

Innovation Capacity, International Experience, and Export Performance of SMEs in the Field of Information Technology of Vietnam

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Abstract—Although there are many assessments of the innovation capacity of enterprises, there is still a lack of assessment of the innovation capacity of small and medium enterprises in the information technology sector related to the 4th industrial revolution. The structure must be determined from a practical point of view using existing innovation capacity studies. Therefore, this study aims to improve understanding of the characteristics of innovation capacity in the context of small and medium enterprises in the field of information technology by reviewing the empirical literature. This article presents international experiences, assessment models, and the applicability of models to the characteristics of small and medium-sized enterprises in the field of information technology. With the main contribution, the article identifies an overview of growing research around the world on innovation capacity and lessons learned for small and medium enterprises in Vietnam. The research results will contribute to improving understanding of the special characteristics of the innovation capacity of small and medium enterprises in the field of information technology and especially in the context of the 4th industrial revolution. The described innovation capacity characterization can guide further studies by providing criteria for how innovation capacity in small businesses can be understood. Furthermore, using the findings of this assessment, managers can improve the innovation capacity of their businesses by acknowledging many aspects of innovation capacity.

Index Terms—Innovation Capability, Systematic review, Innovation performance, Performance management, SME.

I. INTRODUCTION

In the contemporary era, firms of all industries have been forced to develop innovation with the sole aim of maintaining their presence and enduring their continuity. Any firm that has lagged in the innovation sector has found it rough to stay at par with the others that have taken the initiative to take advantage of the advancement of technology. A commitment to innovation is being regarded as critical to the survival and prosperity of small firms and entrepreneurial ventures; it inspires their growth. Studies on this phenomenon have focused on the concept of innovation capability [1]. Innovation capability has been defined as the potential of a firm to create not only unique but also valuable products or knowledge. According to Oura et al., innovation capability is a firm's ability to unceasingly transform ideas and knowledge into new products, processes, as well as systems for not only its benefit but also for its partners or stakehold-

ers. Empirical research has indicated that firms' future performance is to a greater extent tied to the implementation of innovation activities. In this sense, there exists a positive relationship between the implementation of innovation activities and how firms perform in the future [2]. Firms make use of resources and capabilities to create innovations in the form of novel products, processes, and services. However, some firms outdo others as they prove to be better at reproducing innovation achievement. From these definitions, innovation capability revolves around small businesses' objective to stay at par with large and established businesses; it is points to one direction of small firms aiming to compete with larger competitors who possess relatively more resources. The capabilities and resources firms need to prosper in developing new products, processes, and services are different for different firms, which justifies why some outdo others.

Notably, the current accounts of innovation capabilities overlap with the concept of dynamic capabilities. For this reason, it has been challenging to distinguish between these two concepts. On their part, dynamic concepts stand for a pervasive concept within the field of strategic management. Dynamic capability defines the capability of enterprises to incorporate, shape, and reconfigure both internal and external competencies in an attempt to counter rapidly changing settings [2]. Conceptualizing innovation has, in the modern era, emerged as a complex field of research, drawing the attention of numerous researchers. However, a consensus has not been attained in the literature, and the dire necessity to clearly bring out what type of capabilities fuel innovation in firms, as well as how firms attain these capabilities and utilize them. Some studies have reviewed research on organizational innovation, while others have divided such review into radical and incremental innovation [2]. At the same time, they have presented numerous factors that impact decisions on the development of products. Again, some researchers have provided insights into the innovativeness terminology and technological innovation topology. To achieve this, a review of literature on new product development, marketing, and engineering has taken center stage. At the same time, some researchers have opted for the reviews of innovation

management measurement, with their key objective being to construct a frame that can be employed in assessing firm-level innovation activity. Another lot of researchers have taken a more general approach in their review, whereby they have concluded with a stretched framework of organizational innovation that creates a connection between leadership and innovation as a process on one end and as an outcome on the other. Lastly, some studies have majored in open innovation, that is, a specific innovation type [2].

