Journal of Entrepreneurship, Business and Economics
ISSN 2345-4695
2021, 9(1), 82–120

OPTIMIZATION OF ORGANIZATIONAL PERFORMANCE AMONG MALAYSIAN MANUFACTURING SMES IN DIGITAL AGE VIA TALENT FARMING

Shanmuganathan Palanisamy Shankar Chelliah Rajendran Muthuveloo

Universiti Sains Malaysia, Penang, Malaysia
E-mail: *shankar@usm.my*
Received December 2020; accepted February 2021

Abstract
The purpose of the study is to enhance organizational performance among the SMEs in Malaysia in the digital age, particularly the manufacturing sector, which has an important contribution to the Malaysian economy. This study attempts to provide empirical evidence on the relationship between the four dimensions of talent farming and organizational performance in response to previous scholars' call on the influence of talent on SMEs' organizational performance. The dimensions considered in the study are talent harnessing, talent acquisition, talent retention and talent displacement. A total of 157 responses from a cross-sectional survey from Malaysian manufacturing SMEs were investigated using SPSS software version 24 and Partial Least Squares-Structural Equation Modeling (PLS-SEM). The findings reveal that talent retention and talent displacement has significant influence organizational performance, but talent harnessing and talent acquisition have no influence on organizational performance. This research highlights the importance of talent retention and talent displacement by SME owners or leaders compared to investing on internal talent harnessing and acquiring external talent to embrace and develop their skills as a crucial step towards achieving sustainable performance for their companies. The paper provides strategic insights, practical knowledge and policies that assist SMEs in the manufacturing sector to strategies to explore another alternative approach to prepare well for the digital competencies workforce in the digital age. The novelty of this study to assist SMEs in the manufacturing sector to understand better talent farming and its important approach in formulating effective human capital strategy. The dimension of Talent Farming and conceptual research framework was chosen and formulated based on I-TOP Strategic Agility Model and Dynamic Capability Theory, respectively. The empirical analysis and the tentative conceptual framework make an important contribution towards a demand-led policy framework in the area of digital talent competencies to support for Manufacturing SMEs to overcome the talent shortage in Malaysia. The contribution and limitations of the research are discussed, and recommendations for future research are also presented.

Research paper

Keywords: Talent Farming; I-TOP Strategic Agility Model; Digital Age; Small Medium Enterprises (SME); Organisational Performance

Reference to this paper should be made as follows: Palanisamy, S., Chelliah, S., & Muthuveloo, R. (2021). Optimization of Organisational Performance among Malaysian Manufacturing SMEs in Digital Age via Talent Farming. *Journal of Entrepreneurship, Business and Economics*, *9*(1), 82–120.

Introduction

A large meta-analysis of the organizational performance of small and medium-sized enterprises (SMEs) confirms that that SMEs are the backbone of economic development for a nation (Krishnan & Scullion, 2017). SMEs contribute directly to the country's GDP to employment creation, and indirectly to social balance by way of equitable distributions of income. In the last two decades, SMEs have been facing unprecedented management challenges arising from globalization- the most recent being the Covid-19 pandemic and 'locked down' economies (Kawamorita et al., 2020). The crisis has accelerated the pressure to digitize, exposing the weaknesses associated with local cost model of SMEs (Agrawal et al. 2020). Business organizations, including SMEs, are moving towards automation and digital-based platforms to improve productivity and efficiency in an overall effort to enhance performance. However, there is a major digital skills gap among SMEs workers and the pressure to adapt within a short time to remain competitive continues to be a significant challenge (Prasanna et al. 2019; Yew & Chan, 2019). Without dramatically improving these basic competencies, most SMEs will not be able to survive the current dynamic and disruptive business landscape. The pandemic exposed the lack of investments in training and upgrading of talent. It now clear that workforce competitiveness is crucial for business performance (Chan & Muthuveloo, 2018).

According to Gamage et al. (2019), globalization brings new technology with SMEs exposed to greater competition for talent and the upskilling of existing talent to meet domestic and international manufacturing firms.

This disruptive transformation is creating waves of change in talent management practices among SMEs (Alderete, 2019). This is prompting a need for the enhancement of talent management approaches (Mathew, 2018). This is not a new phenomenon as SMEs have dealt with this in the earlier phases of globalization, particularly in the 1980s and 1990s (Doshmanli et al., 2018). What is new is the intensity and rapidity of change. Thus, previous studies in organizational performance related to talent lack focus on the impact of talent acquisition and talent displacement. This is particularly true in the context of talent management arising from disruption technologies. In reality, the current talent management practices are no longer meeting the strategic needs of businesses (Aina & Atan, 2020). The COVID-19 pandemic has led to greater intensity to develop a new sustainable and dynamic workforce that is always ready to adapt, re-tool and re-make themselves in our age of disruption brought about by digitalization and pandemics (Salamzadeh & Dana, 2020).

This paper aims to fill that gap, addressing one aspect that is driving disruption, including the intensification of the digital transformation that is now upon us. Additionally, this study is focused on the convergence of talent management and technological disruption; how a new type of talent management is required to maintain and increase productivity and redefine a new sustainable platform for manufacturing. The Malaysia experience with its various scenarios, provide the foil for important interrogations to allow for a new talent management practice that will ensure a new competitive advantage (Islam et al., 2021). Ultimately, it is hoped that the study will inform SME-related decision-making, particularly on realigning their strategies towards

greater talent nurturing to ensure these firms are 'fit for purpose' and can compete effectively in the digital age.

Literature Review

Organizational Performance

Research on organizational performance by academics and practitioners is particularly topical. Organizational performance is the most sought variable in the management study and management research. As a result of this, a considerable amount of literature has been published, a key focus being on the improvement in performance dealing with an increasingly uncertain world economic environment (Radović-Marković et al., 2019; Tajpour et al., 2020). Even though the concept of company performance gets a high level of attention, most scholarship has yet to adequately deal with this situation of uncertainty satisfactorily. There is also a lack of operational definitions with no consensus among scholars, and the objectives of an organization are not precisely defined, which results in a large number of concepts employed to explain performance (Elena-Juliana & Maria, 2016).

