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BRICOLAGE AS AN ADAPTIVE TOOL IN RESOURCE CONSTRAINED ENVIRONMENT: A CONCEPTUAL FRAMEWORK

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Abstract: In modern dynamic market environment, business firms need to have the capability to adapt to new environmental settings and be open to innovation for ensuring survival and growth. Unusual environment like Covid-19 pandemic brought drastic changes in the way business is done. To accept inevitable changes, bricolage is often seen as indispensable element for adapting to emerging environment and for gaining competitive edge in the ever-changing market. Bricolage is the secret ingredient to successfully stay relevant in new environmental settings and overcome aftermath of disasters like, pandemic. It enables the firms to collect required information to avail of the emerging opportunities and help firms to convert challenges into opportunities. Therefore, the purpose of this study is to explore the role of bricolage as an adaptive strategy in resource constrained environment. The comprehensive review of extant literature is done to develop the propositions and explain the relationships between bricolage and its effectiveness in adapting to new situations. In the backdrop of above arguments, this study proposes a conceptual model based on the composition-based view (CBV) to explain the relationship between bricolage and adaptability to new world order. The study has managerial implications that, although adequate resource is necessary for smooth functioning of any firm, but sudden new circumstances demand capability to make do with whatever in the hand to come out of such circumstances successfully.

Keywords: Bricolage; Innovation; Resource Constraint; Composition-Based View

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1. INTRODUCTION

Every era appears to have witnessed unsurmountable disruptions of normalcy, but the repercussions of the COVID-19 pandemic on business were unprecedented (Ketchen & Craighead, 2020) and the outbreak has threatened growth of business firms (Micah et al., 2023). Covid-19 pandemic brought abrupt changes in every sphere of life across the globe. It gave birth to new environmental setting which was earlier considered to be abnormal. This pandemic, has a strong implication to the human kind, that the status quo is not here to stay for long (Cankurtaran & Beverland, 2020). It wreaked havoc in the business world, totally disrupted global supply chains, and changed the way how business houses interact with clients (Bartik et al., 2020; Craven et al., 2020; Hartmann & Lussier, 2020). During such challenging time, it is imperative for business houses to adapt and ensure their own survival and grwoth (Jabeen et al., 2022; Shah et al., 2023). Marketers were compelled to adapt themselves to new normal and drastically modify their strategies in response to circumstances created by the pandemic (Craven et al., 2020; Pedersen et al., 2020; Sharma et al., 2020). During the pandemic, for example, abrupt and unwanted disruptions in supply and demand compelled firms to improvise even though this caused many of them far outside their comfort zone (Craighead et al., 2020). The precautionary measures and lock-down imposed in most countries for stopping the spread of virus among citizens, such as social distancing and quarantines, had caused serious disruption to the chain of supply and demand for goods and services and brought down economic growth rate of many countries (Adam &Alarifi, 2021). Businesses across the globe had to find new solutions to stay alive and keep themselves ahead of the competitors in the market. Finding new solutions to new normal or adaptability is often seen as the big challenge and bricolage is being adopted specially in emerging markets to address the new challenges or opportunities. Bricolage means when an entrepreneur works on "making do with what is at hand," such as "by exploiting physical, social, or institutional inputs that other firms rejected or ignored" (Baker & Nelson, 2005, p. 329). A recent review study by Mateus & Sarkar (2024) reiterated the fact that bricolage is gaining attention from both academics and practitioners because it has gained its importance as an effective tool for innovation and entrepreneurship not only in resource-constrained environment but also in resource rich economy. The COVID-19 pandemic had made it even more imperative to investigate and comprehend strategies such as bricolage which have proven their contributions in overcoming constraints

