

The Significant Role of Entrepreneurial Bricolage Towards SME's Innovation Performance in China

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ABSTRACT

The evolvement of sustainability concepts has become a new global aim under the United Nations' Sustainable Development Goals, for which business enterprises are expected to play a crucial part in adopting sustainable procedures. The United Nations has identified enterprises and entrepreneurial activity, along with innovation, as key components in addressing the challenges of sustainable development. Nonetheless, the influence of business entrepreneurship by small enterprises varies depending on the nature of effort, and in many instances, sustainable entrepreneurship is only a source of instability and resource deployment. The major purpose of this study paper is to speak on the aspects that effect on the development of innovation performance among SMEs and how the entrepreneurial bricolage able to facilitates this process specifically to cope with the pandemic, lost income and customers demanding. The unique influence of entrepreneurial bricolage on innovation performance has yet to be identified for China settings. This study has been established the conceptual framework which constructed five variable which are innovation performance, entrepreneurial bricolage as endogenous variable, while constraint in finance, constraint in human resource and constraint in technology as exogenous variable. This produced conceptual framework backed by the theory of diffusion of innovation and expected to gather the data via questionnaire from the SMEs entrepreneurs' enterprises in China. This study allows to contribute to the existence body of knowledge and the understanding of the entrepreneurial bricolage and the factors impacting innovation performance among SMEs.

Keywords: Entrepreneurial Bricolage, Innovation Performance, China.

I. INTRODUCTION

The evolvement of sustainability concepts has become a new global aim under the United Nations' Sustainable Development Goals, for which business enterprises are expected to play a crucial part in adopting sustainable

procedures (Naciti, 2019). The United Nations has identified enterprises and entrepreneurial activity, along with innovation, as key components in addressing the challenges of sustainable development (UN, 2016). Nonetheless, the influence of business entrepreneurship by small enterprises varies depending on the nature of effort, and in many instances, sustainable entrepreneurship is only a source of instability and resource deployment (Beesley & Hamilton, 1984; Baptista & Karaöz, 2009).

In recent times, there has been a notable shift in the corporate paradigm and focus on sustainable development, with increased attention being given to supply chains, environmental concerns, and the promotion of sustainability performance. In light of this, an increasing number of enterprises have formulated environmental strategies to effectively articulate and implement their vision, objectives, and initiatives pertaining to environmental sustainability. The "Sustainability 360 Programme" was implemented by Wal-Mart as a component of their global strategy. According to the ESG Report of Wal-Mart for the year 2019, it can be observed that the involvement of small firms in entrepreneurial activity can have a significant impact as a platform for generating profits, so contributing to global wealth and improvements in living standards. In response to these requirements, there is a notable focus among managers, researchers, and industry practitioners on engaging in talks pertaining to sustainability. The objective of these discussions is to establish the most current framework for supply chain strategies within firms. The concept of sustainability encompasses three fundamental pillars: economic prosperity, social equity, and environmental protection. Sustainable entrepreneurship aims to achieve a harmonious integration of these dimensions by establishing a connection between business activities and sustainable development (Thelken & De Jong, 2020).

The COVID-19 pandemic has had a significant impact on small and medium-sized businesses worldwide, including China. The government has implemented a range of support measures and incentives for small and medium-sized enterprises (SMEs) in recognition of their pivotal role in driving economic development (Cui & Jae-hoon, 2022). In the aftermath of the global economic recession that occurred between 2007 and 2008, it is imperative to allow sufficient time for the small and medium-sized enterprises (SMEs) sector to fully recuperate and make a substantial contribution to the national gross domestic product (GDP) of any given country. The responses to the discovered challenges have been duly mentioned and comprehensively documented (Andalib & Halim, 2019).

