



## Comparing perceptions of leadership, innovation and performance in Asian SMEs

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### ABSTRACT

Having a clear understanding of how leaders perceive their leadership behaviours and firms' situation is critical to help SMEs grasp their strengths and weaknesses. The current paper, therefore, aims to examine the perception towards leadership behaviours, innovation and organizational performance among Asian SMEs. SMEs in China, Japan, Vietnam and Thailand, responded to a survey that revealed their perceptions on four behaviours associated with Design Leadership, four levels of Workplace Innovation, and two types of organizational performance; Profitability and Growth. The analysis of variance was conducted to provide a complete picture of the comparison among the countries. The results revealed that there was a significant difference between Thailand and Japan, Vietnam and Japan, China and Japan on Design Leadership. With relations to Workplace Innovation, there was a negative variance of score between Vietnam and Thailand, and China and Thailand. Finally, significant differences were found amongst most of the countries on Profitability and Growth. The study would assist researchers in understanding how Asian SMEs perceive their leadership behaviours; stages of innovation, and assess their performance. With an accurate perception and understanding, it would lead to the creation of proper strategies and training programs that would contribute to the development of Asian SMEs.

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## Introduction

Researchers argue that leadership, knowledge capital and infrastructure are essential factors that contribute to innovation capabilities and productivity growth in Small and Medium Enterprises (SMEs). SMEs, in turn, are a strong force that drives the country's economy. Asian countries, like other parts in the world, have a large number of SMEs and these SMEs have played an essential role in their economic growth.

For instance, since the economic reform with 'Doi Moi' in 1986, Vietnam has experienced rapid economic growth. SMEs in Vietnam are believed to have held important positions in the country's economic development (Harvie 2008). In Vietnam, SMEs

represent 97% of the number of businesses in the country; employ 77% of the workforce and account for 80% of the retail market. It was recorded that SMEs produce over 40% of the GDP, and on average, have seen their profits grow approximately 20% each year (Runckel 2012). Similar to Vietnam, the Chinese government released the Growth Plan for SMEs in the 12th Five-Year Programme period. It was its first national-level particular plan for SMEs to improve the capacity of SME business and to optimize the structure of SMEs in China (Yang 2011). In China, according to the Minister of industry and information technology, SMEs comprise 99% of all firms, account for 60% of GDP and fiscal revenues and employ nearly 80% of the country's population. Furthermore, SMEs have become a significant force in pushing forward China's science and technology innovation. SMEs, in fact, currently account for 65% of the country's all invention patents, 75% of corporate innovations and 80% of new product developments (Dawn.Com 2012).

The perceptions of SMEs on leadership behaviours, workplace innovation and performance, are essential due to the lack of support or disadvantage of SMEs in its innovation practices. While SMEs have been recognized as a vital force to a country's economic development, the implementation and creation of innovation in SMEs that led to overall performance was limited. Conducting a study that provides a clear picture of how SMEs leaders perceived and observed their leadership behaviours, innovation and performance would help SMEs grasp its strengths and weaknesses. Besides, the study would also expand the research and literature to the field of leadership and workplace innovation.

With the significant importance of SMEs in Asian countries along with their innovation capacity, the current paper intends to compare the similarity and difference in SMEs' perceptions among four Asian countries towards leadership behaviours, innovation and organizational performance. The researchers, therefore, aim to answer the following research question: Are there differences in perceptions towards leadership behaviours, innovation and organizational performance among SMEs in China, Thailand, Japan and Vietnam? By investigating the similarity and difference, it should assist researchers to understand how Asian SMEs perceive their leadership behaviours; stages of innovation and assess their performance and with accurate perception and understanding, it would lead to the creation of proper strategies and training that would contribute to the development of Asian SMEs.