Nonetheless, innovation capability analyses in SMEs context do not exist, in spite of the abundance of innovation reviews as aforementioned. In this sense, there is a need for search review, given the fact that innovation capability is not uniform in small and large business entities — it has been found to be sophisticated [3].

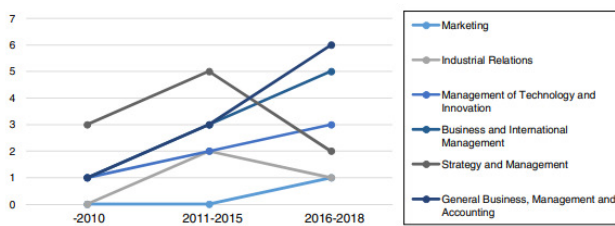


Fig. 1 Trends of Innovation Capability Research in SME Context.

The existing innovation capability categories typically take into consideration a certain form of innovation. For instance, in the case of comprehensive innovation capability, there is a product or process innovation. Some researchers have grouped innovation capability into either incremental or radical. Others have prioritized evaluating the capability of the firm to innovate by identifying its capabilities. As such, it would be significant to approach the concept of innovation capability from a practical point of view. This can be done through referencing existing innovation research. This study's primary goal has been to enhance the comprehension of the characteristics of innovation capability in SMEs perspective. At the outset, the research adds to the literature by as it identifies the conditions under which business ventures and entities with relatively lower resources are more likely to show high innovation capability. Furthermore, the research adds to the literature by taking the contemporary comprehension of innovation capability to another level.

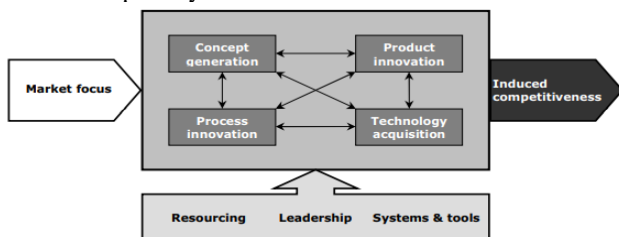


Fig. 2 Process of Innovation Capacity in SMEs

The paper is structured into: characteristics of SMEs in the field of Information Technology; introduction and analysis of methods as well as tools for assessing innovation capacity of enterprises; analysis and recommendations on the application of tools or methods to assess innovation capacity for information technology enterprises; and the recommendation of a set of indicators to evaluate innovation capacity for enterprises.

II. CHARACTERISTICS OF SMALL AND MEDIUM-SIZED ENTERPRISES IN THE FIELD OF INFORMATION TECHNOLOGY

There is little to dispute that Information Technology (IT) has advanced in the recent past and continues to be dynamic and sophisticated. With this skyrocketing sophistication, however, managers regard it as a key tool when it comes to competition; they take it as a competitive tool that can help create a gap between them and their competitors depending on how best they strategize on them. In this connection, investment in IT by firms has witnessed a rapid increase in the recent past. Small and medium-sized enterprises that are more determined to survive and continue despite the significant competition from more established firms have been at the forefront of implementing IT in their operations [2]. IT has been found to significantly influence firms' ability to outdo each as far as marketing themselves is concerned — firms have utilized IT as a tool to hold their ground as far as competition is concerned. Linking strategy to IT has to a greater extent, allowed firms to compete more effectively.

A study by Saunila has established a direct link between firm performance and IT; it has established a direct connection between investments in IT capabilities and firms' financial performance [1]. With the knowledge that prior studies concentrated on established and more resourceful corporations, there is a great gap in the case of SMEs. Questions have been raised on whether the results that have gotten on large corporations also represent the smaller firms. However, given the more flexible managerial capabilities of SMEs, it is presumed that the chances of IT adoption success are relatively higher. It is perceived that the relatively less complex nature of small businesses is more likely to see positive financial benefits as a result of IT adoption [1]. This means that smaller firms are better positioned to benefit from investing in IT and, as such, should effectively utilize it to exploit emerging technologies. But, a question has been raised: what are the characteristics that SMEs and medium-sized enterprises that have invested in IT should exhibit? The performance of firms is enhanced when there exist interactions among the elements of a system. Systems' complementary factors function in such a way that the returns of doing more of one thing depend on what is done with others. In this connection, a firm's successes or failure (Overall performance) cannot be tied to failure or adoption of IT; a committed investment in IT does not guarantee firms productivity and growth without complementary developments [4].

