ANALYZING BUSINESS PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES (SMEs) BASED ON HUMAN CAPITAL, SOCIAL CAPITAL AND COMPETITIVE ADVANTAGE

Inneke QAMARIAH
Universitas Sumatera Utara, Medan, North Sumatera, Indonesia
Yasmin Chairunisa MUCHTAR
Universitas Sumatera Utara, Medan, North Sumatera, Indonesia

Abstract
Small and Medium Enterprises (SMEs) play an essential part in the development of national economy. It is also considered as the main source of employment, poverty reduction, improvement in lifestyle and empowerment of low-income groups. In Indonesia SME also has important role, SME acts as the driving force of economic growth and development. Nevertheless, there are various issues to be addressed for SMEs to improve its performance and competitiveness in the hyper dynamic global business. To encounter the rapid changing, SME should possess the intellectual capital as its strategy management to create continuous competitiveness. The aim of this research is to analyze the effect Human Capital (HC) and Social Capital (SC) on Competitive Advantage, and the role of Competitive Advantage (CA) as the mediator of the relationship between Human Capital (HC) and Social Capital (SC) on Business Performance (BP). The result shows only Human Capital significantly affects the Competitive Advantage of SMEs, while Social Capital does not affect the Competitive Advantage of SMEs. Next, both Social Capital and Competitive Advantage significantly affect the Business Advantage of SMEs, meanwhile human capital does not affect the Business Advantage of SMEs. Moreover, competitive advantage does not mediate the relationship between human capital and social capital to business performance.

Keywords: Human capital, social capital, competitive advantage, business performance SME.

JEL Codes: J21, J24, M54, M55.

I. INTRODUCTION

In the 20th century, the industrial economy have transformed to a knowledge-based economy, along with the nature of assets. In a knowledge-based economy, knowledge is regarded as the critical asset for the success of an organization. In knowledge-based economy intellectual capital is considered as the backbone. Stewart (1997) reveals that intellectual capital is the intellectual material that is compiled, apprehended, and utilized to produce capital by generating a higher-valued asset. Small and Medium Enterprises (SMEs) play an essential part in the development of national economy. It also considered as the main source of employment, poverty reduction, improvement in lifestyle and empowerment of low-income groups. In Indonesia SME also has important role, SME acts as the driving force of economic growth and development. According to Statistics Indonesia (Biro Pusat Statistik/BPS), SME’s contribution in Indonesian Gross Domestic Product (GDP) and employment has increased from 57.84% to 60.34% and from 96.99% to 97.22%, respectively, in the last five years. Nevertheless, there are various issues to be addressed for SMEs to improve its performance and competitiveness in the hyper dynamic global business. To encounter the rapid changing, SME should possess the intellectual capital as its strategy management to create continuous competitiveness. Research on intellectual capital has been widely developed by several earlier researchers in developing countries such as Indonesia, Malaysia and Pakistan (Khaliq and Isa, 2014; Supeno et al., 2015; Khalique, 2013). However, there are still very few of research conducted in Indonesia specifically investigating the component of intellectual capital which is human capital and social capital on SME. Bontis (1998) agreed that one of the components of intellectual capital is human capital and Bueno et al. (2004) added social capital as a part of intellectual capital components as well. Thus, researchers are interested to explore this topic in order to be able to contribute to the development of SMEs in Indonesia. Human capital is on many occasions cited as an intangible resource that is closely tied to knowhow and contributes to competitive advantage (Ismail et al., 2013). Carmeli and Tishler (2008) demonstrated the human capital as one of the six intangible factors extenuating the competitive advantage in 99 local Israeli firms. Human capital is regarded greater than before due to its contribution in wealth success and its being a prime source of competitive advantage (Memon et al., 2009). The study of Hasoni (2016) examined the impact of the dimensions of intellectual capital (human capital, structural capital, and relational capital) on competitive advantage at general company for mechanistic industry. The results showed that there is...
II. LITERATURE REVIEW

Human Capital

Human capital can be explained as the knowledge, skills, and abilities of employees (Edvinsson and Malone, 1997; Bhartesh and Bandyopadhyay, 2005). It can be viewed as a group of values, attitudes, and aptitude of employees that lead in competitive advantage and value creation for the organization (Jardon and Martos, 2009). In other words, know-how, experience, and talent are the components of human capital (St-Pierre and Audet, 2011). The significance of human capital cannot be accentuate more, since it has been proven as the most important aspect of intellectual capital (Boekestein, 2006; Choudhury, 2010; Cohen and Kaimenakis, 2007; Durst, 2008; Jardon and Martos, 2009), whereby the financial merit of human capital does not need to be proved anymore (Stewart, 1998).

