

Entrepreneur Bricolage Model Matter for Learning Purpose During the Pandemic

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ABSTRACT

This article focuses on whether Entrepreneur Bricolage Model (EBM) is important for business owners in managing financial matters during crises or pandemics. Crises and pandemics are undoubtedly challenging and stressful events that can have significant impacts on individuals, communities, and the world. In the scope of financial matter, crises or pandemics can result in reduced revenues and profits for businesses, as consumer spending decreases and supply chain disruptions occur. Business owners may also face increased costs due to safety measures or changes in operations. The high level of uncertainty and risk for businesses would occur, as the situation may be constantly evolving and difficult to predict. Hence, the purpose of this study is to review several past studies on the importance of Entrepreneur Bricolage Model (EBM) for business owner during crisis or pandemic. ROSES is used in this review of the current research that is using three main journal online databases which are Scopus and Web of Science. A total of 21 articles have been taken from the journals and been analyzed thoroughly for this research. There are two (2) main themes that have been observed by this review, which are Entrepreneurial and Bricolage. Further observation and discussion of the main two themes have developed a total of four (4) sub-themes for this research. In summary, this comprehensive literature review brings attention to the vital subject of businesses during crises and pandemics, where the entrepreneurial bricolage model stands out as a potent strategy embraced by business owners. This model encompasses the key elements of entrepreneurship and bricolage, while integrating sub- themes such as entrepreneurial self-efficacy, resilience, bricolage capability, and improvisation. Future research should adopt a holistic approach to financial management which it includes financial planning, budgeting, forecasting, and risk management. This approach can be particularly useful during times of crisis or change, as it allows companies to adapt quickly and efficiently to new circumstances. By adopting these approaches, companies can position themselves to navigate periods of crisis and uncertainty and create value for their stakeholders over the long term.

Keywords: Entrepreneur, Business Owner, Entrepreneurial Bricolage, COVID-19, Financial constraint

INTRODUCTION

An unprecedented pandemic that has stirred the whole world in the late 2019 where the first case was recorded from a Wuhan City, a province in Hubei of Republic of China (World Health Organisation, 2020). Pandemic is defined as “an epidemic occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people (Last, 2001; Kelly, 2011). It was triggered by the new virus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) that was officially announced on 11 February 2020 by International Committee on Taxonomy of Viruses (ICTV). Which later, the disease was declared by World Health Organisation (WHO) as Coronavirus Disease (COVID-19). Until recent date, there have been 765,222,932 confirmed cases of COVID-19, including 6,921,614 deaths, reported to WHO (WHO, 2023). Due to aggressive transmission of disease by the virus most of the countries has implementing a series of action as an agile respond to curb the spread of the virus. For instance, government has imposed social distancing, bans on mass events, and numerous travel restrictions, for example, border closures (Wieczorek-Kosmala, 2021).

The implementation of new stringent operational policies and drastic measures has resulted in adverse consequences for individuals, public organizations, and private companies. The COVID-19 pandemic has emerged as a significant economic threat, leading businesses to halt operations, downsize their workforce, and undertake innovative measures for survival (Deschryvere et al., 2020). During times of crisis, these disruptions severely impact the performance of numerous businesses, leading to waves of bankruptcies, rising unemployment rates, and mounting social concerns and anxiety (Wieczorek-Kosmala, 2021). Baier-Fuentes, Andrade-Valbuena, Gonzalez-Serrano & Gavia-Marín (2023) has highlighted that from several researchers note have highlighted the parallel impact of two crises—the Great Recession in 2008 and the COVID-19 pandemic—resulting in sharp declines in major stock markets (Mayer & Schnabl, 2021), significant spikes in unemployment rates (Fazzari & Needler, 2021), business closures (Doern, William & Vorley, 2019), uncertainty, and diverse reactions to the economic collapse (O’Donoghue, Adamovic & Sojo, 2022).

As a result of the COVID-19 restrictions imposed by numerous countries to limit domestic and international travel, businesses, particularly those in the hospitality and tourism industry, have been significantly affected. These measures have led to a sharp decline in sales revenues due to the sudden decrease in demand and sales following the lockdown of businesses (Wieczorek-Kosmala, 2021). According to the recently published scenarios by United Nations World Tourism Organization (UNWTO) the gradual reopening of borders and the easing of travel restrictions may result in a 58-78% drop in international tourist arrivals and a potential decrease of 1 trillion US dollars in international tourism receipts in 2020. The economic impact is expected to be immense, leading to substantial losses in export revenues from tourism and putting 100-120 million direct tourism jobs at risk (UNWTO, 2020). The aftermath of the COVID-19 pandemic is particularly challenging for business owners in the industry, such as resort, hotel, and tourism owners, as they face significant uncertainty and disruption from the period of business discontinuity to the resumption of regular operations.

The impact of the COVID-19 pandemic on business owners, particularly in the industry, has been significant. Business owners have had to bear fixed costs, which can be relatively high in the hospitality sector due to property maintenance and workforce-related expenses. As a result, there has been a substantial decrease in operating profit, negatively affecting the overall profitability of the business (Wieczorek-Kosmala, 2021). In response to the crisis, entrepreneurs have taken measures such as deferring new investments and facility upgrades. They have also implemented cost-cutting strategies, including reducing the workforce. However, this reduction in costs often leads to additional work for the remaining essential personnel, creating a delicate balance between cost reduction and sales increase. Unfortunately, for entrepreneurs who relied heavily on one aspect of their business, the challenge of reducing costs while trying to boost sales has not always been successful (Suvittawat, 2021).

The immediate survival of businesses can be threatened by three dimensions: financial, socioeconomic, and consumer fear (Duarte Alonso et al., 2021). From the previous study from Galindo- Martín et al., 2021; Alam et al., 2019; Hall et al., 2016; Hottenrott & Peters, 2012, stated that financial factors play a crucial role in starting

and developing a business, making them significant determinants of business activity. However, unforeseen catastrophes and crises can impact businesses. Therefore, effective financial management and risk mitigation practices provide a cushion to navigate such incidents. Businesses with higher levels of financial slack holdings are considered better prepared for risks (Galindo-Martin et al., 2021).

Resilience and creativity have become essential skills for businesses to adopt and adapt during periods of uncertainty. There is a strong relationship between entrepreneurial activities and resilience strategies employed by businesses (Kantur & Iseri-Say, 2012; Purnomo et al., 2021). In emerging markets, the lack of resources is a common challenge that compels companies to reconsider their strategies for innovation (Santos et. al., 2020).

