

STRATEGIC AGILITY: LINKING PEOPLE AND ORGANISATIONAL PERFORMANCE OF PRIVATE HIGHER LEARNING INSTITUTIONS IN MALAYSIA

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ABSTRACT

Strategic agility arises from the capabilities of people. Ultimately, in today's turbulent business landscape, organisations need strategic agility to acquire the dynamism to achieve their goals. The main purpose of the study is to examine the relationship between people, strategic agility, and organisational performance. The partial least squares equation modelling technique (PLS-SEM) was utilised on a dataset of 155 private higher learning institutions in Malaysia. The results did not support the direct relationship between people and organisational performance. Instead, it confirmed the mediating effect of strategic agility in the relationship. This finding provided significant contribution as strategic agility, created by people, was empirically proven as a crucial link that needs to be prioritised by private higher learning institutions in Malaysia. With strategic agility, private higher learning institutions will be able to optimise their performance in order to attain business sustainability in the current dynamic market.

Keywords: People, organisational performance, strategic agility, mediating effect, private higher education.

Received: 29 June 2020

Accepted: 6 April 2021

<https://doi.org/10.33736/ijbs.4616.2022>

1. INTRODUCTION

Strategic agility refers to the constant ability of organisations to have the flexibility and adaptability to quickly develop and deploy resources needed in response to the dynamic external business changes (Junni et al., 2015). Fundamentally, strategic agility is needed, especially in a turbulent business landscape. With strategic agility, organisations are able to anticipate instead of reacting to changes, and make quick strategic decisions with immediate implementation to manage the challenging dynamic changes (Muthuveloo, 2015). On this basis, strategic agility positively affects the performance of organisations operating in unpredictable business environment.

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In the context of higher education in Malaysia, it is extremely critical for private higher learning institutions (HLIs) to perform well and remain relevant in the intensely competitive higher education industry (Ahmad & Ng, 2015). The higher education sector in Malaysia comprises of 629 institutions, of which 73% are private HLIs (Jabatan Pendidikan Tinggi, 2018). Due to this, private HLIs are considered to have significant influence on the economic growth of the nation. They play a crucial role of producing highly capable and qualified workers for the nation to move up the value chain of global competitiveness (Lewin, 2015). Recent environmental scanning revealed the dismal organisational performance status of private HLIs in Malaysia which involved closures of 79 private colleges from 2012 to 2017; reported financial losses of six private universities from 2013 to 2015; poor domestic and international performance ranking; and comparatively lower graduate employability from 2009 to 2015 (Chan & Muthuveloo, 2018; Lim & Williams, 2015). As such, this study is timely as it intends to provide private HLIs further understanding on how to leverage their people in order to acquire strategic agility to sustain their organisational performance in present challenging times.

Past studies have indicated that people are crucial towards the strategic agility of organisations (Oyedijo, 2012). For instance, Khavari et al. (2016) asserted the vulnerability of universities who lacked understanding of the rapid changes in the higher education landscape and proposed organisational agility as a means of protection. Their research on 270 faculty members of a university and its branches throughout Iran revealed that human resources or people play an important part in the level of organisational agility. To increase organisational agility, people within the universities must be trained and accountable for their work. As indicated in Khavari et al.'s (2016) findings, there is a connection between people and agility. However, Khavari et al. (2016) are looking at organisational agility, not strategic agility. Organisational agility is usually seen as a holistic concept whereby agility is dependent on various organisational factors, while strategic agility is part of the corporate strategy of the management process (Walter, 2020). In a dynamic business environment, strategically agile organisations will be able to quickly counter rapid changes with quick strategic decision-making and implementation capabilities (Muthuveloo, 2015).

Past studies have also revealed that characteristics of people can either have positive or negative effects on strategic agility. That is why it is important for organisations to adopt the ability-motivation-opportunity (AMO) practices so as to develop people with the right mindset and capabilities that can contribute towards strategic agility of the organisations. More specifically, through the AMO practices, people will become more agile as they are able to quickly and efficiently respond to any onslaught of disruptive changes from the business environment. In Marin-Garcia and Tomas' (2016) study, they systematically reviewed published literature from 1993 to 2016 that examined human resource practices with performance. They discovered that the three main components of AMO are present when organisations intend to increase individual performance. Nonetheless, the influence of AMO practices on people towards strategic agility has not been examined yet. The closest study would be by Khavari et al. (2016) who advocated that organisational agility can be further improved when there is proper training and development of people within the organisations.

Furthermore, past studies have highlighted that the success of organisations is very much dependent on people within the organisations (Mir & Mufeed, 2016; Valmohammadi & Roshanzamir, 2015). In particular, people who are critical to the corporate strategies and

organisational success are indispensable and costly to replace (Barney & Arikan, 2001). This type of people is known as the transformers or star performers in their organisations. They are considered valuable resources as they provide organisations the differentiating factor from competitors. Although, transformers are crucial for organisations to perform well, many organisations are not able to retain them and instead lose them to their competitors (Branham, 2001; Murray et al., 2015). Nevertheless, past studies have not specifically examined types of people against strategic agility. It would be important for organisations to know if types of people and AMO practices influence strategic agility which is very much needed in current turbulent business environment.

Although there are extensive literature promoting the direct link of people with organisational performance (Mir & Mufeed, 2016; Murray et al., 2015; Valmohammadi & Roshanzamir, 2015), studies identifying mediating variables in this relationship are limited, in particular, under the higher education context. For instance, Navarro et al. (2016) focused on organisational agility as a mediator, while Wu et al. (2015) and Chow et al. (2013) used strategic alignment and strategic orientation as mediators in their research. Despite strategic agility being known to influence the performance of organisations operating in dynamic and volatile markets or business environment, research on strategic agility is mainly conducted in the enterprise or information system and information technology contexts (Navarro et al., 2016; Verma et al., 2017). However, there is limited attention given to the critical role of strategic agility in the context of higher education. At present, private HLIs are also faced with the challenges of operating in a turbulent business landscape, and as such, also need strategic agility for sensing market threats, seizing new opportunities that arise, and shaping their internal resources and capabilities (Junni et al., 2015; Mukerjee, 2014).

