



## **ENTREPRENEURIAL RESOURCE BRICOLAGE AND SOCIAL INNOVATION: MODERATING EFFECT OF ENTREPRENEURIAL ALERTNESS**

*Bricolagem de recursos empreendedores e inovação social: efeito moderador do alerta empresarial*

R.M.C.S. Ratnayake, A.A.K.K. Jayawardhana, K.J.T. Perera  
Department of Management Sciences, Faculty of Management, Uva Wellassa University, Sri Lanka  
E-mail: sajalasachi@gmail.com, kumudu@uwu.ac.lk, jami@uwu.ac.lk

### **ABSTRACT**

Entrepreneurial resource bricolage concept evolved with the scientific studies and it spread towards the social sciences recently. Mainly focusing on the social purpose organization context with the entrepreneurial resource bricolage has a researchable area which can lead to solved social issues via socially conscious innovations. Accordingly, this study investigates how entrepreneurial resource bricolage leads nurturing social innovations and how entrepreneurial alertness moderates the whole process. Drawing upon a sample of 264 social entrepreneurs, the study followed a quantitative approach to investigate the focal research question. The results reveal that entrepreneurial resource bricolage significantly influences on nurturing social innovations while entrepreneurial alertness moderates the process. The study also finds that there is a higher level of SI in Sri Lanka and Sri Lankan social entrepreneurs ERB usage level is at a higher level. Along with the findings, this study provides significant theoretical and managerial insights.

**Key-words:** Entrepreneurial Resource Bricolage, Social Innovations, Entrepreneurial Alertness, Entrepreneurship, Social Purpose Organizations.

**ACEITO EM: 04/05/2022**

**PUBLICADO: 15/06/2022**



## BRICOLAGEM DE RECURSOS EMPREENDEDORES E INOVAÇÃO SOCIAL: EFEITO MODERADOR DO ALERTA EMPRESARIAL ENTREPRENEURIAL RESOURCE

*Entrepreneurial resource bricolage and social innovation: moderating effect of entrepreneurial alertness*

R.M.C.S. Ratnayake, A.A.K.K. Jayawardhana, K.J.T. Perera

Department of Management Sciences, Faculty of Management, Uva Wellassa University, Sri Lanka

E-mail: sajalasachi@gmail.com, kumudu@uwu.ac.lk, jami@uwu.ac.lk

### RESUMO

O conceito de bricolagem de recursos empresariais evoluiu com os estudos científicos e se espalhou para as ciências sociais recentemente. Focando principalmente no contexto da organização de propósito social, a bricolagem de recursos empresariais é uma área de pesquisa que pode levar a solução de problemas sociais por meio de inovações socialmente conscientes. Assim, este estudo investiga como a bricolagem de recursos empresariais leva a inovações sociais nutritivas e como o empreendedor pode moderar todo o processo. A partir de uma amostra de 264 empreendedores sociais, o estudo seguiu uma abordagem quantitativa para investigar a questão principal da pesquisa. Os resultados revelam que a bricolagem de recursos empreendedores influencia significativamente na promoção de inovações sociais, enquanto o empreendedor modera o processo. O estudo também descobriu que há um nível mais alto de SI no Sri Lanka e que o nível de uso dos empreendedores sociais ERB do Sri Lanka está em um nível mais alto. Juntamente com os resultados, este estudo fornece insights teóricos e gerenciais significativos.

**Palavras-chave:** Bricolagem de Recursos Empreendedores, Inovações Sociais, Prontidão Empreendedora, Empreendedorismo, Organizações de Propósito Social.

## INTRODUCTION

Social Purpose Organizations (SPO) combines resources to effectively address social issues (Adams and Hess, 2010) and specifically, address the market failures that neither the government nor the private sector makes active involvements (Martinez et al., 2017). Accordingly, by taking a socially entrepreneurial posture, the core of these ventures is to create a positive social impact in lieu of financial gains (Kannampuzha and Suoranta, 2016) via socially conscious innovations (Acs and Sany, 2009). Thus, the core purpose their existence is to battle with wicked social issues via socially conscious innovations (Adams and Hess, 2010).

Under the tag of “resource bricolage”, effective resourcing receives an increased attention within the concurrent SE research agenda (Davidsson et al., 2017). This is since social organizations operate within a highly resource-wise constrained environment compared with their for-profit counterparts (Kannampuzha and Asauoranta, 2016). This can be attributed to their purpose of existing – making a tangible social impact in lieu of resource accumulation (Senyard et al., 2011). The resource bricolage aspect highlights on grasping new opportunities and tackling the existing challenges with existing undervalued, slack, or discarded resources that are often available for free or cheaply (Davidsson et al., 2017).