The concept of Entrepreneur Bricolage Model (EBM) was closely being studied in regard to constraint face by the entrepreneur all around the globe. According to Desa and Basu (2013) bricolage focuses on harnessing opportunities and solving problems by taking advantage of existing resources that are devalued, neglected or discarded, and that are generally available for free or at low cost (Santos, Borini, de Miranda Oliveira, Rossetto, & Bernardes, 2020). Baker and Nelson (2005, p. 333) addressed this capability as bricolage, defining it as “making do by applying combinations of the resources at hand to new problems and opportunities.” In other words, the goal is to show evidence that bricolage is a capability for the development of frugal innovation in competitive contexts of crisis in emerging markets based on characteristics such as resourcefulness and improvisation (Santos et. al., 2020; Davidsson, Baker & Senyard, 2017; Levi-Strauss, 1967), which is necessary to attain substantial cost reduction, focus on core functionalities and enable to do more with less resources, principles inherited from frugal innovation (Santos et. al., 2020; Tiwari & Herstatt, 2012; Radjou, Prabhu & Ahuja, 2012; Zeschky, Winterhalter & Gassmann, 2014).

Can-do attitude is highly leveraged for business to sustain during pandemic period as Baker & Nelson (2005) identified three main characteristics of bricolage; 1) Improvisation, 2) Resources at hand and 3) Resource combination for new purposes. Many real example been depicted in various researches such as Hotel owners adjusting in investment deferral, adjusting in effective labor cost reduction, reduce operating costs, management inventory downsizing, concentrate on activities that generate income for businesses (Suvittawat, 2021) and The Javanese Noodle Maker sales of his canned *Bakmi Jawa* through e-commerce platforms had increased, The Batik Maker acquiring the master design of personal protective equipment and securing the sources of required material (Purnomo et al., 2021). Entrepreneurial bricolage, which seeks to gain an understanding of what entrepreneurs do in situations where they face resource constraints (Senyard, Baker & Davidsson, 2009; Duarte Alonso et al., 2021). Entrepreneurial bricolage will be discussed together with improvisation, which is referred to as “intuition guiding action in a spontaneous way” (Crossan and Sorrenti, 2002, p. 29 and Duarte Alonso et al., 2021).

Elements that drive entrepreneurs in sought-after bricolage capabilities in managing with financial constraints were related to entrepreneurial self-efficacy, entrepreneurial mindset and improvisation. Self-efficacy is a construct which derives from social cognitive theory (Barbosa, Gerhardt & Kickul, 2007), refers to one’s belief in his/her own capabilities “to organise and execute the courses of action required to produce given attainments” (Bandura, 1997, p. 3). self-efficacy is shaped by individuals’ collection of assets, experiences and skills (Kasouf, Morrish & Miles, 2015). Thus, self- efficacy is manifested through having the confidence to undertake the necessary efforts and succeed in the face of challenges (Mao, He, Morrison & Coca-Stefaniak, 2020). Ahlin, Drnovšek & Hisrich (2014) identified entrepreneurial self-efficacy as having a positive moderating effect on an individual’s creativity, with direct implications for a firm’s process innovation and outputs. From this, it is found that Entrepreneurial Bricolage Model helps entrepreneur in industry able to cope with financial constraints during crisis period.

1.1 The Need for a Systematic Review

Systematic literature review (SLR) defined as a systematic review which is an examination of a clearly formulated question that uses systematic and explicit methods to identify, select and critically appraise relevant research and to collect and analyse data from studies that are included in the review (Higgins, Altman, Gøtzsche,

Jüni, Moher, Oxman, Savovic, Schulz, Weeks & Sterne, 2011). Dewey and Drahota (2016) explain that a systematic literature review (SLR) is a process to categorise, choose, and critically appraise past research to find the answer to formulated questions and by using this method helps the researcher to have a plan before the reviewing process begins. A quantitatively and qualitatively recognising, combining, and evaluating all accessible data in order to produce a hearty, observationally determined response to an engaged research question (Petrosino et al., 2001). Also, it is a as a method of critically appraising, summarising, and attempting to reconcile the evidence (Petticrew and Roberts, 2006). A systematic review is a comprehensive literature review different from a traditional literature review (Xiao and Watson, 2019). It is conducted methodically or systematically, according to a pre-specified protocol, to reduce bias to synthesise the retrieved information for the research study. In simple words, it is a process of extracting information from research related to the reviewer's study to fulfil its objective (Dempster, 2011). Meanwhile, statistical methods may or may not be used to analyse and summarize the results of the included studies (Higgins et al., 2011).

It also helps other researchers re-conduct the investigation, confirm the analysis, or study the generality by providing details about the keywords and articles used and selected for the review process (Shaffril et al., 2020). According to Xiao and Watson (2019), SLR also offers a good advantage compared to other conventional literature reviews because it is organised and contains a transparent process. The researcher can search for past studies using several databases. Those same processes can be followed or replicated by other researchers when they conduct their systematic research. This method also covers such a strategic way of searching to help the researcher answer a defined question. According to Mallett, Hagen-Zanker, Slater & Duvendack (2012). The reviews can be strengthened via a transparent article retrieving process, a more prominent wider area of research, more significant objectives which can control research bias. Apart from that, this also motivates the researcher to produce quality evidence with more significant results (Mallet et al., 2012) and scientific findings are consistent and can be generalised across populations, settings, and treatment variations or whether findings vary significantly by particular subsets can be gleaned (Mulrow, 1994).

METHODOLOGY

In this part, several techniques, and processes of finding the relevant articles regarding the importance of Entrepreneur Bricolage Model (EBM) for business owners during pandemic are being discussed. Among the applicable methods used are ROSES, resources, and the systematic review process, including identification, screening, eligibility, and data abstraction and analysis.

2.1 Roses

This study was guided by the ROSES (Reporting Standards for Systematic Evidence Syntheses) review protocol. It is known as a set of guidelines developed to improve the reporting of systematic reviews and meta-analyses (Muhammad, Hasnu, & Ekins, 2021). These guidelines were developed by an international group of experts in systematic reviews and evidence synthesis and were first published in 2013. So, it is appropriate to be used for this study as it has been used by many researchers that shows this tool are valid. The standards make sure that researchers provide accurate information with the right amount of detail (Muhammad, Hasnu, & Ekins, 2021). Hence, the guidelines help to make sure the research are useful and reliable.