Therefore, this study intends to address these research gaps by examining the influence of people, specifically types of people and AMO practices, on organisational performance in the presence of strategic agility. The next section describes the theoretical background and research hypotheses, followed by the methodology, results, and conclusion and implications.

2. THEORETICAL BACKGROUND AND RESEARCH HYPOTHESES

2.1. Recent Agility Research in the Malaysian Higher Education Context

As mentioned earlier, research on the agility concept within the higher education sector in Malaysia is still at its infancy stage. Under the Malaysian higher education context, there are limited studies on agility, even less on strategic agility. Menon and Suresh (2020) used the total interpretive structural modeling (TISM) in their study and revealed that leadership, human resources strategies and organisational structure were the most significant factors contributing towards agility of universities and colleges in Malaysia. However, their study only looked at the overall agility of higher education institutions and used TISM to interpret the factors. In this current study, the research framework specifically focuses on people, which includes the types of people and AMO practices, as a key factor influencing strategic agility. AMO practices here could be seen as human resources strategies.

Yusoff et al. (2019), through literature review, analysed agility as a moderator for the marketing function and brand equity among private HLIs in Malaysia. They recommended private HLIs to have agile marketing so as to recruit high quality students and staff but admitted this was relatively an under explored construct. Nonetheless, this is only a conceptual paper without any empirical evidence. The current study intends to position strategic agility as a mediator instead of a moderator because strategic agility has been known to influence organisational performance (Junni et al., 2015; - Oyedijo, 2012). Examining strategic agility as a mediator or a crucial link between people and organisational performance will be able to contribute significantly to the body of knowledge as new insights could be gained into how private HLIs, through the types of people and AMO practices, will be able to achieve the much-needed strategic agility, which in turn increases their organisational performance.

Furthermore, Ghasemy et al. (2018) discovered through a qualitative inquiry on 235 academic leaders from 25 universities in Malaysia that the top four main issues faced by these HLIs are (i) staff affairs management, (ii) finance, budgeting, grants and fundraising, (iii) time management, and (iv) achieving goals, KPIs and standards. What was interesting is that challenges under staff affairs management encompass shortage of local academic talents and negative staff behaviour. This means people as a resource is a major concern for Malaysian HLIs and could explain their poor performance as indicated in the environmental scanning. As such, the current study would be able to provide new insights into the linkage of people and organisational performance via strategic agility.

2.2. *Underpinning Theories*

According to the resource-based view theory, organisations are able to achieve competitive advantage when they have the right set of people, with the right set of skills, doing the right set of tasks within the organisations. That is why it is important that organisations are aware of the types of people needed to gain competitive advantage. Generally, people are categorised into four types such as transformers/star performers, transactors/high performers, followed by performers, and lastly low/non-performers (Branham, 2001; Muthuveloo & Teoh, 2017). For instance, transformers or star performers in the organisations are extremely valued for their innovativeness and creative ideas which can bring high value to the organisations. This makes transformers hard to be replaced, imitated or reproduced by competitors. In other instances, low or non-performers affect the bottom-line of organisations due to their insignificant and low productivity or performance. Thus, people can be considered as the differentiating factor among organisations.

Furthermore, according to the dynamic capability theory, a turbulent business environment dictates the necessity of organisations to have quick responses and adaptation to the rapid changes happening (Eisenhardt & Martin, 2000). One way of achieving this is to have strategic agility which equips organisations with such capabilities. As the higher education sector is becoming more competitive, private HLIs definitely need strategic agility to overcome the challenging business environment. People, with their cumulative knowledge, skills, and experience, are able to quickly read the changing business landscape, and strategically deploy resources promptly to address the occurrences of uncertainties or disruptions that affect them. As such, people contribute positively to the strategic agility of the organisations, and through strategic agility, organisations are able to achieve success in their organisational performance.

2.3. *The Relationship between People and Organisational Performance*

In current times, people are considered not as assets but as a capital to the organisation. The reason for this is because people bring with them different skills, knowledge, and ability that are of value to the organisations. Hence, the role of people is extremely crucial for the overall performance of organisations.

Previous organisational performance studies focused on both leaders and employees. The findings indicate that the personality and style of leaders influence the work performance of employees, organisational climate, and culture of the organisation (Ashford et al., 2017), thus impact organisational performance and sustainability in the long run. Furthermore, the characteristics of employees such as entrepreneurial orientation (Engelen et al., 2015), mindfulness (Hyland et al., 2015), personality (Guay et al., 2016), and work passion (Astakhova & Porter, 2015), are positively related to organisational commitment, which in turn, positively influence organisational performance.

More recent studies have focused on managing knowledge of people and its impact on the performance of organisations (Ha & Lo, 2018; Navarro et al., 2016; Ngoc-Tan & Gregar, 2019). For instance, Muthuveloo et al. (2017) revealed that tacit knowledge of people is considered a valuable resource for organisations to compete with one another. Their study indicated that tacit knowledge influences organisational performance of 108 local and foreign manufacturing companies in Malaysia.

As such, due to the importance of people in organisations, it is pertinent that the organisations are aware of the different types of people found in their organisations, such as the transformer, transactor, performer, and low/non-performer, so that they can be managed effectively and efficiently (Branham, 2001; Muthuveloo & Teoh, 2017). Additionally, organisations need to have the right mix of people in order to achieve organisational success (Valmohammadi & Roshanzamir, 2015). For instance, transformers are known to significantly contribute towards business sustainability and growth of their organisations due to their ability to provide innovative and novel ideas that are of high value (Muthuveloo & Teoh, 2017).