and managing crisis (Kuckertz et al. 2020; Sarkar, 2021). This often takes the form of changing the existing operation method or taking up new challenges with the resources at hand. Firms in emerging markets face the difficulty of resource constraints specially during crisis as they generally lack the requisite resources and capabilities required for innovation. In such scenario, maximum utilisation of available and generic resources is the basic requirement to staycompetitive and grow in volatile market. In such kind of unprecedented situation, Compositional Based View hereafter referred to as (CBV) has a relevance to build competitive advantage despite the hostile circumstances. Several FMCG manufacturers started manufacturing sanitizers, soaps and face masks to keep themselves afloat during pandemic. That had resulted in their survival and withstand the crises brought by pandemic. Bricolage strategy fetches good results like: Stenholm and Renko's (2016) research on around 2,500 start-ups found greater bricolage among surviving firms vis-a-vis failed ones. The concept of bricolage occupies special relevance for marketers in emerging markets. Authors like, Baker and Nelson (2005) emphasis on the importance of bricolage for innovation in resource constrained environment. Firms in emerging markets often encounter the challenge of resource constraints. This COVID-19 pandemic has had a long-lasting bearing on the business ecosystem (Amoah et al., 2020). With more than 14 million cases and over 600,000 deaths globally affecting countries across Africa, Americas, Eastern Mediterranean, Europe, South-East Asia, and Western Pacific (World Health Organization, 2020; Worldometers, 2020) resulting in large scale cases of forced closure, unprecedented unemployment, personal car repossessions, and business failures on large scale ranging from retailers, airlines, and health, fitness, & wellbeing centers, among several others (Amoah et al., 2020). A recent study by Walsh (2020) reported that business firms irrespective of their size and scale of operations are becoming victims of the Covid-19 and the year 2020 is being seen a record year for infamous mega bankruptcies. Many small and medium enterprises (SMEs) and multinational enterprises (MNEs) are on the verge of closure due to the COVID-19 pandemic, a need is being felt for comprehending processes causing collapse of business firms (Amoah et al., 2020). In a situation like Covid-19, the concept of "making do" becomes more relevant for firms. Examining to what extent bricolage helps entrepreneurs adapt to new normal created by the pandemic could generate more insights. Leveraging compositional based theory could prove to be helpful given the theory's focus on how to combine available resources to take on new challenges

and avail new opportunities. Some business firms managed to successfully overcome the effects of Covid 19 and survived this pandemic. While bricolage by entrepreneurs tends to be an enduring approach, it remains to be seen whether entrepreneurial bricolage pursued during severe disruptions, such as COVID-19 helps firms to withstand the crisis.

Despite the recognition of effectiveness of bricolage in the context of resource constraints environment, the literature on its effectiveness during unprecedented crises like pandemic is sparce. This study attempts to partially fill this gap in the literature by proposing a conceptual model. We offer our arguments in the context of firms in emerging markets where resource constraint is a common phenomenon. We have chosen emerging markets because there is an institutional void and lack of required resources, which consequently compel entrepreneurs to optimally utilise the resources at hand and integrate the generic existing resources to stay competitive in the markets. This study aims to develop a conceptual model to offer insights about the association between entrepreneurial orientation and innovation and firms' survival while underlining the auxiliary role of bricolage in such a relationship.

This conceptual paper offers several contributions. First, it is one of the few papers that examine the role of bricolage in the survival of firms during crises like, pandemic. We extend earlier work by addressing the role of entrepreneurial orientation in bringing innovation particularly during crisis. A deeper comprehension of these relationships is of paramount importance specially in the context of resource constraints. Second, this study focuses on the role entrepreneurial orientation in inculcating and promoting bricolage among entrepreneurs for making do with generic resources at firm's disposal. In this regard, the paper adds to compositional based work on innovation by deepening our comprehension about using available resources and integrating them for bringing out innovation to meet the evolving challenges during crises.

This study primarily aims to investigate the effect of bricolage on the relationship between entrepreneurial orientation and innovation in the context of resource constraint environment. For this purpose, this study presents a conceptual model based on extensive literature review. Then, research propositions are developed and offered for empirical examination. Finally, implications and recommendations are presented.