The ultimate goal of the ROSES initiative is to facilitate quality assurance of systematic reviews and maps while raising and maintaining high standards in the conduct of systematic reviews and maps through improved transparency (Haddaway, Macura, Whaley, & Pullin, 2018). The checklist includes items such as the research question, search methods, inclusion and exclusion criteria, data extraction methods, and statistical methods. This is a crucial component of a form that attempts to be adaptable to numerous different synthesis techniques. This adaptability is seen as a major strength of ROSES (Haddaway et al., 2018).

Adherence to the ROSES guidelines can help authors to improve the quality and completeness of their reporting and can make it easier for readers to evaluate the validity and reliability of the review. From this, adherence to the guidelines can help to promote consistency and transparency in the conduct and reporting of systematic reviews and meta- analyses across different fields of study.

2.2 Resources

The second technique utilized in finding the current research for the systematic literature review is resources or databases. The articles were found from Web of Science and Scopus. These databases are being selected because they are among the reliable resources and have encompassed over 256 study areas, including the importance of EBM for business owners during crisis or pandemic. Moreover, both resources' searching process is user-friendly since the reviewers can set their search according to their needs and preferences, such as the keywords, publication date, subject areas, document type, and others. As a result, the studies that specifically focus on the usage of EBM during crisis or pandemic are 132 in Scopus and 269 papers from Web of Science which are ample for the systematic reviews.

2.3 The Systematic Review Process for Selecting the Articles

There are three phases that need to be considered in the systematic review process for selecting the articles, which are identification, screening, and eligibility.

2.3.1 Identification

The initial phase known as the identification, which the main keywords for the current research must be identified. Thesaurus, dictionaries, past studies and other terminology associated with the present studies can all be used to search for the keywords. The keywords must be relevant to the research topics of the article review studies, according to the researchers. As seen in Table 1, the search strings have been established for the Scopus and Web of Science database.

Table 1 – Keywords and searching articles strategy.

Databases	Keywords used
Scopus	TITLE-ABS-KEY (("Entrepreneurial bricolage model" OR "Entrepreneur bricolage" OR "Entrepreneurial bricolage" OR "Bricolage" AND "pandemic" OR "crisis" OR "COVID-19"))
Web of Science	TS (("entrepreneurial bricolage model" OR "entrepreneur bricolage" OR "entrepreneur" OR "bricolage" AND "hospitality" OR "business owner" OR "hotel" OR "resort" AND "crisis" OR "pandemic" OR "COVID-19"))

2.3.2 Screening

As for the second phase, pursuant to the inclusion and exclusion criteria, which may include the type of document, language, year of publication, and subject areas, researchers will move on to the second phase of the screening process (Muhammad et. al., 2021). In terms of document types, the researchers chose to focus solely on research publications simply because they only offer data based on actual observations and would serve as the most important sources for systematic literature reviews. In addition, the articles must be in English and must not include any other languages. Additionally, the publications must have been published between the years of 2008 and 2020 as of the publication date in order to guarantee the validity of the studies and the data gathered from the relevant literature (Shaffril et al., 2021). However, the researchers decided to focus on the articles published within the years of 2018 until 2023 to ensure more validity of how the situation goes especially during crisis or pandemic. Other than that, social science and business have been chosen as the journals' primary field of studies. As they are in line with the objectives of the article review, it may increase the likelihood that relevant articles will be selected. A total of 254 articles have been removed as a result of the discussion above because they do not meet the criteria as stated in Table 2.

Table 2 – The inclusion and exclusion standards.

Criterion	Inclusion	Exclusion
Document type	Research articles	Non-research articles, Systematic literature review journals, chapter in book, conference proceeding
Language	English	Non-English
Year of publication	Between 2018-2023	Below 2018
Subject areas	Social Science, Business	Other than Social Science, Business

2.3.3 Eligibility

The third stage is eligibility, when a total of 146 articles have been assembled for expert analysis. The authors looked over the unresolved areas of the articles to determine how the content was related to the titles and eliminated any articles that did not match (Muhammad et. al., 2021). To ensure that all the articles meet all the inclusion requirements, the researchers must pay closer attention to the titles, abstracts, and the primary content of each article. To be used in the current article reviews, the papers must also be consistent with the objectives of the systematic literature review. The researchers excluded 125 articles due to it did not focus on business owner and crisis.

2.3.4 Appraisal of Quality

The remaining 146 articles were given to experts for quality assessment in order to determine the level of the articles' content. The remaining articles should be divided into three categories based on quality: high, moderate, and low (Petticrew and Roberts, 2006). The reviewers determined that if an article meets four or more criteria, it is of a high level of quality; if it meets at least three criteria, it is of a moderate level of quality; and if it meets just one or two criteria, it is of a low level of quality (Shaffril et al., 2021). Therefore, only 21 articles were qualified for the review.

2.4 Data Abstraction and Analysis

The research studies will be the subject of an integrated evaluation. The article reviews were able to incorporate three distinct research methods which are qualitative research, mixed-methods research, and quantitative research. According to Whitemore and Knafl (2005), integrated information could be created or assessed using a qualitative or mixed-method approach. These strategies are among the most effective kinds of research methodologies because they let researchers make constant and systematic views about the empirical databases. Therefore, the current research utilises a qualitative methodology. The researchers will next read through the remaining 21 publications in full, paying particular attention to the abstract, results, and issue-related discussions. Data extraction procedures included in the use of research questions. In other words, all the reviewed research studies must be able to address the research questions before they can be listed together. Otherwise, they will be eliminated from the list.

Thematic analysis was then chosen by the researchers to be used in identifying the themes and sub-themes of the systematic literature review. In order to set aside the data that addresses the study questions of the studies, the researchers must first compile all the information from all articles they have chosen. Second, the related information can be acquired by converting the unprocessed information to the useful one as according to Sandelowski (1995) and Patton (2002). Recognising the themes or guiding principles from the studies can help with this activity. In the end, the researchers have identified two (2) major themes which are entrepreneur and bricolage and four (4) sub-themes which are entrepreneurial self-efficacy, resilience, bricolage capability, and improvisation as shown in Table 3.