On this basis, it is important for organisations to determine the types of people working in their organisations and match them with the right job for optimisation of both individual and organisational performance (Chan & Muthuveloo, 2018; Valmohammadi & Roshanzamir, 2015). Moreover, the recruitment and selection processes need to be effective in order to get the right person on-board or else suffer the consequences of poor performance (Mir & Mufeed, 2016; Muthuveloo & Teoh, 2017). Organisations can also conduct selective retention in order to retain the right people within their organisations.

However, at times, organisations put too much focus on their low performing employees or non-performers and continue to retain them. This creates low morale among the other employees who are performing, especially for the transformers (Branham, 2001). Not surprisingly, organisations

find it hard to retain their transformers, losing them to their competitors (Branham, 2001; Filley & Aldag, 1978; Murray et al., 2015).

Hence, organisations need to not only know the different types of people in their organisations, but they also need to establish practices that enhance the ability, knowledge, and skills of their people. One way of doing this is for organisations to adopt the AMO practices introduced by Appelbaum et al. (2000). When people are effectively developed and managed, they will be able to provide their values and perspectives which are beneficial to the organisations. This is important as past studies have indicated that the performance of people has a direct link with the performance of organisations.

The AMO practices advocate three components that are needed to increase the individual performance of people. Organisations first need to have proper selection and recruitment processes in order to get the right fit of people into their organisations (Marin-Garcia & Tomas, 2016), then carry out proper training and development for their people to help them acquire new abilities that can increase their capacity at work (Marin-Garcia & Tomas, 2016). Next, organisations need to keep their people motivated by providing financial and non-financial incentives and rewards to increase work commitment and efforts, thus increase performance. Finally, organisations need to provide their people opportunities to get involved in problem-solving and decision-making processes, and share their knowledge within the organisations.

When organisations implement the AMO practices effectively, the performance of people will ultimately increase. According to Gardner et al. (2011), organisations with available opportunities for their employees who are skilled and motivated, experience positive organisational performance. That is why hiring the right type of people and knowing how to enhance their abilities, knowledge and skills through the AMO practices are extremely critical for organisations to optimise their organisational performance (Astakhova & Porter, 2015; Hyland et al., 2015).

As such, it is undeniable that people, especially those in pivotal positions, are critical for organisations. Organisations need to know the types of people and adopt the AMO practices within their organisations so as to achieve superior organisational performance. Therefore, this study intends to test out the following assumptions:

- H1: People significantly affect organisational performance*
- H1a: Types of people significantly affect organisational performance*
- H1b: AMO practices significantly affect organisational performance*

2.4. Linking People and Organisational Performance through Strategic Agility

People and strategic agility

Although literature pertaining to people indicates a direct influence on organisational performance, people can also be a key driving force for enabling organisations to become more strategically agile. However, as mentioned earlier, the characteristics of people according to the four types of transformer, transactor, performer, and low or non-performer can influence strategic agility positively or negatively. Clearly, transformers who are known for their creativity, novel

ideas, and high performance, are most valued in organisations, while the non-performers are considered as liabilities in their organisations due to their negligible contributions (Muthuveloo, 2015; Muthuveloo & Teoh, 2017).

Under the context of higher education, transformers in private HLIs are usually the star faculty members who are well-known for their expertise and innovative research abilities (O'Shea et al., 2005). Moreover, transformers thrive in dynamic situations as they have quick and efficient responses to exploit changes instead of just adapting to them (Muthuveloo, 2015). Private HLIs that are able to recruit and retain transformers will have a higher chance of acquiring strategic agility in their organisations. As such, knowledge of the types of people within the organisation is needed for adoption of the right AMO practices (Kroon et al., 2013; Valmohammadi & Roshanzamir, 2015). An agile workforce translates to higher strategic agility in the organisations. Therefore, this study intends to test out the following assumptions:

- H2: People significantly affect strategic agility*
H2a: Types of people significantly affect strategic agility
H2b: AMO practices significantly affect strategic agility

Strategic agility and organisational performance

Past researchers have generally examined strategic agility under the context of manufacturing industry, with most results indicating the positive effects of strategic agility on organisational performance (Junni et al., 2015; Navarro et al., 2016; Verma et al., 2017). Hence, fostering this relationship enables organisations to cope with the market uncertainties and disruptive changes. This is further reinforced by Oyedijo (2012) who found that Nigerian telecommunication companies with low strategic agility are less adaptable to handle the changing business environment.

In the past, the higher education industry is under a slow cycle market. However, with the effect of globalisation and massification of private higher education, the higher education market has become lucrative and intensely competitive. Subsequently, these changes have transformed the business operations of private HLIs. Those that are unable to cope with the fast-changing environment tend to experience financial losses and become irrelevant. Under such conditions, strategic agility is seen as a mechanism for private HLIs to survive the dynamic changes and remain competitive. Here, Mukerjee (2014) rightly pointed out that despite strategic agility being a crucial capability for organisations, current researchers have neglected to examine it within the higher education context. Therefore, this study intends to test out the following assumption:

- H3: Strategic agility significantly affects organisational performance*

The mediating effect of strategic agility

According to Pucciarelli and Kaplan (2016), strategic agility enables organisations to have flexibility and fluidity in developing and deploying resources to address the occurrences of dynamic changes. Nevertheless, strategic agility has not yet attracted the attention of the higher education researchers, as most research on strategic agility is based on the manufacturing or IT contexts. Despite this, under current dynamic times, private HLIs undeniably need strategic agility to sense out market threats, seize potential opportunities, and shape internal resources and

capabilities (Junni et al., 2015; Mukerjee, 2014). Having strategic agility makes a difference for organisations to outperform one another (Oyedijo, 2012).

