The effect of leadership style and innovation capital on SMEs sustainability performance from a managerial perspective

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ARTICLE INFO

Article history:
Received 15 June 2021
Accepted 30 August 2021
Published 21 September 2021

Keywords:
Leadership style
Innovation capital
SMEs
Sustainability

ABSTRACT

Small and medium enterprises (SMEs) face various challenges in sustaining their operations in the global business competition. In line with the resource-based view (RBV), SMEs need to utilize their available assets, including the right leadership style and innovative initiatives, to create a competitive pursuit of sustainability performance. An effective leadership style should be adaptable and flexible, manifesting in different scenarios of varying leadership behaviors. Meanwhile, innovation capital is a valuable asset that may help businesses create value in today's economy and encourage employees to be more creative. However, there has been little empirical research on the impact of leadership styles and innovative capital on sustainability performance from the emerging economies perspective. Hence, this study aimed to test the relationship between innovation capital, leadership styles, and sustainability performance of SMEs. Data were collected from 111 SMEs in Malaysia and analyzed using IBM SPSS. The results revealed that leadership styles and innovation capital have significant positive relationships with sustainability performance. This study contributes to the literature on the sustainability performance of SMEs and helps leaders strategize the appropriate leadership approaches and innovation capital to achieve sustainable performance.

1. Introduction

Eriksson and Svensson (2016) stated that sustainable development within the organization could be understood as meeting the present economic, environmental, and social obligations without compromising future generations' capability to meet their own needs. Sustainability within an organization is crucial in constructing a good image for the company (Hogan & Lodhia, 2011) and enhancing the sustainable environment, economy, and community (Hanafi et al., 2020). A bad reputation due to environmental scandals could tarnish its brand, making it hard for it to sustain longer in the market (Dekhili, Achabou, &
Alharbi, 2019). An organization with a better image gains a higher chance of attracting customers to buy their products or services. The increasing focus on the triple bottom line (TBL) issues has triggered enthusiasm and inspiration in sustainable entrepreneurship, especially among SME owners or leaders responsible for sustainable organizational performance (Nor-Aishah, Ahmad & Thurasamy, 2020).

However, the uncertain economic situation due to globalization phenomena has seen many failures among SMEs. Corresponding to increased economic globalization, population growth, and urbanization, entrepreneurial actions are predictably associated with global warming, climate change, and negative social impacts (Nor-Aishah et al., 2020). Globalization has also exposed the SMEs to ongoing changes and competitive environments, which calls for the SMEs to compete effectively to survive (Kamaluddin, Hasan, Arshad, & Samah, 2016). All these issues are closely related to sustainability, which consequently demands SMEs to ensure sustainability performance. Sustainability potentially significantly impacts organizational performance (Bodhanwala & Bodhanwala, 2018; Das, Rangarajan, & Dutta, 2019; Wu, Roan, & Santoso, 2017), thus warranting more study on key capabilities that potentially could contribute to sustainability performance, especially for SMEs.

In developing countries, including Malaysia, SMEs stand high as the backbone of economic growth, dominating 98.5% of total business establishments (Nor-Aishah et al., 2020). According to the SME Corporation Malaysia (2019), in 2018, SMEs contributed 38.3% of Malaysia’s overall gross domestic product (GDP). This figure reflects the importance of SMEs to the Malaysian economy. While the performance so far is commendable, more needs to be done to achieve the targets set by the National Entrepreneurship Policy 2030 whereby 50% GDP contribution and 23% export contribution will come from SMEs by 2030. Therefore, the importance of ensuring the sustainability performance of SMEs becomes more significant. The management teams in every organization need to be well equipped with the necessary leadership knowledge to steer their ‘ship’ towards the desired course. In addition, Boufeldja Ghiat (2020) stated that leaders in developing countries often fail to understand workers’ motives and need to find adapted management methods to keep up with local social values that lead to complex human problems in organizations. Challenging business environments demand effective leaders within an organization to ensure its survival. Leaders need to monitor the changes happening to the organization continually, make necessary adjustments, and adapt their leadership styles that best suit the current business environment (Seah & Hsieh, 2015).