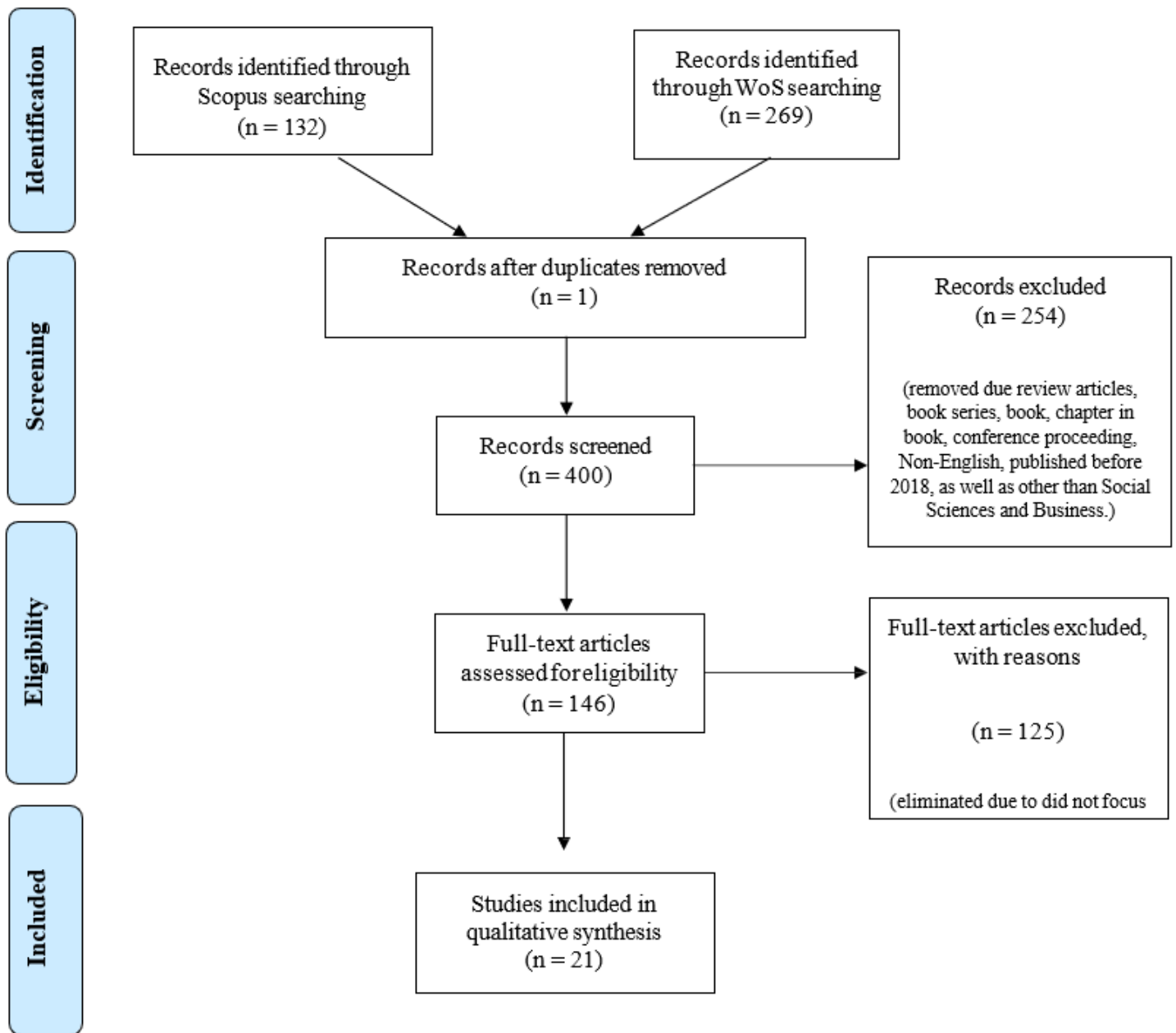


Figure 1. Flow Diagram of the study adapted from Shaffril et al. (2019).

RESULT

3.1 General Findings and Background of The Studies Included in The Review

The analysis produced a total of 2 main-themes and 4 sub-themes related to entrepreneurial bricolage model for business owner during pandemic. As presented in Table 3, the two themes are entrepreneurial are (2 sub-themes) and bricolage (2 sub- themes). The sub-theme of entrepreneurial self-efficacy was mentioned in five articles whereas entrepreneur’s resilience was found in ten articles. On bricolage capability, eleven articles have mentioned the sub-themes while ten articles talked about improvisation.

The review was extracted from a total of 16 articles that have been approved. Among the articles used, five were published in 2020, seven in 2021, four in 2022 and one in 2023. Most of the articles have been conducted in relation to crisis that happened during the COVID-19 pandemic.

3.2 Main Findings

This section will revolve around discussion on two main themes namely entrepreneur self-efficacy, resilience,

bricolage capability and improvisation along with the emerging six sub-themes (Refer Table 3).

Table 3 – The Main themes and Sub-themes

Authors	Entrepreneur		Bricolage	
	Entrepreneurial Self-Efficacy	Resilience	Bricolage Capability	Improvisation
Santos, Borini, de Miranda Oliveira, Rossetto, & Bernardes (2020)		/	/	/
Duarte Alonso, Bressan, Kok, Sakellarios, Koresis, O’Shea & Santoni (2021)	/	/	/	/
Purnomo, Adiguna, Widodo, Suyatna & Nusantoro (2021)		/		
Baier-Fuentes, Andrade-Valbuena, Gonzalez-Serrano & Gaviria-Marin (2023)		/	/	
Tsilika, Kakouris, Apostolopoulos & Dermatis (2020)			/	/
Batat (2021)		/	/	/
Crupi, Liu & Liu (2022)			/	/
Bowen, Dowell & Morris (2023)		/	/	/
Mishra (2021)		/	/	/
Kuckertz, Brändle, Gaudig, Hinderer, Reyes, Prochotta & Berger (2020)		/	/	
Halim, Zainal & Ahmad (2022)			/	/
Scuotto, Cicellin & Consiglio (2023)			/	
Malewska, Ratajczak-Mrozek & Sajdak (2021)	/			
Emami, Ashourizadeh, Sheikhi & Rexhepi (2022)	/			
Lee (2022)			/	
Nguyen, Ngo & Tran (2021)		/		

3.2.1 Entrepreneur

Entrepreneur is an ambitious individual who launches and runs a business, taking on financial risks in the process of pursuing success. In specific, entrepreneur aspect was examined in majority of articles selected and it describe

fundamental attributes of entrepreneur that enable them to succeed the elements of entrepreneurial self-efficacy and resilience such as their individual key characteristics, motivation and mindset and persistently managing crisis at critical time.

3.2.1.1 Entrepreneurial self-efficacy

Entrepreneurs' ability to believe in their own capabilities, known as self-efficacy, plays a crucial role in developing resilience in the face of challenges and setbacks in their ventures. It enables them to recover and rebound from failures in their entrepreneurial pursuits. (Bullough & Renko, 2013; Bernard & Barbosa, 2016; Purnomo et al., 2021). Also, it builds upon the principles of social cognitive theory, examines an individual's confidence in their ability to accomplish entrepreneurial tasks. (Miao, Qian, & Ma, 2017, Duarte Alonso et al., 2021). When evaluating the viability of a particular opportunity, entrepreneurial self-efficacy is specific to the venture and is connected to an entrepreneur's objectives and motivations (Cassar & Friedman 2009; Dimov & Pistrui 2020; Emami, Ashourizadeh, Sheikhi, & Rexhepi, 2022).