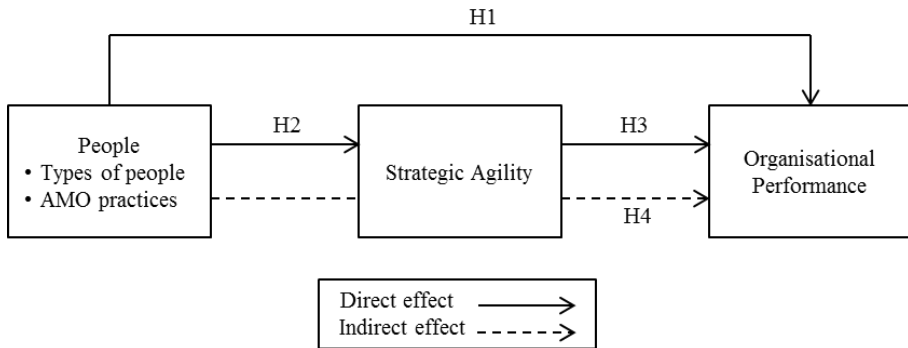
On this basis, the study posits that strategic agility is the crucial link between people and organisational performance. Organisations that develop their people have greater opportunity to leverage strategic agility, which in turn helps organisations to respond appropriately to the uncertainties and disruptions happening in the business environment, thus achieve strong organisational performance. Therefore, this study intends to test out the following assumptions:

H4: Strategic agility mediates the relationship between people and organisational performance

H4a: Strategic agility mediates the relationship between types of people and organisational performance

H4b: Strategic agility mediates the relationship between AMO practices and organisational performance

Figure 1: Research Model



3. METHODOLOGY

The study used a quantitative research method for data collection. The sample of private HLIs was based on purposive sampling from the private HLI master list found in the Ministry of Higher Education website (Jabatan Pendidikan Tinggi, 2018). The registration approval date for the private HLIs also had to be valid during the duration of data collection, thus, the sampled population was 375 private HLIs. Based on Green’s sampling adequacy table, a 66 minimum sample size was required for two predictors, under the assumption of a power of 0.80, alpha value of 0.05, and a medium effect size (Green, 1991, p. 503).

The unit of analysis in this study is the organisation. As such, only one respondent per private HLI was targeted from the top management level due to their depth and breadth of knowledge in their respective organisations. Based on Hair et al. (2017), 100 respondents were identified as the minimum sample size. A web-based survey link was emailed to 375 potential respondents. A total of 155 responses were received (41.33% response rate). As the web-based survey was set with compulsory responses, no missing values were found, and as such, all responses were used for data analysis. SPSS was used to analyse the data collected for demographic profile and

descriptive statistics. Additionally, SmartPLS version 3.2.7, which adopts a partial least squares structural equation modelling (PLS-SEM) technique, was used to analyse the formulated hypotheses (Ringle et al., 2015).

A six-point likert scale with the range of “1 = strongly disagree” to “6 = strongly agree” was used to measure all the constructs established in the research model. The construct of people was measured under two dimensions of types of people (TP) and AMO practices (AMO) with items adapted from past studies of Filley and Aldag (1978), Valmohammadi and Roshanzamir (2015), and Kroon et al. (2013). Next, the construct of strategic agility was modified using items from Trinh (2015) and Souitaris and Maestro (2010). Finally, the measurement items of Chen et al. (2009), and Cruke and Decramer (2016) were adapted for the construct of organisational performance.

4. RESULTS AND DISCUSSION

Prior to testing the measurement model, common method bias, which could potentially affect the research validity due to single sourced data, was tested with Harmon one-factor test (Podsakoff et al., 2003). Based on the unrotated principal component factor analysis on all item measures of the study, the result indicated that six factors were extracted with eigenvalues more than 1.0, accounted for 60.06% of the total variance. A single factor of 34.91%, which explained the biggest variance, was below the recommended value of 50%. As such, the study is cleared of the presence of common method bias.

4.1. *Measurement Model*

The measurement model of the study was then tested for reliability and validity (convergent and discriminant) of measures based on the recommended values by Hair et al. (2017). It should be noted that the reflective measurement model assessment involves first-order constructs of organisational performance, types of people, AMO practices, and strategic agility, while the second-order construct of people was assessed with the latent variable scores of types of people and AMO practices. First, internal consistency reliability for the model was confirmed when the composite reliability of all constructs met the 0.708 criteria, except for the second-order construct of people which had a 0.689 value (see Table 2). However, according to Hair et al. (2017), composite reliability that falls within the range of 0.60 and 0.70 is still acceptable. Thus, the model is assured of construct reliability. Next, convergent validity was established as (i) the factor loadings for all first-order construct measures met the criteria of more than 0.60, after deleting the poor outer loadings of OP1, OP10, TP4, TP5, and SA6; and (ii) the average variance extracted (AVE) of all measures exceeded the criteria of more than 0.50 (see Table 2). Despite the low loading of the second-order construct of people at 0.461, it was retained due to its importance in the model and its AVE of 0.554 met the threshold limit of more than 0.50 as recommended by Hair et al. (2017).

Table 2: Measurement model results

First-order construct	Second-order construct	Measurement item	Loading	AVE	CR
Organisational Performance		OP2 – OP9	0.641 – 0.831	0.559	0.910
Types of People		TP1 – TP3	0.679 – 0.929	0.713	0.880
AMO Practices		AMO1 – AMO5	0.724 – 0.882	0.671	0.910
	<i>People</i>	<i>Types of people</i>	<i>0.946</i>	<i>0.554</i>	<i>0.689</i>
		<i>AMO practices</i>	<i>0.461</i>		
SA		SA1 – SA10	0.710 – 0.828	0.639	0.941

Note: OP = organisational performance; TP = types of people; AMO = AMO practices; SA = strategic agility.

