

# Perception of Intellectual Capital and Financial Innovation on SME Food Industry Performance in Malaysia

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#### **ABSTRACT**

This study aims to examine the moderating role of Financial Innovation (FI) on Intellectual Capital (IC) to measure the business performance of SMEs food industry. IC is implemented in SME firms to enhance business performance and organisational value. In order to create new knowledge in the context of IC and business performance of the SME food industry, this study focuses on the moderating effect of FI. This research uses quantitative and multiple regression methods to analyse research data. The findings of this study support previous research, indicating that there is a significant relationship between IC and SME food industry business performance, moderated by FI. The implication of this research shows that FI can foresee the advancement capability of a company. The results of this study indicate that FI provides important information and methods that would help entrepreneurs how to enhance their business performance and be competitive compared to their competitors.

**Keywords:** Intellectual Capital, Business Performance, SME Food Industry, Financial Innovation

## 1. INTRODUCTION

Small and Medium Enterprises (SMEs) are known as the backbone for industrial development in many countries and have been set up for any business activity in city or rural areas. SMEs firm operating around the world provide job opportunities and assist young entrepreneurs by enhancing their business skills to strengthen market growth. Based on the Ministry of Entrepreneur Development and Cooperatives (2020), the contribution of SMEs to the economy expanded further due to the challenging domestic and global environment. However, the implementation of the Movement Control Order (MCO) impacted the performance of SMEs from 2020 onwards. Firms under SME still finding many ways to remain sustainable and competitive for a longer period in increasing business performance. SMEs always looking forward to becoming high productivity and generating high income as developed countries and being the nation's outstanding organisation for the development of progressive SMEs (Darus et al., 2017).

The SME food industry in Malaysia has been highlighted in this study as a fast-growing market and one of the country's major revenue generators. On the other hand, unexpected changes and difficulties in the local and global market had influenced the productive business performance and economy that demonstrate the development of the country (Yonita et al., 2020). Involving IC in the business environment has gained huge interest among academic communities. According to Mubarik et al. (2016) IC and business performance have a major positive impact on organisations' financial and non-financial success. Three components of IC (HC, SC, and CC) play a critical role in leveraging business performance (Mehralian et al., 2018) and are responsible for improving SME performance

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## (Inkinen, 2015).

Community perspectives on IC and business performance are to come up with new advanced technology or concepts as companies had started to operate with the global business market (Jordao et al., 2017). Therefore, FI plays an increasingly important role in the current organisation by helping firms to grow and contributes to the economy. The rapid growth of technology, ideas, innovation, knowledge, and strategies have a significant impact on current SMEs' performance, leading to FI systems that differ from traditional financial systems. According to Syed, Riaz, and Waheed (2016), in order to provide a strong predictor of business performance, innovation is the key moderating component rather than other variables that affect business performance. Although numerous studies have been conducted on the concept of IC, this study intends to promote the current understanding of IC-related effects on business performance in the SME food industry. It will also investigate what helps organisation increase their business performance through FI contents. On the other hand, the dimension of IC which comprises the human, structural, and CC will also be discussed. It is also important to identify business performance measurement which includes the rate of new product development, customer satisfaction, and customer retention. Hence, this study's major issue is to examine the moderating role of FI on IC to measure the business performance of SMEs food industry.

## 2. LITERATURE REVIEW

The food industry in Malaysia is a fast-growing market and one of the main contributors to the national account. This industry is predominantly dominated by SMEs (Ngah et al., 2017; Azmi et al., 2018). Malaysia's food industry is diversified, with a large range of processed foods catering to Asian tastes and nutritional needs, as well as many western recipes (Based on food industry report, 2020). Besides SMEs, many foreign and MNCs companies are manufacturing processed food products in the country too. In recent years, Malaysians' lifestyles have increased the demand for organic and nutritious foods. This industry is recognized by a huge export market, which is mostly for palm oilbased products. Malaysia is one of the world's two largest exporters of palm oil. Chocolates, fishery products, cereals and cereal products, processed fruits and vegetables, confectionery, food ingredients, herbs and spices, drinks, animal feed, and others are all part of the food business. Many raw resources are imported for further production and export, such as dairy milk, and wheat. For domestic use, Malaysia is significantly reliant on the importation of various commodities such as rice, beef, and seafood items. Malaysia is a net food importer since there is substantial demand for imported food goods in domestic consumption. With the government continuous support by providing various incentives, Malaysians now have access to a huge range of locally manufactured and imported food products (Food Industry Report, 2020).