Besides leadership styles that potentially influence sustainability performance, the extant literature has also emphasized the importance of innovation to generate wealth and drive the business’s expansion (Alrowwad, Abualoush, & Masa'deh, 2020). With innovation, SMEs can gain a competitive advantage and perform better than their competitors. However, most existing studies on SMEs’ sustainability looked at the impact of a few limited enablers on sustainability performance or the effect of sustainability performance barriers. There is a clear gap in a robust framework for sustainability performance analysis to measure and improve sustainability performance (Malesios, De, Moursellas, Dey, & Evangelinos, 2020). Therefore, this study examined the SMEs’ sustainability performance concerning leadership styles and innovation capital to address the literature gap.

This study contributes to the literature of sustainability performance, specifically concerning leadership styles and innovation capital. The findings would be an added value to SMEs’ business advisors and owners. It potentially helps the SMEs in identifying key capabilities required by SME owners to improve sustainability performance. The following section discusses the literature review on the underpinning theory of the resource-based view (RBV), sustainability performance, leadership styles, and innovation capital. The research methodology, discussion, and conclusion are outlined in the subsequent sections.
2. Literature review

2.1 Theoretical underpinning

The resource-based view (RBV) theory is recognized as a basis for an organization’s competitive advantage. It consists of related, yet distinct. Theoretical tools are useful for analyzing sources of sustained competitive advantage for an organization (Barney, 2001; Foss & Ishikawa, 2007), leading to sustainability performance. This theory suggests that organizations with a beneficial core competence will be more successful during uncertain times than those without such core competence (Arik, Clark, & Raffo, 2016). The companies will achieve competitive advantage when all their types of assets: tangible and intangibles, and capabilities attain four attributes: value, rare, imperfect distinctive, and non-convertible (Barney, 2001).

RBV theory views innovation capital as the firm’s innovation activities that have the opportunity and capacity to produce innovative output to renew the future value of its specific assets, which are difficult to imitate by competitors. The whole innovation process is based on combinations of strategic assets that are firm-specific (Kostopoulos et al., 2002). This is relevant to a study by Kamaluddin et al., 2016 that found SMEs need to use all of the available assets to help them achieve a competitive advantage and improve their performance. Leaders of SMEs and innovation capital are identified as valuable resources that could become the drivers to enhance competitive advantage and foster sustainability performance (Kamaluddin et al., 2016). Specifically, the Situational Leadership Theory (SLT) suggests that no single style is ideal (Bharti, 2018). Leadership styles have evolved and changed over the past century. Hence, further identification of the leadership styles would open the avenue for SMEs to strategize the leadership style that best suits their current need.

2.2 Sustainability performance

In 1987, the World Commission on Environment and Development (WCED) popularized the concept of sustainable development in organizations (Laskar & Maji, 2016). The concept has caused organizations to shift their focus to sustainable practices and reporting. As time passes, sustainability has become one of the primary concerns discussed among politicians, academics, and community members (Poveda, 2017). Teh and Corbitt (2015) described sustainability as the organization’s ability to meet its current needs while ensuring that stakeholders’ future needs are not abandoned. Current stakeholders demand that companies conduct their business environmentally friendly and nurture a healthy work environment. Opebiyi (2020) stated that sustainable development practices include reducing pollution from operations, saving costs, and managing human resources better.

In Malaysia, sustainability reporting requirements include disclosing corporate social responsibility (CSR) within the company’s annual report (Bursa Malaysia, 2015). However, this requirement only applies to listed companies, which signals that not all SMEs must follow the reporting guideline. Not to mention that SMEs might not have the financial and technological advantage to support sustainable development (Das, Rangarajan, & Dutta, 2020). The increased public scrutiny and legislative changes force SMEs to re-evaluate their business activities related to sustainability issues (Das et al., 2020). Failure to meet the public’s expectation towards a sustainable goal could lead to resentment from every stakeholder and negatively affect the organization’s image. Diverse stakeholders, such as the government and the public, force businesses to perform sustainably in a highly complex environment (Iqbal, Ahmad, & Abdul Halim, 2020).