2. THEORETICAL BACKGROUND

Entrepreneurs occupy pivotal place in the economic development of any country (Wennekers & Thurik, 1999). Considering the abrupt slow-down

due to the crisis like Covid 19 pandemic had raised the question mark over the adaptability of economic agents to new economic settings. Some firms could not adapt to new environment emerged due to Covid-19 and some have managed to survive and grow during the pandemic despite hostile market environment. Hence, carrying out study on entrepreneurship and its response to new settings is not only research agenda, but an economic urgency. One overarching theory and one concept that underpin this study are Composition based view (CBV) and Bricolage. In the extant literature, there is a scarcity of studies on CBV, but this theory has special relevance to emerging markets where resource constraints is quite normal. CBV posits that firms can attain a competitive edge by using a compositional strategy to combine and integrate ordinary internal resources and open generic resources available outside the firm. The basic crux of this strategy lies in the fact that competitive edge can be built by developing capability to synthesize and integrate scattered and open resources (Sun et al., 2020). Contemporary scholarship on survival and growth of the firms operating in emerging markets has implication that firms, "without the benefit of resource advantages, proprietary technology, or market power" (p. 379) can compete boldly and attain competitive edge over market rivals by smartly collecting and leveraging upon publicly available and internal common resources (Luo & Child, 2015). In this context, entrepreneurs with bricolage are expected to play crucial role in adapting to new crises and perform well. Bricolage describes the skills and behavior of entrepreneur to "make do" by leveraging on existing resources to face new challenges and avail new opportunities (Baker & Nelson, 2005). CBV focuses on how firms with normal resource endowments can accomplish excellent output through the smart utilization of open generic resources and unique integrating capabilities which consequently result in an increase speed and a value-price ratio that are appropriate for high proportion of mass market consumers (Luo & Child, 2015). The CBV argues that appropriate creative composition of resources and capabilities coupled with skills required to adapt to market demands can go a long way in gaining competitive edge in the market. This theory is in contrast to other theories of the firm, it does not ask why firms exist, but rather how a firm can continue to exist. It is a 'deliberate, intelligent, pragmatic approach' (Luo & Child, 2015, p. 414). In essence, CBV is a managerial theory on how to build competitive advantage with ordinary resources at firm's disposal. Burton (2015) argues that CBV emphasis more on survival than growth; CBV is a survival tactics to stay alive despite the existing constraints and hostile

environment and it essentially includes the alternative to go beyond the usual choices. He further posits that CBV is combining together of something to survive to play again another day. Therefore, CBV has a special relevance in studying the role of strategic orientation and bricolage in adapting to new normal particularly in the context of resource constraint environment.

3. LITERATURE REVIEW AND PROPOSITIONS

3.1. Entrepreneurial Orientation and Innovation

Majority of prior literature has addressed the relationship between strategic orientation and innovation from a resource-based view. Tang et al. (2015) reveal that entrepreneurial orientation (EO) influence corporate innovation, while (Bouncken et al., 2016) reported that EO positively affect joint product innovation. Review of extant literature reveals that a firm's strategic orientation plays a decisive role as they form a part and parcel of a firm's strategy which requires the deployment of a substantial part of resources to build the strategic orientation. EO refers to the degree to which a firm is entrepreneurial in its plans and activities and covers processes, structures, and behaviours of firms (Stam & Elfring, 2008). Entrepreneurially oriented firms always keep themselves abreast of emerging novel technical know-how, vigilant of ever-changing market trends, and evaluates the new potentials (Lumpkin et al., 2009). Entrepreneurial orientation comprises of three dimensions, i.e., innovation, pro-activeness and risk-taking (Miller, 1983; Miller & Friesen, 1982). The capability of an entrepreneur to bring forth a new product or service is innovation; pro-activeness refers to the readiness of an entrepreneur to predict future opportunities; and risk-taking is extent to which management deploys assets to initiatives when the results are unsure (Covin & Slevin, 1991; Mahmood & Hanafi, 2013; Wiklund, 1999). During volatile period like pandemic, entrepreneurs are compelled to take risks to stay alive in the market. Researchers have contended that entrepreneurial orientation helps firms to identify and grab emerging opportunities and incorporate new ventures (Lumpkin et al., 2009). Innovativeness pertains to creating and encouraging novel ideas and creativity which consequently leads to novel products, services or processes (Miller & Friesen, 1982). Innovativeness is popularly measured by the firm's frequency of launching new product lines, significant modification in product or service lines, and research and development leadership (Knight, 1997). Risk-taking may be described as "a tendency to take bold actions, such as venturing into unknown new markets,