Social Capital

Corporate responsibility toward fairness, transparency, honesty and ethics are the bases of social capital (Bueno et al., 2004; De Castro and Sáez, 2008; Lesser and Prusak, 1999; McElroy, 2002; Nahapiet and Ghoshal, 1998; Subramaniam and Youndt, 2005). Three perspectives of social capital are social capital as concurrent standards and networks (Coleman, 1988; Putnam, 2000), social capital as standards (Fukuyama, 1997) and social capital as networks (Bourdieu, 1986; Dasgupta, 2005; Lin, 2001). M. Paldam claims that there are three basic concepts for describing social capital. The first refers to trust, the second to cooperation and, added by M. Bugdol (2010), the third to social networks.

Competitive Advantage

Bharadwaj et al. (1993) describes that competitive advantage is the demonstration of strategic implementation by utilizing abundant kinds of resources owned by organization. Distinctive skill and assets are regarded as the source of competitive advantage. Competitive advantage does not depend on natural resources, technology or economic scale, but more to greater value, exceptional, incomparable (Bharadwaj et al, 1993). Competitive advantage classified into three categories are product differentiation, market forecasting and market responsiveness (customers and competitors) by Ramaswarni et al. in Mahmood and Hanafi (2013). Furthermore, Porter (1990) illustrated competitive advantage is the center of marketing works in order to face the challenges.

Business Performance

Business performance is a company’s potential to adapt to the business environment, along with changes in the market environment that consist of customers, competitors and other power forces that can change the way business works (Rekarti and Doktoralina, 2017). Therefore, a right management, better marketing strategy, and a good financial planning are necessary for a good business performance (Halim et al., 2011). Sanchez & Marin (2005) appraises the performance of small and medium enterprises (SME’s) with referral to three aspects, such as profitability, productivity, and market. Profitability aspect views business performance from the perspective of financial aims accomplishment as devised by the company. Productivity is based on company achievement in its business activities to meet customer wants and needs, as well as employee’s productivity. Market aspects, such as, achievement of product sales, market position and market share, is the base of business performance.

The Relationship between Human Capital, Social Capital, Competitive Advantage on Business Performance of SMEs

The study by Muda and Rahman (2015) found that human capital directly and indirectly affects the performance. Human capital has been exhibited to be central in SMEs’ internationalization and performance (Yeoh, 2004). Human capital is often referred as an intangible resource that is closely tied to savvy and pays a part in firm performance (Ismail et al., 2013). The study of Pratono et al. (2016) showed that there is significant statistical impact for social capital on competitive advantage. Odeh (2014) aimed to identify the role of social capital in achieving competitive advantage at private banks in Iraq. The study presented that there is statistical significance relevance between social capital dimensions and competitive advantage. The study of Xiang (2009) intended to measure and analyze the impact of social capital, dynamic capabilities, and innovation on competitive advantage in Chinese real estate industry. The results registered that there is a positive correlation between sustainable competitive advantage with social capital, dynamic capabilities, and innovation. On the previous research there were a elaborate relationship between business performance and competitive advantage (Morgan et al in Majeed, 2011). Competitive advantage will differentiate an organization from its contender,
which will lead to an improved performance achievement. Che rose et al. (2009) study exhibits there is a positive relationship between competitive advantage and business performance. The hypotheses of this research are:

H1: Human Capital (HC) and Social Capital (SC) have effect on Competitive Advantage
H2: Human Capital (HC), Social Capital (SC), and Business Performance (BP) have effect on Business Performance (BP).
H3: Competitive Advantage (CA) mediates the relationship between Human Capital (HC) and Social Capital (SC) on Business Performance (BP).