## Literature review

### *SMEs in Asia*

In the world economy, SMEs are one of the most significant drivers of innovations in most countries (Mastercard 2013). SMEs are considered as the backbone of national economic development in many Asian economies (Harvie 2010). SMEs' potential benefits may include job creation, private ownership stimulation, diversification of economic activities encouragement, and opportunities for developing entrepreneurial skills (Harvie and Lee 2002, 2005; Lim and Kimura 2009; Yamazaki 2013). Panitchpakdi (2006) also sees SMEs as a source of employment, competition, economic dynamism, and innovation.

China has been considered as the winner in the world competitiveness rankings, ranking from 23<sup>rd</sup> in 2012 to 14<sup>th</sup> in 2019 (IMD World Competitiveness Rankings 2019). As highlighted by Zhou (2012), over 40 million SMEs in China account for approximately

99% of all Chinese firms and have a significant contribution to the robust and steady growth of the country's economy. China's SMEs contributed to nearly 60% of its GDP, 50% of tax revenue, nearly 60% of export and 75% of new employment (Zhou 2012). China's SMEs have been the drivers of innovation, accounting for nearly 70% of invention patents (MasterCard Worldwide 2013). Zhou (2012) surmises that the volatile growth in China may be possible, but it will rely on an appropriate strategy for going global. MasterCard Worldwide (2013) has acknowledged China's remarkable growth in the last few decades but also pointed out the need for the country to embark on a new wave of industrial growth driven by innovation rather than relative labour cost advantages to remaining globally competitive.

In Vietnam, in line with the economic reform with 'Doi Moi' in 1986 and the Enterprise Law promulgation in 2000 similar to China, SMEs have contributed significantly to employment, output and entrepreneurship development (Nhung and Nhung 2013). As noted by Nguyen (2019), SMEs in Vietnam represent 98% of the number of businesses. SMEs in Vietnam also create more than 50% jobs for the local people and contribute more than 40% of national GDP and about 18% of national budget. SMEs in Vietnam, therefore, are recognized as the driving force of the national economy (Molnar et al. 2011). According to the report of Swiss State Secretariat for Economic Affairs (SECO 2013), the Ministry of Planning and Investment, Vietnam Government had approved the 2<sup>nd</sup> Five-year plan on SMEs development to encourage the renovation and application of new technologies in SMEs. The plan objectives are 10–12% of SMEs are export-driven; SMEs share 40% of total capital investment; SMEs generate 4 million additional jobs; labour productivity will increase by 29–32% as compared to 2010; the proportion of trained workers will be 55% of the total labour force; jobs for 8 million workers created (SECO 2013). Although SMEs in Vietnam have developed significantly and have been the driving force behind Vietnam's economic growth, the sector still faces significant hurdles to grow and to become internationally competitive resulting from lacking technology-creating capability (Nguyen et al. 2009). The plan also proposes solutions to perfect the legal framework on SMEs' operation, assist them in accessing financial and credit sources, and motivate the renovation and application of new technologies in SMEs (SECO 2013).

Similarly, SMEs in Thailand have also been an avenue for job creation and local capital formation. As the core of the country's economic development, SMEs in Thailand have contributed to increasing competitiveness of the country. More particularly, Thailand was ranked as 30<sup>th</sup> in 2012 and 25<sup>th</sup> in 2019, (IMD 2019). According to Charoenrat, Harvie, and Amornkitvikai (2013), SMEs have significantly contributed to the Thai economy, accounting for 99% of all business establishments, nearly 75% of total employment, and nearly 40% of the total GDP. SMEs have been highly innovative, and hence, the sector leads to the utilization of Thai natural resources which in turn translates to growing the country's wealth through higher productivity (Chittithaworn et al. 2011). Amornkitvikai et al. (2013), however, have pointed out SMEs have struggled to survive under intense competitive environments since the sector has traditionally relied on low-cost labour and natural resource advantages rather than technological capability or qualified human capital.