However, significant knowledge lacunas can be observed on how new resource combinations facilitate nurturing socially conscious innovations within social enterprise research context on multiple grounds. First, Entrepreneurial Resource Bricolage (ERB) is a least researched dimension in SE research context (Kannampuzha and Suoranta, 2016) though this has received enough scrutiny in for-profit research context (Weerawardena, J., 2013; Jayawardhana, K., 2020).

Second, Social Innovation (SI) is getting increasingly popular in SPO research agenda (Senyard et al., 2011) since it is recognized as the core of social enterprises to exist. SI has been researched on different themes; conceptualizing (Thompson et al., 2015), measurement building (Lopes et al., 2017), as a main instrument of social value creation (Martinez et al., 2017) as an antecedent of overall performances (Kannampuzha and Suoranta, 2016). However, the potential antecedents for SI need further conceptual and empirical scrutiny.

Third, Entrepreneurial Alertness (EA) is intensively scrutinized in for-profit research context (Samo and Hashim, 2016), while a minor attention has been received in SE research context (Tang, 2008). Reflecting on the social organizations which are also branded as “hybrid” organizations, they are supposed to be keep their ears to the ground to capture the future market trends and prevailing market needs since they battle with sustaining in two contrasting ends – To sustain the expectant social mission, and, to stay financially sustainable (Jiao et al., 2014). These both ends propose the need of acting on the true market needs. Considering the mission perspective, a higher degree of market sensitivity matters in the process of designing and implementing the socially conscious innovations and, considering the financial perspective (Rezvani et al., 2018), these organizations are forced to meet the financial ends by incubating sustainable business models since attaining financial sustainability matters in delivering the desired social ends. However, from SE research perspective, the aspect has been received a limited academic scrutiny.

Investing on the outlined important knowledge gaps, this paper investigates how ERB influence in nurturing SIs within SPOs. Moreover, amidst the need of investing on real market needs, this study further investigates the role of EA in enhancing the relationship between ERB and SIs.

The rest of this paper is organized as follows. First, the literature of ERB, SI and EA which provides the rationale for the study leading to present the conceptual model and hypotheses of this paper. Second, the research design using quantitative method is presented. Third, the paper presents the key findings of the data analysis and the remainder of the paper discusses the implications for theory, practice, and the recommendations for future research areas.

## 1. LITERATURE REVIEW AND THEORETICAL BACKGROUND

### 1.1 Entrepreneurial Resource Bricolage

Optimizing wealth amid of resource constrained environments has received ample attention of researchers in mainstream entrepreneurship literature (Yu et al., 2019) since resources are essential ingredients for the survival and subsequent growth for business enterprises (Davidsson et al., 2017). Since the organizations are normally constrained with resources, it is important to find alternative solutions to optimize the resource usage, and here, researchers argue that creating effective and new combinations of extant resources could lead organizations to win the resource constrained nature in diverse fronts; a) incubating/ generating more innovations (Lopes et al., 2017), b) identification of new opportunities (Baker et al., 2003), and, c) increased value creation (Senyard et al., 2015). Reflecting on the dimension, Baker and Nelson (2005) view that entrepreneurs may cope with resource constraints while creating something new out of the resources they already own which is called “resource bricolage” (Baker and Nelson, 2005).

Analyzing this extant stock of knowledge, it is evident that resource bricolage which emphasizes the significance of overcoming the resource constraints can be viewed as a significant strategic choice for SEs to optimize the performances though the aspect has not been received a considerable academic scrutiny in the extant SE context specific literature. Turning to mainstream entrepreneurship literature the research on ERB has been evolved on diverse themes. Table 1 presents; a) thematic analysis of the concept, and b) citation analysis for those research areas which leads to understand the most researched areas in the concept.

**Table 1- Thematic analysis and the citation analysis - Resource bricolage**

Authors	Objective of study	Theme	Published Year	Number of Citations
Baker et al., (2003)	To investigate the existence, channels and implications of strategic improvisation in knowledge-intensive new businesses	Conceptualizing	2003	1157
Kincheloe, (2011)	Picking up on Norman Denzin’s and Yvonna Lincoln’s articulation of the concept of bricolage, describes a critical notion of this research orientation.		2011	1152
Kincheloe, (2011)	The article generates a variety of important categories in which multiple perspectives may be constructed: methodology, theory, interpretation, power relations, and narratology		2011	717
Senyard et al., (2009)	Theorize and provide preliminary test of the bricolage-performance relationship and how it is affected by firm innovativeness		2009	131
Senyard et al., (2015)	Theorize and provide preliminary test of the bricolage-performance relationship and how it is affected by environmental dynamism		2015	04
Jayawardhana, (2020)	Study investigates how open innovation orientation leads nurturing greater innovation and acquiring greater sustainable goals and specifically, how entrepreneurial orientation and resource bricolage facilitate the whole process		2020	
Senyard et al., (2014)	Develop and test arguments that “bricolage,” defined as making do by applying combinations of the resources at hand to new problems and opportunities, provides an important pathway to achieve innovation for new resource-constrained firms.	Developing Measures	2014	330