The current sustainability issue has encouraged leaders worldwide, particularly SMEs, to respond urgently. As mentioned earlier, SMEs are one of the most significant contributors to the Malaysian national economy (Nor-Aishah et al., 2020). Hence, there is an increasing need to ensure sustainable performance among SMEs. There has been a shift in SMEs’ performance from traditional methods, such as assets and liabilities (Iqbal, Ahmad, & Halim, 2020). Nowadays, businesses are aligning their financial performance
with their social and environmental performance. Aligned with the RBV theory, SMEs must fully utilize their resources to create a competitive advantage that enhances sustainability performance to compete and sustain locally and globally.

2.3 Leadership styles

Leaders are identified as intangible assets or resources important for SMEs (Kamaluddin et al., 2016). Leaders, with their ability to plan, implement, and promote strategies, including policies and programs, are required to fulfill sustainable development needs (Iqbal, Ahmad, & Halim, 2020). The importance of leaders has been acknowledged by past researchers (Nor-Aishah et al., 2020). Among the recognized leadership styles highlighted in literature was the situational leadership theory, or SLT (Hersey & Blanchard, 1969; Thompson & Glasø, 2018). The four basic leadership styles identified within the theory are Directing, Coaching, Facilitating, and Delegating (Bharti, 2018). Table 1 shows the basic description of each leadership style:

Table 1: 4 Basic leadership styles

| Directing                  | Coaching                     | Facilitating                | Delegating                  |
|----------------------------|------------------------------|-----------------------------|------------------------------|
| Very direct behavior       | High directing and supporting behaviors | Low directing behavior, high supporting behaviors | Low directing and supporting behaviors |
| Low supporting behaviors   | Motivates subordinates to make decisions | Proactive leaders participating with their subordinates | Delegate responsibilities to subordinates |
| Gives detailed procedures to achieve specific goals and objectives | Provides feedback to subordinates | Open-minded | Expect subordinates to handle the tasks given independently |

Significantly, the main point of the SLT is that not one of these four leadership styles is best. Instead, an effective leader will match their behavior to each subordinate’s developmental skill for the tasks at hand. Therefore, different situations should be handled uniquely since every situation has its characteristics, circumstances, and background (Bharti, 2018). Graeff (1983) also highlighted the need for behavioral flexibility in leaders towards goal attainment. Flexible leaders can think more critically in solving organizational problems. Blanchard et al. (2017) explain four development stages for subordinates to master a particular task. These are called ‘The Development Continuum.’ Figure 1 shows an overview of the stages in the continuum.

![Figure 1: The development continuum](https://doi.org/10.24191/jeeir.v9i3.14755)

Based on Figure 1, each stage has different levels of competency and commitment. Effective leaders need to change their leadership styles depending on their followers’ competency and commitment (Suriyadi, Syaifuddin, Sidu, & Mursidin, 2020). Blanchard and Johnson (2015) summarized that an effective leader plans their goals thoroughly, ask for feedback, encourage people, and make necessary adjustments based...
on changing environments. Blanchard et al. (2017) later explained how each leadership style could best fit the subordinate's development level, as shown below:

- **D1 (enthusiastic beginner)** - with low competence and high commitment, the subordinate will need a **Directing** leader
- **D2 (disillusioned leaner)** - with low to somewhat competence and low commitment, the subordinate will need a **Coaching** leader
- **D3 (capable but cautious)** - with moderate to high competence and variable commitment, the subordinate will need a **Facilitating** leader
- **D4 (self-reliant achiever)** - with high competence and high commitment, the subordinate will need a **Delegating** leader

Keeping this concept in mind, leaders need to change their leadership styles appropriately to pursue organizational objectives and goals. Situational leaders must have the ability to give suitable guidance and task support for their subordinates based on their development level (Ghazzawi, Shoughari, & Osta, 2017). This trait is important because leadership styles are important contributors to employees and organizational performance (Arham, 2014; Maamari & Saheb, 2018; Mohd Adnan & Valliappan, 2019). Accordingly, it is predicted that leadership styles would influence sustainability performance. Therefore, the following hypothesis was proposed:

**H1:** Leadership style has a significant positive influence on sustainability performance.

### 2.4 Innovation capital

Innovation can be understood as creating something new that is crucial to the entrepreneurial process (Barringer & Ireland, 2016). In line with the RBV, they hold specific characteristics that include uniqueness, inimitable, and irreplaceable (Alrowwad et al., 2020). Previous literature has extensively discussed the specifications of innovation and how they can be identified. For example, Knight (1967) categorized innovation into organizational structure, production process, people, and product or service. Baregheh, Rowley, Sambrook, and Davies (2012) classified innovations into position, process, product, and paradigm innovation in recent literature. Meanwhile, Kamaluddin et al. (2016) explained innovation capital in two stages. The first stage involves decisions and activities by pinpointing a problem through research and development (R&D) and the commercialization of an invention. The second stage involves creating a new product or significantly improving the existing products, services, and other organizational processes. In this study, innovation capital refers to the talent to develop new ideas to generate new products and services and accidentally contribute short or long-term profits to the organization (Kamaluddin et al., 2016). Regardless of how innovation is produced, past studies agreed that innovation capital could significantly impact organizational performance (Alt, Berezvai, & Agárdi, 2020; Kamaluddin et al., 2016; Lichtenthaler, 2016; Prima Lita, Fitriana Faisal, & Meuthia, 2020). The generation of innovation capital is important in every organization. It will improve the operations’ overall effectiveness and efficiency and give a competitive edge in the market (Kamaluddin et al., 2016). Most quantitative studies had shown positive relationships between innovation capital and multiple firm performance measures, and a recent meta-analysis had further supported a positive innovation-performance link (Lichtenthaler, 2016). Accordingly, it was predicted that innovation capital would influence sustainability performance. Therefore, the following developed hypothesis was:

**H2:** Innovation capital has a significant positive influence on sustainability performance.

### 3. Methodology

This study used a random sample of SMEs registered in Malaysia. Using the contact information that SME Corporation Malaysia gave, 400 questionnaires were distributed to SMEs owners or managers in
various Selangor and Kuala Lumpur sectors through appointments and emails. The unit of analysis in this study is the individual SME. The respondents were managers or owners as these are persons that have held in SME’s and know better about leadership styles, innovation capital, and organizational performance. They will be assumed to be knowledgeable and familiar with the operations related to the issues under investigation. A total of 111 usable responses were received (28%).

The questionnaire used in this study was adopted from Kamaluddin et al. (2016) to measure innovation capital and sustainability, Abernethy (2001) to measure performance, and Crowe, A. (2013) to measure leadership styles. The dependent variables of sustainability performance have been adapted to performance indicators that are more relevant to the SMEs industry. Managers perceive their performance because the majority of the owner cannot reveal their actual amount of profit thus, manager or owner perception is the most suitable platform. As Abernethy (2001) indicators are more towards healthcare performance, this study adapted specific items for SMEs. The questionnaire consisted of four main sections: the demographic profile, leadership styles, innovation capital, and sustainability performance. For the leadership style, the measurement scale ranged from 1 (to almost no extent) to 5 (to a very great extent). The measurement scale ranged from 1 (strongly disagree) to 7 (strongly agree) for innovation capital. The measurement scale ranged from 1 (not at all well) to 7 (perfectly well) for sustainability performance. Later, a regression analysis was employed to analyze the data. Based on the Cronbach's Alpha values reported in Table 2, all measurements are above 0.70, ranging from 0.917 (Sustainability performance) to 0.927 (Innovation Capital), implying that the data is valid (George & Mallery, 2003). This consistency manifests in Cronbach’s Alpha value which corresponds to a correlation coefficient, thus implying that the various statements reliably measure the respondents' perceptions on all variables.