Finally, the Heterotrait-Monotrait ratio (HTMT), which provided a more accurate measure compared with Fornell-Larcker criterion and cross-loadings, revealed that all constructs met the criteria of less than 0.90 (see Table 3) and as such confirmed discriminant validity for the model (Henseler et al., 2015).

Table 3: Discriminant validity (HTMT)

Construct	Types of people	AMO practices	Strategic agility	Organisational Performance
Types of people				
AMO practices	0.168			
Strategic agility	0.307	0.863		
Organisational Performance	0.211	0.517	0.575	

Note: HTMT=heterotrait-monotrait ratio (<0.90).

4.2. Structural Model

Once the measurement model was confirmed valid and reliable, the structural model was analysed on the hypothesised relationships of the constructs in the study. Bootstrapping method of 1,000 resamples was used to test out collinearity, path coefficient significance, loadings, and weights of the constructs. The predictive power of the structural model (R^2) was also tested. Collinearity was not present in the structural model as the tolerance and the variance inflation factor (VIF) values of all constructs were within the recommended values of more than 0.20 and less than 5.00 respectively (see Table 4). The structural model was found to high predictive power (see Table 4) to explain the main dependent constructs of strategic agility and organisational performance as their R^2 values are more than 0.26 (Cohen et al., 2003).

Table 4: Collinearity and predictive power results

Dependent construct	R^2	Independent construct	Dimension	Tolerance	VIF
Strategic agility	0.637	People	TP	0.977	1.024
			AMO	0.977	1.024
Organisational	0.291	People	TP	0.917	1.090

performance	AMO	0.383	2.611
	Strategic agility	0.363	2.753

Note: TP=types of people; AMO=AMO practices; R²=predictive power; Tolerance (>0.2); VIF=variance inflation factor (<5.0).

4.3. Hypothesis Testing

Table 5 shows the summary of the structural model results for all the direct relationships tested. The results indicated that people, including its first-order constructs of types of people and AMO practices, do not have a direct effect on organisational performance, while the remaining direct effects of people, including types of people and AMO practices, to strategic agility, and strategic agility to organisational performance are all supported.

Table 5: Direct relationship results

Hypothesis	Direct relationship	β value	Std. error	t-value	Results
H ₁	People → OP	0.139	0.146	0.951	Not supported
H _{1a}	TP → OP	0.057	0.082	0.696	Not supported
H _{1b}	AMO → OP	0.121	0.156	0.776	Not supported
H ₂	People → SA	0.791	0.033	23.94**	Supported
H _{2a}	TP → SA	0.156	0.051	3.025**	Supported
H _{2b}	AMO → SA	0.759	0.039	19.558**	Supported
H ₃	SA → OP	0.422	0.134	3.141**	Supported

Note: SA = strategic agility; OP = organisational performance; TP = types of people; AMO = AMO practices; Alpha values refer to *p<0.05 and **p<0.01 (based on one-tail test).

Following the analysis of the direct relationships, Table 6 shows that there is mediating effect of strategic agility on the direct relationships in the structural model of the study as all hypotheses are supported.

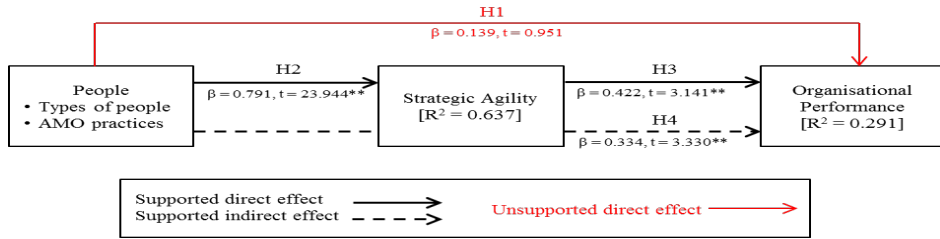
Table 6: Indirect relationship results

Hypothesis	Indirect relationship	β value	Std. error	t-value	Confidence interval		Results
					2.50%	97.50%	
H ₄	People → SA → OP	0.334	0.100	3.330**	0.147	0.548	Supported
H _{4a}	TP → SA → OP	0.066	0.026	2.490*	0.021	0.125	Supported
H _{4b}	AMO → SA → OP	0.320	0.110	2.903**	0.109	0.532	Supported

Note: SA = strategic agility; OP = organisational performance; TP = types of people; AMO = AMO practices; Alpha values refer to *p < 0.05 and **p < 0.01 (based on two-tailed test).

Figure 2 illustrates the overall results of the hypothesis testing.

Figure 2: Significant path analysis



5. CONCLUSION AND IMPLICATIONS

Currently, organisations need strategic agility in order to develop and deploy resources in a fluid and flexible manner so as to cope with the dynamic changes that are happening in the business environment (Pucciarelli & Kaplan, 2016). More specifically, strategic agility is postulated as the crucial link in the relationship between one of the key resources of organisations, namely people, and organisational performance. Undeniably, people enable organisations to acquire the differentiating factor among competitors in current turbulent business landscape. A research model was conceptualised to examine the relationships of people, strategic agility, and organisational performance. Based on the findings, it can be concluded that strategic agility does play an important role in the direct relationship of people and organisational performance, as it strongly mediates this relationship. As such, this study has empirically proven that strategic agility is the crucial link between people and organisational performance.

First, in hypothesis one (H1), people are not related to organisational performance. Similarly, the two constructs of people examined with organisational performance i.e., types of people (H1a) and AMO practices (H1b) revealed insignificant relationships. This outcome is inconsistent with past studies which claimed that people directly influence the performance of organisations (Ashford et al., 2017; Astakhova & Porter, 2015; Valmohammadi & Roshanzamir, 2015). One reason for this finding could be that as individuals, people do not have a direct impact on organisational performance, but it is only when their abilities are enhanced, individual performance increases, hence, indirectly increases the overall performance of the organisation. In order to increase individual performance, private HLIs should adopt the AMO practices which are known to enhance the ability and motivation of people, and provide workplace opportunities for people to perform well (Appelbaum et al., 2000; Gardner et al., 2011). Subsequently, organisations should experience improvement in the overall organisational performance. Furthermore, the insignificant finding implies the presence of an intervening mediator. This happens when there is a third variable that could further explain the relationship between people and organisational performance (Hair et al. 2017). In this study, strategic agility was found to be the third variable and a strong mediator in this relationship.

