

The Effect of Purchasing Skill on The Implementation of Strategic Purchasing And its Impact on Financial Performance in Restaurant Business

Hery Suliantoro¹, Kirana Rukmayuninda Ririh², Baby Monica I Simanjuntak³, Nia Budi Puspitasari⁴, Zainal Fanany Rosyada⁵

^{1,3,4,5}Industrial Engineering Department, Diponegoro University, Semarang, Indonesia

²Research Centre for Policy and Management of Sciences, Technology and Innovation Indonesian Institutes of Sciences Jakarta, Indonesia

ABSTRACT: Restaurant business is one of the fastest growing businesses and is increasing in number at the moment. Also noted that in 2018 food and beverage industry's development rate reached 8.67%. Where the number exceeds the value of Indonesia national economic development. With the increasing population of people in Indonesia, the effect of demand for food and beverages has also increased. Therefore restaurant is an important type of business at this time. However, many problems occurred in restaurants which related to the amount of procurement costs that occur in the budget plan. There is no research that explains the steps to improve financial performance through procurement. Therefore, this study was conducted to look at the relationship between the ability of employees in procurement to strategic purchasing and its impact on the financial performance of restaurants. After the research finished, it will give advice and recommendations to the restaurant to improve its performance. This research uses Structural Equation Modeling-Partial Least Square method with a sample of 60 restaurants in Semarang. After the research, it was found that the ability that would improve the implementation of strategic purchasing and improve the financial performance of the restaurant was technical knowledge. And also by implementing strategic purchasing the financial performance will also improve.

KEYWORDS: Strategic Purchasing, Purchasing Skill, Restaurant Procurement, Semarang Restaurant

I. INTRODUCTION

Food and Beverage Industry is one of the industry sectors with the biggest development in 2018. In the second quarter of 2018, Industry Minister of Indonesia said that the development of the food and beverage industry reached 8.67% and this performance exceeded the national economic growth of 5.27%. Thus, the food and beverage industry is continuing to grow in line with the increasing population in Indonesia at this time. One type of business that most developed and well-contributed to the Food and Beverage Industry is restaurant business.

Semarang, as one of the capital city of Central Java province and approximately populated 1,500,000 people, is an area with vast development of restaurant business. But its development is not going along with positive development of restaurant financial performance. According to several researches [1][3][4] supply chain played main role of achieving 14,08% sales profit in many business sectors including food and beverages. Moreover, in supply chain management, strategic purchasing had been an efficient and effective tools for minimizing operational cost and gaining business profit [11]. Therefore, it is important to define strategic purchasing in restaurant business performance.

High business performance is certainly obtained from various factors. The most important factor is the ability or skill of employees to carry out procurement activities. The higher ability they have, the easier procurement plan can be carried out effectively and efficiently. Restaurants should be able to integrate external resources from suppliers integrated with internal resources to increase level of competitiveness [10]. Integration with suppliers refers collaboration between suppliers and buyers to achieve mutual goals in order to improve supply chain performance in restaurants, in return to improve financial performance of restaurants. To establish a good relationship between suppliers and buyers must have a sense of trust, openness, communication, shared values, empathy and reciprocal relationships. A long with that, procurement activity of restaurant business must be considered important because the cost for procuring raw materials took the biggest portion of overall business cost [2][4].

In conclusion, this research will examine the strategic purchasing skill in restaurant business and find out its impact to restaurant financial performance. There are six parts in this articles consists of introduction, literature review, research

method, result and discussion, conclusion, implication and limitation.

II. THEORITICAL BACKGROUND

A. Purchasing Skills

Purchasing skills, related to main activity of the procurement function, is to purchase or procure products and services at the lowest price while still suitable to quality standards and maintaining good relationships with suppliers. Everyone who involved in restaurant business had to own this purchasing skills. According to previous studies [5][9] purchasing skills consisted of technical knowledge (skill to implement technology and enhance its impact to external environment), interpersonal skills (ability to persuade and communicate with others), and managerial skills (individual competency to fulfill specific management task or activities). Past researches found that organization with high strategic procurement has a relationship with the number of employees who tend to have good interpersonal ability and proper technical skill. Moreover, managerial skills often related to how good managers promote productivity. From previous premises, we conclude that :

H1a. Technical Knowledge has a positive direct relationship to Strategic Purchasing

H1b. Interpersonal Skills has a positive direct relationship to Strategic Purchasing

H1c. Managerial Skills has a positive direct relationship to Strategic Purchasing