Witell et al., (2017)	To formalized new service development process could be counter-productive and a bricolage perspective might better explain service innovation in resource-constrained environments		2017	114
Greg & Jonatan, (2017)	How social entrepreneurs handle the increasing pressure to measure social impact with formal methodologies through a bricolage lens		2017	69
Davidsson et al., (2017)	To describe the development and contents of a novel measure of entrepreneurial bricolage behavior and assesses its validity		2017	39
Kannampuzha, & Suoranta, (2016)	To understand how resource constraints are addressed in the development of a marketing strategy by a social enterprise		2016	18
Senyard et al., (2011)	To test bricolage using different forms of innovation using data from the Comprehensive Australian Study of Entrepreneurial Emergence (CAUSEE) project.		2011	15
Sandeep et al., (2013)	To demonstrate how entrepreneurial service firms strategically combine resources at hand (bricolage) to innovate and stay ahead of rivals	Antecedent of Organizational performance	2013	245
Pick et al., (2015)	To investigate how artists utilize bricolage to create projects and develop their skills.		2015	57
Hooi et al., (2016)	To delve the influencing factors of sustainable entrepreneurship among SMEs in Malaysia		2016	36
Kariv & Coleman, (2015)	To examine the impact of small loans on new firm performance using data from the second Panel Study of Entrepreneurial Dynamics, a large longitudinal data set of new firms in the USA		2015	27
Burgers et al., (2014)	Hypothesize corporate entrepreneurs through bricolage may be able to mobilize, redefine and recombine existing resources available via social connections inside and outside their organization, resulting in better performance of CE initiatives		2014	10
Teasdale et al., (2012)	To examine the extent to which urban social enterprises (SEs) have diversified their funding sources and shifted towards loans and development finance in recent years.	Social bricolage	2012	119
Sunley & Pinch, (2012)	Examine the extent to which urban social enterprises (SEs) have diversified their funding sources and shifted towards loans and development finance in recent years		2012	137
Langevang & Namatovu, (2019)	Show how groups of disenfranchised young people use social bricolage to create social change in a volatile situation marked by extreme resource deprivation and a plethora of challenges arising in the aftermath of war. Based on empirical data, we outline three key practices of social bricolage employed to cope with resource scarcity, extended crisis and volatility.		2019	16

The analysis of ERB literature shows that the dimension has been mainly evolved and investigated on four themes; a) conceptualizing of entrepreneurial bricolage, b) bricolage developing measures, c) bricolage as a antecedent of organizational performance and, d) social bricolage (Molecke and Pinkse, 2017; Senyard et al., 2015;

Pick et al., 2015). Moreover, researchers investigate performance of bricolage theory with the different perspectives as, SME's creating projects, service innovations and open innovations (Salunke et al., 2013; Pick et al., 2015; Hooi et al., 2016).

First, based on the citation analysis, it is evident that most influential and impactful research theme has been to conceptualize what resource bricolage is. Overall, researchers have taken different standards and observed the constructs from diverse perspectives and angles when conceptualizing (e.g. Baker et al., 2003; Senyard et al., 2009; Jayawardhana, 2020). Though the definitional ambiguity is amply evident, it is evident that all researchers agree on the core of the construct – combining the existing resources to find novel solutions for the prevailing organizational challenges (Kincheloe, 2011; Baker, et al., 2003) which in return lead optimizing the firms' value creation.