Efficiency in the enterprise innovation process, impact of output, and contribution to enterprise business success are all aspects of enterprise innovation performance. In definition of corporate innovation performance, Sharin, Hanafi and Ahmad (2020) emphasised the need of fostering the enhancement of enterprise benefits through various forms of innovation, such as technological innovation and product innovation. After reviewing the evaluation indicators of innovation performance, Ferrando and Griesshaber (2021) came to the conclusion that innovation performance is a measure of how well businesses acquire and use resources to achieve better economic outcomes. Small and medium enterprises (SMEs) commonly encounter various limitations, including inadequate financial resources, challenges in procuring essential materials, limited access to pertinent business data, insufficient technological capacities, complications arising from time-consuming and expensive bureaucratic

processes, disruptions caused by movement restrictions during the COVID-19 pandemic, and market distortions resulting from policies and regulations. Notwithstanding these limitations, small and medium-sized enterprises (SMEs) demonstrate a distinctive connection between innovation and performance. Small and medium-sized enterprises (SMEs) commonly encounter various limitations, including insufficient financial resources, challenges in acquiring necessary raw materials, limited access to pertinent business information, inadequate technological capabilities, complications arising from burdensome and expensive bureaucratic processes, and policies and regulations that create distortions in the market (Muda & Rahman, 2016). Notwithstanding these limitations, small and medium-sized enterprises (SMEs) exhibit a distinctive association between innovation and performance. Over the past five years, numerous experts have conducted research on this particular association. Regrettably, small and medium-sized enterprises (SMEs) in China are seeing a decline in revenue as a result of the COVID-19 pandemic. The implementation of movement restrictions by the government has compelled many businesses to suspend operations because to the significant loss of profits.

According to a number of scholars, innovation exerts a favourable influence on the performance of small and medium-sized enterprises (SMEs). In contrast, alternative research has indicated that within a sample of 7,222 manufacturing enterprises, a little 11.8 percent partake in any type of innovative activities, while the remaining 88.2 percent abstain from engaging in innovation altogether (Halim et al., 2020). The incorporation of a career matrix pertaining to innovation and sustainability within small and medium-sized enterprises (SMEs) enhances the sustainability of their performance. While the scope of this discovery is confined to the manufacturing industry, it provides impetus for scholars to explore the root causes and determinants that hinder companies' ability to engage in innovation. The identification and comprehension of the variables that impede innovation are of utmost importance. Due to the distinct characteristics of each organisation operating in the market, the aforementioned elements exhibit variations based on the size of the firm. Small and Medium-sized Enterprises (SMEs), in contrast to larger organisations, function on a reduced operational magnitude. Due to their dimensions, these entities could encounter internal limitations in terms of resources. Academic discourse has encompassed discussions among scholars regarding diverse business variables and modelling structures, with the aim of enhancing comprehension and knowledge acquisition. According to researchers, it is argued that small and medium-sized enterprises (SMEs) are more prone to encountering financial limitations, hence posing a threat to their productivity and potential for expansion.

This study has three primary objectives. Firstly, it seeks to identify the creative practises employed by entrepreneurs in the context of entrepreneurial bricolage. Secondly, it aims to investigate the various constraints faced by these businesses, including those related to human resources, finance, and technology. Lastly, it aims to explore the relationship between balanced business innovation and innovation performance.

In order to pursue further investigation, the researcher must address the following inquiries:

- (i) How do the businesses happen and become an entrepreneurial bricolage in innovation performance?

- (ii) Is there any significant relationship between all limitations (finance, human resources & technology) and innovation performance?

II. LITERATURE REVIEW

A. The Aims of Innovation Performance in Entrepreneurship

An entrepreneur is a someone who possesses the ability to identify opportunities that are often disregarded by others and subsequently establishes novel marketplaces for products and services, which have the potential to significantly impact or even dismantle existing enterprises. Entrepreneurs possess a rich historical background in navigating and adapting to shifts in the business landscape and market disturbances (De Jong & Den Hartog, 2007). Given their exceptional capabilities and distinct worldview, it is reasonable to anticipate their significant contribution to the societal and economic recuperation following the COVID-19 pandemic. The avoidance of risk is a common behaviour among individuals. Risk reduction plays a crucial role in our everyday existence. The global pandemic has resulted in unforeseen and significant consequences, contributing to the challenges we currently face. When considering the concept of danger, individuals may experience a heightened perception of risk. In contrast, entrepreneurs exhibit a distinct perspective on risk. The findings derived from various studies illustrate the efforts made to effectively control or guide market outcomes, taking into consideration the level of risk prevailing in the market context. Entrepreneurs have the option to react to prevailing circumstances by augmenting their assessments of risk. As a consequence of acquiring this novel information, individuals may commence formulating innovative strategies and implementing measures to enhance their anticipated outcomes, but a significant portion of the population remains fixated on, or even incapacitated by, the perceived threat (Mafini, 2016).

