
Influence of Resource Bricolage on Entrepreneurial Orientation in Family Firms in Western Province, Sri Lanka: The Moderating Role of Family Member Characteristics

Mudalige, D.M.

Department of Industrial Management, University of Moratuwa

darshanadm@uom.lk

Abstract

Startups often have a larger chance of failing than more established businesses. It is stated that family businesses, i.e. businesses that are actively owned, operated, and managed by two or more members of a single family, have a unique set of characteristics that differentiates them from typical start-ups and requires special attention in research. Family firms have the unique characteristic of getting heavy pressure from family members in business decisions and tend to be less risk-taking. However, few studies have addressed the effect of family member influence on entrepreneurial orientation in the Sri Lankan context. From a resource-based perspective, previous research has shown how resource bricolage plays a role in influencing a firm's entrepreneurial orientation. This research expands the past research by analyzing the effect of entrepreneurial bricolage on entrepreneurial orientation in family firms. A quantitative approach was adopted and a self-administered questionnaire was used to collect data. Based on the data from 79 family-owned firms in the Western Province of Sri Lanka, it was discovered that resource bricolage has a significant positive influence on entrepreneurial orientation when start-ups encounter resource restrictions, and the link is negatively moderated by the top management team's heterogeneity and behavioral integration. The findings should theoretically help start-ups, mainly family firms, to improve their entrepreneurial attitudes, overcome resource limitations and achieve smooth survival and growth. Policymakers need to design awareness campaigns that address not only entrepreneurs but also their family members, who need to be involved to enhance the entrepreneurial nature of Sri Lankan SMEs.

Keywords: resource bricolage, entrepreneurial orientation, behavioral integration, family firms team heterogeneity

01. Introduction

Startups typically have a higher risk of failing than more established businesses. Start-ups face increased levels of technological and market uncertainty due to weaknesses caused by newness. It is challenging for start-ups to secure external resources due to the absence of performance records and information asymmetry that makes it extremely difficult to evaluate entrepreneurs by funding agencies (Xiumei & Yupeng, 2010). According to research, such as Wiklund and Shepherd (2003), in an unpredictable environment, developing an

entrepreneurial orientation can successfully improve dynamic capabilities, enterprise development, and firm performance. It is clear that a focus on entrepreneurship orientation is crucial for start-ups. Although researchers have established frameworks involving firms' internal resources, and acknowledged the significance of resources for entrepreneurial orientation, the majority of research efforts on entrepreneurial orientation are restricted to entrepreneurial characteristics and internal resources. As a result, past research is unable to offer a viable solution to the issue of resource scarcity in the entrepreneurship journey and how resources are used and optimized (Sun et al., 2020). In a nutshell, the success of many entrepreneurs and small firms is not due to the availability of unique and valuable resources, but their ability to modify and use current resources effectively and to recombine assets in an unusual manner to respond to changes in the business environment.

Resource bricolage is a technique used by entrepreneurs to address new business possibilities or obstacles by modifying and using current resources, (Baker & Nelson, 2005). Young businesses may better manage market instability, endure resource shortages, and perhaps even grow, thanks to successful bricolage (Lomberg et al., 2017). The mechanism of how bricolage impacts entrepreneurial orientation is yet to be investigated.

For the past 10 years, bricolage has been one of the essential concepts in entrepreneurship studies to understand entrepreneurs' complex behavior and ways of resource development and utilization (Digan et al., 2019). Making do by combining the resources at hand to solve new challenges and seize new opportunities is known as bricolage (Baker & Nelson, 2005). Just a small number of studies have applied it to entrepreneurship in developing countries, despite the fact that it has been widely researched in the contexts of entrepreneurship in developed countries (Bojica et al., 2018). Given the unique resource scarcity situation in developing countries, this research argues that bricolage plays a more significant role in shaping the entrepreneurial orientation of developing countries. The resource bricolage perspective gives a new theoretical perspective for breaking the resource constraints of SMEs. Little research is done in the Sri Lankan context on resource bricolage. Rathnayaka (2019) found that resource bricolage increases entrepreneurial innovation capability in social ventures. Research by Rathnayaka, Jayawardhana, and Perera (2022) found that entrepreneurial resource bricolage significantly influences nurturing social innovations, while entrepreneurial alertness moderates the process.