Furthermore, several academics provided definitions and understandings of IC in a variety of approaches. In the current economy, IC is considered as the essential element which helps firms in creating value and building wealth. IC contributes to improving reputation, allowing better exploitation in market potential, increasing sales and profits growth as well as establishing the greater capacity for innovation. IC had been considered as one of the strategic resources in helping firms to gain competitive advantage and achieve superior performance (Al-Musali et al., 2014). There are three components of IC which are: Human Capital (HC), Structural Capital (SC); and Customer Capital (CC). HC is the most important intangible asset in an organisation and the most important component of IC that influences capital performance and is also developed for efficiency and capabilities of capital. HC has a strong relationship between organisational performance and innovativeness. HC is also recognized as an important element for the success of companies in a competitive environment (Alqershi et al., 2020). Employees' IC is developed by their competency, attitude, and intellectual agility, as well as their knowledge, skill, competency, inventiveness, and capability (Subramaniam & Youndt, 2005).

Next, SC serves as a supporting infrastructure for HC that remains in the office or factory after the workers have left for the day. Roos et al. (1997) defined SC as the knowledge that remains within an organisation when people leave work. SC in the organisation has the company's most valuable strategic assets which are organisational capabilities, culture, processes, patents, copyrights, trademarks, databases, and so on (Sardo & Serrasqueiro, 2017). It includes data, processes, patents, and organisational ability. According to AlQershi, Abas and Mokhtar (2018) and Manzaneque et al. (2017), SC is a resource that plays a significant role in the formation and maintenance of the competitive advantage of the firm, as it is characterised by a non-commutable nature and it is difficult if not impossible to imitate. CC is a valuable resource that connects a company's positive relationships with its customers, shareholders, strategic partners, suppliers including brands, customer loyalty, licensing agreements, distribution networks, and supporting contracts for increasing the organisational performance (Allameh, 2018). The most important aspect of CC is the knowledge used in the marketing channels and build customer relationships through conducting business. CC is the value of customer position, customer relationships, and customer potential, and CC cannot be achieved without HC (Chen et al., 2004).

Essentially, FI as a moderating variable plays a significant role in the current organisation by assisting firms in expanding and contributing a competitive advantage to the economy (Eniola & Entebang, 2015) including facing demand in driven force and competitive pressure from financial markets. FI can be used to capture and obtain information about a company's operations, procedures, and finances. FI is capable of facilitating financial transactions and services through a payment system while controlling inherent risks and moving cash across time and location (Mehta & Brahmbhatt, 2020). Aside from that, the previous research focused on FI. According to them, FI is a process of developing new financial products, services, and processes. They stated that FI is well-known for inventing and popularising new financial instruments as well as new financial technologies, markets, and institutions. FI mostly existed in financial instruments and payment systems used in the lending and borrowing of funds such as internet banking, internet payments, e-insurance, mobile banking, and other e-finance services. However, accessibility to financing for SMEs is not available in all economies (Wellalage et al., 2020). Through literature review, there was a shortage of understanding in the SME food industry about how to access FI. Only a few studies about FI were found in developed countries such as the United States, Hong Kong, etc but limited studies in developing countries, especially in Malaysia. FI plays a crucial role in ensuring the survival of SMEs firms and assisting them in improving their performance. Therefore, for this reason, a study on FI is very important to find out the importance of FI in determining SME's business performance.