B. Strategic Purchasing

Quality standards is the main part of strategic purchasing [1][7]. Strategic purchasing is a process of planning, evaluating, implementing and controlling in raw material procurement decisions. Strategic purchasing intended for meeting the quality standard of customers [10][13]. Companies that implement strategic purchasing have a mutual long-term relationship with their suppliers based on trust and internal commitment (informal relationship) rather than involving formal agreements in court. Since then, strategic purchasing could save costs and increase profits between collaborating parties [1][12]. This also focused on communication and how to integrate procurement functions with other functions within the company as good as to optimize company performance [14]. So, we build hypothesis that :

H2. Strategic Purchasing has a positive direct relationship to Restaurant Performances

C. Supplier Integration

In restaurant business, integrating internal resource with external source from suppliers will build a strong business competitiveness [5][7]. Supplier integration was defined as collaboration between supplier and buyer in sharing information of stock availability, logistics, demand-supply forecasting, product development, and quality management to

achieve the same business goals [3]. There are several levels in supplier integration : strategic level, tactical level, and operational level. At strategic level, relationship among suppliers and buyers added higher chance to reach business goals and potential benefits in the future. In addition, at the tactical level, a good supplier-buyer relationship supported the increasing of the flexibility and efficiency of resource allocation. Operational level showed exact daily activities targets, this level was expected to minimize uncertainty level and enhance controllability. Therefore, we concluded that :

H3. Supplier integration has a positive direct relationship to Strategic Purchasing

H4a. Supplier integration has a positive direct relationship to Technical Knowledge and Strategic Purchasing

H4b. Supplier integration has a positive direct relationship to Interpersonal Skills and Strategic Purchasing

H4c. Supplier integration has a positive direct relationship to Managerial Skills and Strategic Purchasing

D. Buyer-Supplier Relationship

In a buyer-supplier relationship, both parties want to minimize costs while wanting to achieve higher profits. The competing interests from both parties will also jeopardize their relationship. To achieve success and prosperity in a buyer-supplier relationship, it requires equal commitment from both parties in terms of achieving future vision and mission [11][13][14]. Actually, the mutualism relationship is widely used in business context because it provided benefits for both parties. Managements believed that the more solid buyer-supplier relationship had built, the stronger positive impact both parties will have [3][11].

Several researches concluded that buyer-supplier relationship should be based on trust and honesty in sharing information. On the other hand, buyers and suppliers should respect each other believes so this relationship will not end to dominating each other and excessive power. An unbalanced relationship between suppliers and buyers will result an unhealthy, unproductive environment and a short life span of relationship [2]. Buyer-supplier relationship must highlighted supplier's capacity and capability. It referred to companies should determined what the production process is and what is needed by the company when choosing suppliers, so they would find suppliers who can meet their needs according to their capacity and capability in accordance to establish good productivity. Two-way communication was also the key in buyer-supplier relationship. Two-way communication should be implement in initial agreement, technical specifications, standard of products and shared profit so that buyers and suppliers have the same level of understanding. So, we proposed that :

H5. Strategic Purchasing has a positive direct relationship to Buyer-Supplier Relationship

“The Effect of Purchasing Skill on The Implementation of Strategic Purchasing And its Impact on Financial Performance in Restaurant Business”

E. Restaurant Financial Performance

Company performance is measured by inputs, processes and outputs of the company. All management activities, from planning to execution and evaluation, are seen as a company's performance. These results can be seen from the evaluation or performance review that conducted regularly. There are two ways to measure company performance, such as financial performance and operational performance. Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues [4]. While operational performance can be seen from how the company carries out its production activities. Financial performance can also be seen from how the company's operational performance. The measurement of business performance can be done in two ways : subjective and

objective measurements. Objective measurements are carried out using data such as financial data obtained from financial statements. While subjective measurements was obtained by questionnaires filled out by certain respondents that relates to financial division. Both method between objective and subjective, are strong enough to measure financial performance. If buyer-supplier can work together to achieve the same goals, both parties will reach equal benefits [3][4]. Several researches stated that conflicts between buyer and supplier led to decreased profits for both partes [7][9]. From the premises, we proposed that :

H6. Buyer-Supplier Relationship has a positive direct relationship to Restaurant Performances.