Second, in hypothesis two (H2), people are related to strategic agility. Likewise, both constructs of people examined i.e., types of people (H2a) and AMO practices (H2b), indicated significant relationships with strategic agility. This outcome is consistent with past studies which revealed that strategic agility of organisations is highly dependent on people in the organisations (Khavari et al., 2016; Oyedijo, 2012). In particular, the types of people contribute positively towards strategic agility of organisations. For instance, transformers or star performers are very much needed by organisations as they are alert, adaptive, and have the ability to convert disruptive changes into novel ideas which creates value for their organisations (Oyedijo, 2012). As such,

private HLIs should acquire more transformers and retain them with the adoption of AMO practices. Through these practices, people's abilities could be further enhanced through the right set of training and development (Khavari et al., 2016). Motivation of people could also be further increased with rewards and involvement in problem-solving and decision-making opportunities. When organisations provide the three elements of ability, motivation, and opportunity, the individual performance of people should increase exponentially as they now have stronger capabilities to respond effectively and efficiently towards disruptive external market changes (Oyedijo, 2012). This also implies that private HLIs should prioritise on building the capacity and capability of their people so as to acquire the much-needed strategic agility.

Third, in hypothesis three (H3), strategic agility is related to organisational performance, as it was found to have a significant relationship with organisational performance. This outcome is consistent with past studies (Junni et al., 2015; Verma et al., 2017). Strategic agility is most crucial for organisations when the business landscape is unpredictable and turbulent. Organisations that have strategic agility would be aware of current updates or trends at the marketplace and have quick responses to changes, especially in strategic decision-making and decisive implementation (Muthuveloo, 2015). On this basis, private HLIs should be alert on customer requirements, make quick strategic decisions, and have the desire to adapt to rapidly changing business environment. Essentially, having strategic agility enables private HLIs capitalize potential opportunities, and remain relevant in the intensely competitive higher education market, thus, achieve organisational performance and sustain future business growth.

Finally, in hypothesis four (H4), strategic agility mediates the relationship between people and organisational performance. Strategic agility was also found to mediate the relationships of types of people (H4a) and AMO practices (H4b), with organisational performance. Although there was no direct relationship between people and organisational performance, the mediating effect of strategic agility could still take place (Hair et al., 2017). This outcome is consistent with past studies which found that despite the lack of direct effect, people could still indirectly influence organisational performance with the presence of a mediator (Boehm et al., 2015; Chow et al., 2013). In the current study, strategic agility was found to have a strong mediating effect on the relationship between people and organisational performance. Organisations should develop their people with high levels of training in order to increase strategic agility (Khavari et al., 2016). When there is an increase in strategic agility, it should then increase the overall performance of the organisations.

The current study has managed to provide significant contributions to the body of knowledge. For instance, empirical evidence of this study has enriched the literature of resource-based view and dynamic capability theories. The role of strategic agility is now clearer. Empirical findings indicate strategic agility crucially links people and organisational performance. Specifically, through AMO practices, people are transformed into valuable, rare, inimitable, and non-substitutable resources for private HLIs to achieve strategic agility. Private HLIs, who are currently operating in a dynamic business environment, definitely need strategic agility as a protective mechanism against rapid disruptions and uncertainties. With the presence of strategic agility, private HLIs will be able to increase their organisational performance. Furthermore, findings of the study have narrowed the research gap of limited empirical studies conducted on strategic agility in the higher education context.

To conclude, Mukerjee (2014) has highlighted the importance of universities in Australia to have strategic agility which is seen as a critical capability during disruptive changing environment. In the Malaysian context, private HLIs have found it challenging to perform well in current dynamic and unpredictable business environment (Ahmad & Ng, 2015). Past experiences have highlighted the weaknesses of private HLIs which involved closures, financial losses, poor rankings locally or globally, and poor graduate employability (Chan & Muthueloo, 2018; Lim & Williams, 2015). This then poses a concern as to how private HLIs can continue to be a major contributor towards the nation's economic growth and global competitiveness. The higher education sector is so competitive that in order to remain relevant, private HLIs need to be strategically agile. The current study has managed to provide evidence that private HLIs should leverage their people in order to acquire strategic agility. In particular, private HLIs in Malaysia should focus on the right types of people, supported by appropriate AMO practices, in order to develop the strategic agility needed to optimise their organisational performance and sustain business growth in current dynamic business landscape.

Further research could delve deeper into the types of people and their link to strategic agility. As there are three distinctive types of people found within any organisations such as transformers, transactors, and performers, it would be interesting to investigate which types of people will significantly influence strategic agility. Additionally, future research could extend this study to the public higher education sector to examine if strategic agility has the same influence on their people and organisational performance. As the current business environment is disrupted by rapid changes and uncertainties, strategic agility would be vital for organisations to sustain their performance and business growth.