In this study, a desktop methodology was employed to examine the extensive empirical evidence in Indonesia about the relationship between innovation and the performance of small and medium-sized firms (SMEs). The survey findings indicate a dearth of empirical evidence in Indonesia pertaining to the investigation of innovation and its influence on performance. Due to the aforementioned factors, it is evident that there remains a substantial amount of research and analysis required in the realm of innovation and its impact on organisational prosperity. Additionally, it was discovered that there was a lack of consistent empirical evidence indicating a substantial influence of the inventions on corporate performance. Therefore, it might be argued that the conclusion lacks universal applicability. There is a pressing demand for additional research endeavours akin to the present study, particularly within the African context, where a significant dearth of scholarly investigations in this domain exists (Hadjimanolis, 1999, Baierle et al., 2020).

The available resources refer to those that are easily accessible within the entrepreneur's surroundings, requiring minimal effort or financial investment for acquisition and utilisation. Entrepreneurs who effectively utilise the resources at their disposal are perceived as persons who demonstrate a refusal to succumb to the limitations imposed by their surroundings. Instead, individuals engage in acts of resistance against societal restraints and

challenge established norms or conventional notions of acceptable contributions. The use of bricolage spans across various areas, encompassing physical inputs, human resources, markets, human capital, and institutional settings. Nevertheless, there exists a scarcity of empirical study on this idea.

B. Constraint in Finance

Financial limitations are characterised by their specificity and objectivity, as they can be clearly defined and quantified. The lack of sufficient financial resources to invest in a particular firm, as well as difficulties in comprehending the intricacies of stock investments, should not be regarded as instances of constraints or limitations. Providing a roadmap that includes specific details like speed traps, adverse weather conditions, and long distances without access to petrol stations is akin to offering guidance on the optimal route for travel between Kansas City and Denver. A financial constraint refers to a factor that imposes limitations on the range or calibre of investment opportunities accessible to an investor (Di Zhang & Bruning, 2011). The distinction between internal and external constraints is inconsequential in this context, as both the aforementioned cases can be categorised as internal constraints, such as insufficient knowledge or limited financial resources. Investors encounter a combination of internal and external constraints in their investment activities. Certain norms and regulations are self-evident. For instance, it is imperative for every investor to acknowledge the constraints given by the duration of their investment horizon. This holds true for both a customer with a 5-year-old daughter aspiring to accumulate sufficient funds to finance her four-year college education, and a 50-year-old individual who is lagging behind in retirement savings and desires to retire prior to reaching the age of 70.

Small enterprises face challenges in meeting collateral requirements due to limited movable assets. Certain banks and non-banking financial institutions exhibit a hesitancy in extending loans to small and medium-sized firms (SMEs) due to apprehensions around the availability of collateral. Due to the prevailing economic conditions, businesses exhibit a reduced propensity to allocate resources towards investments in human capital and novel technologies. The presence of human capital and the use of cutting-edge technology are imperative factors that contribute to a company's capacity for innovation. Small and medium-sized firms (SMEs) face several hurdles within the global economic landscape, encompassing obstacles related to information acquisition, funding, technology, and human resources (Brancati, 2015). Financial challenges are commonly encountered by innovative small firms due to several liabilities they face, such as limited resources, vulnerability stemming from their size, and the difficulty in obtaining finance for investments. Small and medium-sized enterprises (SMEs), however, are more susceptible to encountering financial challenges compared to larger corporations. Based on the analysis of several scholars, financial institutions often exhibit caution when extending loans to small and medium-sized firms (SMEs) due to the comparatively higher operational expenses and diminished profitability associated with such ventures. The activities of a small and medium-sized enterprise (SME) necessitate constant monitoring due to the relatively small loan amount and substantial operating costs involved. Another area of study centers on the impact of financial resources in constraining the growth potential of small enterprises. The World Business Environment Survey reveals that small and medium-sized firms (SMEs) encounter a substantial impediment to

