

Knowledge Management Capability and Agile

by Lppm 2022

Submission date: 24-Aug-2022 12:06PM (UTC+0700)

Submission ID: 1886272296

File name: 14_ProSIDING_CISIS_Knowledge_Management.pdf (197.22K)

Word count: 3318

Character count: 19405



4 Knowledge Management Capability and Agile Leadership to Improve SMEs' Ambidexterity

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Abstract. This research aimed to develop a model that can help ambidexterity in Small and Medium Enterprises. SMEs ambidexterity is a capability of SMEs to explore and exploit resources to be more competitive and to support community welfare. Organizational ambidexterity is an important condition to support SMEs in order to more contributive in national economic growth. Data in this research were collected by distributing questionnaires to 232 respondents of SME owners in Indonesia creative industry, and it was analyzed by using SmartPLS. The results showed that SMEs ambidexterity can be achieved by increasing the ability to manage knowledge and the availability of agile leadership. These two conditions will create organizational ambidexterity which in long term will improve SMEs competitiveness and contribute to community welfare.

1 Introduction

Organizational ambidexterity becomes an important thing for a long-term success of an organization [1]. One of the more persistent ideas in organizational science is that long-term success depends on how an organization exploits its capabilities while simultaneously exploring fundamental new competencies. Earlier studies have often assumed that mutual exchanges between these two activities cannot be addressed, but new research illustrates organizational ambidexterity ability to simultaneously exploit existing competencies and explore new opportunities [2]. Some of the strategies that will be discussed in this research are expected to increase SMEs' ambidexterity in Indonesia. Research on ambidexterity in SMEs is still very limited so it will be discussed more in this research.

In research studies by De Clercq et al. [3], the process of how to improve ambidexterity in SMEs is still poorly understood by the organization. Therefore, this research is very important to help SMEs in achieving its ambidexterity. The purpose of this research is to examine the importance of organizational ambidexterity model for small, medium enterprises (SMEs), by determining the influence of knowledge management capability and agile leadership on ambidexterity. In order to have an ambidexterity, a leadership style that supports the situation is required. The styles are empowering leadership Muafi et al. [4] and agile leadership. Agile leadership is an agility in influencing others and

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L. Barolli et al. (Eds.): CISIS 2020, AISC 1194, pp. 326–333, 2021.

https://doi.org/10.1007/978-3-030-50454-0_31

making the changes [5]. Agility is regarded as one of the main skills for current managers. An agile manager has many skills, flexibility and speed. Agile manager is able to facilitate the achievement of a larger organization's success, and face the challenges of the world today [6]. In this situation, it is believed to result organizational ambidexterity.

In addition, we propose another variable to improve ambidexterity. The variable is knowledge management capability. Knowledge management is tools, techniques, and strategies for maintaining, analyzing, regulating, enhancing and sharing business expertise [7]. Knowledge management capability is a company's ability to enhance existing knowledge in order to create and protect new knowledge. Furthermore, a company must combine skills, personal knowledge, physical resources, structures and cultures that simulate the current dynamics of the company [8].

2 Literature Review and Hypotheses Development

2.1 Knowledge Management Capability and Organizational Ambidexterity

1 Knowledge is the most important resource for the transformation of innovative organization [9]. Based on organizational goals, knowledge can be used to develop various forms of value creation and outcomes, such as improving, updating, recombining and replicating strategy. Hence, management is a practice developed in the organizational process to realize the effectiveness and create further value in a dynamic environment [10]. Capability refers to the ability in implementing and integrating resources in order to improve the company's goals. It is also the results of long-term interaction accumulation between various resources [11]. Moreover, knowledge management ability is an organization's ability to acquire, create, transfer, integrate, share, and implement resources and knowledge to-related activities which across the functional boundaries so that it results new knowledge [12]. The fact that knowledge is the main strategic resource which creates company [13]. The company strives to develop this resource to the maximum so that it achieve the company goals. Knowledge management capability not only refers to an ability to acquire knowledge and information, but it is also an ability to protect knowledge and information also encourages the staffs to use this ability as a more efficient working tool [14].

Moreover, Liu et al. [15] stated that ambidexterity illustrates the synergy between exploitation and exploration, a kind of "Yin and Yang". This means that both orientations are established simultaneously but do not have to be balanced. Exploitation emphasizes more on improvements, efficiency, selection and implementation. On the other hand, exploration requires search, experiment and discovery. Meanwhile exploration attempts to adapt new knowledge and opportunities. Ambidexterity discusses the company's ability to improve study and exploration. Exploration requires the company to continuously configure its assets, resources and capabilities in order to face external environmental changes [16]. The application of exploration requires a high level of risk, further efforts of the company and commitment of resources [17]. This study is associated with weak changes and only the modification of existing resources and capabilities. Exploitation requires companies to have mechanisms that emphasize the absorption of new approaches into routine activities [18].