Innovation functions in a similar manner in that firms cannot prioritize innovation without influencing organizational

structures and systems. For instance, given innovation involves substantial risk-taking, successful implantation demands making considerable systemic alterations in firms to enhance risk [4]. Similarly, the chances are high that a strategy that majors in innovation will call for some level of flexibility in its organizational structure. Flexibility in procedures and processes, open communication channels, decentralized and informal decision-making, loosely identified job descriptions as well as coupled decision leakages are all characteristics of innovation. For a firm to be in a position to sustain innovation and incorporate it as an inevitable component of strategy, it must ensure all necessary resources are available for new products.

Moreover, it should provide collaborative structures and solutions aimed at solving problems and addressing challenges in a creative way, and link with existing businesses. SMEs with the capacity to timely respond and carry out innovation activities flexibly and rapidly have huge command in the competition stage. Furthermore, firms that possess relatively fewer resources with the ability to effectively manage, coordinate, and redeploy both internal and external competencies do well when it comes to competition. Although SMEs top the list of enterprises that commit to innovations, empirical innovation research has concentrated on large enterprises.

TABLE I

CHARACTERISTICS OF INNOVATION CAPACITY OF SMES IN THE FIELD OF IT

No	INNOVATION CAPACITY OF SMES	
	INNOVATION KEYS	DESCRIBE
1	Management	In most cases, SME owners are the managers. In this connection, there is room for rapid decision-making. Moreover, the managers can quickly and effectively respond to favorable opportunities while willing to take the risk. Adopting IT is one of these favorable opportunities that SMEs incorporate into their operations with ease; in-depth consultations common in large corporations are avoided here.
2	Marketing	SMEs are able to respond not only promptly but also efficiently to rapidly changing market demands. Moreover, they are more close to customers. Therefore, being effective market manipulators, SMEs are in a position to identify which technologies fit their marketing demands with ease.
3	Internal Communication	SMEs are more enabled to adopt technologies that can provide efficient internal communication. Notably, efficient communication, even if it is between two people, is important for the success of a firm; it can go a long way toward solving internal problems. Similarly, it has the ability to enable managers to identify the firm's external changes.
4	External Communication	With their limited resources, SMEs are not better positioned to identify and use important external resources, IT being one of them. Moreover, the ability of SMEs to absorb knowledge is relatively weaker.
5	Financial Resources	It is challenging for SMEs to attract capital as investors may see a greater financial risk. Understandably, SMEs are not in a position to disperse risk through multiple portfolios or projects. In this sense, their innovation capacity

		is low; IT implementation requires a significant amount of resources.
6	Growth	It tends to be challenging for SMEs to access external funds to meet their rapidly growing needs. One of these needs is the implementation of IT in their operations. Again, this signifies that the innovation capacity of SMEs is lower.
7	Scale Economy	In some economies of scale, there is a huge barrier to entry for SMEs. In this connection, their innovation capacity faces a big challenge in such economies.
8	Government Regulation	Understandably, it is never easy to deal with sophisticated regulatory of authorities. For SMEs, it is costly to comply with complex government policies, so their innovation capacity cannot match large enterprises.

However, there exists a significant difference between innovations in these two categories of businesses. SMEs are more enabled to respond to changes in demand since their organizational structures are more flexible [2]. Additionally, small and medium-sized firms tend to have close relationships with customers. In this regard, they are able to detect market changes more effectively and efficiently than larger corporations. At the same time, SMEs can combine product specialization with the flexibility of production, which can go long toward evading most of the obstacles to mass production. Unlike large enterprises, SMEs are not challenged by changes in technology. Generally, some of the areas through which the characteristics of the innovation capability of SMEs in the field of IT can be brought out include management, marketing, internal communication, external communication, financial resources, growth, scale economy, and government regulation [4].

