

Information and Communication Technology, Franchisor Support and Franchisees' Performance in Malaysia

Siti Nur Aisyah Alias¹, Muhammad Shukri Bakar², Azrain Nasyrah Mustapa³

¹School of Business Management, Universiti Utara Malaysia, Sintok, Kedah, Malaysia

Abstract: *Operational problems are often the issue of a franchise business notably at the franchisee's level. Operational problems are usually linked to customer service, costs management, quality, productivity and assets management. These issues could affect the efficiency and effectiveness of a franchise system and be the cause of customer disloyalty. These problems can be solved with the use of information and communication technology (ICT) as the technology can improve the efficiency of a franchise system in terms of time and costs management. In addition, organizational support was found in previous studies to be a mediator in business performance. Accordingly, the study aims to examine the role of franchisor support as a mediator in the relationship between the benefits of ICT and franchisees' performance in Malaysia. A total of 250 questionnaires were distributed to the franchisees who operate a franchise business format in Malaysia. Ninety-seven questionnaires were collected from the franchisees thus representing a 39% response rate. The results present evidence that the benefits of ICT and franchisor support are the contributory factors to the performance of a franchise business system. The mediating effect of franchisor support is key to a franchisee's performance hence the success of a franchise system.*

Keywords: Franchisees' Operational Performance, Benefits of ICT, Franchisor Support

1. Introduction

Franchising is a vital source of entrepreneurial growth encompassing two types of entrepreneurs. Franchisor who recognized an opportunity and copes its distribution and image from corner to corner geographically dispersed locations, and franchisees who locally exploit the opportunity. Franchisees convey revenues and extremely motivated and capable managerial expertise that promptly enlarges franchisors' entrepreneurial growth capacity [1], which lowers costs, attracts investment, and promotes rapid growth e.g., [2],[3],[4].

Recently, franchise systems around the world fronting a sharp decline in performance with amount of outlet closure and non-renewal of contracts by franchisees increasing steeply. In Malaysia, many franchisees have faced difficulties in running their business and they have left the franchise system due to poor performance or termination by the respective franchisor [5]. According to [6], franchisee in the food and beverage sector claimed that many franchisees face difficulties in operating their franchise business and finally close their outlets after one or two years in operation.

Consequently, the above stated negative performance records of franchise systems across the world have debatably underlined the need for studies to reassess the nature of franchise business performance. Currently, it is believed that not enough research has been done to understand the critical issues that explain the performance of franchise units/system [7],[8],[9], [10],[11],[12]. Therefore, exploring factors that influence success in franchising is an important area of academic inquiry [5]. Furthermore, studies on performance of franchisee in the Malaysian framework are limited [13]. Such studies could assist the government agencies to formulate new strategies to enhance existing

franchising developmental programs for potential new entrepreneurs.

Even though franchising is a global phenomenon, there is still a noticeable lack of academic research in the field of franchising in Malaysia, especially regarding the current trends in this field. The use of information and communication technologies (ICT) affects almost every aspect of current society, both in Malaysia and worldwide. In this regard, it is important to mention that franchise organizations increasingly choose for intensive use of technology in their business processes, which leads to a series of changes in the relationship between the participants in a franchise system [14]. It is very important to include franchisees in technological innovation and development, so that franchisors can apply innovative solutions truly successfully. When applying ICT, it is always the best to create a mutual process in which franchisor and franchisees will work together, not only to create but also to implement some technological solutions and to continue improving them.

ICT is considered to be very important in Malaysia, so the government has taken a vigorous role in its establishment. However, most of the initiatives were designed for manufacturing companies or small and medium enterprises (SMEs) to embed ICT in their businesses and finally to execute online transaction. Franchisee companies were rarely exposed to government initiatives, particularly in adopting e-commerce [15]. Many owners/managers of the franchisee need to supply or invest themselves on ICT and ICT infrastructure especially within their organization. However, to what extent the benefits of ICT effect to the performance of the franchisees is unclear. Thus, there is a purpose to study the relationship between the benefit of ICT and franchisees' performance.