## 3. METHODS

This study adopted a quantitative research design with a sample size of 181 respondents. There are 200 questionnaires distributed to the top management of food companies in Malaysia, unfortunately only 181 or 90.5% feedback from respondents willing to answer the questionnaire completely. The remaining 19 sets of questionnaires (9.5%) were incomplete. The sampling technique in this study is stratified random sampling, used to divide the population into smaller sub-groups. The questionnaire serves as the main source of data used to generate responses from respondents. To guarantee the validity of the instrument using the content validity and the use of the Cronbach alpha test to ensure the reliability of the instrument. The indicators of IC, FI, and business performance of the SME food industry is measured using five points: the Likert scale consists of 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree. This study uses statistical software for social sciences (SPSS) to analyse hypotheses. Based on the number of questionnaires that were feasible to analyse and met the requirement, 181 respondents (49 male, 132 female) were obtained in Table 1 together with the race, age, position, and years of experience.

**Table 1.** Profile of Respondents' (N=181)

Variables	Category	Frequency	Percentage (%)
	_	_	
Gender	Male	49	27.1
	Female	132	72.9
Race	Malay	131	72.4
	Chinese	10	5.5
	Indian	33	18.2
	Others	7	3.9
Age	20-30 years old	157	86.7
	30-40 years old	10	5.5
	40-50 years old	8	4.4
	50-60 years old	4	2.2
	60-70 years old	2	1.1
	Director /Founder	35	19.3
Position	Manager	24	13.3
	Assistant Manager	71	39.2
	Head of Department	51	28.2
Years of Experience	Less than 10 years	167	92.3
	11-15 years	5	2.8
	16-20 years	4	2.2
	21 years and above	5	2.8

#### 4. RESULTS AND DISCUSSIONS

The analysis of the test requirements that will apply in this study: means, standard deviations, correlations, and multiple regression analysis utilized to test the relationship between dependent, moderating, and independent variables using the SPSS Version 24. Table 2 presents the mean, standard deviation, and total variance of the study variables, which are IC, FI, and measuring performance of the SME food industry. The mean for CC is 4.35 which shows the majority of respondents agree that CC can be measured by customer satisfaction, repeat business, and price sensitivity. The mean score for HC is 4.18 shows customers agreed that HC is also recognised as an important element for the success of companies in a competitive environment (Alqershi et al., 2020). The almost similar mean score was also recorded for SC which is 4.16, reflecting those respondents who moderated agree with the question of "Organisation has a good information system utilised staff to improve their performance." As for FI, relatively a high mean score was recorded (4.31). Henceforth, respondents agreed that the food industry has positive and successful FI. The business performance of the food industry means the score is 4.23, stating that respondents agreed to use the rate of new product development, customer satisfaction, and customer retention as the dimensions to measure business performance in the SME food industry.

Table 2. Mean, Standard Deviation and Total Variance

Variables	N	Mean	Std. Deviation	Variance
НС	181	4.18	0.63	0.40

Variables	N	Mean	Std.	Variance
			Deviation	
SC	181	4.16	0.67	0.45
CC	181	4.35	0.66	0.43
FI	181	4.31	0.60	0.37
<b>Business Performance</b>	181	4.23	0.61	0.38

Table 3 provides the correlation test among the study variables. The Spearman rank correlation test does not carry any assumptions about the distribution of the data and is the appropriate correlation analysis when the variables are measured on a scale that is at least ordinal. Spearman's rho is also the best way to report correlations between Likert scale items. The result showed a significant and positive relationship between IC and business performance of SME food industry moderated by FI at (r=0.78, p=0.01), (r=0.79, p=0.01) and (r=0.70, p=0.01) respectively. The correlation indicates a moderate relationship between HC (r=.74, p=.01), SC (r=.73, p=.01), and CC (r=.75, p=.01) with FI. The correlation between FI and business performance of the SME food industry indicates highest positive correlation (r=.83, p=.01) is significantly and positively correlated each other.