The second researched area has been based on developing the measures to empirically test the construct. However, there are ample differences between the measures those have been developed by the researchers so far. The differences could be seen via two domains; a) the core defining dimensions they have used to define the construct, and, b) measures were largely different based on the country and the region. Interestingly, in common most of the measures have been developed on the large corporates' experiences (Witell, et al., 2017) while the researches are lacking from other organization perspectives such as SMEs (Senyard, et al., 2014) and SPO perspective (Kannampuzha, & Suoranta, 2016)

The third most researched theme has been to test the behavior of ERB as an antecedent. The construct has been largely investigated as an antecedent of; a) overall organizational performance (Kariv, & Coleman, 2015), b) firm innovation (Salunke et al., 2013), c) building organizational capability base (Sandeep, et al., 2013), and d) skill enhancement (Pick, et al., 2015)

Finally, the literature review shows least number of researches on the SPO research context which shows a huge knowledge lacuna in the field. Arguing on the adequacy of for-profit theories to understand the SPO research context, some researchers have attempted to modify and use the construct in the SPO research domain as a strategic response to create enhanced SPO context-specific understanding (Teasdale, et al., 2012; Langevang, and Namatovu, 2019). However, it is questionable whether most of the researchers have made a clear departure from the conceptualizations in the for-profit research domain to understand the SPO research domain.

## 1.2 Social Innovations

Bending the common view of being interpreted as a strategic tool to maximize the wealth in for-profit research context (Svetlik, et al., 2007). SPO researchers argue the potentials of innovations as a strategic tool to address wicked social problems results (Dwivedi, & Weerawardena, 2016). Thus, the core of SI has been to deliver positive in social impact rather than wealth accumulation. Just as the innovations in commercial sphere, SIs can take different forms such as, product innovations, services innovations, business model innovations, processes innovations, and marketing innovations (Szutowski, 2012; Svetlik, et al., 2007) Table 2 summarizes the thematic areas that the SI research has been evolved so far and the citation analysis for the particular themes.

**Table 2- Thematic analysis and the citation analysis – Social Innovation**

Authors	Objective of study	Theme	Published Year	Number of Citations
Mulgan et al., (2007)	Examines how social innovation happens in NGOs, the public sector, movements, networks and markets. It presents an analysis of the history, the theory and the process, paving a way for social innovation to play an increasingly significant role in society.	Conceptualizing/ Defining SI	2007	2151
Sullivan et al., (2003)	Conceptualizes social entrepreneurship as a multidimensional construct involving the expression of entrepreneurially virtuous behavior to achieve the		2003	1314

	social mission, a coherent unity of purpose and action in the face of moral complexity, the ability to recognize social value-creating opportunities and key decision-making characteristics of innovativeness, proactiveness and risk-taking			
Dawson & Daniel, (2010)	Examines what we understand by the concept of social innovation		2010	419
Hagedoorn, (1996)	To examine the entrepreneurial activities, play an active role in understanding the dynamics of innovation throughout Schumpeter's theory		1996	285
Dwivedi & Weerawardena, (2016).	Addressing the need for conceptualization and operationalization of the social entrepreneurship construct, we propose a behavioral measure of social entrepreneurship orientation		2018	118
Adams & Hess, (2016)	Identify components of SI practice and indicate how these might be theorized into generally applicable models.		2016	116
Krlev et al., (2014)	To develop the conceptual understanding for SI, through operationalization it strengthens the link between theory and empirical phenomena.		2014	105
Hölsgens et al. (2018).	Examine in how far a multilevel perspective approach is suited to analyze and better understand diffusion trajectories of social rather than technological innovations, taking a social practice theory perspective		2018	29
Klůvanková et al., (2018)	To present an original definition of SIs for marginalized rural areas and to find key mechanisms that enable efforts for SIs in forest-dependent communities to emerge and develop.		2018	25
Martinez et al., (2017)	To examine the conceptual construct of SI in business as distinct from SI implemented by civil society and the state.		2017	07
Jayawardhana & Weerawardena, (2014)	Attempts to conceptualize the constituent elements of market learning in SPO context and how such learning potentially relates to the types and degrees of social innovation.		2014	04
Svetlik et al., (2007)	To examine the influence of individual factors (enjoyment in helping others and knowledge self-efficacy), organizational factors (top management support and organizational rewards) and technology factors (information and communication technology use) on knowledge sharing processes and whether more leads to superior firm innovation capability.	Developing Measures for SI	2007	1858
Chalmers, (2013)	Seeks to contribute to current debates on social innovation by critically reviewing extant literature and proposing a model of 'open' social innovation		2013	156
Antadze & Westley, (2012)	Describes conventional measurement tools and their limitations for evaluating social impact, and proposes that developmental evaluation is more suited to evaluating social innovation.		2012	121
Sillanpää (2013)	To present a framework to measure the multidimensional impacts of welfare service innovations and report the empirical results from two case studies		2013	23
Taylor, (2017)	Looks at the applicability of innovation through highlighting two studies carried out in England of		2017	19