Previous study shows franchisors choose franchising as a business model because it allows them to grow faster in comparison to other business models. It probably because franchisees provide human resource and financial capital to accomplish the expansion [16],[17],[18],[19],[20]. Instead, franchisees choose franchising due to the help supplied by franchisors [19]. Franchisors need to be responsive and attend franchisees' needs, particularly during the early stages of the partnership [21]. It is because, many entrepreneurs do not have previous work experience to be successful businessmen. So that, they prefer appealing to franchisors to receive help and training to start their own business [20].

The result from a study done by [21] found that franchisor supports do play a mediating role in the relationship between marketing relationship and franchisor's performance. Franchise business is a relational exchange between parties on contractual agreement and shows the franchisees perceived relationship from franchisor in making business decisions. It is essential to each party to achieve sustainable profitability [22]. The franchisor should increase support or assistance to franchisees to motivate franchisees to sustain their satisfaction in the relationship decision to continue a franchise business. Franchisor who provides the assistance required to the franchisees will be viewed by the franchisees to be better than those who did not [23]. Thus, based on the literature review, this study will identify franchisor support is related to franchisees' performance and whether the franchisor support will influence the relationship between the benefit of ICT and franchisees' performance.

2. Literature Review

Over the past few decades, academics and industry practitioners have conducted numerous studies on performance to understand the experiences, processes, and other factors that can improve organizational outcomes [24]. In the context of franchise business, poor performance can be caused by both the franchisor and the franchisee [25]. A franchisor would strive to select a franchisee who is seen as having the potential to improve the performance of the former's networks [26]. Franchisees are also considered the key to a successful franchise system [27] because they perform the daily activities of the business and understand the needs of the customers [28]. Such significance necessitates exploring the factors that influence franchisees' performance for their contribution to the success of a franchise business.

Information and communication technology (ICT) can be inferred as a tool that can be utilized among competitive communities and organizations in the current age [29]. It is well-known that the use of ICT has become competitive in the economic growth of companies, organizations, and countries that have exploited the technology [30], [31], [32], [33]. Worldwide, ICT has largely been used to assist day-to-day business operations [34] notably by small-and-medium enterprises (SMEs) [35]. The integration of ICT in SME activities can facilitate business owners to increase productivity and manage their business efficiently. Studies on franchising have mainly focused on ICT in the development of a franchise system [13] and the impact of the use of the technology on the relationship between a

franchisor and a franchisee [36]. Franchisees would invest largely in the opening fees and royalty payments [37], to sell or distribute products or services, using the brand and complete business format provided by the franchisor [38]. Thus, it is important to examine franchisees' perceptions on the benefits of an ICT system and its impact on improving the performance of a franchise outlet. Therefore, this study will contribute to the new knowledge of franchising field.

H1: There is a significant relationship between the benefits of ICT and franchisees' operational performance

Franchisor support is defined as a business infrastructure and services that enable franchisees to establish and launch business units as well as expand and achieve targeted levels of performance [13], [39], [40]. Providing quality business support services to franchisees is a critical aspect for maintaining franchise relationships and achieve superior organizational performance for the entire network [41], [42],[43], [44], [39], [45]. These supports can measure the level of franchisees' reliance on a company's operational support. Such supports are provided in the form of education and training, information support, and promotional support [46]. Various support services have been provided to franchisees, depending on the terms of the franchise contract. Good franchisor support is key towards achieving the performance of business-format franchises because excellent and continual operational and management assistance was found to be important to harness and improve franchise relationships [41], [45]. Several empirical studies have noted the importance of franchisor support in franchise implementation; yet, many have suggested the need for more empirical findings from various settings to further strengthen the evidence of the role of franchisor support on a franchise business's performance [47], [39]. Accordingly, a study on franchisor support is extended in the Malaysian context.

H2: Franchisor support as a mediator to the relationship between the benefit of information and communication technology and franchisees' performance.

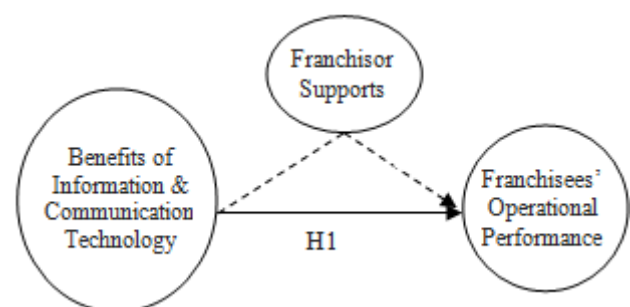


Figure 1: Research Framework

Based on the empirical literature, the research framework was developed. This framework shows that there are three variables that will be studied, namely the franchisee's operational performance (dependent variables), the benefits of ICT (independent variables) and franchisor supports (mediating variables).