their growth prospects due to limited availability of financial resources. In alternative terms, the absence of adequate financial resources hinders the ability of small and medium-sized enterprises to achieve their maximum growth potential (Ferrando & Griesshaber, 2021). Based on the aforementioned literature, the researcher formulated the initial hypothesis for this investigation as follows:

H1. The constraint in finance significantly influences the SME's innovation performance mediated by entrepreneurial bricolage.

C. Constraint in Human Resource

The decision of individuals to enter, persist in, or contribute to the healthcare workforce is influenced by several social, economic, cultural, and gender-related factors. One illustrative practise involves the deliberate recruitment of individuals possessing specific socioeconomic, ethnic, and cultural characteristics, aimed at fulfilling the healthcare needs of the most disadvantaged individuals. The devotion of healthcare personnel at the service level is influenced by organisational and managerial factors (Hashim, Osman & Alhabshi, 2015). The workplace environment has a crucial role in influencing the quality and efficiency of healthcare services. The utilisation of both monetary and nonmonetary incentives within the health sector is of utmost importance in order to guarantee the presence of an appropriate skill mix at the appropriate location. Expanding the range of focused therapies would undoubtedly necessitate substantial upfront and continuous investments in training. Expenditures of this nature necessitate early implementation during the scaling-up process due to the considerable time required for the production of additional healthcare workers. In order to ensure effective development of human resources for health (HRH) and their integration into healthcare systems, it is imperative that HRH policies are congruent with national health sector reforms, prioritised interventions, poverty reduction programmes, and training methodologies (Durst, Edvardsson & Foli, 2023). These policies should serve as a framework to guide HRH development and provide a connection between HRH and the aforementioned healthcare concerns. The sociopolitical and economic context of a particular nation has a significant impact on the growth of its health sector workforce, as well as the probability of emigration from that country.

The allocation of resources towards the development of human capital is necessary in order to actively engage in the exploration and implementation of novel concepts. Numerous studies have identified human capital as a crucial determinant in the achievement of organisations in terms of their ability to innovate novel products or services. The active involvement of employees in generating profit-oriented ideas can potentially have a substantial impact on the innovation process. Organisations highly prioritise people that possess the ability to generate creative ideas. In contrast, it is imperative for businesses to leverage the cognitive abilities of their employees to think innovatively (De Massis et al., 2018). In order to achieve a significant degree of creative performance, it is imperative for small and medium-sized firms (SMEs) to allocate a sufficient amount of time. Small and medium-sized firms (SMEs) are required to consistently improve their existing skill sets while simultaneously developing new ones. The acquisition of these competencies can only be achieved through natural development. The attainment of this objective would pose challenges in the absence of a highly skilled staff

capable of contributing their inventive concepts to the company's expansion and the advancement of novel competencies. Based on the aforementioned literature, the researcher formulated the second hypothesis for this investigation as follows:

H2. The constraint in human resources significantly influences SME's innovation performance mediated by entrepreneurial bricolage.

D. Constraint in Technology

Technology is an additional element that has the potential to impede the expansion of small and medium-sized enterprises (SMEs). There exist a multitude of definitions pertaining to the concept of technology. Technology comprises two main components: the physical aspect and the informational aspect (Gartner, 2019). Physical components refer to concrete entities, encompassing many elements like products, equipment, designs, and procedures. The concept of "informational components" encompasses a range of knowledge domains, including but not limited to management, marketing, production, skilled labour, and quality control expertise. A recent study in academic literature endeavours to provide a conceptual definition of technology. This study posits that technology comprises three essential components: an intelligent entity, an intentionally designed artefact with a specific function, and a substantial advantage that can be harnessed for a purpose based on logically derived knowledge (Filimonau & Naumova, 2020). Based on the aforementioned literature, the researcher formulated the third hypothesis for this investigation as follows:

H3. The constraint in technology significantly influences SME's innovation performance mediated by entrepreneurial bricolage.