REFERENCES

- Ahmad, A. R., & Ng, K. S. (2015, August 25-27). Balanced Scorecard in Higher Education Institutions: What Should Be Consider? (pp. 64-68). *Proceedings from International Symposium on Technology Management and Emerging Technologies (ISTMET)*. Langkawi, Kedah: Malaysia. <https://doi.org/10.1109/ISTMET.2015.7359002>
- Appelbaum, E., Bailey, T., Berg, P., & Kallenberg, A. L. (2000). *Manufacturing advantage: Why high-performance work systems pay off*. Cornell University Press.
- Ashford, S. J., Wellman, N., de Luque, M. S., de Stobbeleir, K. E. M., & Wollan, M. (2017). Two roads to effectiveness: CEO feedback seeking, vision articulation, and firm performance. *Journal of Organisational Behaviour*, 39(1), 1-14. <https://doi.org/10.1002/job.2211>
- Astakhova, M. N., & Porter, G. (2015). Understanding the work passion – performance relationship: The mediating role of organisational identification and moderating role of fit at work. *Human Relations*, 68(8), 1315-1346.
- Barney, J. B., & Arikan, A. M. (2001). The resource-based view: Origins and implications. In M.A. Hitt., R. E. Freeman, & J. S. Harrison (Eds.), *Handbook of Strategic Management* (pp. 124-188). Blackwell.
- Boehm, S. A., Dwertmann, D. J., Bruch, H., & Shahmir, B. (2015). The missing link? Investigating organisational identity strength and transformational leadership climate as mechanisms that connect CEO charisma with firm performance. *The Leadership Quarterly* 26, 156-171. <https://doi.org/10.1016/j.leaqua.2014.07.012>

- Branham, L. (2001). *Keeping the people who keep you in business: 24 ways to hang on to your most valuable talent*. American Management Association.
- Chan, J. I. L., & Muthuveloo, R. (2018). Key success factors for organisational performance of private HLIs in Malaysia. *Strategic Direction*, 34(8), 7-9. <https://doi.org/10.1108/SD-03-2018-0041>
- Chen, S. H., Wang, H. H., & Yang, K. J. (2009). Establishment and application of performance measure indicators for universities. *The TQM Magazine*, 21(3), 220-235. <https://doi.org/10.1108/17542730910953004>
- Chow, I. H. S., Teo, S. T. T., & Chew, I. K. H. (2013). Human Resource Management systems and firm performance: The mediation role of strategic orientation. *Asia Pacific Journal of Management*, 30, 53-72. <https://doi.org/10.1007/s10490-012-9288-6>
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioural sciences* (3rd ed.). Lawrence Erlbaum Associates Publishers.
- Cruke, S., & Decramer, A. (2016). The development of a measurement instrument for the organisational performance of social enterprises. *Sustainability*, 8(2), 1-30. <https://doi.org/10.3390/su8020161>
- Eisenhardt, K., & Martin, J. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10-11), 1105-1121. [https://doi.org/10.1002/1097-0266\(200010/11\)21:10/11<1105::AID-SMJ133>3.0.CO;2-E](https://doi.org/10.1002/1097-0266(200010/11)21:10/11<1105::AID-SMJ133>3.0.CO;2-E)
- Engelen, A., Gupta, V., Strenger, L., & Brettel, M. (2015). Entrepreneurial orientation, firm performance, and the moderating role of transformational leadership behaviors. *Journal of Management*, 41(4), 1069-1097. <https://doi.org/10.1177/0149206312455244>
- Filley, A. C., & Aldag, R. (1978). Characteristics and measurement of an organisational typology. *The Academy of Management Journal*, 21(4), 578-591.
- Gardner, T., Wright, P., & Moynihan, L. M. (2011). The impact of motivation, empowerment, and skill-enhancing practices on aggregate voluntary turnover: The mediating effect of collective affective commitment. *Personnel Psychology*, 64(2), 315-350. <https://doi.org/10.1111/j.1744-6570.2011.01212.x>
- Ghasemy, M., Hussin, S., Megat Daud, M. A. K., Md Nor, M., Ghavifekr, S., & Kenayathulla, H. B. (2018). Issues in Malaysian higher education: A quantitative representation of the top five priorities, values, challenges, and solutions from the viewpoints of academic leaders. *SAGE Open*, 8(1), 1 – 15. <https://doi.org/10.1177/2158244018755839>
- Green, S. (1991). How Many Subjects Does It Take To Do A Regression Analysis?. *Multivariate Behavioral Research*, 26 (2), 499–510. https://doi.org/10.1207/s15327906mbr2603_7
- Guay, R. P., Choi, D. J., Oh, I. S., Mitchell, M. S., Mount, M. K., & Shin, K. H. (2016). Why people harm the organisation and its members: Relationships among personality, organisational commitment, and workplace deviance. *Human Performance*, 29(1), 1-15. <https://doi.org/10.1080/08959285.2015.1120305>
- Ha, S. H., & Lo, M. C. (2018). An empirical examination of knowledge management and organisational performance among Malaysian manufacturing SMEs. *International Journal of Business Innovation and Research*, 17(1), 23-31. <https://doi.org/10.1504/IJBIR.2018.094196>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modelling (PLS-SEM)* (2nd ed.). SAGE Publications.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>