The inclusion of relevant organizational characteristics is the second crucial element in furthering research on the connection between resource bricolage and entrepreneurial attitude.

The Top Management Team (TMT) of each organization is the decision-maker or executor of the corporate strategy and TMT plays a crucial part in the enterprise activities.

The upper echelons theory's theoretical extension demonstrates that TMT's traits—including age, career path, previous professional experience, education, socioeconomic background, economic standing, group features, etc.—are crucial organizational determinants that influence entrepreneurial attitude in small firms (Yang & Wang, 2014). TMT behavioral integration can be defined as the extent of participation and interaction of team members in thought and action in the decision making process of firms.

It is believed that resource bricolage has a direct impact on shaping entrepreneurial attitude, but several factors are found to moderate the relationship. Learning Orientation (An et al., 2018), psychological capital and TMT heterogeneity, and TMT behavioral integration (Xiaobao et al., 2022) are some of the moderators of interest in the recent past.

This study focuses only on family firms as the study sample. It can be seen from past research that family team characteristics have a stronger impact on family firms than non-family member set-ups (Alayo et al., 2019). This research focuses on the impact of resource bricolage on entrepreneurial orientation in family-owned start-ups. In addition, the relationship between resource bricolage and entrepreneurial orientation is modified by TMT's decisions; therefore, TMT behavioral integration is taken as the moderating variable.

The following research objectives are formulated for this research.

- To assess whether resource bricolage affects entrepreneurial orientation in family-owned start-ups in the Western Province, Sri Lanka
- To assess whether Top Management Team (TMT) heterogeneity and behavioral integration moderate the relationship between the resource bricolage effect and entrepreneurial orientation in family-owned start-ups in Sri Lanka

02. Literature Review

Entrepreneurial Orientation (EO) refers to the “processes, practices, and decision-making activities that lead to new entry” (Lumpkin & Dess, 1996). As per previous research, start-ups with higher EO should be able to develop strategies for entering new markets and dealing with complex environments (Kusumawardhani et al., 2009).

The cornerstone of entrepreneurial orientation and the key to entrepreneurial success are resources (Barney, 1991). The success, survival, and growth of entrepreneurial companies are significantly influenced by the amount and nature of available resources (Guohong & Lan, 2018). Prior research concentrated on the crucial role of resources for firms to create and sustain strategic advantages and has concluded that competitive advantage and high performance of firms come from a unique and diverse resource inventory (Steffens et al., 2022). Integrating and employing existing resources are efficient solutions to the issue of a start-up's inability to acquire favorable and expensive resources or to the issue of inadequate resources. For start-ups, which usually require substantial resources during the start-up and growth phases, the issue is acute. The most noticeable characteristic of entrepreneurial resources is resource scarcity (Wu et al., 2022). Consequently, accessing and utilizing resources effectively is one of the crucial responsibilities of founders in the entrepreneurial process.

Resource bricolage is a novel way of thinking and acting to address resource issues, according to Baker and Nelson's (2005) article. In accordance with the principle "make the best use of everything," businesses utilize their already-available, readily-accessible resources to take advantage of opportunities in the environment and overcome obstacles.

Making do with what you have (i.e. resource at hand), “making do” and “combining resources for novel uses” represent the three main components of resource bricolage. "Resource at hand"

is the first component. Utilizing already-existing, underutilized resources more effectively for current business processes not only lowers resource acquisition costs but also generates more income from investments, thereby significantly enhancing businesses' capacity to take risks (Xiue & Kun, 2018). Resources at hand refers to resources that exist in the market but have not yet been found or exploited for alternative uses; such resources are often obtained at a lower cost than standard alternatives. Making do means that the firm is quick to seize opportunities based on satisfaction rather than optimization. The third element, "combination of resources for new purposes" relates to integrating resources in a novel way that were previously used for other purposes to achieve new goals (Liang & Xinglu, 2016). The third element is similar to the concept of "Asset orchestration" found in dynamic capabilities literature.