	innovation being applied within a social housing organization			
Zoltan & Joseph, (2009)	Measuring the economic and social impact of innovation is a nontrivial act. Using an embedded analysis method this paper examines the Grameen Bank and Microsoft Corporation as examples of social and commercial entrepreneurship		2009	6
Szutowski, (2012)	To create multidimensional innovations' classification that is appropriate for tourism companies.		2012	1
Saji & Ellingstad, (2016).	Focuses on the data available through the internet and the papers and articles related to social innovation experience of technology companies	SI as an antecedent of performance	2016	63
Ruebottom, (2011)	To identify important elements of the evaluation and definition of success in social entrepreneurship.		2011	49
Svensson, (2020)	Study was to examine antecedents and outcomes of social innovation in a global sample of sport for development and peace (SDP) organizations.		2020	11
Lopes et al., (2017)	To discuss recent developments in the fields of management innovation and SI, in order to discover any possible convergences and divergences between them		2017	07
Nandan et al., (2020)	Describes the Human Centered Design, draws parallels with social work management competencies and concludes with state and county level illustrations of how the Human Centered Design has been used to address complex, wicked and recalcitrant social and organizational challenges.		2020	02

When evaluating the overall SI research agenda, it is evident that the research has been evolved mainly on five themes. First, the most popular and dominating theme according to the citation analysis is to address the definitional ambiguities on the construct - SI (Dwivedi and Weerawardena, 2018). However, the researchers have been unable to agree upon a unified definition for SI and our analysis array that this could be attributed to three reasons; a) being based on highly niche areas (Klůvanková et al., 2018) to define the SI (Krlev et al., 2014), b) empirical evidence restrained only for limited countries/ limited regions in the world (Jayawardhana and Weerawardena, 2014), and c) varied with the area of study content (Adams and Hess, 2016). Accordingly, applicability of SI in diverse contexts studies by several researchers and there are two main ideas in SI process; a) analyzing elements of process in different contexts, b) combine different approaches and factors together to investigate SI with social change (Quandt et al., 2017; Neumeier, 2017; Cajaiba-Santana, 2014). Further, applicability of SI mainly focused in social entrepreneurship and under the concept of social service and as a contribution to the society (Martinez et al., 2017; Taylor, 2017).

The second most popular theme according to the citation analysis is developing the measures. Though the researchers have not agreed on common set of measures to measure the construct, the core argument of these all papers has been that borrowed theories and measures from for-profit context to measure SI could hinder the context specific knowledge creation (Szutowski, 2012; Acs and Sany, 2009). Thus, these all papers challenge the direct borrowing and application of theories from for-profit research context to measure SI. The other salient feature of the theme is mainly based on medium and large-scale sector organizations in different industries when developing the measures (Svetlik et al., 2007; Sillanpää, 2013).

Third theme, SI as an antecedent of performance illustrate to investigate the difference of SI than the other innovation categories (Lopes et al., 2017) and to measure the effectiveness of social entrepreneurship (Ruebottom,



2011). Based on the discussion, this paper argues that high resource constraints have to be consider social entrepreneurs when they are engaging in SI.

ERB, being an emerging research filed in for-profit research context as well, has received limited academic scrutiny so far (Jayawardhana, 2020; Langevang & Namatovu, 2019) are exceptional. However, extant literature shows a growing trend of linking ERB as a strategic tool to nurture greater innovations (Sandeep et al., 2013) which finally leads achieving increased organizational performances (Burgers et al., 2014). The core argument of these studies is, the more the organizations focus on combining existing resources to come up with solutions for novel challenges, the more they can nurture the innovations since the practice clearly boost up the power of undertaking novel initiatives. Turning to SPO context, it's evident that ERB research are quite lacking which hinders the SPO context specific resource optimization. Extending this knowledge gap and being aligned with the extant stock of knowledge, we theorize that ERB positively relates with SI in SPO context:

H1: ERB positively effects on the nurturing of SI

### 1.3 Entrepreneurial Alertness

According to Pick et al., (2015) EA is not an unusual quality attributable to some people but is simply a result of the progress and application of the tablet used in the minds of the world. If people are alert about the changing environments and technology information and market changers, they can identify an opportunity before others. Because they have unique readiness than others in the market (Jiao et al., 2014). Most researchers argued, alertness as evidence of a person working out knowledge and experience in the past, identifying patterns in the environment, processing information, and engaging in social interaction. Therefore, EA can improve the thinking pattern and new ideas of entrepreneurs (Tang, 2008).