Table 2: Summary of Cronbach's alpha

| Variables           | No of statements | Cronbach's Alpha |
|---------------------|------------------|------------------|
| Leadership style    | 24               | 0.924            |
| Innovation          | 9                | 0.927            |
| Sustainability performance | 13             | 0.917            |

4. Results and discussion

4.1 Descriptive statistics

For the demographic profile (refer to Table 3), it was observed that the majority of the respondents are female (67.6%). The Malays made up majority of the sample (85.6%), followed by Chinese (6.3%) and Indian (1.8%). More than half of the respondents are less than 31 years old (59.5%), and 20.7% are more than 40 years old. This is consistent with years of working experience, which majority of the respondents have below four years of working experience, and they could become from a young age group of respondents. The majority of the respondents are engaged in the services industry (68.5%). The others are manufacturing and trading (11.7%) and finally other industries (8.1%). In addition, most of the respondents are middle management (56.8%) and followed by senior management (19.8%) and top management (18.9%). This is consistent with Mintzberg (1989) who emphasised that, while all managers must make judgments, various levels of managers should make different decisions. Thus, these appropriate respondents to give feedback on their leadership styles and innovation capital activities involved in their organizations.
Table 3: Profile of respondents

| Demographic Profile | N  | %  |
|---------------------|----|----|
| Gender:             |    |    |
| Female              | 36 | 32.4 |
| Male                | 75 | 67.6 |
| Working Experience: |    |    |
| < 4 years           | 47 | 42.3 |
| 4 - 6 years         | 31 | 27.9 |
| Age:                |    |    |
| 30 and below        | 66 | 59.5 |
| 31 to 35            | 13 | 11.7 |
| 36 to 40            | 9  | 8.1 |
| Above 40            | 23 | 20.7 |
| Industry types:     |    |    |
| Manufacturing       | 13 | 11.7 |
| Services            | 76 | 68.5 |
| Job Specification:  |    |    |
| Trading             | 13 | 11.7 |
| Other               | 9  | 8.1 |
| Middle management   | 63 | 56.8 |
| Senior management   | 22 | 19.8 |
| Top management      | 21 | 18.9 |
| Others              | 5  | 4.5 |

Next, Table 4 presents the means and standard deviations of the perception scores on the facilitating, coaching, delegating, and directing leadership styles. Among these four leadership styles, the overall mean score of 3.91 indicates that the respondents viewed the delegating leadership style as relevant and important. Delegating is the highest score among the other four types. The results show that, on average, the respondents perceived the leaders are very low in directing and supporting leader behavior. Good leadership should be able to delegate responsibilities to others, and this approach expects subordinates to handle the task given independently.

The second highest mean score applies to direct leadership style (mean=3.87), indicating that directing leadership style will give detailed procedures to subordinates to achieve any specific goals. As SME managers perceive, this style is very direct behaviour but, on the other hand, low supporting behaviors. In addition, the responses on the coaching leadership style show that the respondents agree most on the average (mean=3.7) agree with the coaching style. The managers have high directing and supporting behaviors and always give feedback to subordinates.

Finally, facilitating approach is less applied as perceived by managers in Malaysian SMEs. It can be concluded that on average (mean=3.68), the respondents perceived that the facilitating managers are open-minded and proactively participate in many activities with their subordinates. Even though this style has high supporting behaviour, it shows a low score because of low directing behaviour.

Table 4: Mean and std. deviation of perception scores on leadership style

| Types of Leadership Styles | Mean | Std. Deviation |
|----------------------------|------|----------------|
| Facilitating               | 3.68 | 0.695          |
| Coaching                   | 3.72 | 0.726          |
| Delegating                 | 3.91 | 0.838          |
| Directing                  | 3.87 | 0.765          |

Table 5 presents the mean scores of statements to measure the perception of respondents on innovation capital. Based on all the nine statements, the overall mean score of 5.06 implies that the respondents agree with the elements of innovation as manifested in the statements. From Table 5, my organization's success

https://doi.org/10.24191/jeer.v9i3.14755 ©UiTM Press, Universiti Teknologi MARA
depends on the management’s support towards innovation (Mean=5.44) is the most important statement viewed by the respondents for the company to sustain its business in the current environment.