III. ANALYSIS OF METHODS AND TOOLS FOR ASSESSING INNOVATION CAPACITY OF ENTERPRISES

Business capability entails the resources, abilities, and knowledge that an enterprise accrues over time and directly links to the accomplishment of its goals. In this connection, the first step towards analyzing the drivers of innovation is collecting data on business capabilities; most of the firms' innovation activities and their success are supported by business capabilities.

A. Resources of the Firm

The resources at the disposal of a firm go a long way toward influencing its ability to accomplish its goals. Notably, businesses pursue their objectives by engaging in varied types of activities with which innovation-related activities are part. Some of the resources here include both physical and intangible assets, workforce, available financial resources, and accumulated experience in carrying out business activities.

1) *Firm Size*: The size of a firm is the one determinant of its innovation capability [5]. Since these are small and medium-sized firms, size here can be measured in terms of the volume of turnover and the number of employed individuals.

In this connection, in assessing the innovation capacity of an enterprise, it is always advisable to collect data on both turnover (or the equivalent in the financial sector) and employment. Employment data can be obtained in terms of headcount but should be based on full-time equivalents (FTE) [5]. Furthermore, firm size can be measured in terms of the assets at its disposal, which is fundamental for analyzing productivity.

2) *Business Assets*: Assets range from tangible fixed assets, intangible fixed assets, and current assets to goodwill assets. Current assets here include inventories, receivable accounts, and cash [5]. To assess a firm's innovation capability in this category, one should consider the resources that the firm has total control over and are set to continue being productive for not less than one year. The key sources of asset data include financial statements such as the gross carrying amount of tangible assets and the book value of tangible fixed assets. It is worth noting regulatory licenses to exploit resources fall in this category.

3) *Age*: The age of a firm is another key factor that can tell the innovation capability of a firm. Firstly, a firm's age captures the entire experience the firm has accumulated for the entire period it has been in operation. In this sense, firms that have operated for a long tend to be associated with a larger stock of experience compared to the enterprise, which is just picking momentum. Majorly, the experience here can be expressed in terms of implementing changes and approaching problems. Logically, the more a firm operates, the more it goes through changes and the more it is faced with incidences that demand not only timely but also effective decision-making. On the other hand, firms with a relatively shorter duration of operation have little experience on how to approach such incidences; they tend to depict lower adjustment to incidences and are adversely hit by organizational inertia. In measuring a firm's age, both practical and conceptual challenges are put into consideration. Another factor that should be considered here is the number of years the firm in question has been in operation, that is, economically active. This sets the platform to assess the duration of the firm has accumulated experience [5]. Notably, there is a difference between the years the firm has been existed, and the years the firm has been economically active; the former may not give a correct picture since some firms are established legally but do not start operating right away. Therefore, assessment in terms of a firm's age should be based on the period it has engaged in any business activity. Additionally, information on how the firm in question was established should be considered. It is worth noting that some methods of business establishment significantly influence innovation and strategies.

4) *Financing and ownership*: Another major tool for assessing the innovation capability of a firm is its internal sources of finances. Firms that have realized economies of scale are more likely to face minimal challenges to invest in new activities aimed at bringing in even more profits. Such activities are those relating to innovation. The significant factors to consider when measuring a firm's internal financial

resources include the equity ratio and the profit margin [5]. On the same note, a firm's internal financing data is useful in the interpretation of its external financial resources as well as access to the financial markets. On ownership status, it has been found to significantly influence a firm's access to resources. For instance, firms that have merged or are part of an enterprise group can have easier access to resources compared to firms that stand on their own on financial matters. In this category, the data that should be considered include:

a. Whether the firm is a member of an enterprise group or a stand-alone enterprise.

b. Whether the firm has ties to any multinational enterprise and, if yes, whether the multinational group is located abroad or in the same country.

c. The origin of the firm's ultimate owner; whether they are locals or foreigners.

d. Whether the firm is listed on the stock exchange; if yes, information on the concentration of ownership should be considered.