E. The Definition of Entrepreneurial Bricolage

Bricolage refers to the practise of utilising and amalgamating preexisting elements in order to generate a novel and inventive result. Bricolage refers to the practise of utilising existing resources in conjunction with novel complexities and prospects (Baker & Nelson, 2005). In spite of operating within a context of limited resources, firms will persist in advancing their objectives by effectively leveraging any accessible resources to generate novel prospects. This notion aims to elucidate the reasons behind the success of certain entrepreneurial enterprises operating within contexts characterised by limited resources (Fu et al., 2019). Again, the objective of this research is to expand and evaluate the application of the bricolage concept in elucidating the phenomenon of innovation within the context of resource limitations among small and medium-sized manufacturing enterprises in Indonesia.

The theory of bricolage is commonly associated with Claude Levi-Strauss, a French anthropologist who introduced the concept of bricolage entrepreneurship. Levi-Strauss aimed to illustrate that indigenous populations, sometimes referred to as "savage," exhibited entrepreneurial qualities comparable to those seen in more "civilised" societies. In his seminal work titled *The Savage Mind*, the author establishes a connection between the concept of the "bricoleur" and that of the "engineer." (Wu, Liu, & Zhang, 2017).

In contrast to the engineer, the bricoleur exhibits a resourceful approach by utilising accessible materials to fabricate the necessary tools for the ongoing execution of a particular project. In contrast, the engineer proactively strategizes and secures the necessary resources in advance of project initiation. The bricoleur is commonly understood to be in opposition to the rational perspective, as they approach work by addressing challenges as they emerge and use existing resources rather than strictly adhering to predetermined requirements. Instead of engaging in premeditated preparation, the bricoleur partakes in audacious experimentation (Halim, Andalib, Ahmad & Ramayah, 2020).

The primary focus of bricolage theory revolves around elucidating the origins of entrepreneurship within circumstances characterised by economic challenges or restricted resources. The philosophy is motivated by the concept of generating something from a state of nonexistence (Alsharif et al, 2021). Resources that are not fully utilised and have the potential to be combined to create productive resources are sometimes referred to as "idle resources." Baker and Nelson (2005) provide an illustration of the adaptation of machinery or software for unintended ends through the use of appendages and hacks. Based on the aforementioned literature, the researcher formulated the fourth hypothesis for this investigation as follows:

H4: There is a significant relationship between entrepreneurial bricolage and innovation performance.

III. RESEARCH METHODOLOGY

This study employs two techniques to investigate the determinants of platforms. The primary objective of this study is to establish a correlation between the independent variables. This research contributes to the progression of knowledge and the production of novel concepts for academics. Consequently, the present study is currently in progress with the objective of collecting the requisite data to examine the issue at hand. The primary data source utilised in this study comprises a quantitative methodology and an online poll, while supplementary data is derived from scholarly journals, publications, and reputable websites. In the scope of this research, the investigator will direct their attention towards a specific sample of entrepreneurs operating within the Small Medium Enterprise (SME) sector who engage in the utilisation of online purchasing platforms. The data was obtained by an online survey utilising a non-probability sampling method in combination with convenience sampling. The demographic characteristics of the participants serve as the basis for distributing surveys via online platforms. The poll was distributed using widely utilised channels of instant messaging and in-person interactions, such as the messaging application WhatsApp. Subsequently, surveys would be distributed to colleagues that possess similar attributes.