According to a study conducted by Baier-Fuentes et al. in year 2023 has demonstrated their entrepreneurial self-efficacy through their entrepreneurial mindset, which was put into action through entrepreneurial bricolage and improvisation. The entrepreneurial mindset is effectively put into practice through entrepreneurial bricolage and improvisation, which collectively enable businesses to identify and capitalize on opportunities amidst the challenging circumstances of an extreme crisis (Ireland, Hitt & Sirmon, 2003; Baier-Fuentes et al., 2023). These practices played a crucial role and provided participants with the adaptive capabilities necessary to confront and mitigate the impacts of the COVID-19 crisis. The entrepreneurial mindset is effectively put into practice through entrepreneurial bricolage and improvisation, which collectively enable businesses to identify and capitalize on opportunities amidst the challenging circumstances of an extreme crisis (Baier-Fuentes et al., 2023).

The coping-related dimension involves being self-reliant and taking initiative independently. The previous experience-related dimension includes qualities such as perseverance, unwavering determination, and a practical approach. On the other hand, the managing the business-related dimension entails being dynamic and proactive. When combined, these dimensions, which stem from entrepreneurial self-efficacy and are complemented by entrepreneurial bricolage and improvisation, can yield significant outcomes and enhance the survival of businesses. These outcomes can also contribute to the overall understanding of operationalizing entrepreneurial self-efficacy through entrepreneurs' mindset and associated actions, potentially leading to a critical mass effect (Baier-Fuentes et al., 2023).

3.2.1.2. Resilience

Resilience plays a crucial role in managing entrepreneurial crises (Doern et al., 2019; Kuckertz, Brändle, Gaudig, Hinderer, Reyes, Prochotta, & Berger, 2020). This concept encompasses not only an organization's ability to sustain its operations during a disruptive event but also considers the resources accumulated beforehand and how they are utilized throughout the crisis and its aftermath (Williams, Gruber, Sutcliffe, Shepherd & Zhao, 2017; Kuckertz et al., 2020). In the past, researchers have extensively examined and described resilient activities based on individual analyses. However, when attempting to systematically address the challenges posed by current unknown environmental changes, such as the COVID-19 pandemic, it has been challenging to find effective and appropriate solutions (Bullough & Renko, 2013; Duarte Alonso et al., 2021).

The researcher has classified entrepreneurial resilience into three types: survival, continuity, and growth, based on the observed patterns of emerging opportunities and constraints, resourcefulness, and coping/development strategies. In the survival type of resilience, the venture's business model is primarily limited by the crisis at hand. To address this, the venture demonstrates resourcefulness through bricolage to maintain the continuity of creating, delivering, and capturing value. Survival entails maintaining continuity, albeit at a slower pace. However, it is important to note that survival does not imply isolation or operating in solitude (Purnomo et al., 2021).

Resilience determined by Purnomo et al., (2021) is a dynamic process in which entrepreneurs continuously respond and adapt to evolving constraints and opportunities and their findings reveal that small and medium-

sized enterprises (SMEs) modified the way they create value, deliver value, and capture value in response to the emerging opportunities and constraints they encountered. Furthermore, we observed that SMEs exhibited entrepreneurial resourcefulness both before and after the pandemic. This study builds upon the work of Ratten (2020) by highlighting how entrepreneurs demonstrate resilience by adjusting and pivoting their business models in the face of adversity. Managers are advised to promote certain practices to foster the development of bricolage skills. These practices include combining existing resources to generate new ones, exploring untapped external resources, cultivating resilience, repurposing resources for alternative uses, and leveraging low-cost resources to create opportunities (Davidsson et al., 2017; Santos et al., 2020). According to the survey, even though nearly half (47.8%) of the European participants and a total of 41.1% expressed skepticism about the relevance of previous experience, detailed responses from 13 individuals (23.2%) emphasized their efforts in building resilient capabilities through navigating the challenges posed by the COVID-19 crisis (Duarte Alonso et al., 2021).

On a contrary, according to Batat (2021) resilience demonstrated by Michelin- starred chefs during crisis period is through undertaken philanthropic endeavors as a strategic response to assist healthcare and frontline workers. These philanthropic efforts primarily involved community-based sponsorships, donations, and providing free gourmet meals to enhance the well-being of vulnerable populations and healthcare professionals. Participants cited a sense of solidarity with the medical staff as the main motivation behind their philanthropic actions, viewing themselves as social actors seeking to contribute and support the community in their unique manner. On the other hand, Bowen, Dowell, & Morris (2023), believed resilience is further strengthened by establishing a robust local network where resources can be shared and greater control over supply chains can be achieved. This approach helps mitigate the effects of economic shocks on the supply chain by reducing dependence on national or international suppliers. Moreover, it brings economic benefits to the local community by fostering mutual support among businesses, ensuring they collectively contribute to the growth of the local economy.

3.2.2 Bricolage

Bricolage is a concept borrowed from French, referring to the process of creating or constructing something using whatever materials or resources are readily available. It involves making do with what you have at hand and repurposing existing elements to achieve a desired outcome. In essence, bricolage is a form of creative problem-solving that embraces improvisation and adaptability. It emphasizes the resourcefulness and ingenuity of individuals who can craft innovative solutions using limited means. Bricolage is often associated with DIY (do-it-yourself) projects and can be seen in various fields, including art, design, and even theoretical approaches in social sciences.

3.2.2.1 Bricolage Capability

Bricolage capability can be determine by the development of frugal innovation in competitive contexts of crisis in emerging markets based on characteristics such as resourcefulness and improvisation (Davidsson et al., 2017; Levi-Strauss, 1967), which is necessary to attain substantial cost reduction, focus on core functionalities and enable to do more with less resources, principles inherited from frugal innovation (Tiwari and Herstatt, 2012; Radjou et al., 2012; Zeschky et al., 2014). Besides, bricolage capability can be the strategic mechanism supporting the growth of frugal innovation in emerging markets, due of its spontaneous nature, it is observed that bricolage can be a different approach for businesses to handle such resource limitations. In other words, given its creative capacity for the management of available resources, bricolage is acknowledged as a talent to deal with these resource restrictions (Baker and Nelson, 2005; Senyard et al., 2014; Davidsson et al., 2017). According to Tsilika, Kakouris, Apostolopoulos, and Dermatis, bricolage is a dynamic business capability that uses the firm as a unit of analysis.