III. Methodology of Research

Population and Sample
The population in this study is 60 Micro and Small Medium Enterprises (MSME) in culinary business, with minimum 2 years period of business in Medan city surrounding Universitas Sumatera Utara. In this study, all members of the population become the sample for the study. Therefore, the samples for this research are 60 business owner engaged in various business fields. All construct is measured using five-point Likert scales ranging from 1=strongly disagree to 5=strongly agree (Junita et al., 2018 & Yahya et al. 2018). Human capital consists of 3 dimensions, namely competencies [6 items], attitude [5 items], and intellectual agility [6 items]. Social capital consists of 4 dimensions, namely corporate responsibility toward fairness [3 items], transparency [3 items], honesty [2 items], and ethics [3 items]. Competitive advantage consists of 3 dimensions, namely product differentiation [4 items], market forecasting [4 items], and market responsiveness [4 items]. Business performance consists of 3 dimensions, namely productivity [4 items], profitability [4 items], and market [4 items].

Path Analysis
Path analysis is an extension of the multiple regression analysis that is used to estimate the causal relationship between variable predetermined by the theory. The influence of the mediating variables can be detected directly by viewing the model as follows:

\[ Y = \alpha_1 + c \times \ldots + Y = \alpha_2 + c \times \ldots \]

\[ Y = \alpha_3 + c'X + bM \]

Sobel Test
The mediation hypothesis testing can be done with a procedure developed by Sobel (1982) known as Sobel Test. This test requires the assumption of large sample size and the mediation coefficient of normal distribution.

IV. Result

Hypothesis 1
Path Analysis
H1: Human Capital (HC) and Social Capital (SC) have effect on Competitive Advantage
Hypothesis is tested by using Path Analysis.
The first equation, \( BP = \alpha + p1HC + p2SC + e1 \)

![Figure 1. Path Analysis](image)

*: Significant \( \alpha \) 95%

2.1.1. Coefficient Determination

<table>
<thead>
<tr>
<th>Table 1: Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>
As shown in Table 1, the R-Square of the Model is 0.076, implying that the Human Capital and Social Capital contributed 7.6% in explaining the Business Performance, while the rest of 92.4% were explained by other variables which are not discussed in this research.

2.1.2. F test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>106,083</td>
<td>2</td>
<td>53,041</td>
<td>2,330</td>
<td>.106*</td>
</tr>
<tr>
<td>Residual</td>
<td>1297,317</td>
<td>57</td>
<td>22,760</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1403,400</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Processed Data, (2018)

According to Table 2, the significant value is 0.106 > 0.005. It means that Human Capital and Social Capital simultaneously do not have significant effect on Business Performance of SMEs.

2.1.3. T-test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>54,411</td>
<td>4,988</td>
<td>10,907</td>
<td>.000</td>
</tr>
<tr>
<td>HumanCapitalX1</td>
<td>.256</td>
<td>.130</td>
<td>.250</td>
<td>1,960</td>
</tr>
<tr>
<td>SocialCapitalX2</td>
<td>.127</td>
<td>.148</td>
<td>.110</td>
<td>.860</td>
</tr>
</tbody>
</table>

Source: Processed Data, (2018)

Based on Table 3, the equation of substructure 1:

\[ CA = 54.411 + 0.256 \text{HC} + 0.127 \text{SC} + 92.4 e1 \]

Table 3 also demonstrates the significant value of Human Capital is 0.055 < 0.05. It means the Human Capital partially affected the Competitive Advantage of SMEs. While the significant value of Social Capital is 0.394 > 0.05. It means that Social Capital partially did not affect the Competitive Advantage of SMEs.

Hypothesis 2 Path Analysis

H2: Human Capital (HC), Social Capital (SC), and Business Performance (BP) have effect on Business Performance (BP).