Ambidexterity organization comes from a contradiction process of knowledge related to exploitation and exploration. Ambidexterity organization excels in exploiting the existing knowledge and experience [19]. In addition, although knowledge is a primary resource with high strategic potential, the company must have knowledge management capability to assess and respond the fast competitor's actions [20, 21]. Thus, the more companies have knowledge management capabilities, the more efficient in balancing exploration and exploitation through digitally.

H1: Knowledge management capability has a positive and significant effect on organizational ambidexterity

2.2 Agile Leadership and Organizational Ambidexterity

Experts argued that leadership is about “embracing inconsistencies” [22, 23]. In order to understand the complex circumstances, leaders effectively consider the balance from the known to the unknown and assess the risk. Leaders then communicate their understanding to others, renegotiate the balance and coordinate appropriate actions to adapt and make changes. Leaders need agility to navigate diverse and fragmented organizations, while maintaining a sense of stability and coherence in the ever changing world [24]. In the past, agility was only demanded for the chief executive. The current senior sector manager has begun to be responsible for a wider range of services, including those with no experience or expertise. It is not only depend on experience and expertise managed, they also have to implement efficiency. In this uncertain business environment, leader must demonstrate an agile leadership [25]. According to Fachrunnisa et al. [10], an agile leader can guide the team and continually influence the team's behavior by defining, expanding and maintaining the vision. A strong understanding of the vision will help the team through tough decisions about value and business priorities, it keeps them focus and inspired (Fig. 1).

H2: Agile leadership has positive and significant effects on organizational ambidexterity

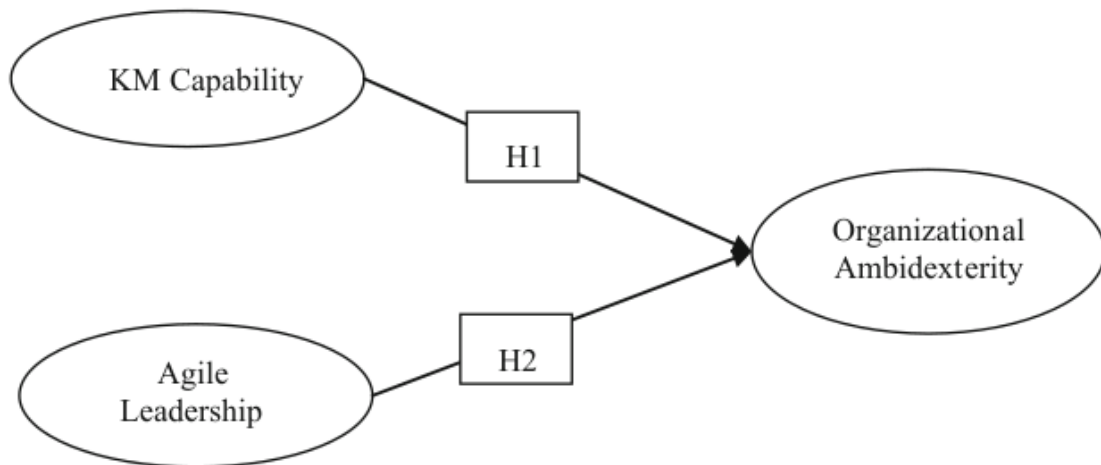


Fig. 1. Research model

3 Method

3.1 Data

Sample of this research were Indonesian SMEs that have less than 300 employees. This research used sampling non-random sampling technique with purposive sampling methods. The researcher compiled corporate data and information (e.g., industry type, number of employees, and annual sales) into a database for this research project. The researcher compiled the primary data by providing a questionnaire to the owner/leader/manager of 350 SMEs in Semarang-Central Java Indonesia. After several months, the number of valid questionnaires were 232 respondents (66.3%). Semarang as one of the capital city in Indonesia, is chosen as the target population because this city has the potential for the development of creative industry [26, 27].

In Indonesia, SMEs in creative industry sector including fashion, handicrafts, retailers, services, food and beverage. The results showed that the majority of respondents (first rank) in this research are SME actors who are engaged in food and beverages business by 94 units (40.51%). The second rank of the respondents is SME actors in fashion business as much as 73 units (31.46%). The third rank is SME actors with handicraft business of 41 units (17.6%). The fourth rank is SME actors with service business as much as 19 units (8.18%) and the last one is SME actors who are engaged in the retailer business by 5 units (2.15%).