EA is considered vital for identifying the opportunity which can have an impact on mindset for exploiting the opportunities (Hussain et al., 2016). According to Samo (2016), there is a high level of attachment between property and new agenda which leads to identifying opportunities and start new businesses. Moreover, it is considered as an important factor in increasing the supply of entrepreneurship in society (Hussain et al., 2016).

**Table 3- Thematic analysis and the citation analysis – Entrepreneur Alertness**

Authors	Objective	Theme	Published Year	Number of Citations
Gaglio & Katz, (2001)	To examine and address the entrepreneurial alertness, a distinctive set of perceptual and information-processing skills, has been advanced as the cognitive engine driving the opportunity identification process	Conceptualizing	2001	1800
Sharma, (2019)	Aims to integrate the varied research on entrepreneurial alertness, identify its core components and develop the understanding of the concept of entrepreneurial alertness.		2019	17
Tang et al., (2012)	To offer a model involving three distinct elements of alertness: scanning and search, association and connection, and evaluation and judgment.	Developing Measures for EA	2012	696
Minniti, (2004)	Presents a model in which an individual decides whether to become an entrepreneur based on her alertness and on the information available in her environment. Spin-glass simulations are used to illustrate the dynamics of the decisional process		2004	230
Puhakka, (2011)	To explore alertness to business opportunities in order to develop a model of business opportunity recognition		2011	43
Tang, (2008)	To examine the effects of environmental munificence on entrepreneurs' alertness, as moderated by self-efficacy, and the effects of this alertness on	EA as an Antecedent of Performance	2008	198

	entrepreneurs' commitment to their new ventures.			
Adomako, (2018)	To address the gap of how and when entrepreneur alertness to entrepreneurial opportunities drives new venture success		2018	37
Jiao et al., (2014)	To explores the possible relationship between sources of knowledge acquisition and entrepreneurs' innovativeness from the perspective of knowledge management		2014	34
Samo, (2016)	Identified significant association between entrepreneurial alertness and starting new firms		2016	04
Valliere, (2013)	An investigation into Kirzner's concept of entrepreneurial alertness — its mechanism and its antecedents. By drawing from decision theory and schema theory, a model is developed to show how changes in the environment are mediated by entrepreneurial alertness and brought to the situated attention of entrepreneurs for evaluation	As a Mediator	2013	172
Uy et al., (2015)	Examined the role of entrepreneurialism in careers in the information society and global economy, bringing together key constructs in the fields of career studies and entrepreneurship		2015	164
Urban, (2017)	To understand how entrepreneurial alertness may facilitate CE activity		2017	20
Samo & Hashim, (2016)	To analyze the connection between opportunity identification and intentions formation through entrepreneurial alertness based on the theory of planned behavior		2016	15

According to the analyzed literature, EA conclude within four fronts: a) conceptualizing, b) developing measures, c) as an antecedent of performance and d) as a mediator. First, based on the citation analysis, it is evident that most influential and impactful research theme has been to conceptual the construct – EA. Overall, several researchers introduce the concept of EA in different aspects such as, the information processing skill of an entrepreneur (Sharma, 2019), and some studies differentiate the idea of EA according to the objective of the study purpose (Gaglio et al., 2001). Thus, it is evident that there is no any universally agreed definition for EA though all the researchers have emphasized the significance of EA in information generating mechanism for entrepreneurs.

The Second of the citation analysis is the developing measures for EA. It includes the different models and it differentiate with the research objective of the studies (Tang et al., 2012; Minniti, 2004). Among the several measures, for this study we used the measures as scanning and search, association and connection, evaluation, and judgment for the EA (Tang et al., 2012) by considering the practicability. In this EA measures, researchers focus mainly as one of the entrepreneur attitudes for the business success (Minniti, 2004).

The third theme is EA as an antecedent of performance (Tang, 2008). Considering the field of management alertness mostly used to measure the performance in situational perspectives like measuring entrepreneurial commitment to their new ventures, entrepreneurial decision making and knowledge acquisition (Samo, 2016; Tang, 2008). Lastly, EA can be also use as the informative factor as well as the mediator to build a strong relationships between two variables. Further, EA practice in moderator or mediator forms to evaluate entrepreneur's attention and opportunity identification in the area of entrepreneurship research studies (Valliere, 2013; Samo and Hashim, 2016). There are least number of research in this theme, and we cannot find research studies that used EA as a moderator to emphasize the relationship. Accordingly, EA used in different research contexts to measure organization performance and as a supporting variable for the main relationship.