According to literature review above, we proposed our research model as follows:

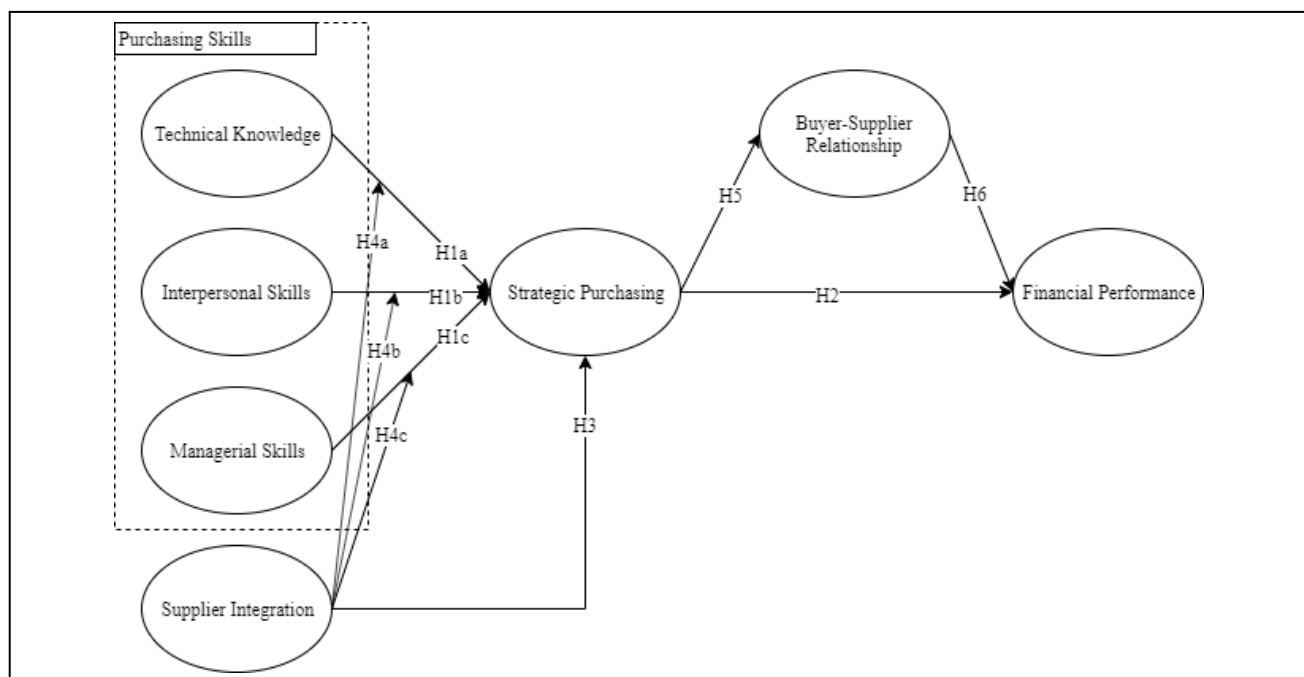


Figure 1. Research Model

III. RESEARCH METHOD

This research implements purposive sampling to 60 restaurants throughout Semarang. There are 7 variables that adopted from several studies [3][4] also measured by using Likerts Scale. There are seven latent variables. The six variables Technical Knowledge, Interpersonal Skills, Managerial Skills, Strategic Purchasing, Supplier Integration, Buyer-Supplier Relationship are measured by using 5-scale (1=Strongly Disagree to 5=Strongly Agree). On the other hand the variable of Restaurant (Financial) Performances is measured by using 7-scale (1=Extremely Decrease to 7=extremely Increase). These variables consist of 41 indicators as shown in Appendix 1 below.

Moreover, statistical tools Smart-PLS is utilized. Smart-PLS is one of statistical tools that helps to examine the hypothesized relationship between variables. Through this

software, we can determine the level of the strength of the relationship between both variables between the latent variables and the manifest variables. How significant relationship between the variables, and how fit model hypotheses compared with real data field. Smart-PLS, rather than LISREL, do not need complicated programming language to operate and generate sufficient analysis eventhough the samples are less than 100 respondents [6][8]

IV. DATA ANALYSIS

A. Validity and Reliability

Convergent validity test is a test that measures the correlation between manifest / indicator variables with latent variables. This test is assessed based on the correlation between item scores and construct scores that can be estimated from the outer loading value of each indicators. From the

“The Effect of Purchasing Skill on The Implementation of Strategic Purchasing And its Impact on Financial Performance in Restaurant Business”

Appendix 2, it is shown that indicators that has outter loading value less than 0.5 will be excluded. Only indicators with outter loading value more than 0.5 will included in overall research model measurement. Moreover, to measure reliability or composite reliability we use *Cronbach's Alpha* and *Composite Reliability* value. Reliability refers to the consistency of a measurement. Reliability test can be shown in Appendix 3.