5) *Management Capabilities*: A firm's management capability is another tool that is used to assess its innovation capability — its ability to adopt innovations, undertake innovation activities, and produce innovation outcomes. In this category, the firm's competitive strategy and the managerial capabilities employed in the overall implementation of that strategy.

6) *Business Strategy*: A firm's strategy of operation entails objective formulation and the identification of policies necessary to accomplish these objectives. Strategic objectives set the course for the intended outcomes over the long-term or even the mid-term [5]. On the other hand, strategic policies cover the ways through which a firm gives itself a competitive advantage over its competitors. Some of the notable strategic choices include: competition on quality or price, market leadership, approach to incidences (risks), level of openness, transformation, and creation of a brand. Notably, a firm's general strategies for the achievement of goals are connected to its innovation objectives, thus, data obtained here can be used in the assessment of its innovation capability.

7) *Organizational and Managerial Capabilities*: Organizational and managerial capabilities include an enterprise's internal capacity and competence to mobilize, command, and exploit available resources for the attainment of business objectives. These capabilities are closely related to innovation capability, and as such, a closer look at them can go a long way toward assessing a firm's innovation capability.

8) *Innovation Management Capabilities*: Logically, it is challenging for an enterprise to adopt something it cannot manage — initiate, develop, and achieve results from it. In this connection, looking into the enterprise's ability to pursue ideas for innovation, align varied innovation activities, allocate the necessary resources, manage innovation activities, and monitor the results can be a crucial indicator of its innovation capability.

9) *Workforce Skills and Human Resource Management*: It is indisputable that humans are the most fundamental

resource for innovation; they are the source of new ideas and creativity. The whole process of innovation calls for varied skills and the collaboration of different people [5]. Therefore, analysis of an enterprise's workforce qualifications, occupational structure, and competencies can offer an accurate assessment of its capacity to innovate. Understandably, the only way an enterprise can get a creative workforce is by embracing effective and healthy human resource management practices. Hence, an enterprise's human resource management policies can talk much about its potential to innovate.

10) Technological Capabilities: The improved characteristics of innovation can be attributed to the utilization of modified technology. This new technology has the potential to create new markets and fresh opportunities for innovation. When it comes to innovation capability assessment, technical expertise, design capabilities, and capabilities related to digital technologies and data analytics are of particular interest [5]. Technical expertise entails an in-depth knowledge and ability to utilize technology. Notably, this knowledge is derived from qualifications and skills. Design capabilities, on the other hand, are concerned with planning and designing procedures as well as technical specifications for new products and processes. In this category, expertise with emerging technologies should be considered. In the contemporary technological world, artificial intelligence (AI) and quantum computing is needed expertise for any enterprise that wishes to stay ahead of competitors. By collecting generic information on an enterprise's degree of technical expertise and identifying the percentage of its workforce with design abilities can be an indicator of its innovation capability. At the same time, data on the enterprise's capabilities to use digital technologies can be used to tell more about its potential to innovate. Digitalization offers a wealth of innovation opportunities for enterprises [6]. An enterprise boasting technical expertise, design capabilities, capabilities related to digital technologies, and expertise with emerging technologies is considered to be at a high level of innovativeness. On the contrary, a firm that lacks any or all of these capabilities in its workforce cannot be considered as having the potential to see a breakthrough in innovation.

B. Methods of Assessing Innovation Capability

The field of innovation capacity measurement has witnessed substantial research both at the country and enterprise levels [7]. Considering the innovation process as inputs, activities, and outputs, the majority of these researches have assessed the innovativeness of firms in terms of either the innovation process inputs or innovation process outputs. Nevertheless, this approach has been associated with bottlenecks, especially in the case of SMEs as well as companies in underdeveloped countries such as Vietnam. The overall measure of innovation capacity for enterprises has been the level of research and development (R&D) expenditures [8]. This is an input to innovation processes and does not basically result in innovations. Considering it incorporates unsuccessful R & D efforts, these expenditures may lead to higher figures which may not depict the actual innovation