3.2 Measurement

Knowledge management capability is defined as the ability to implement and integrate resources to develop knowledge in order to result new knowledge. The variable measurement in this research consisted of 4 items which are knowledge transfer capabilities, knowledge protection, sensing capability² and integration capability [9]. Moreover, agile leadership is a leadership capability that can guide and influence teams to always deliver value to customers. This can be achieved by having the flexibility and speed skills that can facilitate the organization success. Agile leadership measurements consisted of 4 items which are a sense of urgency and direction, shares responsibility and mutual accountability, effective in recognizing problems and making a decision, and commitment⁵ and trust among members [28]. Lastly, organizational ambidexterity is the company ability to exploit current opportunities while simultaneously exploring new opportunities for the future. The variable measurements consisted of 3 items, namely always using new technology, based on their success in the capability to explore new technologies, and enhance the role of customers¹³ [29].

All variables are measured by using Likert scale of 1 = strongly disagree to 5 = strongly agree. The result showed the Cronbach's alpha value for organizational ambidexterity (0.876), KM capability (0.882) and agile leadership (0.861). It can be concluded that all variables have fulfilled reliability because it has a value above 0.7.

4 Finding and Discussion

The test of the proposed conceptual models including hypothesis testing by using Partial Least Squares Structural Equation Modelling (PLS-SEM) and the WrapPLS software as the research tools. Result is presented in Table 1.

Table 1. The result of path coefficients method PLS

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	P values
KM capability → org ambidex	0,184	0,185	0,080	0,021
Agile leadership → org ambidex	0,168	0,172	0,075	0,026

The direct influence of knowledge management capability on organizational ambidexterity shows the value of 0.184, while the t-statistic is 2,313. T-statistic is greater than 1.960 (t table), hence the **hypothesis 1** that stated knowledge management capability has a positive and significant effect on organizational ambidexterity is accepted. This is in line with the research by Andriopoulos and Lewis [30]. This hypothesis test results show that the higher level of knowledge management ability, the higher the ambidexterity of its organization. In this research the ability of SMEs in managing their knowledge management is able to improve their organization's ambidexterity. Organizational ambidexterity arises from a contradiction process of knowledge in term of exploitation and exploration. Organizational ambidexterity excels in exploiting existing knowledge and experience. The company must have knowledge management capability in order to be able to assess and respond to competitors' actions quickly. Companies that have a good knowledge management ability can balance two conflicting activities i.e. exploration and exploitation. Exploration and exploitation need to be maintained by the company for long-term sustainability.

Meanwhile, the second hypothesis examines the direct influence of agile leadership on organizational ambidexterity. The test results show a value of 0.168 and T-statistic of 2.236. T-Statistic is greater than 1.960 (T-table), hence the **second hypothesis** which mentions that agile leadership has a positive and significant impact on workforce transformation is supported. Leaders with a high level of agility will facilitate the organization to have ambidexterity.

5 Conclusion

The first objective of this paper has analyzed the effect of knowledge management capability on SMEs ambidexterity. The finding suggests that knowledge management capability has positive and significant relationship with SMEs ambidexterity. This finding is supported by previous research which mentions that although knowledge is the primary

resource with high strategic potential, the company must have knowledge management capability to assess and respond to the fast competitor's actions [16, 26, 27]. The ability to create and share relevant knowledge prepares and enables to exploit new opportunities.

The second objective has tested the relationship between agile leadership and organizational ambidexterity. The results of this study verified that agile leadership is one of requirements for organizational ambidexterity. The results ensure that the existence of agile leadership is antecedent to the organizational ambidexterity.

The main point of this finding is SMEs should have capability to combine the practices of knowledge exploration (creation), knowledge exploitation (storage, transfer, and application) and a leadership style with high agility to have an ambidexterity. The organizations should have the capability to flexibly change on these elements in accordance with the situation [31]. Therefore, developing an environment that encourages the use of exploration and exploitation and agile leadership is an essential condition for managers to improve SMEs ambidexterity.

However, this research has the following aspects of limitations. First, the research design of is cross-sectional, and the research design is unable to ensure that the causal relationships set out in the hypotheses; even the results are consistent with theoretical reasoning. Future research could solve this issue by applying a longitudinal design. Second, this research analysed knowledge management capability characteristics such as knowledge management creation capability, transfer capability, storage capability, and application practices capability. Nevertheless, approaches that are more specific may be needed to take full advantage of each process. So that, it obtains distinct results when a company finds themselves in different contexts (e.g., environment and time stage). Hence, when SMEs require creativity and experimentation to face scenarios of radical change, an agile leadership is probably most suitable. Whereas, in more stable situations, other style of leadership maybe more appropriate, as the company essentially pursues stability. In this regard, future studies could try to elaborate another type of leadership with different environmental or temporal settings.

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