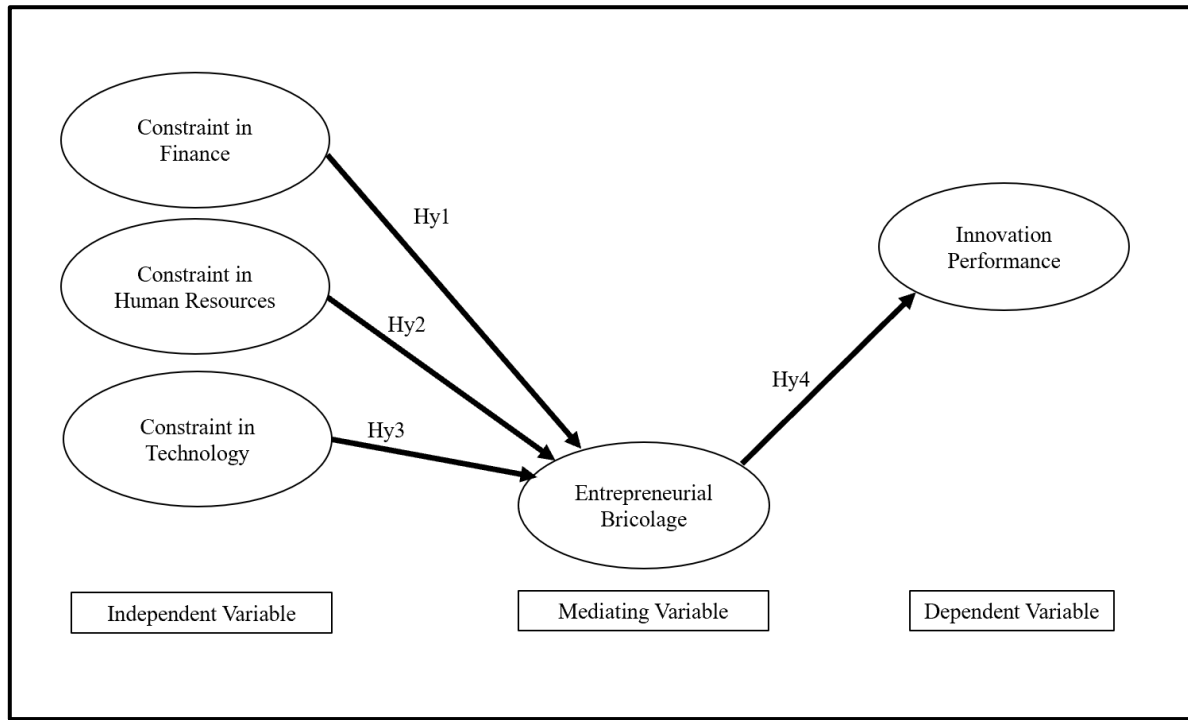


Figure 1: Conceptual Framework

A. Measurable Variable/ Item

The measurement and items that will be used in structural questionnaire was developed by the researcher, drawing upon previous material and utilising 31 items that had been produced for subsequent research, as outlined in Table 1 below:

Table 1: Measurement and Items

Innovation Performance	
IP1	First-to-market with new products and services
IP2	Later entrant in established but still growing markets
IP3	Entrant in mature, stable markets
IP4	Entrant in declining market
IP5	At the cutting edge of technological innovation
Entrepreneurial Bricolage	
EB1	We are confident of our ability to find workable solutions to new challenges by using our existing resources
EB2	We gladly take on a broader range of challenges than others with our resources would be able to

EB3	We use any existing resource that seems useful to responding to a new problem or opportunity
EB4	We deal with new challenges by applying a combination of our existing resources and other resources inexpensively available to us
EB5	When dealing with new problems or opportunities we take action by assuming that we will find a workable solution
EB6	By combining our existing resources, we take on a surprising variety of new challenges
EB7	When we face new challenges, we put together workable solutions from our existing resources
EB8	We combine resources to accomplish new challenges that the resources were not originally intended to accomplish
EB9	To deal with new challenges we acquire resources at low or no cost and combine them with what we already have
Constraint in Finance	
CF1	If there is an effective financial constraint, there will be less of an anti-poaching effort, so the equilibrium stock of wildlife will be smaller
CF2	The third aspect of reduced state capacity, related to the problem of financial constraint, is the lack of discipline within security forces
CF3	Freedom from financial constraint undoubtedly allows much more scope for a progressive life review
CF4	His approach conveniently fitted the wider government agenda of financial constraint and a limited military view of shellshock
CF5	The strongest feelings of financial constraint came from those who felt their current situation on benefits could only be replaced by entering secure, well-paid work
CF6	An unsustainable target deficit is one that precludes the existence of a steady state in the model without the additional government financial constraint
Constraint in Human Resources	
HR1	Human resource capabilities to the availability of people who have the right skills in the company
HR2	Management practices this pertains to the manner in which company authorities initiate and implement the key activities of planning, directing, organizing, and controlling
HR3	External orientation interactions with external stakeholders such as government, the community, customers, competitors and suppliers