capacity of an enterprise; they result in overestimation of the enterprise's innovativeness capacity [8]. Moreover, R&D factories are not the sole creators of all new products and processes; innovations can be triggered by either a self-discovery idea or a unique problem [9]. In the event of such scenarios, measuring an enterprise's innovation capacity through R&D expenditures will definitely put it at an innovativeness level lower than the actual level. A study by Jugend et al. identifies that R&D data utilized in measuring the potential of enterprises to innovate tend to favor established enterprises. Small and medium-sized firms, in most cases, fall on the wrong side of this approach because they may either be omitted or infrequent [10]. Patent data is one of the transitional output methods which has repetitively been employed in measuring enterprises' innovativeness. But, instead of this approach measuring innovation, it counts on inventions [11]. Since innovation is the result of an invention, measuring the latter does not put enterprises at their right innovativeness levels [9]. Measuring the innovation capability of a firm using the patent approach may result in an overestimation of the level of innovativeness as inventions that have not materialized into innovations may be included. Additionally, the tendency of the patent is not uniform for all industries, a reason to associate the approach with inconsistencies [12]. Such reasons as high costs force some firms to prefer safeguarding their innovations through such techniques as technological complexity, maintaining lead time over competitors, and upholding secrecy [13]. Therefore, patent data is not a suitable measurement of firms' innovation capability due to the fact that not all innovations are patentable. Innovation count and firm-based surveys are the output-based approaches to measuring the innovation capability of enterprises [13]. In the former, data on innovation is gathered and counted from specialized journals, novel processes and products, databases, and announcements, and other specialized sources. Thus, it is considered an objective approach [14]. Firm-based surveys, on their part, are subjective since surveys, as well as interviews, are conducted on enterprises. Nevertheless, both these methods have a drawback. For instance, the innovation count approach, in practice, tends to lack a balance between product innovations and process innovations; it has been found to favor product over process innovations [15]. Furthermore, it prioritizes radical innovations over incremental ones [12]. At the same time, the innovation count approach does not account for innovations that fail to succeed and does not embrace a relative analysis of innovation performance [13]. On the other hand, the methodology utilized by firm-based surveys measures firms' innovativeness or newness by asking questions whose response depends on the respondents' interests. For instance, they may present such questions as to whether they have engaged in innovation activities. Since there is no technique to confirm whether the response is right or wrong, this approach is not purely accurate [16]. The Analytic Hierarchy Process (AHP) and the Analytic Network Process (ANP) are other approaches used to measure the innovation capability of enterprises. Notably, these approaches measure

intangible criteria of which innovativeness is part [16]. Inarguably, when strategic business decisions succeed, they provide the appropriate operational actions for the right markets. In this connection, strengths, weaknesses, opportunities, and threats (SWOT) analysis is used to examine where a firm performs well and where it is set to fail. Innovation is one of the strengths of a business as it can go a long way toward helping it accomplish its goals [14].

TABLE II
PAIRWISE COMPARISON SCALE

Intensity of importance	Explanation
1	Two criterion contribute equally to the objective
3	Experience and judgement slightly favor one over another
5	Experience and judgement strongly favor one over another
7	Criterion is strongly favored and its dominance is demonstrated in practice
9	Importance of one over another affirmed on the highest possible order
2, 4, 6, 8	Used to represent compromise between the priorities listed above

AHP and ANP approaches are useful in this analysis and, therefore, can be used to assess the level of innovativeness of an enterprise. AHP is a multicriteria decision-making technique that breaks down complicated problems into structures of multiple criteria, objectives, and alternatives. This approach is effective in measuring innovation capability due to the fact that subjectivity is involved [17]. One of the drawbacks of this approach is that innovation does not exist physically and cannot be shown as precise numbers; it is challenging to determine the measuring criteria [18].

On the other hand, ANP uses pairwise comparisons with judgments that represent the dominance of one element over another with respect to the common properties between them [19]. Notably, this approach is a generalization of the AHP. Many decision problems involve interaction and dependence on both higher and lower-level elements [19]. Unlike AHP, which is a unidirectional hierarchy structure, ANP facilitates multifaceted interrelationships among decision levels as well as attributes [19].