SMEs in Asia, therefore, typically account for the vast majority of companies in the economy, create the majority of employment, and are responsible for a substantial number of technical innovations in various sectors. Consequently, SMEs growth and survival are critical for sustainable and inclusive socio-economic development under

intensified global competition. Furthermore, the market globalization and increasing international competition force SMEs to seek new, innovative, flexible and imaginative ways to survive (Casals 2011).

### ***Innovation, leadership and performance in SMEs***

Mbizi et al. (2013) argued that innovation is the ability to improve and modify existing technologies. In particular, technological innovation has a significant impact on SMEs performance (Saleem et al. 2020). Innovation creates new technologies, applied to process and product technologies and production organization and management. Several studies have indicated that internal and external sources constitute innovation capabilities and would also contribute to SMEs performance (e.g. Mathews et al. 2018; Mbizi et al. 2013). According to Oluwajoba (2007, cited in Mbizi et al. 2013), internal sources comprise three elements: (1) founders/managers' educational background and working experience, (2) the workforce's professional qualifications and (3) technological efforts. The external sources also included three elements: (1) frequency of networking with a variety of other private sector agents and various institutions, (2) geography proximity advantages associated with networking, and (3) the nature and extent of institutional support received.

In the SMEs context, governments of Asian countries, like China, Japan, Vietnam and Thailand, have been seeking their ways to support SMEs concerning innovations, aiming at going forwards meeting the country's economic and social challenges (Yang 2011; SECO 2013). Understanding which factors influence innovation in SMEs is significant to increase value creation from efficient innovation implementation. Researchers, such as Mbizi et al. (2013), identified six key factors that have a significant influence on innovations in SMEs: (1) firm characteristics, (2) managers' characteristics, (3) size and age of the organization, (4) technological factors, (5) organizational factors and (6) environmental factors.

In terms of SME leadership, the research found that leadership, particularly from the owner-manager in SMEs, is significant in encouraging innovation and supplying the management and resources to make it happen (Ratam and Mazzarol 2003). Leadership and innovation in SMEs are usually complementary to each other to achieve the organization's business objectives, including sustainable growth and profitability (Allison, Kitching, and Hartshorn 2009). Stanley conducted a study on clinical leadership and innovation and suggested that effective leadership leads to innovation, innovation leads to change, and that change leads to an improvement in business performance (Stanley 2012). Likewise, it is evident that effective leadership can lead to improved innovation, productivity and sustained competitive advantage for organizational leadership improvement (Obiwuru et al. 2011).

### **Method**

The four countries, Japan, China, Thailand and Vietnam, were selected as the targeted countries in this study due to their different stages of economic development classifications and their advancement of innovation in Asia. In this study, the balance of the two criteria was essential. While Japan and China represented developed or newly developed countries and are more advanced in their innovation implementation, Thailand and

Vietnam were both classified as developing countries and had less innovative practices when compared with the former countries (United Nations 2020; Dutta et al. 2019; Gao and Zhou 2019).

It is acknowledged that the definitions of SMEs were varied across the countries. For example, Vietnam categorized its SME into micro-enterprises (less than ten persons), small enterprises (10 to 49 persons) and medium-sized enterprises (50 to 299 persons) in its SMEs development plan (Tran, Le, and Nguyen 2008). SME definitions in Thailand were set, according to the Thailand Ministry of Industry, by industry types (e.g. production, services, wholesales) and the number of employees (OECD 2016) which seemed to be similar to the definitions adopted by Japan's Ministry of Economy, Trade and Industry for Japanese SMEs (Economist Intelligence Unit 2010). However, more complicated definitions of SMEs could be found in China. The classification of micro, small or medium-sized enterprises was dependent on a series of variables such as the industry, operating income, total assets and its number of employees (EU SME, 2019). Having different definitions across the countries and no universal SME definition, the researchers decided to employ the local definition of each country when conducting the survey.