According to Rehman, Rapiah, & Ayoup, (2019), organization performance is about measuring how well an organization performs to meet its objectives and goals, which in turns allows organizations to measure how effectively it is achieving targets. Until recently, most researchers - most of whom come from an academic background - were not sure on what factors they needed to include when measuring performance. Should it only be purely financial, which is more quantifiable or do they also include non-financial

performance indicators, which can also reflect efficiency? In the digital age, measuring organizational performance based on financial results as the only measurement for business performance is not comprehensive (Primadona & Emrizal, 2018). According to Dobrovic et al. (2018), new empirical findings points out that non-financial performance indicators also reflect organizational performance. The study revealed that some of the common non-financial measurements adapted by most of the organizations are market demand, customer satisfaction, employee satisfaction and product/service quality. Currently, non-financial performance indicators are acceptable in manufacturing companies (Ahmad & Zabri, 2016) because measuring performance here can be best done by applying non-financial actions (Dobrovic et al., 2018). Moreover, financial reports alone do not adequately tell the whole story. Newly-established non-financial performance measurements can help complete the picture and help point to new ways of assessing business processes and arrive at recommendations to improve performance.

The outcome of organizational performance analysis influences actions taken by the organization to define their future direction. According to Prasanna et al. (2019), technological progress in SMEs correlates with improvements made based upon anticipating new market trends, consumption patterns and technological advancement will improve productivity. By predicting the 'future', SMEs are better able to adapt to new competition, thus enhancing its chance of survival. Unlike in the past, digitalization represents a paradigm shift, and its rapid permeation in all aspects of human activities

have led to a wholesale change in the way manufacturing and production operates. This has led to sudden obsolescence in the talent pool, with sudden gaps appearing in the value chain with the result in the intense need to ensure human talent acquiring new skills (Kamaruzaman et al., 2019). The research study by Nasir, Mamun, & Breen (2017) found that the effect of strategic talent alignment will increase the performance of Malaysian SMEs. In their study, they point out that organizations that can pool resources and invest in innovation eventually perform better. Performance depends on the strength of an organization's talent to acquire adequate competencies for business continuity (Mirzadeh et al., 2017). However, most SMEs tend to develop talent nurturing activities with limited means and struggle against the challenges posed external the natural challenges (competition, economic and political crises, and the like) in the market (Ung et al., 2018). In this sense, SMEs' success in market performance will denote how talent been "farm" by human resource management practice towards the external environment changes.

Therefore, this studies on organizational performance of SME's in Malaysia especially in manufacturing SMEs is important since the research is still narrow in scope and fragmented in nature towards digitalization talent readiness and how this been farmed for new talents. The following section elaborates further on how talent been farmed with the right combination of talent dimensions.

Talent Farming

In today's globally interrelated and volatile business environment, companies are looking to human capital management as critical for the realignment and optimization of resources to achieve, maintain, and sustain their competitive advantage (Hamadamin & Atan, 2019). Talent management within the scope of human resource management(HRM) in SMEs perform various ways of managing talent in the organization. However, due to lack of full execution of human resource (HR) functions, limited resources to specialize talent optimization and many cases, the traditional way of managing talent by owner-managers is limited without the required level of competence to groom others (Pauli & Pocztowski, 2019). The fast pace changes brought by digitalization through Industry 4.0 had created pressure to organization stakeholders to recognize in their talent management process to address the digital skill mismatch gaps to execute their new roles efficiently. Assumptions on approaching with common hiring practice of talent management to address in the case of Industry 4.0 will not accurate as it equates like talent war for digital talents are rare and scarce (Whysall et al., 2019; Salamzadeh et al., 2019). Disruption by accelerated digitalization has highlighted new demand for digital competencies forcing companies to revisit their current talent management practices. Lack of digital competencies is why many organizations are reluctant or slow on digitalization. To sustain a business in the digital age, an organization requires real-time stakeholder attention for digital competencies either through internal or talent acquisition (Mathew, 2018).

New talent management in the digital era needs to address the low-performing employees based on business contribution and performance. An enhance talent programme needs to be established that automatically detect mismatch skills, identify employee deficiencies. The new dedicated HR department will have to pay close attention to changes in organizational structures and management styles to retain talent to sustain competitive advantage (Puhovichova & Jankelova, 2020). New themes for talent management need to be created considering the fact of the competitive labour market for digital skills based on specific technologies with the right strategic talent investments. However, most of the studies on human resource management and talent management are keeping with a very traditional approach without detailed studies in other related talent dimensions that are more relevant in the digital age. Internal alignment is a strategic cooperation between the company's departments to act quickly and in synchronization with each other. Internal alignment with dynamic capabilities will positively improve the performance of firms in the sectors that are particularly complex and have a high degree of uncertainty (Uğurlu et al., 2018).

As illustrated by Agrawal et al. (2020), the recent pandemic accelerated the digital transformation of firms, which has now reached all areas of the SME sector. According to Alderete (2019), digitalization acceleration changes the complexity of the manufacturing process. Intense demand for new technologies to improve efficiency and productivity created new challenges for SMEs, especially as technology adoption is increasing. However,

the successful deployment of any new technologies depends on the availability of an informed and skilful workforce (Obaji et al., 2019). In a previous study done in Malaysia, the absence of skilful workers was the biggest concern of the manufacturers in Malaysia (Kamaruzaman et al., 2019). Nevertheless, the digitalization of SMEs is being challenged by a growing problem due to the lack of talents with digital skills in the industries (Leifels, 2020). Most of the organizations tend to focus on managing capital and little done towards "farming" new talent pools. SMEs need to build a bigger talent pool whether from the existing talent 'seeds' within the organization or importing new "seed" from local large or multinational companies (MNCs) to replace unproductive talents to create unique competencies to enhance organizational performance. This self-reliance nurturing talent is called "Talent Farming".

Why Talent Farming? The organization must ensure the proper seeding of talents in place to succeed like farmers planting the "seeds" based on the specific crop they seek to grow. Once the right "seeds" of the organization talent pool are ready, employees will able to build the competencies required to create unique value offerings. At the same time, the organization needs to ensure the existing talent pools do not have redundancy or bad influence on employees - similar analogy like farming when the farmer removes weeds that affect crop growth (Simiyu & Auka, 2016). A need for having the 'right' people for the job was always addressed by external 'hiring' since organizations unable to 'farm' talent within their limited resources. However, this approach relies on the assumption that the required skills already exist within the industry. Based on Nagy et al. (2019), knowledge and the solid business

process with the right hardware and software selection have the greatest influence on SMEs' successful implementation. The reality, there is still a lack of the disruptive technologies deployments skillsets in the industry. The education system as it is today is not producing talent, and the industry pool is also not adequately training them to meet the volume of talent required to meet the needs of a wholly-digitized work environment, which is a challenge faced by many countries in general (Whysall et al., 2019).

Therefore, the importance of talent farming needs to be further investigated to ensure the right mix of people dimension to contribute towards the success of organizational performance (Muthuveloo & Ping, 2020). To form the right contributors to the theoretical foundation for the research on SMEs organizational performance, a completely new combination of talent dimensions need to be explored in human resource management practices. The following section examines four talent dimensions that will explain how to optimize SMEs' organizational performance.