**Table 3.** Correlations Statistics for All Variables in the Study Framework (N=181)

			НС	SC	CC	FI	Business Performance
	НС	Correlation Coefficient	1	.79**	.70**	.74**	.78**
		Sig. (2-tailed)		.000	.000	.000	.000
	SC	Correlation Coefficient	.79**	1	.82**	.73**	.80**
		Sig. (2-tailed)	.000		.000	.000	.000
Spearman's	CC	Correlation Coefficient	.70**	.82**	1	.75**	.79**
rho		Sig. (2-tailed)	.000	.000		.000	.000
	FI	Correlation Coefficient	.74**	.73**	.75**	1	.83**
		Sig. (2-tailed)	.000	.000	.000		.000
	Business Performance	Correlation Coefficient	.78**	.80**	.79**	.83**	1
		Sig. (2-tailed)	.000	.000	.000	.000	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Table 4 shows the results of regression between three dimensions of IC with the business performance of the SME food industry. From the result, the significant value for HC is 0.000 which means a high significant value. The Beta value also shows a positive value. This explains that HC has a positive effect on the business performance of the SME food industry as the significant value is lower than 0.05. The hypothesis  $H_1$  stated that "HC has a significant relationship with the business

performance of SME food industry" is accepted. Next, SC was found to have a significant value which is 0.014 (p<0.05) which shows a high significant value while Beta value also shows a positive value. This explains that SC has a positive effect on the business performance of the SME food industry as the significant value is lower than 0.05. Hypothesis  $H_2$  stated that "SC has a significant relationship with the business performance of SME food industry" is accepted. Moreover, for the third independent variable which is CC, the significant value is 0.000 which shows a high significant value. In addition, the Beta value also shows a positive value. Hypothesis  $H_3$ , examines the relationship between CC and business performance of the SME food industry. The significant value which is low than 0.05 shows that the hypothesis is accepted.

 $\mathbb{R}^2$ No **Items** Std. Std. P Remarks Values Beta Error of the Estimate  $H_1$ HC 0.310 0.000 0.062 0.561 Supported **Business** Performance  $H_2$ SC 0.201 0.074 0.609 0.014 Supported **Business** Performance  $H_3$ CC0.414 0.065 0.622 0.000 Supported **Business** Performance

Table 4. Regression Test

Table 5 showed the result of the hierarchical regression testing for moderating effects of FI on IC and business performance of the SME food industry. Two models of regression analysis are applied to test the interacting terms between the business performance of the SME food industry and IC, and also FI moderates the relationship between IC and business performance of the SME food industry. Moreover, the interaction term (FI as moderator) shows a high R-value of 0.88, so it has an obvious moderation effect on the relationships between the dependent variable and independent variables.

Dependent '	Variable	Independent Variables	Std Beta Model 1	Std Beta Model 2
Business ndustry	Performance	НС	.31**	.21**
ndustry		SC	.20**	.14*
		CC	.41**	.25**
		Moderator: FI		.37**
R			.85	.88
$\mathbb{R}^2$			.72	.77
Adjusted R <sup>2</sup>			.71	.76
F Change			149.127	37.025

**Table 5.** Hierarchical Regression Test

Hence, four hypotheses were tested through multiple regressions and hierarchical multiple regression. In conclusion, all underlying dimensions are significant. Table 6 shows the summary of the hypothesis testing results from multiple regression analysis for the relationship between HC, SC, CC, and business performance of the SME food industry moderated by FI.

**Table 6.** Summary of the Hypothesis Testing Results from Multiple Regressions Analysis

Hypothesis Statement	Remarks
HC has a significant relationship with the business performance of the SME food industry.	Supported
SC has a significant relationship with the business performance of the SME food industry.	Supported
CC has a significant relationship with the business performance of the SME food industry.	Supported
FI moderates the relationship between IC with the business performance of the SME food industry.	Fully Moderated

#### 5. CONCLUSIONS

Involving IC in the business environment has gained huge interest among academic communities and it is defined by many scientists in different ways. Likewise, the emergence of the topic of IC and the emergence of a newly emerging term has also shown its effect on the elements of IC. IC elements have not yet been brought to a certain standard in the relevant literature. The debate on the contribution of FI in the food industry is still scarce. The study of Syed, Riaz, and Waheed (2016) suggested to produce a strong predictor of business performance, innovation is the main moderating variable rather than other variables that affect the business performance. The growth of a food industry depends significantly on employees, who through ideas, knowledge, skills, and experience allow a company to stay active and compete in the market. However, it is important to develop new and better capacities regarding IC which allow generating a better performance. Therefore, future work could investigate the development of IC to allow SMEs to improve their efforts to maintain the industry's rapid growth both locally and globally.

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