Two strategies were adopted to recruit the intended number of respondents for the sample. The first strategy was a web-based survey, and the second was a self-administered questionnaire distributed through training programs, seminars and other events organized by SME associations and other agencies in the respective countries. The list of SMEs was assessed through the databases provided by SME public and private associations in each country (e.g. TA SME, VINASME). The researchers also engaged SME agencies to obtain permissions to distribute survey questionnaires during their events, seminars and training programs. Positive feedback was received from some of those agencies, who were willing to assist with the distribution and collection of the survey questionnaires. The management of SMEs in Thailand, Vietnam, Japan, and China was approached to complete a survey questionnaire using a five-point Likert scale. The unit of study in this research is 'organisation', so multiple respondents from a single SME are not allowed. Therefore, one response represents one SME in this study. The questionnaire comprises a Design Leadership Questionnaire (DLQ) that was developed by Muenjohn (see Muenjohn et al. 2013). McMurray and Dorai developed the twenty-four item Workplace Innovation Scale (WVE) instrument (2003) measured the four dimensions of workplace innovation.

The instruments are tested for their reliability and validity. An Exploratory Factor Analysis (EFA) is used to examine to what extent the dimensions of the variables are linked to their underlying variables. The results indicate that all dimensions load nicely onto a single latent factor with positive eigenvalue. The value of Average variance extracted (AVE) of Design Leadership and Workplace Innovation are 0.795 and 0.712, respectively, indicating that there is no issue with discriminant validity and convergent validity (The value for AVE for each dimension should be above 0.5 as suggested by Fornell 1982). The comparative fit index (CFI) values are 0.995 and 0.985, respectively, showing that the fit of the model to the data is reasonable. The reliability of data is also checked using Cronbach's alpha. The results report that all of the dimensions of Design Leadership and Workplace Innovation are greater than 0.90, indicating that the scales are highly reliable (Nunnally 1994).

The purpose of this paper was to compare the respondents' perceptions of the concerned variables. It assessed how SMEs leaders perceived themselves on their practices of leadership behaviours, the implementation of their firms' innovation and their perceptions of organizational performance. An Analysis of Variance (ANOVA) was the appropriate and effective statistical and analytical technique for this purpose. The analytical technique provided an insight into respondents' perception towards leadership behaviours, workplace innovation and organizational performance of SMEs in the four Asian countries.

## Results

Approximately a total of 2,900 surveys were distributed with 1,137 being usable, representing a 39% response rate. SMEs from the four Asian countries participate in this study with 267 SMEs in Japan, 531 SMEs in Thailand, 165 SMEs in Vietnam and 174 SMEs in China. The SMEs responded in a survey that revealed their perceptions on four behaviours associated with Design Leadership, four levels of Workplace Innovation, and two organizational performance indicators; Profitability and Growth. Over 70% (72.6%) of respondents in the four countries work at the management level. For the age groups, the majority of respondents were aged between 31–40 years old, represented by 32%, followed by 27% of respondents aged from 41 to 50 years old. By countries, Thailand and Japan have the highest number of respondents being from 41 to 50 years old, while most respondents in Vietnam and China are those aged between 31–40 years old. The distribution of respondents by gender is consistent across countries but not so in Japan, where 82% of respondents were male. According to educational levels, the majority of respondents have a degree/bachelors in all countries. The results also show that respondents working in the retail sector take the most substantial proportion from the total population (33%), followed by the service sector (15%) and manufacturing sector (11.5%). By countries, Thailand and Vietnam have the highest number of people working in the retail industry. Most respondents in China are working in the manufacturing sector, while Japan has the highest number of people working in the agriculture and forestry sector.

