a competition in their activities to please the customers.
3. Social Capital have a positive effect but not really significant to increase the SMEs performance but it's need to be recognized although they're not really significant but it's important for maintaining the social capital to create a better teamworks and collaboration between the entrepreneurs.
4. Based on the determinant coefficient (R) shows that between the variables (technological capital,customer capital and social capital) have a very strong impacts and bond towards the printing business SMEs performance in Medan.

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