Table 5: Mean and std. deviation of perception scores on innovation capital

| Statement                                                                                                                                                                                                                                                                                                                                 | Mean  | Std. Deviation |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------------|
| My organization’s success depends on the management’s support towards innovation.                                                                                                                                                                                                                                                          | 5.44  | 1.457          |
| My organizational innovation may include new processes or strategies.                                                                                                                                                                                                                                                                        | 5.34  | 1.462          |
| Innovation has a positive influence on my organization’s turnover profitability and employment.                                                                                                                                                                                                                                               | 5.25  | 1.598          |
| My organization makes product/service innovation, such as improvement of an existing product/service or developing a new product/service.                                                                                                                                                                                                     | 5.24  | 1.630          |
| My organization developed numerous ways to become innovative.                                                                                                                                                                                                                                                                             | 5.22  | 1.455          |
| Productivity in my organization will be enhanced through innovation.                                                                                                                                                                                                                                                                         | 5.16  | 1.474          |
| My organization is interested in promoting innovation activity.                                                                                                                                                                                                                                                                           | 5.14  | 1.420          |
| The survival of my organization in the long-run depends on innovation.                                                                                                                                                                                                                                                                      | 4.80  | 1.512          |
| My organization receives R&D grant.                                                                                                                                                                                                                                                                                                          | 3.92  | 1.912          |
| Innovation                                                                                                                                                                                                                                                                                                                             | 5.06  | 1.234          |

Table 6 presents the mean scores and standard deviations on sustainability performance. Based on the mean scores, the respondents agreed most on Quality of Products and Services (Mean=5.66), followed by Overall Business Performance (Mean=5.41) as the second-highest mean score. New Product Development (Mean=5.14) is the lowest scored item.

Table 6: The mean and std. deviation of perception scores on sustainability performance

| Statement                                    | Mean Score | Std.Deviation |
|----------------------------------------------|------------|---------------|
| Quality of Products and Services            | 5.66       | 1.066         |
| Overall Business Performance                 | 5.41       | 1.022         |
| Sales Growth                                 | 5.29       | 1.021         |
| Employees Contentment                        | 5.28       | 1.089         |
| Profit Growth / Return on Assets             | 5.22       | 1.074         |
| New Product / Service Development            | 5.14       | 1.187         |
| Sustainability Performance                   | 5.33       | 0.919         |

4.2 Normality test

A normality test was carried out using the Skewness and Kurtosis test on leadership style, innovation, sustainability, and sustainability performance. As observed in Table 7, all skewness and kurtosis values are within the range -2 to 2. Hence, the data is assumed to be normally distributed.
4.3 Correlation analysis

Correlation analyses were carried out to determine the relationships between variables of leadership style, innovation capital and organization sustainability performance. As the variable values were found to be normally distributed, the analyses were carried out using Pearson Coefficient Correlation, a parametric correlation tool. The summary statistics of the correlation analyses are presented in Table 7. It shows that the results were statistically significant, moderate positive correlation between organization sustainability performance and leadership style \( r = 0.591, p < 0.000 \) with sustainability performance explaining 35% of the variation in leadership style. However, organization sustainability performance is positively and highly correlated with innovation capital \( r = 0.702, p < 0.000 \) with sustainability performance explaining 49% of the variation in innovation capital. To a great extent, an increase in organization performance sustainability is associated with increased innovation capital and moderately increased in leadership style.

4.4 Regression analysis

Based on Table 9, the regression equation is statistically significant at 0.01 \( (p < 0.01) \), implying an association between sustainability performance and the independent variables of leadership styles and innovation capital. Hence, hypothesis 1 and hypothesis 2 are accepted. The adjusted R-square for the model is 0.561, and the F-value is 68.956 \( (p < 0.000) \). The model can explain about 56.1% of the variation in the SMEs’ sustainability performance. Both the coefficient of leadership styles and innovation are statistically significant at 0.01 \( (p < 0.01) \). The coefficients of leadership styles (0.451) and innovation (0.441) mean that an increase in leadership style and innovation increases the organisations’ sustainability performance.
Table 9. Results of regression analysis: Leadership styles and innovation capital and sustainability performance on sustainability performance.

| Independent Variable | Std. Coeff. (β) | Std. Error |
|----------------------|-----------------|------------|
| Leadership style     | .451**          | .110       |
| Innovation Capital   | .441**          | .061       |
| R²                   | .561            |            |
| Adj. R²              | .553            |            |
| F Change             | 68.956          |            |
| df                   | 110             |            |