Table 1 presents the descriptive analysis of Design Leadership, Workplace Innovation, and the company's performance for the overall sample (Four countries). For the four dimensions of design leadership, Envisioning the Future has the highest mean score

**Table 1.** Mean score – overall sample.

Variable	Mean	Std. Dev.
<i><b>Design Leadership</b></i>		
Envisioning the Future	2.89	0.64
Directing Design Investment	2.82	0.66
Manifesting Strategic Intent	2.76	0.64
Creating and Nurturing an Innovative Environment	2.82	0.64
<i><b>Work Innovation</b></i>		
Organization Innovation	2.69	0.70
Workplace Innovation Climate	2.70	0.70
Individual Innovation	2.73	0.64
Team Innovation	2.65	0.68
<i><b>Organizational Performance</b></i>		
Profitability	2.55	0.86
Growth	2.53	0.85

among respondents ( $M = 2.89$ ) while Manifesting Strategic Intent has the lowest score ( $M = 2.76$ ). For four dimensions of Workplace Innovation, Individual Innovation has the highest mean score ( $M = 2.73$ ), and Team Innovation has the lowest mean score ( $M = 2.69$ ). The mean score of Profitability and Growth are 2.55 and 2.53, respectively.

Table 2 reports the Japanese respondents' mean and standard deviation scores for all variables and their respective dimensions. Similar to the overall sample, within the dimension of Design Leadership, the highest mean score is Envisioning the Future ( $M = 2.40$ ), but the dimension with the lowest score is Directing Design Investment ( $M = 2.28$ ). With relation to Workplace Innovation, Individual Innovation has the highest mean score of 2.24, followed by Workplace Innovation Climate. Both Profitability and Growth have a mean lower than that of the total population.

Table 3 provides the Thailand respondents' mean and standard deviation scores for all variables and their respective dimensions. Overall, Thailand takes the highest number of observations in the sample of analysis. Compared with results obtained from Japanese respondents, mean scores of Design Leadership are not consistent in four dimensions. Envisioning the Future has the highest mean score ( $M = 3.08$ ), like in the case of Japan. However, Manifesting Strategic Intent has the lowest score of 2.94. About Workplace Innovation, the highest and lowest scores can be found in Workplace Innovation Climate and Individual Innovation, respectively. Finally, companies in Thailand have an average score of Profitability and Growth higher than the average score of the total population.

**Table 2.** Mean score – Japan.

Variable	Mean	Std. Dev.
<i>Design Leadership</i>		
Envisioning the Future	2.40	0.70
Directing Design Investment	2.28	0.69
Manifesting Strategic Intent	2.34	0.69
Creating and Nurturing an Innovative Environment	2.29	0.66
<i>Work Innovation</i>		
Organization Innovation	2.18	0.78
Workplace Innovation Climate	2.19	0.76
Individual Innovation	2.24	0.69
Team Innovation	2.18	0.71
<i>Organizational Performance</i>		
Profitability	1.91	0.94
Growth	1.97	1.02

**Table 3.** Mean score – Thailand.

Variable	Mean	Std. Dev.
<i>Design Leadership</i>		
Envisioning the Future	3.08	0.51
Directing Design Investment	3.00	0.51
Manifesting Strategic Intent	2.94	0.53
Creating and Nurturing an Innovative Environment	3.02	0.52
<i>Work Innovation</i>		
Organization Innovation	2.95	0.55
Workplace Innovation Climate	2.96	0.55
Individual Innovation	2.94	0.53
Team Innovation	2.95	0.55
<i>Organizational Performance</i>		
Profitability	2.93	0.66
Growth	2.78	0.65



**Table 4.** Mean score – Vietnam.

Variable	Mean	Std. Dev.
<i>Design Leadership</i>		
Envisioning the Future	2.94	0.51
Directing Design Investment	2.83	0.61
Manifesting Strategic Intent	2.84	0.55
Creating and Nurturing an Innovative Environment	2.88	0.53
<i>Work Innovation</i>		
Organization Innovation	2.75	0.50
Workplace Innovation Climate	2.67	0.55
Individual Innovation	2.70	0.52
Team Innovation	2.54	0.59
<i>Organizational Performance</i>		
Profitability	2.62	0.65
Growth	2.66	0.60

The results of Vietnamese respondents' mean and standard deviation scores for all variables are reported in Table 4. One specific point is that Vietnam has the lowest number of observations in four countries. Compared to Thailand and Japan, the mean scores of Vietnamese are close to the overall sample, with the highest score in the dimension of Envisioning the Future ( $M = 2.94$ ) and the lowest score in the dimension of Directing Design Investment ( $M = 2.83$ ). For Workplace Innovation, Organization Innovation is considered to be most important as compared to the other three dimensions, while Team Innovation is perceived to be less critical. About Profitability and Growth, Vietnamese companies have mean scores of 2.62 and 2.66, respectively.