committing a large portion of resources to ventures with uncertain outcomes, and/or borrowing heavily" (Lumpkin & Dess, 2001, p. 431). Entrepreneurial orientation is the measure of the extent and intensity of firm's entrepreneurial inclination (Covin & Wales, 2012). It is a strategic orientation that lay emphasis on the entrepreneurial aspect of firms' strategies (Bhuian et al., 2005; Lumpkin & Dess, 1996; Hult et al., 2004; Wiklund & Shepherd, 2005). A firm is referred to as entrepreneurial oriented provided that firm lay emphasis on the culture of innovativeness, risk-taking and proactiveness. Entrepreneurial firms are known for taking initiatives in resource-constrained environment (Salunke et al., 2013; Sirmon et al., 2007). These firms rely on their entrepreneurial orientation to be innovative to launch new products or services, as argued by Gundry et al. (2011). EO has evolved as a major and indispensable construct in the literature of strategic management and entrepreneurship over the years (Covin & Slevin, 1986; Miller, 1983). EO has been used as an important construct in the emerging market context as well (Cui et al., 2018). But, firms in emerging markets often encounter the common problem of resource constraints and they generally lack resources and capabilities required for innovation. In this context, optimum utilisation of ordinary and available resources is the key to survive and grow in competitive market. CBV lays importance on integrating available resources and capabilities to achieve outstanding result in-spite of all the constraints. Burton (2015) posits that CBV is all about combining and integrating something to survive to play again another day. Moreover, Luo and Child (2015) asserted that CBV emphasis on how firms with very average resource possession can attain extraordinary result by leveraging upon ordinary resources and integrating capabilities. During the pandemic caused by Covid-19, innovation is seen as the only means to stay relevant and survive in the market. EO in the context of pandemic has received greater attention from management practitioners and marketers for responding to the crises in proactive ways, be more innovative and assume more calculated risks to withstand the unprecedented turbulent environment. Entrepreneurially oriented firms have the strength to explore and exploit emerging market opportunities (Barringer & Bluedorn, 1999; Wiklund & Shepherd, 2003) and have the ability to remain relevant and competitive in the hostile environment (Lumpkin & Dess, 1996; Shane & Venkataraman, 2000). Firms in the emerging markets lack required resources, lack of focus on research and development (R&D) and encounter more uncertainties and hindrances to innovation (Genc et.al., 2019). In the modern period of open innovation, the networks and know-how created by EO have the potential to

become a driver of innovation (Chesbrough, 2003). Therefore, on the basis of above argument our first proposition is framed:

P1. Entrepreneurial orientation has a significant effect on innovation during pandemic.