Dimension #1: Talent Harnessing

Organizations need workers with the right "Talent". Muthuveloo & Ping, (2020) in their study cited developing unique qualities of the workforce with the most potential to ensure their continued commitment to the organization. According to their study, to achieve a business goal effectively, organizations should have the ability to identify the right talent and bring out the best from these employees so that they reach their full potential. This way,

they are investing in future needs to sustain and grow the organization. Therefore, talent harnessing is a key influence on organizational performance. Hence,

H_1: Talent Harnessing has a significant positive influence on the organizational performance of Manufacturing SMEs in Malaysia.

Dimension #2: Talent Acquisition

Organizations that build a strategy around acquiring talent to complement both current and future business needs will be able to compete better. In Whysall et al. (2019), it is explained that organizations must consistently fill critical vacant positions arising from staff turnover by addressing skill-sets requirements crucial for ensuring current and future organizational performance. They indicated that firms have a natural tendency to respond to the talent gaps by poaching talent from the competitors to address immediate business needs. This reflects that they are unable to internally harness the talent or the process is too costly. Therefore, talent acquisition has a significant influence on organizational performance. Hence,

H_2: Talent Acquisition has a significant positive influence on the organizational performance of Manufacturing SMEs in Malaysia.

Dimension #3: Talent Retention

To actualize business strategies, organizations should have the right talent retention program to keep the right people with the necessary abilities and skills. According to Chan & Muthuveloo (2018), keeping a talented

workforce is a tactical strategy to tap on any possibilities and opportunities for any organization to perform well. They further add that talent retention should be considered a strategic opportunity for organizations to maintain core competencies, uniqueness and as a competitive advantage. Therefore, talent retention has influence organizational performance. Hence,

H_3: Talent Retention has a significant positive influence on the organizational performance of Manufacturing SMEs in Malaysia.

Dimension #4: Talent Displacement

According to Ung et al. (2018), firms that readily dispose of all their less effective and less productive resources have a significant effect on firm performance. Most companies tend to regard the displacement or separation of 'unproductive' employees as a way to increase performance. Instead, the organization must continue in the process of rectifying talent gaps through appropriate adjustments with the right policies so that the available workforce can meet the strategic challenges. Special attention on the decrease in human resource efficiency and productivity will help mitigate against waste and liabilities arising from collective action and reduce operational problems in human resource management (Tajpour et al., 2020). Therefore, talent displacement has influence organizational performance. Hence,

H_4: Talent Displacement has a significant positive influence on the organizational performance of Manufacturing SMEs in Malaysia.

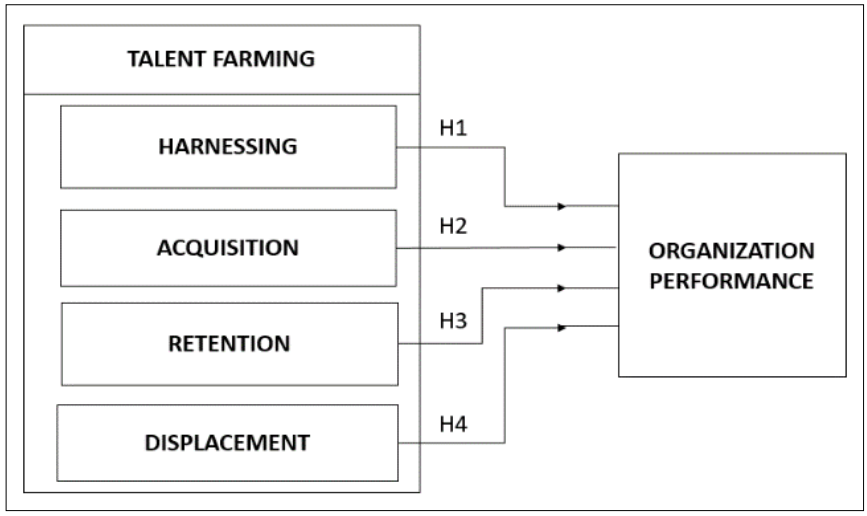
Underpinning Theory

As organizations are currently operating in a dynamic business landscape, this study applied the I-TOP Strategic Agility Model and Dynamic Capability Theory in postulating that organizations need to have the right combination of talent dimensions to respond to the rapid and disruptive changes that surround them to sustain their competitiveness (Teece, Pisano, & Shuen, 1997). The I-TOP Strategic Agility Model conceptualized by Muthuveloo & Ping (2020) together with the Dynamic Capability Theory, can provide a better approach in addressing the dynamic, unpredictable landscape in the digital age. This model has incorporated the internal people resources with capabilities sensing the external market environment trends with outright environmental scanning. Dynamic capabilities are deeply entrenched in the firm‘s resources to achieve its performance, competitive and temporary advantages through in house making, acquire, discard or replace resources, integrate or recombine the resources to adjust the resource base to create and add value to enhance performance (Banerjee et al., 2018). Therefore, this study will be through the lens of the I-TOP Strategic Agility Model and the Dynamic Capability Theory to fill this research gap by providing a different perspective of viewing organizational performance in the context of talents. Consequently, empirical findings from the study will provide further light on how SME organizations need to have fluidity in the agility of their talents to priorities incline to a dynamic market environment changes to gain a competitive edge.

Research Model

Considering the main goal of this research is that talent farming dimensions have a significant positive influence on organizational performance, research hypothesis and underpinning theory justifications above, a conceptual framework is provided as shown in Figure 1. The conceptual framework formed the foundation for the entire research project based on the literature on the ideas and earlier research work. This study formulates the conceptual framework explaining that the dependent variable focusing on the performance of Malaysian SME's from the context of talent farming dimensions (talent harnessing, talent acquisition, talent retention and talent displacement) as independent variables based on underpinning I-TOP Strategic Agility Model and the Dynamic Capability Theory.

Figure 1. Conceptual Framework



Research Methodology

The research methodology used in this study is detailed in the following sections.

Research Design

The primary goal of this study is to test out the hypotheses formulated to examine the relationships of the different key variables identified in the context of manufacturing SMEs in Malaysia through its correlational study. To ensure minimal interference from the researcher as the survey was conducted within a non-fixed study setting where the variables being studied took place generally at the respondent's convenience environment. Furthermore, this is a cross-sectional study as it was based on a one-time data collection time horizon between October to December 2020, to answer the research questions raised in the study. Finally, this research design best fits the constraints of costs, time and post-pandemic recovery focus priorities in organizations when carrying out this particular study.