Meanwhile Appendix 3 showed that all latent variables have Cronbach's alpha values greater than 0.6 and composite reliability values greater than 0.7. Therefore, all variables are considered reliable. The coefficient of determination (R^2) is used to indicate whether the effect of the independent latent variable on the dependent latent variable has a substantive effect or not.

From Table 1 below, it can be seen that the influence of the strategic purchasing and restaurant performance variables are good models which can be said significantly influences to dependent variables. Goodness of fit is a measure of fit indexes for evaluating measurement models, structural models, and simple measurements for the overall prediction of the model. Meanwhile, value of 0.100 was included in the least category, a value of 0.250 was included in the medium category and a value of 0.35 was included in the high category [8].

$$GoF = \sqrt{AVE \times R^2} \quad (1)$$

$$GoF = \sqrt{0.686 \times 0.901} = 0.786 \quad (2)$$

From the calculation results above, it represents that this model has a Goodness of fit value of 0.786 which is included in the high category. It means the model highly represents the case in the field.

Tabel 1. Determinant Coefficient

Variable	R-Square	R-Square Adjusted	
Strategic Purchasing	0.953	0.946	Good
Restaurant Performance	0.849	0.846	Good

B. Hypothesis Testing

In hypothesis testing, we use bootstrapped resampling method. It used all original samples for resampling again. The recommended number of bootstrapping is 5000, with notice the amount must be greater than the original sample [8]. Hypothesis testing is done by comparing the value of T-Stat with T-Table at a significance level of 5%. T-table values (at the significance level of 5%, 10% and 15%) are 1.96, 1.65, and 1.44 consecutively. To obtain significant results, T-Stat value must be more than these T-Table value (1.96; 1.65; 1.44) [6][8]. From the results of hypothesis testing (see Appendix 4), it can be seen in Table 6 that there are 4 hypotheses rejected,

namely H3, H4a, H4b, and H6 with T-statistic values <T-table values. The remaining 6 hypotheses were accepted, namely H1a, H1b, H1c, H2, H4a, H4c, and H5 because the T-statistic value > T-table and p-value were significant.

V. DISCUSSION AND CONCLUSION

The most important factor is the ability of technical knowledge (technical knowledge) which will enhance the application of strategic purchasing and indirectly improve the financial performance of the restaurant as a whole

The procurement ability of employees in a restaurant is divided into three namely technical knowledge which is technical knowledge about menus, prices, and others [2]. Then interpersonal skills which include interpersonal communication skills and to suppliers. And the last is managerial skills or personal abilities to become leaders and design procurement plans and evaluate them. From the results of data processing it can be seen that these three things can increase the application of strategic purchasing in restaurants. With good technical skills, namely knowing basic information in the restaurant, fostering positive relationships with suppliers, and making an effective and flexible procurement schedule and implementing it will help the implementation of strategic purchasing. Integration with suppliers is the alignment of cooperation with suppliers through ways such as the sharing of important information between suppliers and restaurants. From the research that has been done, the results show that implementing supplier integration will not increase the application of strategic purchasing. It is also seen whether supplier integration can improve the relationship between technical knowledge, interpersonal skills, and managerial skills on strategic purchasing. It is found that with technical knowledge and interpersonal skills will not improve results while with managerial skills will actually reduce the results of strategic purchasing.

Establishing a good relationship with suppliers turns out to have the same impact as integration with suppliers, which does not increase the application of strategic purchasing and restaurant financial performance [2][5]. With the implementation of strategic purchasing in the business, it is stated that the restaurant has a good procurement plan and structured and supports the strategy of the restaurant itself. In this study, it is seen that the results of the influence of strategic purchasing will improve restaurant performance. That means having a good and structured procurement plan and implementing strategic purchasing will improve the restaurant's financial performance.

VI. IMPLICATION AND LIMITATIONS

Since supplier integration is more impactful as moderating effect, it is important to enhance purchasing skills that consider about the capacity and business aims of both buyers and suppliers. In this point of view, purchasing skill that

“The Effect of Purchasing Skill on The Implementation of Strategic Purchasing And its Impact on Financial Performance in Restaurant Business”

encouraged by sufficient sharing information of both parties will tend to fulfil strategic purchasing implementation as well as financial performance development. Therefore, in restaurant business should train its high and low level employees to master purchasing skill in both in technical (pricing and capacity counting) and soft (negotiating and persuading) skills.