Finally, Table 5 reports the Chinese respondents' mean and standard deviation scores for all variables and their respective dimensions. In general, mean scores of Chinese respondents are higher than the overall sample. Unlike other countries, Directing Design Investment has the highest score of 3.06. About Workplace Innovation, Individual Innovation is the most crucial factor with the highest mean of 2.86. However, Team Innovation has the lowest score of 2.56. The mean scores of Profitability and Growth are 2.21 and 2.47, respectively.

**Table 5.** Mean score – China.

Variable	Mean	Std. Dev.
<i>Design Leadership</i>		
Envisioning the Future	3.02	0.62
Directing Design Investment	3.06	0.59
Manifesting Strategic Intent	2.80	0.64
Creating and Nurturing an Innovative Environment	2.93	0.58
<i>Work Innovation</i>		
Organization Innovation	2.64	0.73
Workplace Innovation Climate	2.69	0.72
Individual Innovation	2.86	0.56
Team Innovation	2.56	0.64
<i>Organizational Performance</i>		
Profitability	2.21	0.86
Growth	2.47	0.92



### ***Comparisons: design leadership, workplace innovation, growth and profitability***

A series of analysis of variance (ANOVA) is conducted in order to provide a complete picture of score comparison between the countries. With Design Leadership, it can be seen from Table 6 that at a significant level of 1%, there is a significant difference of scores between Thailand and Japan, Vietnam and Japan, China and Japan, with Thailand, Vietnam and China having higher mean scores as compared to Japan. At a significant level of 5%, the difference between Thailand and Vietnam is remarkable with Vietnam having a lower mean score. However, there are no differences between China and Thailand and China and Vietnam.

With relation to Workplace Innovation (see Table 7), the ANOVA results are similar to Design Leadership. There is a negative variance of score between Vietnam and Thailand, and China and Thailand. However, the ANOVA result of China and Vietnam is insignificant.

The ANOVA results of Profitability and Growth are presented in Tables 8 and 9, respectively. For Profitability, the results are significant for all pairs of countries. Specifically, Japan has a lower mean score compared to other countries, while Thailand has the highest mean score. The result of Growth is consistent with Profitability, except that the comparisons between Vietnam and Thailand and China and Vietnam are insignificant.

## **Discussion**

The size of organizations has been a debated issue whether large firms are more advantageous to Small and Medium-sized Enterprises (SMEs) in their innovative capability and leadership effectiveness. For example, it has been well evidenced in the debate between Gilder and Ferguson in the Harvard Business Review (Stock, Greis, and Fischer 2002). In general, it has been argued that larger firms would perform better in innovation than their smaller counterparts because of their substantial financial ability to invest more in R&D and hence innovation (Scozzi and Garavelli 2005).

**Table 6.** Analysis of variance – design leadership.

Design Leadership	Contrast	Std. Err.	t	P > t	[95% Conf. Interval]	
Thailand vs Japan	0.687	0.039	17.550	0.000	0.586	0.788
Vietnam vs Japan	0.547	0.052	10.580	0.000	0.414	0.680
China vs Japan	0.629	0.051	12.370	0.000	0.498	0.759
Vietnam vs Thailand	−0.140	0.046	−3.010	0.014	−0.260	−0.021
China vs Thailand	−0.058	0.046	−1.280	0.578	−0.175	0.059
China vs Vietnam	0.082	0.057	1.450	0.471	−0.064	0.228