Population and Sample Size

This study is based on the organizational performance of Manufacturing SMEs whereby the unit of analysis is the organization. The target respondent population in this research is representative of organizations who involved in strategies planning and execution such as the top management,

senior management and the senior executive's team of SMEs of the manufacturing sector in Malaysia. This survey excluded the large local companies (LLC) and micro industries due size of employees and financial bandwidth.

In Malaysia, SME classifications for Manufacturing defined by Malaysia SME Corp as Figure 2 below.

Figure 2. Definition and categorization of SMEs (SMECorp, 2016)

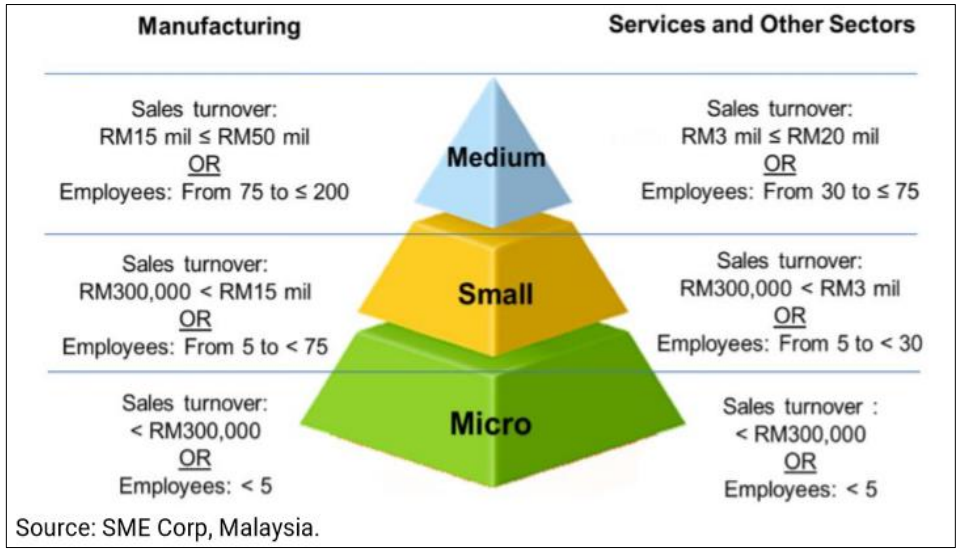


Table 1. Breakdown of the manufacturing SMEs in Malaysia

	Micro	**Small**	**Medium**	**Total**
Textiles & wearing apparel	7,428	1,236	38	8,702
Food & beverages product	4,396	3,374	522	8,292
Fabricated metal product, except machinery & equipment	2,282	2,769	233	5,284
Machinery & equipment incl. repair & installation	1,678	2,930	135	4,743
Printing and reproduction of recorded media	1,558	1,572	64	3,194
Furniture	891	1,494	102	2,487
Rubber & plastics product	317	1,793	336	2,446
Other non-metallic mineral product	588	1,252	159	1,999
Wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	492	1,104	141	1,737
Computer, electronics and optical products, electrical equipment	285	1,198	218	1,701
Others	2,168	4,374	571	7,113
Total Manufacturing SMEs	2,083	3,096	2,519	47,698

Source: SME Landscape of Malaysia (Economic Census 2016. Department of Statistics Malaysia (DOSM))

For this study which based on PLS-SEM, Green‟s (1991) sample size approximation table for more accurate sample size estimation was adopted. This means that the study only needed an initial minimum sample size of 84 (based on four predictors), with the assumption of medium effect size, a power of 0.80, and an alpha value of 0.05.

Table 2. Manufacturing SME Industries

State	Number of SME	Sampling for sample size
Selangor	9,530	17
WP Kuala Lumpur	5,185	9
Johor	7,787	15
Perak	4,298	7
Pulau Pinang	4,021	7
Sarawak	2,512	4
Sabah	1,751	3
Kedah	3,214	6
Kelantan	1,830	3
Pahang	1,752	3
Negeri Sembilan	1,826	3
Melaka	1,479	3
Terengganu	2,010	4
Perlis	370	0
WP Labuan	117	0
WP Putrajaya	16	0
TOTAL SMEs	47,698	84

Source: Department of Statistic (DOSM) in 2016.

Sampling Technique and Data Collection Method

This study used the purposive non-random method, which involves samples from a part of the population that is close at hand. While it may not be as representative as a full random sampling method, it is practical and quick. To minimize the effect of biased sampling, data was collected from multiple companies across different geographical regions in Malaysia. Google Forms were used to collect respondent feedback.

Measurement Instruments

The questionnaire comprised of a total of 62 questions spread over three sections, in which Section A contained ten questions related to the organizational performance as the dependent variable, while Sections B contained 44 questions related to the talent factors as the independent variable, and Section C contained eight questions related to the demographics of the respondents and their organizations. The questionnaire begins with a notification on the exclusion of large and micro industries from the study. All questionnaires selected used a 5-point Likert scale and are widely used and have been proven reliable as shown in Table 3.

Table 3. Questionnaire Design

Sec.	Variable	Dimension	Coding of Question	No of Question	Sources
A	Organizational Performance	Market Perspective Customer Perspective Employee perspective	OP1 – OP3 OP4 – OP6 OP7 – OP10	10	Ravichandran & Lertwongsatiem (2005); Delaney & Huselid (1996)
B	Talent Farming	Talent Harnessing Talent Acquisition Talent Retention Talent Displacement	TH1 – TH11 TA1 – TA12 TR1 – TR11 TD1 – TD10	44	Jayaraman, Talib, & Khan, (2018)
C	Demographics	Respondent Organization	D1 – D4 D5 – D8	8	

Total number of questions	62

Pre-testing of the survey questionnaire was conducted with five manufacturing industry experts and two academics to ensure that gross problems with the survey were detected before the pilot testing. Before proceeding for the distribution of the survey, a further pilot test of 30 samples was conducted to see the reliability shown below Table 4. Based on the findings below, no modification was needed for the questionnaire as the composite reliability values for the measurement items were all more than 0.708.

Table 4. Pilot Study Findings

Construct	Cronbach's Alpha	No. of Items
Organisational Performance	0.89	10
Talent Harnessing	0.92	11
Talent Acquisition	0.85	12
Talent Retention	0.89	11
Talent Displacement	0.89	10

Data Analysis Techniques

Partial Least Squared (PLS) was used in data analysis. PLS is a Structural Equation Modelling (SEM) technique that uses a prediction-oriented variance-based approach that emphasizes endogenous target constructs in the model and maximizes their explained variance (Hair et al., 2014). SmartPLS-SEM version 3.2.7 was used for PLS data analysis, while IBM-SPSS Version 24.0 was used for descriptive statistical analysis.