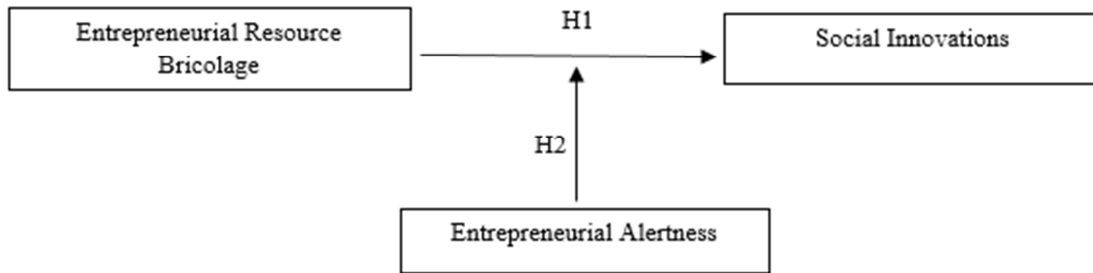
In that sense, studies use EA as a mediator variable to emphasize the theories and define clearly. However, extant literature shows a growing trend of linking EA as a tool to mediate the relationships under management arena. If considering the SPOs and related research studies, there are limited applications with the concept of EA and its

evident that EA researches quite lacking in this field of businesses. Extending this knowledge gap and being aligned with the extant stock of knowledge, we argue that EA positively moderates the relationship between ERB and SI in Sri Lankan context:

H2: EA positively moderates the relationship between ERB and SI.

Thus, based on the discussion above, the conceptual framework of this paper is presented in Figure 1.

Figure 1. Path from the usual model to the regenerative model



## 2. RESEARCH DESIGN AND PROCESS

### 2.1 Research context – SPOs

SPOs exist to deliver a social mission in lieu of building financial conglomerates (Best et al., 2021). Here, we strategized to capture the maximum variation of the types of SPOs in Sri Lankan context. Here, we chose diverse types of SPOs such as community projects, nonprofit organizations, co-operatives, social enterprises, and social purpose business to capture the big picture of the SPO research context.

### 2.2 Sampling and key informants

Based on a sample of 264 SPOs, this study followed a quantitative approach given the nature of the focal research question that the paper intended to investigate. Sample was randomly derived from broad categories of SPOs operating in Sri Lanka. Thus, the study adopted a purposive sampling method in the selection of the sample for the survey. Owner managers, CEOs and senior managers were the key informants in this study, since they are aware of the overall strategic directions of the SPO. The diverse nature of sample is summarized in below table 4.

Table 4 - Key descriptive statistics of the study sample

	Frequency	Percentage
<b>Gender</b>		
Male	136	51.5
Female	128	48.5
<b>Social Entrepreneurs Location</b>		
Western Province	59	22.3
Central Province	46	17.4
Uva Province	63	23.9
Southern Province	53	20.1
North Province	34	12.9
other	9	3.4
<b>Education Level</b>		
Primary	17	6.4

Secondary	64	24.2
Diploma	80	30.3
Bachelor	80	30.3
Masters	23	8.7
<b>Type of Organizations</b>		
Community Project	23	8.7
Nonprofit organization	38	14.4
Co-operative	45	17.0
Social Enterprise	58	22.0
Social purpose business	100	37.9
<b>Age of the operations</b>		
Less than 5 years	121	45.8
6-10 years	95	36.0
11-15 years	36	13.6
More than 15 years	12	4.5
<b>Number of Employees</b>		
Less than 5	64	24.2
6-29 employees	122	46.2
30-99 employees	59	22.3
More than 100 employees	19	7.2
<b>Annual Income of the Entrepreneur</b>		
Less than Rs.500,000	96	36.4
Rs.600,000-Rs.,1,000,000	108	40.9
More than Rs.1,000,000	60	22.7

Table 4 provides information about the study sample of SPOs. Since SPOs largely differ on operational scope and other firm demographic factors, we strategized to capture the diverse organizational characteristics based on their gender, the location, education level, operational scope, operational models, business age, number of employees, annual income etc. when investigating our core study prepositions. Most of the respondents were males (51.5%) while the female social entrepreneur respondents are also significant (48.5%). A significant majority of 121 (45.8%) of respondents were running their business less than 10 years of time and those who were running their business over 15 years were 12 (4.5%). In terms of the number of employees, most of the responded social entrepreneurs were having the employees 6 to 29 (46.2%) and only a small minority of responded SPOs (7.2%) were having more than 100 employees. Sample was captured respondent diversity based on the annual income level of social entrepreneur and it shows 40.9% are getting annual income between Rs.600, 000 - Rs.1, 000,000. These multiple aspects comprehend that the study strategized to capture the maximum variation (in terms of size, operational scope etc.) of the SPOs operating in Sri Lankan context.