Based on the above argument, the following hypothesis can be formulated.

H1: *There is a significant positive relationship between resource bricolage and entrepreneurial orientation*

Upper echelons theory, which was developed by Hambrick and Mason (1984), was adopted as the main underpinning theory for the conceptual framework development. Upper echelons theory states that when studying resource strategies, one should examine the subject (i.e. people involved in) of decision-making, that is, TMT. Different managers choose different strategies and perceive the information differently when confronted with the same organizational environment and strategic information (Carpenter et al., 2004). Secondly, the differences arise from the past experiences, values, perceptions, and characteristics of the top managers. Therefore, Hambrick and Mason (1984) suggest that in order to understand why a firm makes one choice rather than another, it is necessary to have a deeper understanding of its top managers. The theory explains why start-ups with similar resource constraints might have unique survival and growth prospects.

Because the TMT in family firms is typically composed of family members responsible for strategy formulation, planning, and implementation, the background characteristics of a TMT are closely related to the strategy planning and implementation of the firm (Xinming & Huan, 2021). They are in charge of running and managing the start-up, and they also have higher control and decision-making authority because they are tied to the entrepreneur through a family bond (Hambrick, 2007). As a result, the firm's resource distribution will be impacted by the TMT decision-making process. This study integrates TMT behavioral integration and TMT heterogeneity into a single research framework. The perspective of resource bricolage and the upper echelon theory can both be further deepened and expanded by the suggested conceptual framework.

When there is a great deal of diversity among TMT members, the team's expertise, abilities, and experience are varied. Additionally, diversity indicates that the team has a broad social network and a wide range of relationships, which can lead to the availability of more resources and skills for the expansion of the business (Heyden et al., 2013). On the other hand, it is challenging to possess sufficient external contacts to obtain strategic resources when the degree of TMT variety is minimal. It is not sufficient to rely on static indicators, such as demographic attributes, TMT behavioral interaction is also important. A high degree of TMT behavioral integration suggests frequent information sharing among team members, but this has the drawback of giving everyone access to the same resources, biases, and perceptions (Simsek et

al., 2005). It is challenging to use resources creatively in this circumstance. A low degree of behavioral integration allows for the contribution of team members' individual perspectives on resource acquisition. Teams, however, typically come to a cautious agreement because joint decision-making is frequently founded on risk reduction. The use and accumulation of resources are hindered by such a team's disregard for idle or abandoned resources.

Based on the above argument, the following hypothesis can be formulated

H2: *TMT characteristics (TMT Heterogeneity and Behavioral Integration) significantly negatively moderate the relationship between resource bricolage and entrepreneurial orientation*

03. Methodology

Because of the explanatory character of this study, a quantitative research method was used to gather primary data using survey questionnaires. Based on the measures used in earlier research, a survey questionnaire was created.

The population of the study is all family-owned SMEs in the Western Province of Sri Lanka. Although no accurate details about the total number of family-owned SME establishments in Sri Lanka, it can be assumed that 80% of the total SMEs in Sri Lanka are family-owned (Echelon, 2022).