3. Objectives

This study was carried out to achieve the following objectives:

- 1) To identify the significant relationship among the benefits of ICT and franchisees' performance.
- 2) To examine the moderating role of franchisor supports on the relationship between benefits of ICT and franchisees' performance.

4. Research Methodology

This study focusses on the Franchisees who operated franchise business format in Malaysia. Master franchisees from foreign franchise were excluded from research sampling. This study is based on a quantitative approach, applying a cross-sectional study. A total of 250 questionnaire were distributed and 117 questionnaires were returned. The usable response rate was 39% comprising 97 usable responses from a total 250 questionnaires sent to franchisees. The questionnaire consists of two main sections, namely: Section 1 detailing the franchisees' background data and Section 2 to measures franchisees' performance, information communication and technology dan franchisor support. The franchisee performance is measured by six items that was adapted from [48] which indicate the respondents to compare the operational performance of their outlet with competitor's operational performance. Information and communication technology was adapted from [49] and measured by 8 items. Meanwhile, franchisor support was adapted from [40] and measured by 7 items. Most of the question in Section 2 are mainly in a 5-point Likert Scale.

5. Findings and Analysis

The measurement and structural model were tested by using structural equation modelling. The study uses SmartPLS software version 3.0 in order to evaluate the validation of measurement scales and to test all hypotheses proposed. PLS is used when ordinary such as multivariate normality and large sample size are not met. PLS is a statistical tool specifically designed to cope with small datasets, missing values and the presence of multi-collinearity often in samples used in marketing research [50].

In order to proceed with SEM-PLS, there are two stages for performing SEM which consist of a measurement model and structural model [51], [52]. Firstly, the measurement model is evaluated by checking the reliability and validity of each

measure used in the framework model. The composite reliability and internal consistency reliability (Cronbach's alpha) are evaluated to ensure each value follows the recommended evaluations. The cut-off value for composite reliability and internal consistency reliability (Cronbach's alpha) is 0.7 [53], [54], [55]. After all measurement of all constructs have adequate reliability and validity assessment, all the measurement items are kept for testing the structure model. As tabulated in Table 1, the AVE of all latent constructs ranges from 0.711 to 0.727, which exceeds the recommended level of 0.50 [56].

For discriminant validity, the square roots of AVE for each construct as presented in Table 2 are less than the AVE latent variables. In conclusion, the measurement model demonstrates adequate convergent validity and discriminant validity between the construct and the other constructs [57]. In statistically term, the squared root of each construct's AVE should be greater than its correlation with any other construct in measurement model [58]. As shown in Table 2, the squared roots of the AVE latent variables are greater than the correlations for each construct.

For hypothesis testing, the path analysis was used to verify all hypotheses generated in this study, the PLS software generates estimates of standardized regression coefficients which referto beta values for model path [59]. PLS uses re-sampling procedures known as nonparametric bootstrapping to evaluate the significance of the parameter estimates [60]. In this study, the researcher uses 5000 resampling procedures for bootstrapping as aligned with previous studies in the business-to-business context [61].

The results of the model estimation including standardized path coefficient, one-tailed significance (1.65) of the paths are presented in Figure 2. Based on Table 3, the results of hypothesis testing show that all hypotheses are at significance levels of $p < 0.05$. Information and communication technology benefit is positively related to franchisees' performance, whereas franchisor support is positively related to franchisees' performance. Besides, information and communication technology benefit has positively related to franchisor support. Moreover, franchisor support positively mediating the relationship between information and communication technology benefit with franchisees' performance. Therefore, all hypotheses in this study; H1, and H2 are accepted. Overall, this model is explained 67% of variance franchisee's performance.