However, it is advised that managers support certain bricolage practises, such as repurposing existing resources to generate new ones, seeking out untapped external resources, cultivating resilient behaviour, allocating resources for purposes other than those for which they were originally intended, and investigating inexpensive resources to generate opportunities (Davidsson et al., 2017). Bricolage, on the other hand, refers to an individual's capacity to reframe and evaluate the applicability of and use of their own unique experiences, networks, and

expertise for firm survival during crises. So, it may be pertaining to people's capacity to adapt, reconfigure, and deploy the utilisation of resources in a flexible manner in the face of disruptive circumstances (Vargo & Seville, 2011). For instance, bricolage capabilities in the findings demonstrate by the Michelin-starred chefs use multilevel reaction tactics and social bricolage entrepreneurial thinking to combat the pandemic. The study offers a road map that can be used in other industries to assess response methods that are motivated by various goals, resources, and skills (Alonso-Almeida et al., 2015).

Meanwhile, Crupi, Liu & Liu. (2022) believes that companies may use social bricolage and organisational agility as responses to top-down-initiated SI and SE initiatives. Both of these tactics depend on at least three key factors. Utilising regional resources, making use of internal resources that are accessible, and involving stakeholders are the main forces behind social bricolage. On the other hand, agility depends on rethinking internal innovation, adapting the past to the present, and the flexibility of the resources. In the context of the resource bricolage hypothesis, respondents emphasised their commitment to utilising the available resources as a means of addressing the pandemic's problems and enhancing business resilience. This was accomplished by rethinking their business operations and allocating resources to provide a variety of goods and services, by using social media to advertise their company, or by collaborating closely with the neighbourhood to seek out benefits from supporting one another (Bowen, R., Dowell, D. & Morris, W., 2022). Bricolage capabilities can be determined with the case in of the issue was successfully managed by a social entrepreneur, who also oversaw the production of necessities like masks and sanitary napkins. This was made possible by combining the bricolage technique with design thinking to create a cost-effective solution. The results of each step that the social entrepreneur took while carrying out this procedure can be used to understand this (Mishra, 2021).

Bricolage capability can be seen As a result, by the approach to overcoming challenges has been based on deliberate bricolage (Williams et al., 2017 & Gilbert-Saad et al., 2018) by combining internal resources that are available and enlisting the help of external resources from their network (Baker and Nelson, 2005), which would include the cooperation of partners, support from other startups, and access to social capital through brokers. Moreover, in order to generate or seize potential or address issues, entrepreneurial bricolage innovates, adapts, and recombines existing or available resources in the organisation, such as human capitals and materials, where entrepreneurial bricolage creatively utilizes existing resources, like people and materials, to generate opportunities, solve problems, and innovate (Halim, Zainal & Ahmad, 2022). Furthermore, bricolage in social entrepreneurship, also known as entrepreneurial bricolage (Zollo, Rialti, Ciappei & Boccardi, 2018), enables the identification of underserved markets with a need (Gundry et al., 2011a, 2011b; Bacq et al., 2015), where new contents can be developed, opportunities can be taken advantage of, novel approaches can be advanced, and resources can be attracted and used. Furthermore, a number of academics have noted that bricolage strategies and bricoleurs' behaviour directly affect SEOs' capacity to develop social innovation and to effect social change (Gundry et al., 2011, 2011; Linna, 2013; Desa and Basu, 2013; Desa and Koch, 2014; Bacq et al., 2015). We specifically draw on its social component and the social bricolage concept as proposed by Di Domenico et al. (2010).

3.2.2.2 Improvisation

Mishra et al. (2021) mentioned that bricolage improvises by using available resources creatively and flexibly to solve problems and create opportunities. It is also important to highlight that once bricolage directly influences frugal innovation processes, managers who wish to develop frugal innovations must make an effort to facilitate the performance of activities through bricolage within the organization. In addition to its dependability on trial-and-error, tolerance for failure, and the ability to create situations where unusual behaviour can lead to unexpected and remarkable results, the bricolage capability encourages behaviours like creativity and improvisation (Baker and Nelson, 2005). A special strategy for addressing the opportunities and problems present in situations with limited resources is to improvise solutions in emerging markets (Halme et al., 2012). These include responses, once more, emphasise the importance of bricolage in taking action (doing) in situations where resource constraints affect a business (Senyard et al., 2009), as well as improvisation in managing unexpected situations through creative and spontaneous behaviour (Magni, Proserpio, Hoegl & Provera, 2009).

Bricolage improvisations, according to Tsilika, Kakouris, Apostolopoulos & Dermatis, have been replaced with

strategic decision-making that is more consistent with the expansion of the firm. Eventually, bricolage and improvisation can be in the different ways to innovate in a deficient and "unfriendly" environment rather than implying a lack of strategy with potential losses. Moreover, the recent focus on bricolage in the literature on entrepreneurship provides a theoretical framework for investigating resourceless innovation based on improvisation and human ingenuity. The current research provides interesting instances of Greek SMEs of various categories that frequently innovate through improvisation. Based on Wided Batat., 2021 stated, bricolage relates to the actions taken by chefs to adapt and innovate during the lockdown. They utilized their available resources, such as social media platforms, to share recipes and engage with people. They also ventured into new endeavors like delivering elaborate dinners, which required adjustments in their operations due to supply issues and limited staff. They creatively organized their tasks by utilizing unconventional spaces like the restaurant's dining area for refrigeration. They also considered packaging solutions and even invested in electric bikes for efficient delivery. Bricolage is the entrepreneurial approach of utilizing existing resources and improvising to address challenges and seize opportunities.

Besides, bricolage is the idea of making anything from whatever is at hand. The social entrepreneur had previously made sanitary napkins by using locally accessible raw materials, such as natural fibres. Masks were created using a procedure that was comparable as well. The social enterprise's suppliers were contacted and asked to keep providing goods. Both masks and sanitary napkins were produced using these materials. Making masks was a beneficial application of the knowledge gained from producing sanitary napkins (Mishra, 2021). Based on the aforementioned interview, SMEs are somewhat aware that when faced with significant obstacles, particularly the pandemic crisis, they will engage in entrepreneurial bricolage behaviour to survive and push themselves to be adaptable, resilient, and driven to find practical solutions within their financial constraints (Halim et.al.,2022).