- Hyland, P. K., Lee, R. A., & Mills, M. J. (2015). Mindfulness at work: A new approach to improving individual and organisational performance. *Industrial and Organisational Psychology*, 8(4), 576-602. <https://doi.org/10.1017/iop.2015.41>
- Jabatan Pendidikan Tinggi (2018). Senarai daftar IPTS 31 Disember 2018. *Arkib JPT*. Retrieved from <https://drive.google.com/drive/folders/16HLYe3FamSpdHTsFZP81Sg6Ejza3mp1>
- Junni, P., Sarala, R., Tarba, S., & Weber, Y. (2015). The role of strategic agility in acquisitions. *British Journal of Management*, 26(4), 596-616. <https://doi.org/10.1111/14678551.12115>
- Khavari, S. A., Arasteh, H., & Jafari, P. (2016). Assessing the level of organisational universities agility: Case study of Islamic Azad University in Mazandaran. *Mediterranean Journal of Social Sciences*, 7(3), 112-117. <https://doi.org/10.5901/mjss.2016.v7n3s2p112>
- Kroon, B., Voorde, K. V. D., & Timmers, J. (2013). High performance work practices in small firms: A resource-poverty and strategic decision-making perspective. *Small Business Economics*, 41(1), 71-91. <https://doi.org/10.1007/s11187-012-9425-0>
- Lewin, K. M. (2015). *Educational access, equity, and development: Planning to make rights realities*. UNESCO: International Institute for Educational Planning.
- Lim, P., & Williams, G. (2015). *Private higher education in Malaysia – Avoiding a hidden crisis?* [PowerPoint slides]. Penang Institute. <https://penanginstitute.org/programmes/penang-institute-in-kuala-lumpur/private-higher-education-in-malaysia-avoiding-a-hidden-crisis/>
- Marin-Garcia, J. A., & Tomas, J. M. (2016). Deconstructing AMO framework: A systematic review. *Intangible Capital*, 12(4), 1040-1087. <https://doi.org/10.3926/ic.838>
- Menon, S., & Suresh, M. (2020). Factors influencing organisational agility in higher education. *Benchmarking: An International Journal, ahead-of-print*. <https://doi.org/10.1108/BIJ-04-2020-0151>
- Mir, A. A., & Mufeed, U. (2016). Employee retention – A key tool for achieving competitive advantage. *International Journal of Engineering and Management Research*, 6(6), 334-337.
- Mukerjee, S. (2014). Agility: A crucial capability for universities in times of disruptive change and innovation. *Australian Universities' Review*, 56(1), 56-60. <https://www.learntechlib.org/p/154480/>
- Murray, R., Barrick, G. R., Thurgood, T. A., & Smith, S. H. (2015). Collective organisational engagement: Linking motivational antecedents, strategic implementation, and firm performance. *Academy of Management Journal*, 58(1), 111-135. <http://dx.doi.org/10.5465/amj.2013.0227>
- Muthuveloo, R. (2015). *SWIM: Crafting winning corporate strategy for business sustainability*. Pearson Malaysia Sdn Bhd.
- Muthuveloo, R., Shanmugam, N., & Teoh, A. P. (2017). The impact of tacit knowledge management on organisational performance: Evidence from Malaysia. *Asia Pacific Management Review*, 22(4), 192-201. <https://doi.org/10.1016/j.apmr.2017.07.010>
- Muthuveloo, R., & Teoh, A. P. (2017, October 12). Managing Employees' Irrational Behaviour Through Employees' Classifications. *Paper presented at Conference on Management and Behavioural Studies*. Universitas Tarumanagara, Jakarta.
- Navarro, J. G. C., Soto, P. S., & Wesley, A. K. P. (2016). Structured knowledge processes and firm performance: The role of organisational agility. *Journal of Business Research*, 69(5), 1544-1549. <https://doi.org/10.1016/j.jbusres.2015.10.014>
- Ngoc-Tan, N., & Gregar, A. (2019). Knowledge management and its impacts on organisational performance: An empirical research in public higher education institutions of

- Vietnam. *Journal of Information and Knowledge Management*, 18(02), 1-29. <https://doi.org/10.1142/S0219649219500151>
- O'Shea, R. P., Allen, T. J., Chevalier, A., & Roche, F. (2005). Entrepreneurial orientation, technology transfer and spinoff performance of U.S. universities. *Research Policy*, 34(7), 994-1009. [http://www.sciencedirect.com/science/article/pii/S00487333\(05\)00116-2](http://www.sciencedirect.com/science/article/pii/S00487333(05)00116-2)
- Oyedijo, A. (2012). Strategic agility and competitive performance in the Nigerian telecommunication industry. *Business and Management Review*, 1, 39-50.
- Podsakoff, P. M., MacKenzie, S. B., Lee, Y. L., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Pucciarelli, F., & Kaplan, A. (2016). Competition and strategy in higher education: Managing complexity and uncertainty. *Business Horizon*, 59(3), 311-320. <https://doi.org/10.1016/j.bushor.2016.01.003>
- Ringle, C. M., Wende, S., & Becker, J. M. (2015). *SmartPLS 3*. Boenningstedt: SmartPLS GmbH. <https://www.smartpls.com/>
- Souitaris, V., & Maestro, B. M. M. (2010). Polychronicity in top management teams: The impact on strategic decision processes and performance of new technology ventures. *Strategic Management Journal*, 31(6), 652-678. <https://doi.org/10.1002/smj.831>
- Trinh, P. T. (2015). Building enterprise systems infrastructure - Flexibility as enabler of organisational agility: Empirical evidence. *European Conference on Information Systems (ECIS) 2015 Completed Research Papers*, 185, 1-17. <https://doi.org/10.18151/7217506>
- Valmohammadi, C., & Roshanzamir, S. (2015). The guidelines of improvement: Relations among organisational culture, TQM and performance. *International Journal of Production Economics*, 164(C), 167-178. <https://doi.org/10.1016/j.ijpe.2014.12.028>
- Verma, V., Bharadwaj, S. S., & Nanda, M. (2017). Comparing agility and absorptive capacity for superior firm performance in dynamic environment. *International Journal of Business Environment*, 9(1), 1-17. <https://doi.org/10.1504/IJBE.2017.10005662>
- Walter, A. T. (2020). Organisational agility: ill-defined and somewhat confusing? A systematic literature review and conceptualization. *Management Review Quarterly*, 1-49. <https://doi.org/10.1007/s11301-020-00186-6>
- Wu, S. P. J., Straub, D. W., & Liang, T. P. (2015). How IT governance mechanisms and strategic alignment influence organisational performance: Insights from a matched survey of business and IT managers. *MIS Quarterly*, 39(2), 497-518.
- Yusoff, Y., Alias, Z., Abdullah, M., & Mansor, Z. (2019). Agile marketing conceptual framework for private higher education institutions. *International Journal of Academic Research Business and Social Sciences*, 9(1), 1418-1426.