3.2. Entrepreneurial Orientation and Bricolage

The concept of bricolage was first coined by French anthropologist Claude Levi-Strauss (1966, p. 17) as, "making do with what is at hand". Bricolage has been attracting interests of researchers and practitioners working in the areas of strategic management and entrepreneurship with Baker and Nelson (2005, p. 333) specifying bricolage as, "making do by applying combinations of the resources at hand to new problems and opportunities". Fisher (2012) delineates the foundations of bricolage as (1) making do with what is at hand, and (2) creating something from nothing by combining resources for new purposes. Whereas, Witell et al. (2017) identify bricolage as having four pillars: (1) actively addressing resource scarcity, (2) making do with what is available (3) improvising when recombining resources and (4) networking. Integrating these conceptualizations and others (Baker, 2007; Di Domenico et al., 2010; Molecke & Pinkse, 2017), we define bricolage as the capability of an entrepreneur to smartly leverage on resources at his/her disposal by analysing and integrating the available resources and capabilities to take on new challenges and grab opportunities. Bricolage is found to be more relevant and routine where there is a paucity of required resources like, difficulty in raising funds, paucity of time, and a shortage of expertise, therefore, firms encountering problem of severe resource scarcity gives rise to novel solutions by combining and redeploying resources at their disposal (Baker & Nelson, 2005; Baker et al., 2003; Halme et al., 2012). The study of Welter et al. (2016) depicts that the fundamental premise of bricolage is the condition of resource scarcity. Further, the study of Halme et al. (2012) found that firms in emerging markets often have to face the problem of volatile environment. The recent work of Sivathanu and Pillai (2019) reported that finding workable innovative solutions is the key to stay relevant and competitive in today's turbulent market environment. Extant literature acknowledges the significance of the bricolage in the context of resource scarcity and suggests that bricolage helps to gain competitive advantages when resources are constrained (Baker et al., 2013; Salunke et al., 2013; Steffens et al., 2009). Moreover, Baker et al. (2013) advocated that bricolage can be helpful to firms operating in resourceconstrained environment to resist and change cognitive institutions to build competitive edge.

Entrepreneurially oriented firms are known for taking initiatives that are generally carried out in resource-constrained environments (Salunke *et al.*, 2013; Sirmon *et al.*, 2007). These firms depend on their entrepreneurial orientation to be innovative enough to bring forth new products or services by making optimum utilisation of resources at hand and to use as argued by Gundry *et al.* (2011), bricolage to create innovative products or services from the resources at disposal. Hence, the second proposition is framed as below:

P2: There is a positive relationship between entrepreneurial orientation and bricolage.

3.3. Bricolage and Innovation

Several studies have found that bricolage has positive correlation with innovation (Cankurtaran et al., 2013; Wu et al., 2017). In the light of above discussion, it can be argued that when required resources are not in abundance, in such circumstances firms cannot simply depend solely on standard resources to bring forth innovation (Garud & Karnøe, 2003), rather make do with whatever is available to innovate (Wu et al., 2017). Extant literature on bricolage has one important implication that bricolage provides motivation to strengthen the effects of entrepreneurial orientation on innovation performance. (Digan et al., 2019) found that efficient application of bricolage behavior helps firms to handle market uncertainties smoothly, successfully encounter challenges, and even grow in the face of resource constraints. In this context, Senyard et al. (2014) reported that firms applying bricolage witnessed positive impact on new product innovativeness under resource constraints condition thus, bricolage occupies pivotal role in bringing innovation with limited resources. Though the previous literature highlights the importance of the bricolage for innovation in contexts of resource scarcity (Baker & Nelson, 2005; Senyard et al., 2014; Davidsson et al., 2017), yet the research that study the link between bricolage and innovativeness is scant (Senyard et al., 2014) particularly in context of emerging markets (Digan et al., 2019). A large number of firms in emerging markets work under resources constrained situations (Asakawa et al., 2019; Sharmelly & Ray, 2018). Asakawa et al. (2019) contended that resource scarcity is typical of emerging markets due to prevalence of input, income and infrastructure constraints. Therefore, Senyard et al. (2014) put forward idea of redeployment and recombination of available inputs that are fundamental and

essential to bring out new products and other innovative outcomes. To avail emerging opportunities and encounter challenges, firms strive hard to apply creative combinations of low-cost resources and overcome resource scarcity. It can be argued that firms that apply bricolage will bring about more innovative solutions than those that adopt less bricolage. Thus, in the light of above argument, the third proposition is framed:

P3. Bricolage has a positive effect on innovation during pandemic.