** p-value is significant at 0.01 level

The research model’s equation is as follows:

\[
SP = \beta_0 + \beta_1 LS + \beta_2 IC + e
\]  

(1)

Abbreviation

\( SP \) = Sustainability Performance  
\( LS \) = Leadership Style  
\( IC \) = Innovation Capital  
\( e \) = error term

5. Theoretical and managerial contributions

The results from this study support the findings of previous research that leadership styles and innovation capital significantly positive towards the organisations’ performance. Leadership styles which have shown by a good leader can enhance organisational performance (Tarabisyy et al., 2005; Yang, 2008 and Arham, 2014). As Bhattacharyya (2006) suggested that the right leadership behaviour is important for developing innovation within the organisation. Thus it is proven that a leadership style which consist of element of coaching, facilitating, delegating and directing approaches as perceived by SMEs owners and managers in Malaysia gives strong ingredients to enhance the sustainability performance. In addition, the unique contribution of this study is the effect on the sustainability performance. The effect of these important variables are more concern on the sustainability of the SMEs to continuously perform well and sustain in this industry (Ur Rehman et al., 2019).

Apart from that, the results also support that innovation capital is crucial for the survival of SMEs. The results of this study consistent with prior studies by Chen, Zhu and Xie (2004), Kamaluddin et. al. (2016) and Duran and Gogan (2014) which found that innovation capital has positive effect on market value and financial performance. It shows that research and development activities expenditure which part of innovation capital has great effect towards organisations wealth creation. This is because SMEs are facing high competition in the industry which forces SMEs to distinguish their products and services from their competitors. Such competition requires SMEs to utilise their innovation capital in order to offer attractive product and services which in turn strengthen their sustainability performance.

A better understanding of which leadership styles and innovation capital’s elements and their impacts towards SMEs sustainability performance could help the managers or owners develop their strategies on leadership approach and innovation activities. The output also permits the manager to have more opportunities to learn and work more efficiently which will indirectly lead their organisations to perform better in utilising their intangible assets specifically innovation capital.

The findings of this study suggest that leadership styles are one of the most important elements perceived for SMEs' sustainability performance. The leadership styles that the leaders of SMEs display and practice,
such as coaching, delegating, directing, and facilitating, have significant contributions to sustainability performance. This study also found that innovation capital is significantly positive towards the sustainability performance of SMEs. In line with the findings of previous researchers (Sam et al., 2012; Ur Rehman et al., 2019; Prima Lita et al., 2020), this research presents a framework that assists managers in identifying key, valued assets for SMEs' long-term success. The findings will help the organization evaluate the effectiveness of leadership style practices and innovation capital that could allow for the SMEs development.

This study has discussed the importance of exploiting the leadership style and innovation capital to create a competitive advantage. Besides the practical implication, the research framework, the research questions, and the methodological approach of this study contribute to the existing body of knowledge on leadership, innovation, and sustainability. This could help the academician explore further how each leadership style and innovation capital produced may impact the sustainability performance of SMEs.

Finally, this study's timing is crucial as Malaysia is moving from being a developing country to having a developed country status, and SMEs are considered one of the engines for the growth of the country's economy. On the other hand, organizations with good leaders and innovative capital can be successful in the market. Hence, Malaysian SMEs need to take a deeper thought and understand the concept of leadership styles and innovation capital to attain sustainability and achieve business goals.

6. Limitations and recommendations

Some limitations are acknowledged that indicate future research directions. This study only focused on the Klang Valley area in Malaysia. Thus, SMEs from other regions of Malaysia and other countries should be included in future research to generalize the findings. Other than innovation capital, future studies could also use different dimensions of intellectual capital, such as human capital, relational capital, organizational capital, social capital, customer capital, and technology capital as the mediating variable. It may contribute to results that are more invaluable by integrating these dimensions as an intellectual capital variable.

Acknowledgement

The authors wish to express gratitude to the Institute of Research Management and Innovation (IRMI), Universiti Teknologi MARA, in collaboration with the Ministry of Higher Education Malaysia (MOHE), for providing the financial support for this research project (600-IRMI/Dana KCM 5/3/LESTARI (146/2017). We are indeed very grateful for the grant; without it we would not carry out the research.

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