Findings

A self-administered online questionnaire link was emailed to a total of 510 respondents from Manufacturing SMEs in Malaysia. At the end of a 2-month survey period (from November to December 2020), a total of 157 responses were received, indicating a 30.7% response rate (refer to Table 5).

Table 5. Summary of response rates

State	**Number of SME**	**Target random sampling**	**No. of a questionnaire sent out**	**Valid sponses ceived**	**Re-Re-**	**Re-jected**
Selangor	9,530	17	84	27		1
WP Kuala Lumpur	5,185	9	73	14		1
Johor	7,787	15	80	26		
Perak	4,298	7	21	13		1
Pulau Pinang	4,021	7	70	42		2
Sarawak	2,512	4	16	1		
Sabah	1,751	3	14	1		
Kedah	3,214	6	68	12		
Kelantan	1,830	3	15	2		
Pahang	1,752	3	14	2		
Negeri Sembilan	1,826	3	15	4		
Melaka	1,479	3	14	6		
Terengganu	2,010	4	15	1		2
Perlis	370	0	11	0		
WP Labuan	117	0	0	0		
WP Putrajaya	16	0	0	0		
TOTAL SMEs	47,698	84	510	151		6

For this study, an initial assumption on the minimum sample size based on Green's (1919) with a statistical power of 0.80 is 84 samples. However, the valid sample received of 151 exceeds the minimum requirement and is adequate to represent the population for this study. As the survey was excluding the large and micro industries, the corresponding 6 survey respondents were rejected. However, there were no missing values in all the responses as the online questionnaire was set with compulsory responses for all questions, and neither was there any evidence of patterned responses.

Descriptive Analysis

Finally, in general, 56.4% of the respondents in SMEs is from small industries while 39.6% from medium industries. As manufacturing is more centralized in certain regions of Malaysia, the response mostly comes from Johor, Kedah, Kuala Lumpur, Selangor and Penang compared to other states as shown in Table 6.

Table 6. Profile of Participating Organisation

Variable	Category	f	%
Classification of Organisation	Micro	2	1.3
	Small	84	56.4
	Medium	59	39.6
	Large	4	2.7
Years of Establishment for the Organisation	1-5 years	9	6.0
	6-10 year	20	13.4
	11–15 years	29	19.5
	16-20 years	20	13.4
	> 20 years	71	47.7
Size of Organisation	7 - 75 employees	64	40.9
	201 - 500 employees	48	32.2

Variable	Category	f	%
	501 - 999 employees	33	22.1
	5 - 75 employees	5	3.4
	> 1,000 employees	2	1.3
Type of Organisation	Textiles & wearing apparel	5	3.4
	Printing and reproduction of recorded media	3	2.0
	Rubber & plastics product	13	8.7
	Wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	5	3.4
	Food & beverages product	17	11.4
	Machinery & equipment incl. repair & installation	35	23.5
	Furniture	4	2.7
	Computer, electronics and optical products, electrical equipment	67	45.0
Location of organization	Johor	9	6.0
	Kedah	16	10.7
	Kelantan	2	1.3
	Kuala Lumpur – Wilayah Persekutuan	17	11.4
	Melaka	3	2.0
	Negeri Sembilan	4	3.4
	Penang	63	42.3
	Perak	6	4
	Perlis	2	1.3
	Sabah	1	0.7
	Sarawak	5	4.4
	Selangor	17	11.4
	Terengganu	3	2.0

Measurement Model Analysis

The measurement model assessment was based on the recommendations of Hair et al. (2016), for internal consistency (composite reliability), convergent validity (average variance extracted), and discriminant validity conducted and the results shown in Table 7 and 8. Based on these results, the measurement model is assured of construct validity and reliability as all AVE

values were all above 0.50 while the composite reliability values exceeded the recommended cut-off value of 0.708.

Table 7. Result of Measurement Model

Model Construct	**Measurement**			
		Loading	**AVE**	**CR**
First-Order	Item			
Organizational Performance	OP1	0.687	0.588	0.934
(OP)	OP2	0.758		
	OP3	0.836		
	OP4	0.702		
	OP5	0.769		
	OP6	0.783		
	OP7	0.760		
	OP8	0.823		
	OP9	0.787		
	OP10	0.754		
Talent Harnessing (TH)	TH1	0.753	0.534	0.926
	TH2	0.755		
	TH3	0.614		
	TH4	0.582		
	TH5	0.752		
	TH6	0.809		
	TH7	0.694		
	TH8	0.665		
	TH9	0.816		
	TH10	0.749		
	TH11	0.806		
Talent Acquisition (TA)	TA3	0.651	0.510	0.903
	TA4	0.726		
	TA5	0.744		
	TA7	0.698		
	TA8	0.662		
	TA9	0.732		
	TA10	0.692		
	TA11	0.799		
	TA12	0.708		
Talent Retention (TR)	TR1	0.788	0.522	0.922
	TR2	0.740		
	TR3	0.785		

Model Construct	Measurement			
	TR4	0.833		
	TR5	0.704		
	TR6	0.540		
	TR7	0.571		
	TR8	0.636		
	TR9	0.800		
	TR10	0.785		
	TR11	0.702		
Talent Displacement (TD)	TD1	0.759	0.564	0.928
	TD2	0.553		
	TD3	0.780		
	TD4	0.736		
	TD5	0.806		
	TD6	0.800		
	TD7	0.742		
	TD8	0.736		
	TD9	0.732		
	TD10	0.829		

Note: TA 1, TA2, and TA6 were deleted due to low loadings. AVE = Average Variance Extracted, CR = Composite Reliability.

Discriminant validity

In this research, the third assessment was done in terms of the Hetero-trait-Monotrait (HTMT) ratio for assessment of discriminant validity whereby the HTMT values for all constructs are recommended to be less than the 0.90 threshold value (Henseler et al., 2015). The results as shown in Table 8 demonstrates that discriminant validity assessed by the HTMT ratio has been met. Hence, it indicates that the discriminant validity has been ascertained.

Table 8. Discriminant Validity in HTMT

	1	2	3	4	5	6
1.OP						
2.TA	0.883	0.736				
3.TD	0.826	0.794	0.878			
4.TH	0.826	0.809	0.843	0.817		
5.TR	0.899	0.887	0.806	0.837	0.898	

Testing Hypothesis

It is observed that talent acquisition and talent retention has a direct influence on organizational performance, while talent harnessing and talent displacement has no direct influence on organizational performance. The data analysis revealed that two variables (TH and TD) were not supported. Firstly, talent harnessing has a weak and insignificant influence on organizational performance at $\beta = 0.067$, $p > 0.05$, $t < 1.645$. Secondly, the construct of talent displacement has an insignificant influence on organizational performance at $\beta = 0.112$, $p > 0.05$, $t < 1.645$. On the other hand, the remaining independent variables (HA and HR) were supported. For instance, both talent acquisition and talent retention have a significant positive influence on organizational performance at $\beta = 0.340$, $p < 0.05$, $t > 1.645$; and $\beta = 0.441$, $p < 0.05$, $t > 1.645$ respectively. Details are summarised in Table 9.