**Table 7.** Analysis of Variance – workplace Innovation.

Design Leadership	Contrast	Std. Err.	t	P > t	[95% Conf. Interval]	
Thailand vs Japan	0.751	0.040	18.890	0.000	0.649	0.853
Vietnam vs Japan	0.469	0.052	8.960	0.000	0.334	0.603
China vs Japan	0.491	0.051	9.550	0.000	0.359	0.624
Vietnam vs Thailand	−0.282	0.047	−6.020	0.000	−0.403	−0.161
China vs Thailand	−0.259	0.046	−5.650	0.000	−0.378	−0.141
China vs Vietnam	0.023	0.057	0.390	0.979	−0.124	0.170

**Table 8.** Analysis of Variance – profitability.

Design Leadership	Contrast	Std. Err.	t	P > t	[95% Conf. Interval]	
Thailand vs Japan	1.020	0.059	17.170	0.000	0.867	1.172
Vietnam vs Japan	0.710	0.077	9.210	0.000	0.512	0.908
China vs Japan	0.303	0.076	3.990	0.000	0.108	0.499
Vietnam vs Thailand	−0.310	0.068	−4.570	0.000	−0.484	−0.135
China vs Thailand	−0.716	0.066	−10.770	0.000	−0.887	−0.545
China vs Vietnam	−0.407	0.083	−4.920	0.000	−0.619	−0.194

**Table 9.** Analysis of Variance – growth.

Design Leadership	Contrast	Std. Err.	t	P > t	[95% Conf. Interval]	
Thailand vs Japan	0.812	0.060	13.540	0.000	0.658	0.966
Vietnam vs Japan	0.690	0.079	8.730	0.000	0.487	0.894
China vs Japan	0.502	0.078	6.440	0.000	0.301	0.702
Vietnam vs Thailand	−0.122	0.071	−1.730	0.311	−0.304	0.060
China vs Thailand	−0.311	0.069	−4.470	0.000	−0.489	−0.132
China vs Vietnam	−0.189	0.086	−2.180	0.129	−0.411	0.034

However, a review of previous literature reveals that SMEs have their strengths when involved with the innovation process. Also, with their small size, leadership behaviours tend to play a significant role in their organizational performance. For example, Mitra (2000) argues that SMEs are in a better position to innovate when they operate and collaborate innovative activities within their clusters (groups of firms in the same industry). SMEs have also enjoyed some advantages because of their size, their flexibility and strong relationships with customers (Scozzi and Garavelli 2005). Rothwell (1992) also argues that SMEs have dynamic and entrepreneurial leadership styles that contribute to the success and performance of their organizations.

An understanding of how SMEs, in particular in Asia, perceived themselves in terms of their ability to be innovative and their leadership styles would help them reflect and develop strategies to improve their companies' performance. In this study, the results overall confirm that SMEs in these four countries agreed on the importance of being innovative and adopting appropriate leadership behaviours while there was still room for improvement in their organizational performance, particularly profitability and growth. SMEs in Thailand seem to be more optimistic in their ability to make profit and ability to grow when compared to the other three countries. SMEs in Japan, however, seems to see SMEs managers practice or display leadership behaviours associated with Design Leadership to a lesser degree than SMEs managers in China, Thailand and Vietnam. In comparison, the results also indicate that there was a significant difference in perceptions between SMEs Thailand and SMEs Japan, SMEs Vietnam and SMEs Japan, SMEs China and SMEs Japan on how the managers displayed their leadership behaviours. At the same time, there was no difference between SMEs China and SMEs Thailand, and SMEs China and SMEs Vietnam. Moreover, when coming to Workplace Innovation, SMEs in these four countries perceived their ability to be innovative differently.