Even though this study has original findings, there is still limitation. This research should employ longitudinal study to generate best evidence-based decision making in restaurant purchasing strategy.

REFERENCES

1. Carr, A. S., & Pearson, J. N. (2002). The impact of purchasing and supplier involvement on strategic purchasing and its impact on firm's performance. *International Journal of Operations and Production Management*, 22(9–10), 1032–1053. <https://doi.org/10.1108/01443570210440528>
2. Chen, I. J., Paulraj, A., & Lado, A. A. (2004). Strategic purchasing, supply management, and firm performance. *Journal of Operations Management*, 22(5), 505–523. <https://doi.org/10.1016/j.jom.2004.06.002>
3. Cho, M., Bonn, M. A., Giunipero, L., & Divers, J. (2019). Restaurant purchasing skills and the impacts upon strategic purchasing and performance: The roles of supplier integration. *International Journal of Hospitality Management*, 78(March), 293–303. <https://doi.org/10.1016/j.ijhm.2018.09.012>
4. Cho, M., Bonn, M. A., Giunipero, L., & Jaggi, J. S. (2017). Contingent effects of close relationships with suppliers upon independent restaurant product development: A social capital perspective. *International Journal of Hospitality Management*, 67(February), 154–162. <https://doi.org/10.1016/j.ijhm.2017.08.009>
5. Damlin, A., Dietersdottir, K., Fornander, D., Brykt, Moen, J., Polyantseva, E., & Sundquist, D. (1966). Measuring Buyer Supplier Relationship Performance. *The British Journal of Psychiatry*, 112(483), 211–212. <https://doi.org/10.1192/bjp.112.483.211-a>
6. Ghozali, I., & Latan, H. (2014). *Partial Least Squares Konsep, Metode dan Aplikasi Menggunakan Program WarpPLS 4.0*. Semarang: Badan Penerbit Universitas Diponegoro.
7. Giunipero, L. C., & Percy, D. H. (2000). World-Class Purchasing Skills: The Journal of Supply Chain Management, 36(4), 4–13.
8. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–151. <https://doi.org/10.2753/MTP1069-6679190202>
9. Hartono, Y., Astanti, R. D., & Ai, T. J. (2015). Enabler to Successful Implementation of Lean Supply Chain in a Book Publisher. *Procedia Manufacturing*, 4(Iess), 192–199. <https://doi.org/10.1016/j.promfg.2015.11.031>
10. Jogaratnam, G. (2017). The effect of market orientation, entrepreneurial orientation and human capital on positional advantage: Evidence from the restaurant industry. *International Journal of Hospitality Management*, 60, 104–113. <https://doi.org/10.1016/j.ijhm.2016.10.002>
12. Keitany, P., & Riwo-Abudho, M. (2014). Effects of lean production on organizational performance: A case study of flour producing company in Kenya. *European Journal of Logistics Purchasing and Supply Chain Management*, 2(2), 1–14. [https://doi.org/10.1016/S0924-9338\(14\)78926-6](https://doi.org/10.1016/S0924-9338(14)78926-6)
13. Killen, K. H., & Kamauff, J. W. (1995). Managing purchasing: Making the supply team work. *National Association of Purchasing Management*.
14. Mohanty, M. K., & Gahan, P. (2012). Buyer supplier relationship in manufacturing industry-findings from Indian manufacturing sector. *Business Intelligence Journal*, 5(2), 319–333.
15. Nakandala, D., Lau, H., & Zhao, L. (2017). Development of a hybrid fresh food supply chain risk assessment model. *International Journal of Production Research*, 55(14), 4180–4195. <https://doi.org/10.1080/00207543.2016.1267413>

APPENDIX

Appendix 1. List of Variables and Indicators

No	Variables	Indicators
1	<i>Technical Knowledge</i>	Knowing all products in the restaurant
		Knowing all the product prices in the restaurant
		Knowing the main suppliers that are invited to work together
		Knowing the quality standards of each product
		Know the raw material requirements for each product
		Knowing the role of the procurement function in business activities
		Knowing the marketing program
		Knowing the on-going financial management

“The Effect of Purchasing Skill on The Implementation of Strategic Purchasing And its Impact on Financial Performance in Restaurant Business”