C. Recommendation of Indicators to Evaluate Innovation Capacity for Enterprises

According to Zahoor and Al-Tabbaa, an individual's definition of innovation influences the way they measure it [17]. Innovation is more than a brilliant idea, given that an idea only works after being acted upon; they require to be realized and add value for them to be regarded as innovation. Some of the recommendations of indicators to evaluate the potential of innovation for enterprises include: Customer involvement; Interaction between functions; Team climate; Innovation methodology; Innovation rewards.

1) Customer Involvement

There is little to dispute those ideas, however great they are, cannot be significant without the customer. In this sense, when firms involve customers in their innovation processes, they are more likely to realize the objectives of such innovations. Everybody involved in the entire process should have an in-depth understanding of customers' reality. Therefore, enterprises should assess their level of innovativeness by examining the extent to which they involve customers in their business operations, particularly when imple-

menting new strategies. Enterprises that involve their customers in nearly all aspects that are concerned with their satisfaction are better positioned to witness success in innovation. On the contrary, the chances of enterprises that abstract everything from the customer attaining a high innovativeness level are low.

2) Interaction Between Functions

Innovative break throughs happen at the convergence of varied functions. In a business setup, there are many functions and processes, and innovation integrates the majority of them. Therefore, the innovation process is directly connected to these functions and processes. The implication is that enterprises' innovation capability should be assessed based on the manner these functions and processes are synchronized. Communication and interaction between different departments of an enterprise are essential as they facilitate the transfer of knowledge, support exploration, stream operations, and facilitate the exploration of results [20].

3) Team Climate

Great ideas are born when different teams or even individuals come together. In this regard, the climate of teams goes a long way toward influencing their innovation capability. A good team climate characterized by collaborative problem solving, openness and commitment to goals impacts innovation capability positively. On the contrary, a team climate marred by decisions, work overload, and inadequate time affects innovation capability negatively. Therefore, as a way of assessing enterprises', the climate of different teams should be considered.

4) Innovation Methodology

Innovation calls for creativity, and creativity calls for time. In this sense, for enterprises to witness a breakthrough in innovation, they should allocate not only adequate financial resources but also time to the entire process. Furthermore, innovation demands a balance between creativity and structure, that is, too much system restrains the creativity and vice versa. The chances are high for great ideas to be realized when an enterprise has a little structure. In this connection, an evaluation of the structure adopted by an enterprise can be a significant indicator of its innovation capability. If an enterprise has a complicated structure, it is an indication that its level of innovativeness cannot match a different enterprise that has adopted too little structure.

5) Innovation Rewards

Patents take center stage in the innovation capability of enterprises. Though this assessment alone may fall short of giving the true picture of an enterprise's level of innovativeness, it should be considered. Enterprises that have previously been rewarded for innovations are more likely to witness a breakthrough in a new venture compared to enterprises that have no history of rewarding innovation.

IV. CONCLUSION

This paper has discussed four main concepts of innovation capability from the SME perspective in Vietnam. Firstly, it identifies some of the characteristics of small and medium-sized enterprises in the field of Information Technology. Secondly, it has analyzed the methods and tools for

assessing the innovation capability of enterprises. Thirdly, it has analyzed the application of tools or methods to assess enterprises' level of innovativeness. Lastly, it has recommended a set of indicators to evaluate innovation capacity for enterprises.

This research contributes to the widespread study of innovation capability. From the findings of the research, SMEs in Vietnam that have stepped in to develop innovative outputs have provided the ground to sustain competitive advantage. Also, it is evident that innovation as processes and innovations as outcomes are well established in the small enterprise context. These findings reveal that SMEs in Vietnam can take advantage of the numerous forms of innovation capabilities in their attempt to accomplish their business goals.

In the next studies, we will continue to develop tools to assess the innovation capacity of information technology enterprises, thereby providing recommendations to support enterprises to implement technological innovation. It is up to managers or the top decision-makers of enterprises to identify what works for them best; they are obliged to base their innovation choices on the needs of their respective businesses.

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