DISCUSSIONS

Entrepreneurship is a challenging endeavor, and during times of crisis such as the COVID-19 pandemic and economic downturns, entrepreneurs face unprecedented obstacles. Hence, this has encouraged the entrepreneurs to fortify Entrepreneur Bricolage Model (EBM) during time of crisis by portraying certain criteria. The analysis for this model has resulted in a total of two main theme with two sub-themes each namely entrepreneur, resilience, bricolage capability and improvisation. This discussion aims to explore the EBM and its significance for entrepreneurs and business owners during crisis periods. Entrepreneur could be viewed for several causes and/or to achieve a range of personal goals, entrepreneurs launch new businesses. Entrepreneurs who want challenging work and those who chose self-employment as "a more desirable form of earning" will have quite different motivational systems (Chell, Haworth & Brearley, 1991; McKenzie, Ugbah & Smothers, 2007).

4.1 Entrepreneur Self-Efficacy (ESE)

An entrepreneur's level of confidence in their self-efficacy and business goals can be influenced by their motivation (Bagozzi, Dholakia & Basuroy, 2003; Heckhausen, 2007; Emami et al., 2022). As their motivation can also impact how they acquire market knowledge (Autio, Pathak & Wennberg, 2013; Arenius & Minniti, 2005; Emami et al., 2022). Also, research indicates that at the individual level, an entrepreneur's motivation to initiate a business venture can influence their perception of barriers and opportunities (Shane, 2003; Abreu, Oner, Brouwer & Leeuwen (2019), Virick, Basu & Rogers, 2015; Emami et al., 2022). Furthermore, individuals with innovative ideas tend to be proactive in adapting to changes and are more inclined to take risks compared to others (Pittino, Visintin & Lauto, 2017 & Emami et al., 2022).

Individuals with opportunity-driven motives try to proactively remove barriers through innovative actions and are willing to take risks to pursue the opportunity. In comparison with necessity entrepreneurs, opportunity entrepreneurs tend to be individuals with a higher level of risk acceptance, an internal locus of control, and a stronger need for achievement (Shane, 2003; Emami et al., 2022). Individuals with innovative ideas tend to be more proactive in facing changes and take more risks than others. Risk-taking, innovativeness, and proactiveness are characteristics of people with entrepreneurial orientation (Pittino, Visintin, & Lauto, 2017; Emami et al., 2022). According to Shane (2003) and Emami et al. (2022) stated that Individuals who are motivated by

opportunities demonstrate a proactive approach by taking innovative actions and displaying a willingness to take risks in pursuit of those opportunities.

Align with the essential key characteristics of an entrepreneur is being adept at utilizing advanced digital technologies, fostering innovation, possessing a capacity for continuous learning, particularly in the realm of crisis management, exhibiting leadership competencies such as effective delegation, demonstrating high resilience to stress, and having the ability to make intuitive decisions as it is necessary for identifying, creating, and capitalizing on opportunities encompass a range of qualities and skills (Zahra, 2021; Kirk & Rifkin, 2020; Jean, Kim, & Cavusgil, 2020; Williams, Du, & Zhang, 2020; Liguori & Winkler, 2020; Meyer, Pedersen, & Ritter, 2020; Ratten, 2020; Kuckertz et al., 2020; Asma & Prabhakaran, 2020; Malewska, Mrozek, Sajdak, 2021).

It can be inferred that the choice of entrepreneurship entry mode is influenced not just by economic circumstances but also by individuals' outlooks and perceptions. When entrepreneurs with an opportunity-driven mindset opt to pursue and capitalize on opportunities, they display a willingness to take risks and leverage them to their advantage (Emami et al., 2022). The dimension of perseverance, steadfastness, practicality, and discovery emphasizes the significance of prior business experience, wherein entrepreneurial self-efficacy, bricolage, and improvisation once again offer the means to withstand the profound effects of the crisis (Baier-Fuentes et al., 2023).

4.2 Resilience

There is growing interest in the concept of bricolage as a form of resilience to navigate these uncertain environmental changes. Derived from the French word "bricoler," which means to create or repair something using a mix of available materials, bricolage is gaining attention as an approach to respond to and adapt to unknown environmental changes (Bullough & Renko, 2013; Duarte Alonso et al., 2021). It is crucial to emphasize that bricolage has a direct impact on frugal innovation processes. Managers who aim to foster the development of frugal innovations must actively support and enable bricolage activities within the organization (Santos et al., 2020). Therefore, bricolage serves as a cognitive capability that helps alleviate the negative effects resulting from resource loss and strain (Hobfoll, 1989; Lanivich, 2015; Lanivich et al., 2021; Baier-Fuentes et al., 2023).

Hence, certain approaches are recommended for managing resource constraints. These include the recombination of existing resources to generate novel ones, seeking untapped external resources, adopting a resilient mindset when confronting challenges, assigning new roles to resources, and leveraging low-cost resources to create new ones, in addition to integrating them with the company's existing resources (Santos et al., 2020). In this context, the way owner-managers perceive the strategic importance of the available resources, known as bricolage, can play a crucial role in enabling firms to devise tailored responses. This, in turn, has an impact on the firm's ability to withstand challenges, exhibit resilience, and even thrive in the face of adversity (Bartel & Rockmann, 2022; Baier-Fuentes et al., 2023). In the actual instances highlighted by Purnomo et al. (2021) demonstrated the case of *Gudeg* Maker exemplifies the benefits derived from previously acquired capabilities, as their proficiency in producing canned *gudeg* enhanced their efficacy during this crisis. Although extreme events are typically viewed as obstacles, the optimistic mindset of entrepreneurs enabled them to maintain perseverance and bounce back from adversity by employing bricolage and effectuation approaches.

4.3 Bricolage Capabilities

The discussion centres around the concept of bricolage capability and its relevance in various contexts. Bricolage is characterized by resourcefulness, improvisation, and the ability to do more with less, which aligns with principles of frugal innovation. Where this have been stated by Davidsson et al., (2017) and Levi-Strauss (1967). It is seen as a strategic mechanism supporting the growth of frugal innovation, particularly in emerging markets, managers are advised to support bricolage practices such as repurposing resources and seeking untapped resources. Bricolage is also seen as the capacity of individuals to adapt and utilize resources flexibly during crises. Examples by Alkire et al. (2019) that include the actions of Michelin-starred chefs during the pandemic. Social bricolage and organizational agility are seen as responses to top-down initiatives, relying on regional and internal resources and stakeholder involvement.