Hypothesis is tested by using Path Analysis,

The second equation:

\[ BP = \alpha + p1HC + p2SC + p3CA + e2 \]
2.1.4. Coefficient Determination

Table 4. Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.593a</td>
<td>.352</td>
<td>.317</td>
<td>3.188</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CompetitiveAdvantageZ, SocialCapitalX2, HumanCapitalX1
Source: Processed Data, (2018)

From Table 4, it can be seen the R-Square of the Model is 0.352, implying that the Human Capital, Social Capital and Competitive Advantage contributed to 35.2% in explaining the Business Performance, while the rest of 64.8% were explained by other variables which are not discussed in this research.

2.1.5. F test

Table 5. ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>308,895</td>
<td>3</td>
<td>102,965</td>
<td>10,133</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>569,039</td>
<td>56</td>
<td>10,161</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>877,933</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CompetitiveAdvantageZ, SocialCapitalX2, HumanCapitalX1
b. Dependent Variable: BusinessPerformanceY
Source: Processed Data, (2018)

According to Table 5, the significant value is 0.000 < 0.005. It means that Human Capital, Social Capital and Competitive Advantage simultaneously have significant effect on Business Performance of SMEs.

2.1.6. T-test

Table 6. Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.045</td>
<td>5.587</td>
<td>.008</td>
<td>.994</td>
</tr>
<tr>
<td>HumanCapitalX1</td>
<td>.065</td>
<td>.090</td>
<td>.718</td>
<td>.476</td>
</tr>
<tr>
<td>SocialCapitalX2</td>
<td>.370</td>
<td>.100</td>
<td>3.717</td>
<td>.000</td>
</tr>
<tr>
<td>CompetitiveAdvantageZ</td>
<td>.289</td>
<td>.089</td>
<td>3.264</td>
<td>.002</td>
</tr>
</tbody>
</table>

a. Dependent Variable: BusinessPerformanceY
Source: Processed Data, (2018)

Based on Table 6, the equation of substructure 2:

BP = 0.045 + 0.065 HC + 0.37 SC + 0.289 CA + 0.649 e2

Table 6 also demonstrates the significant value of Human Capital is 0.476 > 0.05. It means the Human Capital partially did not affect the Business Performance of SMEs. While the significant value of Social Capital is 0.000 < 0.05. It means that Social Capital partially affected the Business Performance of SMEs. Moreover, the significant value of Competitive Advantage is 0.002 < 0.05. It means that Competitive Advantage partially affected the Business Performance of SMEs.

2.1.7. Total Effect

Table 7. Total Effect

1. Total Effect Human Capital (HC) to Business Performance (BP)
   Direct Effect HC to BP = 0.065
   Indirect Effect HC to CA to BP = (0.256)(0.289) = 0.074 +
   Total Effect = 0.139

2. Total Effect Social Capital (SC) to Business Performance (BP)
   Direct Effect SC to BP = 0.370
   Indirect Effect SC to CA to BP = (0.127)(0.289) = 0.037 +
   Total Effect = 0.407

3. Total Effect Competitive Advantage (CA) to Business Performance (BP) = 0.289

Source: Processed Data, (2018)

Table 7 illustrates that the total effect of human capital on business performance is 0.139 and total effect of social capital on business performance is 0.407. Consequently, the total effect of competitive advantage on
business performance is 0.289. It may indicate that social capital has the biggest effect on business performance among human capital and competitive advantage.

Hypothesis 3
Sobel Test
H3: Competitive Advantage (CA) mediates the relationship between Human Capital (HC) and Social Capital (SC) on Business Performance (BP).
Competitive Advantage Mediates The Relationship Between Human Capital On Business Performance
Competitive advantage as the mediated variable of the relationship between social capital on business performance of SMEs was tested by using Sobel test.
\[
Sp^2p^3 = \sqrt{p^3p^2 + p^2Sp^3 + p^2Sp^3}
\]
\[
= \sqrt{(0.289)^2 (0.13)^2 + (0.256)^2 (0.089)^2 + (0.13)^2 (0.089)^2}
\]
\[
= \sqrt{(0.083) (0.169) + (0.065) (0.0079) + (0.0169) (0.0079)}
\]
\[
= \sqrt{0.0014 + 0.00052 + 0.00013}
\]
\[
= \sqrt{0.00205}
\]
\[
= 0.045
\]
\[
t = \frac{p^2p^3}{Sp^2p^3}
\]
\[
= \frac{(0.256) (0.289)}{0.045}
\]
\[
= 1.64
\]
According to the calculation above, the t value is 1.64 < t_{table} (1.96) and it demonstrates that there is no mediation effect. It shows that, competitive advantage did not mediate the relationship between human capital to business performance.