Table 9. Results of Structural Model (Direct relationship between IV & DV)

Relationship	Stand-ard Beta (β)	Standard Deviation	t-value	p-value	Decision
TH → OP	0.067	0.087	0.772	0.220	NS
TA → OP	0.340	0.079	4.324	0.001	Supported
TR → OP	0.441	0.095	4.629	0.001	Supported
TD → OP	0.112	0.068	1.643	0.050	NS

Note: TH – Talent Harnessing; TA – Talent Acquisition; TR -Talent Retention; TD – Talent Displacement; OP – Organizational Performance.

Assessment of Importance and Performance Matrix Analysis Map

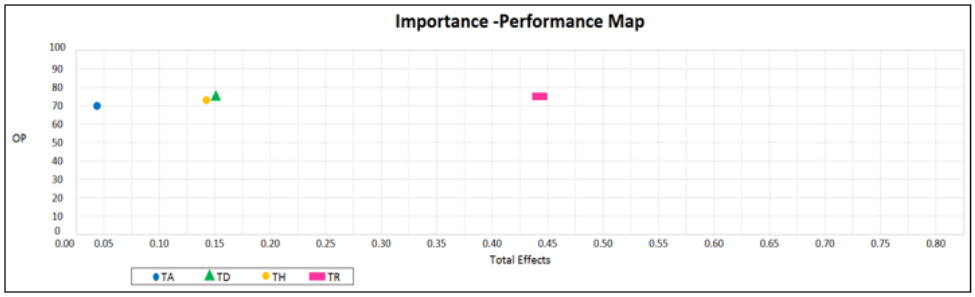
Table 10 and Figure 3 show the IPMA of Malaysian manufacturing SMEs and their operational performance. The values in Table 10 were used to plot the values in Figure 3 to guide the management of manufacturing SMEs on the key factors requiring attention and improvement highlighted in Table 10. Result of Importance-Performance Matrix Analysis (IPMA) provides the actual performance of each construct.

Table 10. Result of Importance-Performance Matrix Analysis (IPMA)

Organizational Performance	Important	Performance
Talent Retention	0.445	76.001
Talent Displacement	0.152	74.177
Talent Harnessing	0.141	73.699
Talent Acquisition	0.036	69.750

Figure 3 illustrated that talent retention showed the highest importance to organizational performance. Followed by talent displacement, talent harnessing and talent acquisition.

Figure 3. Importance-Performance Matrix Analysis Map for Operational Performance



TH – Talent Harnessing; TA – Talent Acquisition; TR -Talent Retention; TD – Talent Displacement; OP – Organizational Performance.

Nevertheless, the IPMA analysis highlighted all four talent variables, namely talent harnessing, talent acquisition, talent retention, and talent displacement towards organizational performance. All four aspects of talent dimensions under talent farming do show the influence organizational performance of SMEs.

Discussion

The findings of this research are stated as follows. This study proposed 4 hypotheses. Out of these 4 hypotheses, 2 of them (H2 and H3) were hypothesized supported, while the remaining 2 hypotheses (H1 and H4) did not support. This implied that only talent acquisition (H2) and talent retention

(H3) have a significant impact on organizational performance. Observations explained as follows:

Relationship between Talent Harnessing and Organisational Performance

This study postulated that talent harnessing has a significant positive influence on organizational performance of manufacturing SMEs. However, the present study assumed that talent harnessing does not influence the organizational performance of SMEs. Grencíková et al. (2020), probably provided the best explanation for this phenomenon. This is probably because smaller enterprises lacked the resources to have dedicated HR development departments to deal with digitalization or IR4.0 challenges. The study revealed that employers demand digital skills and field specialization but do not have a clear or visible talent pool creation approach for the future. The study recommends the employers should make strategic decisions based on general knowledge and training specializations. However, SMEs do not have the financial muscle to invest heavily on talent nurturing (Ling et al., 2020). This is a gap for governmental intervention to ensure SMEs remain competitive in the medium and long term.

Relationship between Talent Acquisition and Organisational Performance

Past studies have demonstrated the close relationship between talent acquisition and organizational performance. Some studies indicated this to be a positive relationship of talent acquisition towards organizational performance (Aina & Atna, 2020). It is not surprising for in the current study, as

already highlighted Mamun (2019), that Malaysian manufacturing SMEs possess limited skills and knowledge in manufacturing and strategy development. Therefore the gaps in skills mismatch in the manufacturing SMEs need to be addressed by acquiring new skills from external sources to optimize organizational performance by transforming to a high-flexibility, high-productivity and resource-friendly production model (Kamaruzaman et al., 2019; Grencíková et al., 2020).

Relationship between Talent Retention and Organizational Performance

The study stated that talent retention has a significant positive influence on the organization of manufacturing SMEs. In the current study, the findings revealed that talent retention significantly and positively influenced organizational performance. The result is not surprising and consistent with past studies. According to Munteanu et al. (2020), organizations performance is very much dependent on talent retention in the organizations.

Relationship between Talent Displacement and Organizational Performance

The study assumed that talent displacement has a significant positive influence on the organizational performance of manufacturing SMEs. However, the current study finding revealed that talent displacement does not influence organizational performance. This phenomenon could be explained when the organizations execute talent displacement without proper planning and lack of transparency (Simiyu & Auka (2016). This is unavoidable when

organizations are forced to adapt to the digital business environment that demands new competencies to cater to a new generation of consumers who need instant gratification. Hence, this must be done carefully without affecting the emotional of survivors workforce that will impact the job performance after talent displacement exercise (Tajpour et al., 2018). Therefore, improper displacement or separation might negatively impact the remaining employees, which in turn affect organizational performance (Ung et al., 2018).