Bricolage capabilities are also highlighted in the successful management of challenges by social entrepreneurs. The deliberate combination of internal and external resources is emphasized, leading to innovation, problem-solving, and opportunity generation. In the context of social entrepreneurship, bricolage enables the identification of underserved markets and the development of new solutions. Bricolage strategies directly impact the capacity of social entrepreneurs to develop social innovation and effect social change. According to Crupi, Liu & Liu. (2022) social bricolage and organizational agility are seen as responses to top-down-initiated social innovation and social entrepreneurship initiatives. In the realm of social entrepreneurship, bricolage plays a vital role in addressing social issues and effecting positive change. Social entrepreneurs often encounter limited resources and complex societal challenges. Bricolage enables them to combine existing resources, leverage external networks, and develop innovative approaches to tackle these problems. It empowers social entrepreneurs to identify untapped markets, create new opportunities, and mobilize resources effectively.

By embracing bricolage, organizations and individuals can navigate uncertainties and resource constraints with agility and resilience. It fosters a mindset of creativity, flexibility, and adaptability, enabling innovative solutions to emerge. Managers can support bricolage practices by encouraging resource repurposing, seeking untapped resources, and cultivating an environment that values improvisation and experimentation. Overall, bricolage capability offers a powerful approach to problem-solving and innovation. It leverages existing resources, promotes sustainable practices, and enables individuals and organizations to thrive in diverse and challenging contexts.

4.4 Improvisation

The concept of bricolage emphasizes the creative and flexible use of available resources to solve problems and create opportunities. It directly influences the process of frugal innovation, making it important for managers to facilitate bricolage activities within the organization to develop frugal innovations effectively. Bricolage encourages behaviors such as creativity and improvisation, as it relies on trial-and-error, tolerance for failure, and the ability to generate unexpected and remarkable results.

In emerging markets and resource-constrained situations, improvisation becomes a special strategy for addressing opportunities and problems. Bricolage improvisations play a significant role in taking action and managing unexpected situations through creative and spontaneous behaviour. Bricolage improvisations play a significant role in these contexts. Bricolage is a term borrowed from the field of anthropology, which refers to the act of creating something using whatever materials and tools are readily available. In the context of business and entrepreneurship, bricolage improvisations involve making do with the resources at hand and finding innovative ways to overcome constraints and achieve desired outcomes.

In such situations, entrepreneurs and individuals rely on their resourcefulness, creativity, and spontaneous behaviour to find practical solutions. They adapt and repurpose existing resources, leverage local knowledge and networks, and experiment with new approaches. This improvisational approach allows them to seize opportunities and address unexpected challenges in a dynamic and uncertain environment. As stated, where the approach allows businesses to innovate in challenging and resource-limited environments (Halme et al., 2012; Senyard et al., 2009; Magni et al., 2009).

In these contexts, where resources may be scarce or limited, businesses are often faced with constraints that require them to think outside the box and find creative solutions. Bricolage improvisations involve using whatever resources are available, even unconventional ones, to overcome these challenges. This could include repurposing existing resources, adapting processes, or finding alternative ways of achieving desired outcomes. The emphasis on improvisation is due to the dynamic and unpredictable nature of resource-constrained environments. Bricolage improvisations allow businesses to be flexible and responsive, enabling them to navigate unexpected situations effectively. By embracing this approach, organizations can make the most of the resources at their disposal, optimizing their utilization and generating innovative solutions.

Overall, the use of bricolage improvisations in emerging markets and resource-constrained situations empowers businesses to overcome challenges and seize opportunities. By embracing creative and spontaneous behaviors, organizations can navigate the complexities of these environments, fostering innovation and resilience.

Bricolage improvisations serve as a valuable strategy for businesses seeking to thrive in challenging circumstances where resources are limited.

RECOMMENDATIONS / FUTURE DIRECTIONS

This study suggested, to focus on creating value for stakeholders: Tobin's Q is a useful tool for measuring financial performance, but it is important to remember that it is influenced by a range of factors. Companies should focus on creating value for their stakeholders, including customers, employees, suppliers, and the wider community. This can be achieved through sustainable practices, innovation, and social responsibility.

Furthermore, adopt a holistic approach to financial management drive the proposed business models in the studies suggest that companies should adopt a holistic approach to financial management. This includes financial planning, budgeting, forecasting, and risk management. By taking a comprehensive approach to financial management, companies can make informed decisions about resource allocation, investment, and risk mitigation. The entrepreneurial bricolage model emphasizes the importance of using existing resources to create new products, services, or business models. This approach can be particularly useful during times of crisis or change, as it allows companies to adapt quickly and efficiently to new circumstances. Moreover, the studies discussed emphasize the importance of a holistic approach to financial management, adaptability and flexibility, sustainable and socially responsible practices, collaboration with stakeholders, and crisis management planning. By adopting these approaches, companies can position themselves to navigate periods of crisis and uncertainty and create value for their stakeholders over the long term.

CONCLUSION

In summary, this comprehensive literature review brings attention to the vital subject of businesses during crises and pandemics, where the entrepreneurial bricolage model stands out as a potent strategy embraced by business owners. This model encompasses the key elements of entrepreneurship and bricolage, while integrating sub-themes such as entrepreneurial self-efficacy, resilience, bricolage capability, and improvisation.

Within the bricolage paradigm, entrepreneurial self-efficacy plays a crucial role. Business owners with high self-efficacy show a strong belief in their capacity to handle difficult circumstances and produce desired results. This self-assurance inspires them, encourages risk-taking, and gives them the strength to withstand hardship. Another essential element of the entrepreneurial bricolage concept is resilience. It makes it possible for business owners to endure the stress and obstacles brought on by crises or pandemics. They demonstrate the capacity to adjust, bounce back, and learn from mistakes, which better prepares them to meet problems in the future. The ability to bricolage highlights an entrepreneur's inventiveness and adaptability. When resources are scarce, they make the most of what they have, including both physical assets and intangible resources like knowledge and abilities.

Entrepreneurs with high bricolage skills are adept at rearranging and repurposing resources, forging strategic alliances, and investigating novel approaches to meet changing needs and capture opportunities. Within this bricolage paradigm, the sub-theme of improvisation is also crucial, necessitating that businesspeople think quickly, act swiftly, and modify their plans as necessary when circumstances change. They exhibit innovation and adaptability by coming up with creative ideas, making the most of their limited resources, and taking advantage of unanticipated opportunities. In conclusion, the entrepreneurial bricolage model, encompassing the sub-themes of entrepreneurial self-efficacy, resilience, bricolage capability, and improvisation, equips business owners with a powerful framework to navigate crises or pandemics. By harnessing their self-confidence, adjusting to changing circumstances, leveraging available resources, and embracing creativity, entrepreneurs can not only survive challenging times but also thrive and shape a more resilient and prosperous future.

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