Competitive Advantage Mediates The Relationship Between Social Capital On Business Performance
Competitive advantage as the mediated variable of the relationship between human social on business performance of MEs was tested by using Sobel test.
\[
Sp^2p^3 = \sqrt{p^3p^2 + p^2Sp^3 + p^2Sp^3}
\]
\[
= \sqrt{(0.289)^2 (0.148)^2 + (0.127)^2 (0.089)^2 + (0.148)^2 (0.089)^2}
\]
\[
= \sqrt{(0.08) (0.02) + (0.016) (0.0079) + (0.02) (0.0079)}
\]
\[
= \sqrt{0.0016 + 0.00013 + 0.00016}
\]
\[
= \sqrt{0.0019}
\]
\[
= 0.043
\]
\[
t = \frac{p^2p^3}{Sp^2p^3}
\]
\[
= \frac{(0.127) (0.289)}{0.043}
\]
\[
= 0.86
\]
According to the calculation above, the t value is 0.86 < t_{table} (1.96) and it demonstrates that there is no mediation effect. It shows that, competitive advantage did not mediate the relationship between social capital to business performance.

V. DISCUSSION

The result of the test shows human capital has significant effect on competitive advantage of SMEs. This is in line with a study by Ismail et al., (2013) that human capital is on many occasions cited as an intangible resource that is closely tied to knowhow and contributes to competitive advantage. Another study by Carmeli ad Tishler (2008) demonstrated the human capital as one of the six intangible factors extenuating the competitive advantage. The study result indicates that the elements of human capital such as, competency, attitude, and intellectual agility can increase the achievement of organization in generating product differentiation, market forecasting, and responsiveness. Despite its limitations, culinary entrepreneurs are still able to utilize its competency, creativity, and passion in producing something unique and rare, for instance by developing a new kind of food which is in demand by the customers. Meanwhile, social capital does not have significant effect on competitive advantage of SMEs. It differs from a study by Pratono et al. (2016), where the result of the research showed that there is significant statistical impact for social capital on competitive advantage. Having social capital means the organization is able to create transparency, honesty, and the responsibility to maintain the business ethics and fairness toward the customer. In culinary business, these elements are very crucial in establishing customer’s trust and loyalty, which provide competitive advantage compared to other competitors. In this case, customers do not seem to concern about transparency, honesty, and the responsibility to maintain the business ethics and fairness. The result shows both social capital and competitive advantage partially have significant effect on business performance. As proposed by Uzzi and Gillespie (2002), McFadyen and Cannella Jr. (2004), and Smith, Collins and Clark (2005), the structural dimension of social capital is related to the
organizational performance. This shows that social capital can improve the organization’s potential to be productive and profitable. Along with social capital, the competitive advantage of an organization can prompt productivity, profitability, and market share the organization has, as proposed by Che rose et al. (2009) that there is a positive relationship between competitive advantage and business performance. On contrary, human capital is not significantly affected the business performance of SMEs in culinary business. This is different with a study by Muda and Rahman (2015), that human capital directly and indirectly affects the performance. However, human capital, social capital, and competitive advantage, simultaneously have significant effect on Business Performance of SMEs. It means that to generate business performance on SME, human capital cannot stand on its own without social capital and competitive advantage. Another important finding is competitive advantage does not mediate the relationship between human capital and business performance. Therefore, in this study, business performance cannot be obtained from human capital directly or through competitive advantage. Finally, it is also discovered that competitive advantage does not mediate the relationship between social capital and business performance. It expresses that business performance can be achieved from social capital without the role of competitive advantage.

VI. REFERENCES