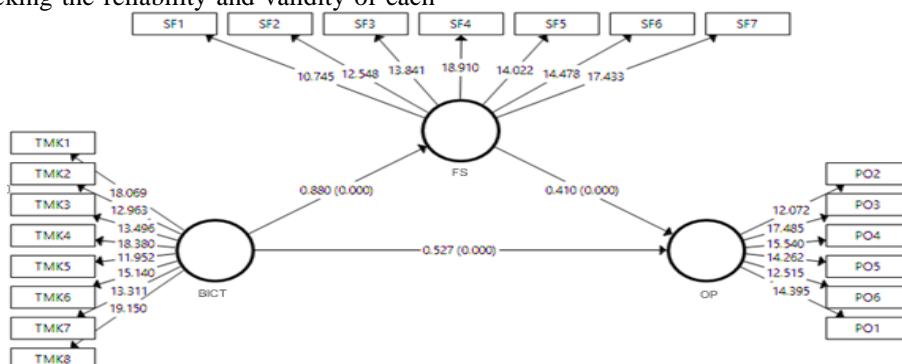


Figure 2: Results of the path analysis

Table 1: Measurement Model

Constructs	Items	Loadings	CR ^a	AVE ^b
Franchisees' Operational Performance (OP)	PO 1	0.733	0.864	0.714
	PO 2	0.666		
	PO 3	0.742		
	PO 4	0.726		
	PO 5	0.721		
	PO 6	0.693		
Benefits of ICT (BICT)	TMK 1	0.765	0.899	0.727
	TMK 2	0.680		
	TMK 3	0.698		
	TMK 4	0.748		
	TMK 5	0.666		
	TMK 6	0.741		
	TMK 7	0.715		
	TMK 8	0.783		
Franchisor Support (FS)	SF 1	0.657	0.879	0.711
	SF 2	0.687		
	SF 3	0.709		
	SF 4	0.743		
	SF 5	0.711		
	SF 6	0.743		
	SF 7	0.745		

^a Composite reliability (CR) = (square of the summation of the factor loadings) / ((square of the summation of the factor loadings) + (square of the summation of the error variances))

^b Average variance extracted (AVE) = (summation of the square of the factor loadings) / ((summation of the square of the factor loadings) + (summation of the error variances))

Table 2: Discriminant validity of constructs Construct

Construct	Franchisee Performance	Benefit of ICT	Franchisor Support
Franchisees' Performance (OP)	0.717		
Benefits of ICT (BICT)	0.687	0.726	
Franchisor Support (FS)	0.573	0.680	0.715

Note: The square root of AVE values is shown on the diagonals and printed with bold; non-diagonal elements are the latent variable correlations

Table 3: Path coefficient and Hypotheses testing Relationship

Relationship	Coefficient (B)	T-value	Result
Benefit of ICT → Franchisee Performance	0.527	7.531**	Supported
Benefit of ICT → Franchisor Support → Franchisee Performance	0.360	4.469**	Supported

Note: **Significant at p<0.05 based on one tail t-statistic table, as t-value greater than 1.65.

6. Conclusion

The analysis found that the benefits of ICT have a significant relationship with the operational performance of franchisees in Malaysia. This finding indicates that the franchisees perceived their outlets' operational performance as being influenced by the benefits of an ICT system. The findings also confirms the moderating role of franchisor support in the relationship between the benefits of ICT and franchisees' operational performance. Therefore, effective franchisor support is considered by the franchisees as necessary to facilitate communication within

the franchise system hence improving their business's operational performance. The benefits of ICT and franchisor support are the important factors that affect franchisees' performance in Malaysia. Franchisor support plays an important role in mediating the relationship between the benefits of ICT and franchisees' performance. This study not only provides evidence on the importance of the benefit of ICT and franchisor support but also validates the research framework with regard to the franchise sector. The findings contribute to the existing body of knowledge thus adding to the limited studies on the subject. The findings can serve as information for the enhancement of franchise management hence possibly improve franchisees' performance.

7. Acknowledgment

It is my honor and perquisite to offer sincere thanks to Associate Professor Dr. Muhammad Shukri Bin Bakar and Dr. Azrain Nasyrah Binti Mustapa, School of Business Management, Universiti Utara Malaysia, Sintok, Kedah, for supervising this work.