Some of the main reasons that lead to the results and explain the significant difference in perception among the SMEs in these four countries could be, first, their cultural differences. Although they are in the same Asia continent, their cultural roots are varied. Several studies have indicated that cultural background might affect how people perceive

things around them. For example, Muenjohn, Armstrong, and Hoare (2012a) argued that the expatriates perceived themselves differently from the host-nation subordinates on most leadership behaviours and identified the cultural background of the subordinates as one of the potential explanations for these different perspectives. Also, different economic development and level of innovation commitments and practices among these four countries might contribute partially to their different perceptions towards innovation, leadership and performance. While Japan and China would be considered as developed (or close to developed) countries and demonstrate a high level of commitment and practice in innovation, Thailand and Vietnam are developing countries and the concept of innovation is considered new. According to Ratam and Mazzarol (2003), levels of innovation, commitment to innovation, long-term vision and acceptance of change could influence firms' innovation intentions. The intentions, therefore, would affect how organizational members perceived their firms' ability to be innovative.

### ***Practical implications***

The examination of the perceptions among Asian SMEs towards leadership behaviours, innovation and organizational performance would have practical contributions and implications.

By understanding how SMEs leaders perceived and assessed their leadership behaviours, innovation and performance and whether they were different from others, would not only help SMEs leaders develop or maintain appropriate leadership behaviours and practical innovation, but also increase the effectiveness of overall organizational performance.

Research has indicated that leaders played a crucial role in improving various organizational processes and aspects, such as firms' ability to become innovative and its overall performance. SMEs leaders were responsible for inspiring and developing their employees to work towards SMEs goals. SMEs leaders, therefore, must have accurate perceptions of their leadership effectiveness and a real understanding of their firms' innovation and performance. The accurate assessment of their perceptions would help them to identify their firms' strengths and weaknesses and have a clear idea of how to deal with them efficiently. SMEs Leaders who were self-reflective on their leadership behaviours and firms' situations would be able to outline the areas of development and improvement, such as developing and offering better training and development programs. They could also initiate a realistic plan and direction for the future growth of their firms and help SMEs to achieve its organizational goals by improving organizational performance.

### ***Theoretical implications***

The empirical results of this study also produce theoretical contributions and implications in the fields of research.

Theoretically, the results in this study made significant contributions to knowledge in the leadership and innovation fields. The findings extended the validity of the Design Leadership concept and construct. Design leadership was an emerging concept of leadership that was believed to have a significant influence on the design and innovation process. In this study, Asian SMEs leaders seemed to see themselves practised all dimensional behaviours of Design Leadership. This indicated and confirmed existing leadership

behaviour that represented and associated with the constructs of Design Leadership. More specifically, it revealed that SMEs leaders in these four Asian countries heavily practised the leadership behaviours that were associated with crafting their vision and nurturing innovative environment.

Similarly, the results confirmed the four different levels of Workplace Innovation, representing the constructs of the Workplace Innovation Scale (WIS). The study not only confirmed the validity and reliability of the WIS but also expanded the reference and literature into the research of workplace innovation.

## Conclusion

Leadership behaviours, that perceived by oneself or others, are likely to be the critical driver of innovation in SMEs and their ability to be innovative is directly linked to firms' performance (Ratam and Mazzarol 2003). However, the relationships between leadership, innovation and performance have to be tested and subjected to people's perceptions, and that culture is its leading enabler on how people see the world (Hofstede 1991; Muenjohn et al. 2012b). Building an innovative organization involves effective leadership behaviours, competent innovation, and supporting management (Ratam and Mazzarol 2003; Muenjohn and McMurray 2017). Therefore, an accurate perception of these factors is essential.

Although this study provided some impressive results, some limitations and recommendations for future research should be recognized. At the national level, the small size of the sample set in each country may be recognized. Subsequent research, therefore, should try to replicate the present findings by seeking a larger sample. Besides, this study was based on self-assessment of SMEs leaders who perceived their leadership behaviour, firms' innovation and their SMEs performance. The results might relate to the inflation of leaders' self-ratings, and researchers need to be cautious. Multiple sources of evaluation, such as Self and other assessments, therefore, are recommended in future research.

## Disclosure statement

No potential conflict of interest was reported by the authors.

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