Research Contribution

This research makes theoretical, practical and policy contributions as follows:

Theoretical Contributions

First, the primary contribution of this paper is to empirically establish the relationship between talent farming and organizational performance of manufacturing SMEs in Malaysia. Talent farm on the new crop of talent towards needs like digital talent to face digitalization wave in SMEs sectors which was largely missed in the literature of talent management and organizational performance. Note that the relationship between talent farming and organizational performance is relatively novel. Secondly, the present study extends the I-TOP Strategic Agility Model and Dynamic Capability Theory in the context of talent influencing organization performance. Previous studies mentioned the relationship between talent management and organizational success, but this work is the first to examine how new farming the talents to

generate self sustain talent pool. Third, the current study theoretically and empirically tested the relationship between talent farming dimensions and organizational performance of manufacturing SMEs in Malaysia. Finally, this study contributes to the literature by extending the understanding of this research area to less developed markets, such as Malaysia. The findings of this research can be used as a benchmark or guideline for similar future researches with similar market contexts like developing markets.

Practical Contributions

First, this study offers the SMEs stakeholders an outcome-oriented view on how talent farming strategies enhance organizational performance. Secondly, the study demonstrates the importance of talent priorities on organizational performance. Thirdly, the study guides the manufacturing SMEs stakeholders to execute the talent displacement exercise only after all efforts of re-skilling or up-skilling programmes failed to prepare them to business needs to ensure the reminding employees loyalty intact and motivated to continue with the organization. Overall the study guides how current talent management needs to take into account the talent farming dimension to meet new challenges of doing business in the digital age.

Policy Contributions

For the policy contribution, the findings from this research will be able to assist policy-makers in creating an ecosystem for SMEs to develop the digital talent pool to avoid talent war with large organizations. This can be seen from the finding where SMEs lack focuses on internal talent harnessing and

talent acquisition due to limited financial bandwidth. By introducing the right talent policy with appropriate enablers for talent farming, the government will be able to help SMEs address the country's talent out-migration. Additionally, the finding of this research also will assist policymakers on mitigation plans on job displacement of those unable to skill-up or upskill to certain competencies beyond the capabilities of SMEs themselves.

Limitation

Three limitations were identified in this study. Firstly, for practical reasons, this study relied on a self-reporting survey which could add to common method bias. Secondly, the study used a purposive non-random sampling technique which could introduce biased data. Thirdly, the challenges in conducting the survey follow up and data collection during pandemic movement control enforced by the Malaysia government.

Conclusion

Most organizations recognize the need to improve talent management strategies and practices, to improve their performance and to create a sustainable competitive advantage that allows them to face the dynamic changes arising from digitalization in the business landscape. Traditional talent management practices mainly focus on in house talents retention, learning and development, and career management; all of which does not adequately meet

the future business needs. Current talent management practice does not address holistically on how to farm a new crop of talents or how to manage talent displacement to replace unproductive or untrainable talents for future needs of the business. Therefore this study explored the relationship between talent farming dimensions and organizational performance of manufacturing SMEs in Malaysia. However, the findings have shown that only talent acquisition and talent retention are the most significant contributors to the performance of Malaysian manufacturing SME's meanwhile talent harnessing and talent displacement does not show a significant influence on the organizational performance. However, IPMA analysis has shown all talent dimensions influence the organizational performance with a continuum of impact. Hence, a wider and more detailed approach like a case study on that talent harnessing and talent displacement is recommended for future research to understand better whether any moderating factors influence the organizational performance of manufacturing SMEs.

Nevertheless, the study has identified talent variables that are important in explaining the organizational performance in manufacturing SMEs in Malaysia. The study improves upon the existing theoretical framework from the literature of best practices on organizational performance and the new knowledge generated from this study shall assist theory-building efforts particularly in the talent management practices field. The study also finds several statistically significant relationships with practical applications. Therefore, SMEs should give the right prioritization to the Talent Farming implementation in their human resource management practices to ensure they

achieve self-reliance, are fit for purpose and can remain competitive in the digital age.

References

1. Aina, R. A., & Atan, T. (2020). The Impact of Implementing Talent Management Practices on Sustainable Organisational Performance. Sustainability, 12(20), 8372.
2. Ali, K. A., & Iskandar, N. I. (2016). The Effect of Business Innovation Capability, Entrepreneurial Competencies and Quality Management Towards the Performance of Malaysian SME's. International Journal of Business, Economics and Law, 10(2), 7-13.
3. Banerjee, C. S., Farooq, A., & Upadhyaya, S. (2018). The Relationship between Dynamic Capabilities, Competitive Advantage & Organizational Performance. International Journal of Interdisciplinary Research and Innovations, 6(3), 603-610.
4. Chan, J. I., & Muthuveloo, R. (2018). Key success factors for organizational performance of private HLIs in Malaysia. Strategic Direction, 34(8), 7-9.
5. Delaney, J. T. (1996). The Impact of Human Resource Management Practices on Perceptions of Organisational Performance. Academy of Management Journal, 39(4), 949-969.
6. Doshmanli, M., Salamzadeh, Y., & Salamzadeh, A. (2018). Development of SMEs in an emerging economy: does corporate social responsibility matter?. International Journal of Management and Enterprise Development, 17(2), 168-191.
7. Elena-Juliana, I., & Maria, C. (2016). Organizational performance – a concept that self-seeks to find itself. Economy Series, 4, 1-12.
8. Gamage, N., Kumara, S., & Ekanayake. (2019). Global Challenges and Survival Strategies of the SMEs in the Era of Economic Globalization: A Systematic Review. MPRA Paper.
9. Green, S. B. (1991). How Many Subjects Does It Take To Do A Regression Analysis. Multivariate Behavioral Research, 26(3), 499-510.
10. Grencíková, A., Kordoš, M., & Berkovic, V. (2020). The Impact of Industry 4.0 on Jobs Creation within. Administrative Science, 10(3), 71.
11. Hamadamin, H. H., & Atan, T. (2019). The Impact of Strategic Human Resource Management Practices on Competitive Advantage Sustainability: The Mediation of Human Capital Development and Employee Commitment. Sustainability, 11(20), 5782