No	Variables	Indicators
2	<i>Interpersonal Skills</i>	Have a good cooperation with suppliers
		Maintain good communication with suppliers
		Have a positive relationship with the supplier
		The ability to overcome conflicts with suppliers
		Having persuasive nature when working with suppliers
3	<i>Managerial Skills</i>	Develop and implement a procurement plan
		Make an effective procurement scheduling
		Manage and adjust business activities to be in line with procurement plans
		Develop procurement goals and strategies according to the general purpose of the restaurant
		Manage procurement for new products
		The person responsible for the procurement function
		Having good communication with suppliers about the needs of raw materials
4	<i>Strategic Purchasing</i>	The procurement function has a good procurement plan
		Plans and procurement strategies are adjusted to the restaurant's core strategy
		Have a procurement plan that consists of the type and number of products
		Having various types of relationships with suppliers
		The procurement strategy is adjusted to support the restaurant's core strategy
		Having a business process planning
5	<i>Supplier Integration</i>	Sharing the production schedule information from main suppliers
		Notification of production capacity from the main supplier
		Providing information on the availability of raw materials that are owned by main suppliers
		Provide production plan information to main suppliers
		Provide demand forecasts for major suppliers
6	<i>Buyer-Supplier Relationship</i>	Trust in suppliers
		Strong relationships with all suppliers
		Fulfill agreed request
		Appropriate raw material specifications
7	<i>Restaurant Performances</i>	Sales amount
		Market share
		Profits
		Return of Investment
		Income before tax

Appendix 2. Validity Test

Variables	Indicators	Outer Loading	Variables	Indicators	Outer Loading
<i>Technical Knowledge</i>	TK1	0.855	<i>Strategic Purchasing</i>	SP1	0.941
	TK2	0.785		SP2	0.934
	TK3	0.521		SP3	0.849
	TK4	excluded		SP4	excluded
	TK5	0.735		SP5	0.638
	TK6	0.759		SP6	0.827
	TK7	0.848	<i>Supplier Integration</i>	SI1	excluded
	TK8	0.850		SI2	0.900
<i>Interpersonal Skills</i>	IS1	0.803		SI3	0.875
	IS2	excluded		SI4	0.729
	IS3	0.833		SI5	0.911
	IS4	0.937	<i>Buyer-Supplier</i>	BSR1	excluded

“The Effect of Purchasing Skill on The Implementation of Strategic Purchasing And its Impact on Financial Performance in Restaurant Business”

<i>Managerial Skills</i>	IS5	0.936	<i>Relationship</i>	BSR2	excluded
	IS6	0.822		BSR3	0.838
	MS1	0.658		BSR4	0.575
	MS2	0.801	<i>Restaurant Performances</i>	P1	0.835
	MS3	0.567		P2	0.792
	MS4	excluded		P3	0.855
	MS5	0.887		P4	0.911
	MS6	0.880		P5	0.856
	MS7	0.778			

Appendix 3. Reliability Test

Latent Variables	Cronbach's Alpha		Composite Reliability		AVE	
	Result	Critical Value	Result	Critical Value	Result	Critical Value
<i>Technical Knowledge</i>	0.883	0.6	0.910	0.7	0.597	0.5
<i>Interpersonal Skills</i>	0.917	0.6	0.938	0.7	0.754	0.5
<i>Managerial Skills</i>	0.857	0.6	0.896	0.7	0.594	0.5
<i>Strategic Purchasing</i>	0.896	0.6	0.925	0.7	0.714	0.5
<i>Supplier Integration</i>	0.876	0.6	0.882	0.7	0.734	0.5
<i>Buyer-Supplier Relationship</i>	0.710	0.6	0.770	0.7	0.517	0.5
<i>Restaurant Performances</i>	0.904	0.6	0.929	0.7	0.724	0.5

Appendix 4. Hypothesis Test

Hypothesis	Original Sample	T-stat	P-value	Results
H1a	0.468	3.836	0.000	Significant*
H1b	0.238	1.670	0.095	Significant **
H1c	0.406	3.109	0.002	Significant *
H2	0.922	31.419	0.000	Significant *
H3	-0.098	0.936	0.349	Not Significant
H4a	0.092	0.590	0.555	Not Significant
H4b	0.084	0.575	0.565	Not Significant
H4c	-0.223	1.539	0.124	Significant ***
H5	-0.209	1.519	0.129	Significant ***
H6	0.005	0.056	0.955	Not Significant

*significancy level = 5%, t-statistic > 1.96, p-value < 0.05,

** significancy level = 10%, t-statistic > 1.65, p-value < 0.10,

*** significancy level = 15%, t-statistic > 1.44, p-value < 0.15