References

- [1] S. W. Norton, "An empirical look at franchising as an organizational form", *J. of Business*, vol. 61, no.2, pp. 197-218, 1988.
- [2] M. Carney, and E. Gedajlovic, "Vertical integration in franchise systems: agency theory and resource explanations", *Strategic Management J.*, vol. 12, no.8, pp. 607-629, 1991.
- [3] M.Madanoglu, K.Lee and G. J.Castrogiovanni, "Franchising and firm financial performance among U.S. restaurants", *J. Retail.*, vol.87, no.3, pp. 406-417, 2011.
- [4] R.S.Thompson, "The franchise life cycle and the Penrose effect", *J. Econ. Behav. Organ.* vol. 24, no. 2, pp. 207-218, 1994.
- [5] K. A.Ishak, N.Zakaria and M. K.Ishak, "The Impacts of Relational Norms and Relationship Quality on Franchise Firm's Performance: The empirical of Malaysian Franchisee", *Int. J. of Supply Chain Management*, vol. 7, no. 6, pp. 134-142, 2018.
- [6] M. A. Mohd Zain, "PNS: HentikanBiayaFrancais", *Bernama*, no. September, 2009.
- [7] A.El Akremi, R. Perrigot, and I.Piot-Lepetit, "Examining the drivers for franchised chains performance through the lens of the dynamic capabilities approach", *J. of Small Business Management*, vol. 53, no. 1, pp.145-165, 2015.
- [8] W. E.Gillis, and J. G. Combs, "Franchisor strategy and firm performance: Making the most of strategic resource investments", *Business Horizons*, vol. 52, no.6, pp.553-561, 2009.
- [9] N.Hua, and M. C. Dalbor, "Evidence of franchising on outperformance in the restaurant industry", *Inter. J. of Contemporary Hospitality Management*, vol. 25, no. 5, pp. 723-739, 2013.
- [10] S. Michael, "The effects of organizational form on quality: The case of franchising", *J. of Economic*

Behaviour and Organization, vol.43, no.3, pp. 295–318, 2000.