3.4. Mediation of Bricolage Between Entrepreneurial Orientation and Innovation

Extant literature has an important implication that bricolage has a significant mediating role in the relationship between entrepreneurial orientation and the performance of start-ups in emerging markets. The basic essence of entrepreneurial orientation is that firms acting entrepreneurially will be in a position to adapt themselves to changing volatile business environment (Covin & Slevin, 1989). Bricolage refers to the behaviours of entrepreneurs that "make do" by capitalising on available ordinary resources to take on new problem or avail new opportunity (Baker & Nelson, 2005). Senyard (2014) has considered bricolage as resourcefulness by means of redeploying available resources to meet the new challenges posed by circumstances. Pertinent literature on the bricolage has an implication that entrepreneurial orientation helps to develop and inculcate bricolage in entrepreneurs by adapting and recombining existing resources in the firm, such as materials, human capital, etc. to address new problems and avail emerging opportunities (Baker & Nelson, 2005). We argue that during pandemic, due to sharp decline in demand for and supply of products, entrepreneurially oriented firms have managed to stay alive and grow because of their "making do" ability. According to Gundry et al. (2011), level of bricolage can be assessed by the confidence level of the entrepreneurs regarding responding to a novel problem or latent opportunity with the competency to find workable solutions with ordinary resources at hand. In this context, Senyard et al. (2009) asserted the point that bricoleurs do not wait for the "right" resources rather, by using a hands-on approach, they twist the principle of what resources "should" against "could" be used. Moreover, extant literature also indicates that bricolage is one alternative for entrepreneurially oriented firms to grow specially when there is a case of resource constraints (Senyard et al., 2014). Therefore, we frame the fourth proposition:

P4. The relationship between entrepreneurial orientation and innovation is mediated by bricolage.

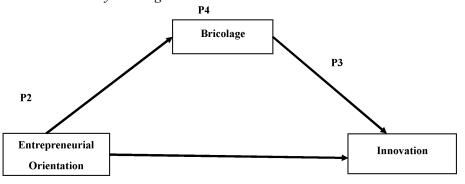


Fig. 1: Proposed Conceptual Model (Source: Author's own)

DISCUSSION AND CONCLUSION

In this article, we suggest that firms have one important strategy i.e., bricolage to stay competitive in-spite of hostile environment. Whether and how to develop bricolage may appear to be easy task theoretically, but practically it is not. Our argument has an implication that bricolage represents a type of strategy that helps firms to adapt to any new normal. The theoretical implications suggest an important conceptual model of bricolage to evaluate the effect of entrepreneurial orientation on innovation in resource constrained situation. Entrepreneurially oriented firms lay stress on taking risks, taking proactive stance to bring out novel products or service and during pandemic these firms are more inclined towards assuming calculated risks by innovating new products or process to keep themselves much ahead of rivals in the market. To be innovative does not require resources only, rather it needs more of willingness and courage to use available resources in the best possible ways either by redeploying or integrating whatever at hand. This paper has some managerial implications as it suggests that entrepreneurial philosophy pursued by firms helps to make do with whatever generic and open resources available with firms to adapt to any unprecedented circumstances. Moreover, it suggests that firm's ordinary resources coupled with "make do" capabilities provide base for developing and gaining competitive advantage to stay competitive and adapt to any new normal. Generic resources at the disposal of firms have great potential for developing competitive advantage in the resource constraint environment which consequently assist firms to perform well, innovate and offer high chances of survival during such crises. Policy makers and management

practitioners need to understand the importance of ordinary resources to build competitive advantages in the resource constrained markets. Although it is always good to have resources with qualities like, rarity, valuable, inimitable and non-substitutable but, these are not in every firm's possession. Therefore, entrepreneurs need to optimally utilise the available generic resources in best possible ways to extract maximum out of them to stay competitive in the market

The basic limitation of this study is the fact, that it is conceptual in nature. In the paper, a conceptual framework based on extant literature is proposed to examine the relationships. In the future, the proposed model can be validated by carrying out empirical studies in different economic contexts. Further, future studies may consider the role of other strategic orientations and slack resources in the adapting to new normal. We call for further research for exploring other factors that may help business to adapt and overcome the effects of unpredictable crisis.

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