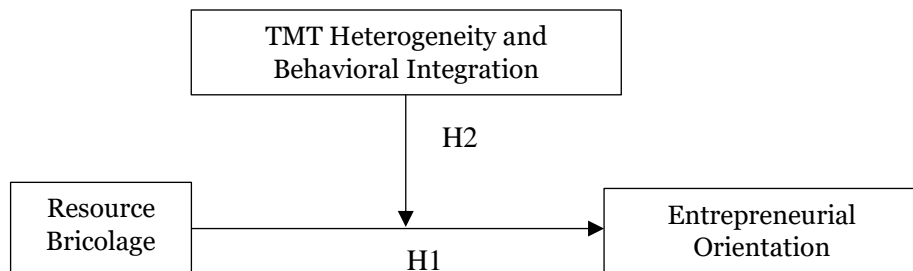


Figure 1: Conceptual Framework of the Study

The population of the study is all SMEs in Western Province, Sri Lanka. The sampling frame used for this study is the yearly registration lists maintained by the Provincial Department of Business Names Registration, Western Province. A simple random sampling method was adopted in selecting the respondents from the sample frame. 100 business organizations were randomly selected from business registrations within the time period 2015-2020. Then a criterion of less than 250 employees was included in the questionnaire to comply with the Sri Lanka Standards Institute (SLSI) definition of SME. Also, it was asked whether the SME is family-owned or not in the questionnaire. Responses not complying with the above criteria were to be removed from the analysis. None were found anyway.

The survey questionnaire for this study has 4 different sections, where the first section looks at the respondent's demographic profile and organizational characteristics. The second section

consists of questions for all the independent, dependent, and moderating variables. Variables were measured using a five points Likert scale.

Resource bricolage was measured using eight items adapted from the work of Senyard et al. (2014), which includes three dimensions. TMT heterogeneity was measured using four items adapted from the work of Heyden et al. (2013). The scale measures professional knowledge field, experience, functional background, and complementarity. TMT behavioral integration using nine items was used from the work of Simsek et al. (2005), which includes three dimensions.

This research adapted a novel scale to measure EO, which is more recent and well-validated. A scale that is specifically developed to measure individual EO would increase the validity of the research as our focus in this research is specifically on entrepreneurs not on organizational EO. The scale was developed by Bolton and Lane (2012). This scale has been used reasonably with a substantial R^2 value being reported by several recent research papers (DeGennaro et al., 2015).

Before the actual distribution of questionnaires, a pilot study was conducted to determine the readers' understanding of the items and to confirm the internal reliability. A total of 10 entrepreneurs were selected based on convenience basis for this pilot study. This was to ensure that the items in the questionnaire will be understood by the targeted group.

A total of 100 survey questionnaires were distributed using both online and physical methods. Questionnaires prepared using the Google Forms facility were distributed through email. Some questionnaires were also physically presented to those entrepreneurs/owners who did not respond to emails after one month. Respondents were promised anonymity, together with a guarantee of the confidentiality of the data they provided. RB and EO were taken from entrepreneurs. TMT characteristics were answered by the entrepreneur based on his perception of other members of TMT. The final response is a total of 79 observations (A response rate of 79%). The conceptual framework and its hypothesis were tested using SPSS and SMARTPLS.

04. Results

For this research, there were 79 usable questionnaires from respondents. By calculating the percentage of each category, descriptive statistics were used to evaluate the demographic traits. Male entrepreneurs outweigh female entrepreneurs in Sri Lanka, according to the analysis of demographic traits. The majority of entrepreneurs are in the 20 to 40 age group. Only 5% of the interviewees had a degree or a higher level of education.

Table 1 summarizes the reliability test of all measures. The CR for all constructs is above 0.70 and the lowest AVE value was 0.729 and the highest was 0.839. These values comply with commonly used thresholds (Hair et al., 2014). Overall, the discriminant validity can be accepted for the measurement model and supports the discriminant validity between the constructs.

After careful examination, the histogram graphs show that although the data is not normal, there are no significant exceptions to the assumption of normal distribution.

Table 1: Reliability Coefficients for Variables in the Study

Variables	Composite Reliability	AVE
Dependent Variable (DV)		
• Entrepreneurial Orientation (EO)	.856	0.820
Independent Variable (IV)		
• Resource Bricolage (RB)	0.795	0.778
Moderating Variable (MV)		
• TMT heterogeneity and behavioural integration (TMT)	0.792	0.826

As for the outer measurement model, factor component loadings of at least 0.50 are typically regarded as important (Hair et al., 2014). This research's outer measurement model indicators all met the requirement of having a minimum value of 0.5. To execute the SMART PLS program, 500 bootstrap samples were used. The results are summarized in Table 2.