- [11] K. J.Nijmeijer, I. N.Fabbricottian and R. Huijsman, “Making Franchising Work: A Framework Based on a Systematic Review”, *Inter. J. of Management Reviews*, vol. 16, no.1, pp. 62–83, 2014.
- [12] D. W. White, “The Impact of Marketing Strategy Creation Style on the Formation of a Climate of Trust in a Retail Franchise Setting”, *European J. of Marketing*, vol. 44, no. 1/2, pp. 162–179, 2010.
- [13] S. Stefanović, &M. Stanković, “The Role of ICT and the Internet in the Development of Franchise Systems,” *Economic Themes*, vol. 52, no. 4, pp. 409-435, 2014.
- [14] N. A. Hashim&M. H. Hanafiah, “E-commerce adoption among Malaysian franchisees,” *Inter. J. of Management and Applied Science*, vol. 1, no.4, pp. 2394-7926, 2015.
- [15] J. Bercovitz, “Externalities and the choice of ownership mode in business-format franchising”, in *Proceedings of the Society of Franchising*, Ed. F. LaFontaine, Institute of Franchise Management, Las Vegas, NV, 1999.
- [16] B.Elango, andV. H. Fried, “Franchising research: A literature review and synthesis,” *J. of Small Business Management*, vol. 35, no. 3, pp. 68, 1997.
- [17] R.W.Emerson, “Franchise terminations: legal rights and practical effects when franchisees claim the franchisor discriminates,” *American Business Law J.*, vol. 35 no. 4, pp. 559–646, 1998.
- [18] R.T. Justis, and R.J. Judd, *Franchising, 2nd edn.*, Dame Publications, US, 2002.
- [19] J.Lim, andL. Frazer, “Exploring the link between goal congruence and satisfaction in the franchising channel”. *The Academy of World Business, Marketing and Management Development, 1-9*, 2004.
- [20] L. Altinay, M.Brookes, R.Yeung, andG.Aktas, “Franchisees’ perceptions of relationship development in franchise partnerships,” *J. of Services Marketing*, 2014.
- [21] K. Hnuchek, I.Ismail, and H. Haron, “Franchisors’ relationship marketing and perceived franchisor support on franchisors’ performance: A case of franchise food and beverage in Thailand,” *J. of Economics, Business and Management*, vol. 1, no. 1, pp. 117-122, 2013.
- [22] T. R. Harmon andM. A. Griffiths, “Franchisee perceived relationship value,” *J. of Business and Industrial Marketing*, vol. 23, no.4, pp. 256–263, 2008.
- [23] A. Peterson, and R. P. Dant, “Perceived advantages of the franchise option from the franchisee perspective: Empirical insights from a service franchise,” *J. of Small Business Management*, vol. 28, no. 3, pp. 46, 1990.
- [24] F. F. Jing &G. C. “Avery Missing links in understanding the relationship between leadership and organizational performance,” *Inter. Business & Economics Research J. (IBER)*, vol. 15, no. 3, pp. 107-118, 2016.
- [25] B.Minguela-Rata, M. C.Rodríguez-Benavides andJ. I. López-Sánchez, “Knowledge complexity, absorptive capacity and weak ties: An empirical analysis of its effects on franchise systems uniformity,” *J. of Manufacturing Technology Management*, vol. 23, no.5, pp. 578-592, 2012.
- [26] E.AsgharianBourkheili, *Performance in franchise systems: The franchisee perspective*, (Doctoral dissertation), Linköping University Electronic Press, 2015.
- [27] M.Peris-Ortiz, M. Willoughby andC.Rueda-Armengot, “Performance in franchising: the effects of different management styles,” *The Service Industries J.*, vol. 32, no. 16, pp. 2507-2525, 2012.
- [28] M.Brookes, andL.Altinay, “Franchise partner selection: Perspectives of franchisors and franchisees,” *J. of Service Marketing*, vol. 25, no. 5, pp. 336-348, 2011.
- [29] N. Y. Ab Wahab andS.Ahmad, “Hubungan antara penggunaan ICT dan prestasi perniagaan PKS di malaysia,” *J. of Global Business and Social Entrepreneurship*, vol. 1, no. 3, pp. 218–226, 2017.
- [30] D. A. Higón, “The impact of ICT on innovation activities: Evidence for UK SMEs,” *International Small Business J.*, vol. 30, no. 6, pp. 684-699, 2012.
- [31] A.Ollo-LópezandM. E. Aramendía-Muneta, “ICT impact on competitiveness, innovation and environment,” *Telematics and Informatics*, vol. 29, no. 2, pp. 204-210, 2012.
- [32] C.Steinfield, R.LaRose, H. E. Chew andS. T. Tong, “Small and medium-sized enterprises in rural business clusters: the relation between ICT adoption and benefits derived from cluster membership,” *The information society*, vol. 28, no. 2, pp. 110-120, 2012.
- [33] V. Vehovar andD.Lesjak, “Characteristics and impacts of ICT investments: perceptions among managers,” *Industrial Management & Data Systems*, vol.107,no. 4, 537-550, 2007.
- [34] S. Omar andF.Noordin, “Career adaptability and intention to leave among ICT professionals: an exploratory study,” *Turkish Online J. of Educational Technology-TOJET*, vol. 12, no. 4, pp. 11-18, 2013.
- [35] A. N. A.Rozmi, A.NordinandM. I. A. Bakar, “The perception of ICT adoption in small medium enterprise: a SWOT analysis,” *Int. J. Innov. Bus. Strat.(IJIBS)*, vol. 19, no. 1, pp. 69-79, 2018.
- [36] C.Brookes, *The Effect of Information and communications technology (ICT) on franchisee to franchisor relationships*, (Unpublished PhD. Thesis). Bournemouth University. United Kingdom, 2012.
- [37] International Franchise Association, *The Economic Impact of Franchised Businesses*, 2016.
- [38] J. S. Chiou, andC.Droge, “The effects of standardization and trust on franchisee's performance and satisfaction: A study on franchise systems in the growth stage,” *J. of Small Business Management*, vol. 53, no.1, pp. 129-144, 2015.
- [39] L.Frazer, S.Weaven, J. Giddings andD. Grace, “What went wrong? Franchisors and franchisees disclose the causes of conflict in franchising,” *Qualitative Market Research: An International Journal*, vol. 15, no. 1, pp. 87–102, 2012.
- [40] E. Y. Roh, andJ. H. Yoon, “Franchisor’s ongoing support and franchisee’s satisfaction: a case of ice cream franchising in Korea,” *International J. of Contemporary Hospitality Management*, vol. 21, no. 1, pp. 85–99, 2009.