HR4	Internal communication this refers to the existence of open multi-lateral and vertical communication in the company
HR5	Employee motivation to the inclination by individuals to exert high levels of effort toward organizational goals, as conditioned by that individual's desire to satisfy some internal or external need
Constraint in Technology	
T1	The use of technology nowadays for SMEs is a waste of time
T2	Confident that SMEs could be successful and smooth by using the technologies
T3	Technology is giving something towards the SMEs to be more creative and imaginative
T4	The use of technology promotes active and engaging lesson for businesses' best learning experience
T5	There is enough training and professional development provided for SMEs about the technology use in businesses
T6	Awareness of the great opportunities that technology offers for effective SMEs journey

IV. CONCLUSION AND RECOMMENDATION

In the nutshell, the present study has investigated the impact of entrepreneurial bricolage behaviour on the innovation performance of small and medium-sized enterprises (SMEs) in the manufacturing sector in China, particularly in the context of limited resources. When considering the constrained context, the researchers encountered difficulties in integrating all the elements. Due to this limitation, the study has exclusively focused on the constraining factors originating from the internal environment of small and medium-sized enterprises (SMEs). Through a comprehensive analysis of the pertinent scholarly literature, this study has identified three prominent limitations faced by small and medium-sized enterprises (SMEs), including financial constraints, human resource constraints, and technological restrictions. In order to examine the impact of these constraints on bricolage behaviour, a theoretical framework has been introduced.

The proposed paradigm encompasses three key elements: limitations (finance, human resources and technology), entrepreneurial bricolage, and innovation performance. Based on the established framework, the researcher has formulated four hypotheses. Entrepreneurial organisations should recognise the significance of mitigating insecurity during challenging periods, as the feeling of uncertainty can significantly hinder their efforts to initiate, adjust, or advance. The academic community has recently shown significant interest in the entrepreneurial leadership style as a means of effectively handling crises within a dynamic and unpredictable corporate environment. The management literature has various theories pertaining to sustainability drivers, with a

predominant emphasis on growth and technology as observed in the majority of research. The existing body of literature does not adequately address the mechanisms via which the fear of failure can motivate entrepreneurs to leverage underutilised or undervalued assets that are already within their reach. Through an examination of the impact of entrepreneurial leadership on externally induced employee job insecurity and sustainable economic performance, our objective was to address the existing knowledge gap about the role of entrepreneurial leadership in promoting innovation and entrepreneurship.

In the context of sustainable entrepreneurship, leadership assumes a pivotal role. Entrepreneurial organisations should recognise the significance of mitigating insecurity during challenging periods, as the feeling of uncertainty can significantly hinder their efforts to initiate, adjust, or advance. The academic community has recently shown considerable interest in the entrepreneurial leadership style as a means of effectively handling crises within a dynamic and unpredictable corporate landscape. The management literature encompasses various theories pertaining to sustainability drivers, but with a predominant focus on growth and technology as evidenced by the majority of studies conducted in this field. The existing research does not adequately address the relationship between the fear of failure and the motivation of entrepreneurs to leverage underutilised or undervalued assets that are already within their reach. Our objective was to address the existing knowledge vacuum regarding the impact of entrepreneurial leadership on externally induced employee job insecurity and sustainable economic performance. Through our examination, we sought to contribute to the understanding of how entrepreneurial leadership promotes innovation and entrepreneurship.

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