Table 2: Summary of structural model testing

Hypothesis	Path	Path Coefficient	Standard Error	t statistics	Significance
H1	RB>EO	0.4350	0.0573	7.818	Significant

The above results show that Resource Bricolage positively influences Entrepreneurial Orientation. Further, the significance of the moderating effect was analyzed. The results showed that a significant negative moderating effect can be observed ($b = -0.104$, $t = -2.141$, $p = 0.016$). This shows that when TMT heterogeneity and behavioral integration increase, the relationship between resource bricolage and EO will be weakened.

The resource bricolage results were split into three groups based on the average value plus or minus one standard deviation in order to investigate the moderating effect of different levels of heterogeneity. X-axis indicates resource bricolage results (in three groups) and Y-axis indicates the EO result for that particular group at low TMT or high TMT.

Using the analysis of the data, an impact slope chart was created. It shows that in low TMT heterogeneity and behavioral integration conditions, the impact of resource bricolage on EO is stronger.

05. Discussion

Previous research has established that resource bricolage favorably affects firm entrepreneurship through innovation capability as well as business innovation and other outcome variables (Senyard et al., 2014). This research complements such research by confirming that resource bricolage positively influences entrepreneurial orientation. The success of new start-ups is largely attributable to the efficient restructuring and use of already available resources (Guohong & Lan, 2018). When start-ups exhibit more bricolage behaviors, they can quickly evaluate the market environment and use existing low-cost resources to provide more resource choices, increasing their capacity to withstand risk and fostering

business innovation. The research has partially demonstrated that resource bricolage is a significant foundation on which new businesses can develop their entrepreneurial orientation.

This paper supports the notion of the positive influence of resource bricolage on EO in start-ups through quantitative analysis in the Sri Lankan context. The main challenge for start-ups is the lack of resources, which also plays a significant role in the low success rate and brief lifespan of start-ups. Resource bricolage is an efficient method for start-ups to get around their resource limitations and gives them a way to effectively conduct entrepreneurial activities and produce economic value (Xiaobao et al., 2022). When start-ups are unable to manage all resources, bricolage can help entrepreneurs make the best possible use of already available resources and get around resource limitations. From this viewpoint, this paper offers a fresh concept for startups to deal with the resource scarcity problem, and the study findings contribute to the advancement of entrepreneurship research topics in developing countries.

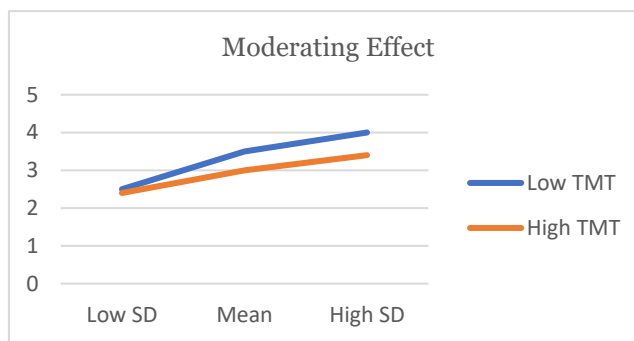


Figure 2: Analysis of Moderating Effect

Based on upper echelons theory and following the recent research of Xiaobao et al., (2022), the current paper considers TMT heterogeneity and TMT behavioral integration to explore the moderating effect between resource bricolage and entrepreneurial orientation.

Most researchers use the upper echelons theory to examine how TMT heterogeneity affects resource acquisition, performance, and business innovation (Zhou & Rosini, 2015). Previous research has examined the effects of TMT behavioral integration on entrepreneurial success but did not reach a consensus (Baoshan & Zhaorui, 2019).

The negative moderating effect of TMT heterogeneity and behavioral integration shows that for the acquisition of resources and the realization of entrepreneurial goals, just having a diversified management team or mere information sharing is not sufficient. Joint decision-making should be promoted only if differences between team members/family members are respected, and consensus is reached after a fair evaluation of ideas.

As for the limitations, the study's findings only apply to new businesses because it only examines the impact of the resource bricolage approach on entrepreneurial orientation during the start-up phase. Future studies might examine how resource bricolage affects entrepreneurial orientation at different development stages. Second, the research only uses Sri

Lankan start-ups as samples. Future studies can do comparative studies to identify differences in different country contexts.