12. Hosseini, E., Tajpour, M., & Lashkarbolooki , M. (2020). The impact of entrepreneurial skills on manager's job performance. International Journal of Human Capital in Urban Management, 5(4), 361-372.
13. Islam, A., Jerin, I., Hafiz, N., Nimfa, D. T., & Wahab, S. A. (2021). Configuring a blueprint for Malaysian SMEs to survive through the COVID-19 crisis: The reinforcement of Quadruple Helix Innovation Model. Journal of Entrepreneurship, Business and Economics, 9(1), 32-81.
14. Jayaraman, S., Talib, P., & Khan, A. F. (2018). Integrated Talent Management Scale: Construction and Initial Validation. SAGE Open Research Paper, 1-12.
15. Kaushik, T., & Girotra, R. (2017). Person-Organization Fit: Important Aspect of Talent Acquisition for Start-ups . ELK Asia Pacific Journal of Human Resource Management and Organisational Behaviour, 4(1), 1-11.
16. Kawamorita, H., Salamzadeh, A., Demiryurek, K., & Ghajarzadeh, M. (2020). Entrepreneurial universities in times of crisis: Case of COVID-19 pandemic. Journal of Entrepreneurship, Business and Economics, 8(1), 77-88.
17. Krishnan, T., & Scullion, H. (2017). Talent management and dynamic view of talent in small and medium enterprises. Human Resource Management Review, 27(3), 431–441.
18. Kuhn, T. S. (1996). The structure of scientific revolutions, 3rd ed. Amweican Psycological Association.
19. Kwamboka, N. E., & Nassiuma, B. K. (2017). Employee Downsizing Strategies and Firm Performance: Evidence from the Kenyan Context . Journal of HUman Resource and Leadrship, 2(7), 58-68.
20. Mamun, A. A. (2019). Diffusion of innovation among Malaysian manufacturing SMEs. European Journal of Innovation Management, 21(1), 113-141.
21. Mathew, E. (2018). Reimagining Talent Management for Business 4.0. Tata Consultancy Services.
22. Mirzadeh, M. S., Salamzadeh, Y., & Salamzadeh, A. (2017). Identification of factors affecting individual industries. Economía y Sociedad, 22(52), 67-87.
23. Muthuveloo, R., & Ping, T. A. (2020). Optimization of Organisational Performance via I-Top Strategic Agility Model. Journal of Entrepreneurship, Business and Economics, 8(2), 154-174.
24. Nagy, J., Oláh, J., Erdei, E., Máté, D., & Popp, J. (2018). The Role and Impact of Industry 4.0 and the Internet of Things on the Business Strategy of the Value Chain—The Case of Hungary. Sustainability, 10(10), 3491.

25. Pa'wan, F., & Said, I. (2020). Strengthening Talent Management in Enhancing Organisational Commitment in Developing Countries. Revista Argentina de Clínica Psicológica, 29(4), 67.
26. Pauli, U., & Pocztowski, A. (2019). Talent Management in SMEs: An Exploratory Study of Polish Companies. 7(4), 1-12.
27. Pauli, U., & Pocztowski, A. (2019). Talent Management in SMEs: An Exploratory Study of Polish Companies. Entrepreneurial Business and Economics Review, 7(4), 1-11.
28. Prasanna, Jayasundar, Gamage, S. K., Ekanayake, Rajapakshe, & Abeyrathne. (n.d.). Sustainability of SMEs in the Competition: A Systemic Review on Technological Challenges and SME Performance. Journal of Open Innovation, 5(4), 100.
29. Radović-Marković, M., Salamzadeh, A., & Vujičić, S. (2019). Selection of organization models and creation of competences of the employed people for the sake of competitiveness growth in global business environment. International Review, (1-2), 64-71.
30. Raharjo, S. T., Mudiantono, & Perdhana, M. S. (2016). SME's Enterprise Resource Planning Implementation, Competitive Advantage and Marketing Performance: Finding From Central Java, Indonesia. Journal of Entrepreneurship, Business and Economics, 4(1), 22–44.
31. Ravichandran, T., Lertwongsatien, c., & Lertwongsatien, C. (2014). Effect of Information Systems Resources and Capabilities on Firm Performance: A Resource-Based Perspective. Journal of Management Information Systems, 21(4), 237-276.
32. Saha, N., Gregar, A., & Sáha, P. (2017). Organizational agility and HRM strategy: Do they really enhance firms' competitiveness? International Journal Of Organisational Leadership, 6, 323-334.
33. Salamzadeh, A., & Dana, L. P. (2020). The coronavirus (COVID-19) pandemic: challenges among Iranian startups. Journal of Small Business & Entrepreneurship, 1-24.
34. Salamzadeh, A., Tajpour, M., & Hosseini, E. (2019). Corporate entrepreneurship in University of Tehran: does human resources management matter?. International Journal of Knowledge-Based Development, 10(3), 276-292.
35. Sekaran, U., & Bougie, J. R. (2019). Research Methods for Business: A Skill Building Approach (5th Edition). John Wiley & Sons.
36. Simiyu, T. W., & Auka, D. O. (2016). Effect of Retrenchment Practices on Performance of Surviving Employees in State Corporations of Nakuru County. International Journal of Science and Research, 11(1), 1-12.

37. Suárez, C. A. (2016). Best Management Practices: SMEs' Organisational Performance Management Based On Internal Controls in Mexico. Journal of International Business and Economics, 4(2), 41-58.
38. Tajpour, M., Hosseini, E., & Salamzadeh, A. (2020). The effect of innovation components on organizational performance: Case of the governorate of Golestan Province. International Journal of Public Sector Performance Management, 6(6), 817-830.
39. Tajpour, M., Moradi, & Jalali. (2018). Studying the influence of emotional intelligence on the organizational. Inernational Journal Human Capital Urban Management, 3(1), 45-52.
40. Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic Capabilities and Strategic Management. Strategic Management Journal, 18(7), 509-533.
41. Ung, L.-J., Brahmana, R., & Puah, C.-H. (2018). Firm performance, retrenchment strategy and different ownership structure: Evidence from public listed companies in Malaysia. International Journal of Business Science and Applied Management, 13(1), 1-12.
42. Whysall, Z., Owtram, M., & Brittain, S. (2019). The new talent management challenges of Industry 4.0. Journal of Management Development, 38(2), 118-129.
43. Whysall, Z., Owtram, M., & Brittain, S. (2019). The new talent management challenges of Industry 4.0. Journal of Management, 38(2), 118-129.
44. Yew, S. S., & Chan, T. H. (2019). Three Decades of Budget Deficit and Shock Responses: The Malaysia Case. Journal of Entrepreneurship, Business and Economics, 7(2s), 144-178.
45. Zaidi, M. F., & Belal, H. (2019). A Preliminary Study to Understand The SMEs' Readiness On IoT In Malaysia. International Journal of Accounting, Finance and Business, 4(19), 1-12.

Shanmuganathan Palanisamy is currently at the final stage of completing his Doctor of Philosophy (PhD) at School of Management, Universiti Sains Malaysia, 11800, Penang.

Shankar Chelliah is an Associate Professor of International Business at School of Management Business, Universiti Sains Malaysia, 11700 Gelugor, Penang. He specializes in internationalization, international trade strategies, born global firms, SMEs, industry 4.0 as competitive capabilities in organizations, and strategic management in education.

Rajendran Muthuveloo is a Senior Lecturer at Graduate School of Business, Universiti Sains Malaysia, 11800, Penang. He specializes in Corporate Strategy, Strategic Agility and Human Capital Development.