- [41] S.-Y.Chien, "Franchisor resources, spousal resources, entrepreneurial orientation, and performance in a couple-owned franchise outlet," *Management Decision*, vol.52, no. 5, pp. 916–933,2014.
- [42] A. M.Doherty, X. Chen andN.Alexander, "The franchise relationship in China: Agency and institutional theory perspectives," *European Journal of Marketing*, vol. 48, no. 9/10, pp. 1664–1689,2014.
- [43] M. J.Ruiz-Ortega, G.Parra-Requena, J. Rodrigo-Alarcón andP. M. García-Villaverde, "Environmental dynamism and entrepreneurial orientation," *Journal of Organizational Change Management*, vol. 26, pp. 475-493, 2013.
- [44] L. Altinay andM. Brookes "Factors influencing relationship development in franchise partnerships," *J.of Services Marketing*, vol.26, no.4, pp. 278–292, 2012.
- [45] J. S.Chiou, C. H.Hsieh andC. H. Yang, "The effect of franchisors' communication, service assistance, and competitive advantage on franchisees' intentions to remain in the franchise system," *Journal of Small Business Management*, vol. 42, no. 1, pp. 19-36, 2004.
- [46] Y. K.Lee, Y.Nor, J.Choi,S.Kim, S. Hanand J. H. Lee, "Why does franchisor social responsibility really matter?" *International J. of Hospitality Management*, vol. 53, pp. 49– 58, 2016.
- [47] J. S. Vaux,*Relationship conflict in construction management and how it affects performance and profit*. Washington State University, 2014.
- [48] Z. Wang andN. Wang,"Knowledge sharing, innovation and firm performance," *Expert systems with applications*, vol. 39, no.10, pp. 8899-8908, 2012.
- [49] K. S.Tan, S. C.Chong, B.Lin andU. C. Eze,"Internet-based ICT adoption among SMEs demographic versus benefits, barriers, and adoption intention," *J. of Enterprise Information Management*, vo. 23, no. 1, pp. 27-55,2010.
- [50] S. Graber, S. Czellar, and J.-E. Denis, "Report Using Partial Least Regression in Marketing Research," University of Geneva, 2002.
- [51] J. C. AndersonandD. W. Gerbing. "Structural equation modeling in practice: A review and recommended two-step approach," *Psychological bulletin*, vol. 103, no. 3, pp. 411, 1988.
- [52] J. F.Hair, C. M.Ringle andM.Sarstedt, "PLS-SEM: Indeed a silver bullet," *J. of Marketing theory and Practice*, vol. 19, no. 2, pp. 139-152, 2011.
- [53] R. P.Bagozzi, and Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, 16(1), 74-94.
- [54] D. Gefen, D. Straub andM. C. Boudreau,"Structural equation modeling and regression: Guidelines for research practice," *Communications of the association for information systems*, vol. 4, no. 1, 7, 2000.
- [55] J. C. Nunnally and I. Berstein, *Psychometric theory*. New York: McGraw-Hill, 1994.
- [56] J. F. Hair, W. C. Black, B. J. Babin, R. E. Anderson, and R. L. Tatham, *Multivariate Data Analysis, Sixth*. New Jersey: Pearson Education International, 2006.
- [57] D. Compeau, C. A. Higgins, and S. Huff, "Social Cognitive Theory and Individual Reactions to computing technology: alongitudinal study," *MIS Q.*, vol. 23, no. 2, pp. 145–158, 1999.
- [58] J. F. Hair, G. T. M. Hult, C. M. Ringle, and M. Sarstedt, *A Primer on Partial Least Squares Structural Equation Modeling (PLS- SEM)*. California: USA: Sage Publications, 2014.
- [59] W. Hammedi, A. C. R. Van Riel, and Z. Sasovova, "Antecedents and Consequences of Reflexivity in New Product Idea Screening," *J. Prod. Innov. Manag.*, vol. 28, pp. 662– 679, 2011.
- [60] J. Henseler, C. M. Ringle, and R. R. Sinkovics, "The use of Partial Least Squares Path Modeling in International Marketing," *Adv. Int. Mark.*, vol. 20, no. 2009, pp. 277– 319, 2009.
- [61] J. F.Hair, C. M.Ringle andM.Sarstedt, "PLS-SEM: Indeed a silver bullet," *Journal of Marketing theory and Practice*, vol. 19, no.2, pp. 139-152, 2011.

Author Profile

SitiNur Aisyah Binti Alias, Ph.D. Student of Entrepreneurship, School of Business Management, Universiti Utara Malaysia, Sintok, Kedah, sitinuraisyah_alias@yahoo.com.