06. Conclusion

Businesses that are actively owned, operated, and managed by two or more members of the single-family, have a unique set of characteristics that differentiates them from typical start-ups and requires special attention in research. Prior research demonstrates the role of resources in forming entrepreneurial orientation from the resource-based view. This research theorized and tested the impact of resource bricolage on entrepreneurial orientation. Based on the data of 79 start-ups in Western Province, Sri Lanka, it was found that when SMEs face resource constraints, the strategy of resource bricolage has a significant positive effect on entrepreneurial orientation, and the relationship is negatively moderated by TMT heterogeneity and behavioral integration. The main limitations are the small sample size and low geographical coverage.

References

- Alayo, M., Maseda, A., Iturralde, T., & Arzubiaga, U. (2019). Internationalization and entrepreneurial orientation of family SMEs: The influence of the family character. *International Business Review*, 28(1), 48-59.
- An, W., Zhao, X., Cao, Z., Zhang, J., & Liu, H. (2018). How bricolage drives corporate entrepreneurship: The roles of opportunity identification and learning orientation. *Journal of Product Innovation Management*, 35(1), 49-65.
- Baker, T., & Nelson, R. E. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative science quarterly*, 50(3), 329-366.
- Baoshan G., Zhaorui W. (2019). Entrepreneurial teams behavioral integration, relationship learning and entrepreneurial performance: The moderating role of entrepreneurial team behavioral complexity. *South China Journal of Economics* 10, 34-46.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Bojica, A. M., Ruiz Jiménez, J. M., Ruiz Nava, J. A., & Fuentes-Fuentes, M. M. (2018). Bricolage and growth in social entrepreneurship organisations. *Entrepreneurship & Regional Development*, 30(3-4), 362-389.
- Bolton, D. L., & Lane, M. D. (2012). Individual entrepreneurial orientation: Development of a measurement instrument. *Education & Training*, 54(2-3), 219-233.
- Carpenter M. A., Geletkanycz M. A., Sanders W. G. (2004). Upper echelons research revisited: antecedents, elements, and consequences of top management team composition. *Journal of Management*, 30, 749-778. <https://doi.org/10.1016/j.jm.2004.06.001>
- DeGennaro, M. P., Wright, C. W., & Panza, N. R. (2016). Measuring Entrepreneurial Orientation in an assessment center: An individual level-of-analysis study. *The Psychologist-Manager Journal*, 19(1), 1-14
- Digan, S. P., Sahi, G. K., Mantok, S., & Patel, P. C. (2019). Women's perceived empowerment in entrepreneurial efforts: the role of bricolage and psychological capital. *Journal of Small Business Management*, 57(1), 206-229.
- Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), 106-121.

- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(3), 382–388. <https://doi.org/10.2307/3150980>
- Guohong, W., & Lan, Q. (2018). Internal mechanism for the transformation from entrepreneurial orientation to new venture growth: case study based on entrepreneurial Bricolage's intermediating effect. *Soft Sci. Magazine*, 5, 135-146.
- Hambrick, D. C. (2007). Upper echelons theory: An update. *The Academy of Management Review*, 32(2), 334–343. <https://doi.org/10.2307/20159303>
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *The Academy of Management Review*, 9(2), 193–206. <https://doi.org/10.2307/258434>.
- Heyden M., Van Doorn S., Reimer M., Van Den Bosch F., Volberda H. (2013). Perceived environmental dynamism, relative competitive performance, and top management team heterogeneity: examining correlates of upper echelons' advice-seeking. *Organizational Studies* 34, 1327–1356. <https://doi.org/10.1177/0170840612470229>
- Kusumawardhani, A., McCarthy, G., & Perera, N. (2009). *Framework of Entrepreneurial Orientation and Networking: A Study of SMEs Performance in a Developing Country*. Paper Presented at Sydney Business School. <http://ro.uow.edu.au/gspapers/23/>
- Liang W., Xinglu Z. (2016). Ambidextrous innovation and firm performance: the mediating role of resource bricolage. *Chinese Journal of Management*. 13, 425–431.
- Lomberg, C., Urbig, D., Stöckmann, C., Marino, L. D., & Dickson, P. H. (2017). Entrepreneurial orientation: The dimensions' shared effects in explaining firm performance. *Entrepreneurship Theory and Practice*, 41(6), 973-998. <https://doi.org/10.1111/etap.12223>
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *The Academy of Management Review*, 21(1), 135–172. <https://doi.org/10.2307/258632>
- Ratnayake, R. M. C. S. (2015). *Do Entrepreneurial Resource Bricolage Lead to Nurture Social Innovations?* (Doctoral dissertation, Uva Wellassa University of Sri Lanka).
- Ratnayake, C., Jayawardhana, A. A. K. K., & Perera, J. (2022). Entrepreneurial resource bricolage and social innovation: moderating effect of entrepreneurial alertness. *Journal on Innovation and Sustainability RISUS*, 13, 92-110. <https://doi.org/10.23925/2179-3565.2022v13i2p92-110>
- Senyard, J., Baker, T., Steffens, P., & Davidsson, P. (2014). Bricolage as a Path to Innovativeness for Resource-Constrained New Firms. *Journal of Product Innovation Management*, 31(2), 211-230. <https://doi.org/10.1111/jpim.12091>
- Simsek, Z., Veiga, J. F., Lubatkin, M. H., & Dino, R. N. (2005). Modeling the Multilevel Determinants of Top Management Team Behavioral Integration. 48(1), 69-84. <https://doi.org/10.5465/amj.2005.15993139>
- Steffens, P., Baker, T., Davidsson, P., & Senyard, J. (2022). When Is Less More? Boundary Conditions of Effective Entrepreneurial Bricolage. *Journal of Management*, 49. <https://doi.org/10.1177/01492063221077210>
- Sun, Y., Du, S., & Ding, Y. (2020). The Relationship between Slack Resources, Resource Bricolage, and Entrepreneurial Opportunity Identification—Based on Resource Opportunity Perspective. *Sustainability*, 12, 1199. <https://doi.org/10.3390/su12031199>
- Wiklund, J., & Shepherd, D. (2003). Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses. 24(13), 1307-1314. <https://doi.org/https://doi.org/10.1002/smj.360>

- Wu, L., Liu, H., & Zhang, J. (2022). How does bricolage release the tensions in organisational ambidexterity for resource-constrained SMEs? A moderated mediation framework. *Technology Analysis & Strategic Management*, 1-14. <https://doi.org/10.1080/09537325.2022.2054317>
- Xiaobao, P., Rui, G., Jiewei, Z., & Xiaofan, S. (2022). The impact of resource bricolage on entrepreneurial orientation in start-ups: the moderating roles of TMT heterogeneity and TMT behavioral integration. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.900177>
- Xinming D., Huan L. (2021). TMT heterogeneity, competitive repertoire and Firm's market performance: empirical study from China's household appliance industry. *Nankai Business Review International*, 24, 103–117.
- Xiue Z., Kun Z. (2018). Impact of entrepreneurial orientation on new social enterprises performance—the mediating role of resource bricolage and moderating role of regulation. *Sci. Technol. Prog. Policy*. 35, 91–99.
- Xiumei, Z., & Yupeng, F. (2010). Empirical analysis relationship Characteristics, resource acquisition and new firm performance. *Nankai Business Review*, 3, 125-35.
- Yang, L., & Wang, D. (2014). The impacts of top management team characteristics on entrepreneurial strategic orientation: The moderating effects of industrial environment and corporate ownership. *Management Decision*, 52. <https://doi.org/10.1108/MD-03-2013-0140>
- Zhou, W., & Rosini, E. (2015). Entrepreneurial Team Diversity and Performance: Toward an Integrated Model. *Entrepreneurship Research Journal*, 5, 31–60. <https://doi.org/10.1515/erj-2014-0005>