### 2.3 Measure

Measurement in this study included ERB independent variable, SI dependent variable and EA moderator variable. All of the items were graded on a five-point Likert scale, with 1 representing "strongly disagree" and 5 representing "strongly agree." Consistent with the extant body of literature, this research approached well-established and tested measures as follows:

**Entrepreneurial Resources Bricolage:** As per the definition of Baker and Nelson (2005), this paper defines ERB as “making do by applying combinations of the resources at hand to new problems and opportunities”. Further, the study used his 9 items unidimensional measure to quantitatively measure the construct.

**Social Innovations:** Aligned with the definition of Casaba-Santana, (2014) on social innovation, this paper defined SI as, “new social practices created from collective, intentional, and goal-oriented actions aimed at prompting social change through the reconfiguration of how social goals are accomplished.” Further, this study used 11 item

multidimensional measurements proposed by Thompson et al. (2015) to measure the construct. Accordingly, the items were projected on measuring three dimensions; a) create systematic social change through scaling and replication, b) act in response to a need that is either overserved or not served at all, and c) offer products and services that are simpler and less costly than existing alternatives.

**Entrepreneurial Alertness:** Aligned with the works of Tang et al. (2012), this paper defined EA as “the potential to add substantially to our understanding of how new ideas get initiated and pursued. Further, this study used his 13 item multidimensional measurement to quantitatively measure the construct. Accordingly, the items were evaluated on three dimensions namely; a) alertness scanning and search, b) alertness association and connection, and c) alertness evaluation and judgment.

### Model specification

The regression equation below was estimated to test the research hypotheses.

$$SI = \beta_0 + \beta_1ERB + \square$$

Note:

SI = Social Innovation

$\beta_0$  = Intercept

$\beta_1$  = Slope

ERB = Entrepreneurial Resource Bricolage

$\square$  = Standard Error

### 2.4 Data analysis

In analyzing data, several techniques were adopted to remain focused on the research problem as descriptive analysis, correlation analysis, linear regression, multi-group analysis and process macro model 11by using SPSS software

### 2.5 Validity and reliability of measurement model

Pilot study was conducted with thirty-five respondents for testing the validity and the reliability of the measurement model. Cronbach alpha reliability test was conducted to evaluate the reliability of the measures for each variable and for the overall model.

As table 5 presented, Cronbach alpha value for all the constructs exceed the generally accepted level of 0.7 ( $0.7 \leq \alpha$ ). Furthermore, 0.875 Cronbach alpha value confirms that the measures used in this study was reliable in the overall model as well. Applying this, values confirm the internal consistency of questionnaire and provides a strong indication for reliability and validity of the questionnaire (Cronbach and Furby, 1970; Nunnally, 1978; Nunnally, 1994).

**Table 5 – Validity and reliability**

Variable	Cronbach's Alpha	Number of Items
Entrepreneurial Resource Bricolage	0.876	09
Social Innovations	0.712	11
Entrepreneurial Alertness	0.891	13

### 3. RESULTS AND DISCUSSION

#### 3.1 Tests for measure the key relationship between ERB and SI

The potential impact of ERB on SI of SPOs in Sri Lanka were investigated with simple linear regression analyses. The equation was built and tested by estimating the following regression equation.

$$SI = 1.901 + 0.520EB + \epsilon$$

Table 6 contains the results of the test for the relationship between SI and ERB variables. It has a significant predictor of impact for the growth of Social Innovations in Sri Lanka

**Table 6: Model summary for linear regression analysis**

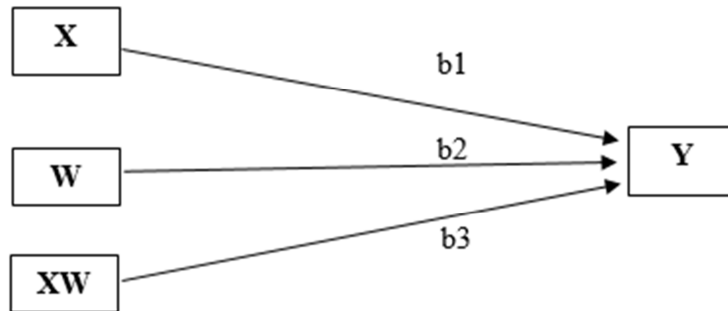
Figure	R	R Square	Adjusted R Square	Std. The error of the Estimate
Value	.585 <sup>a</sup>	.343	.340	.33365

Moreover, according to the correlation analysis also results proved that there is a strong positive relationship between SI and ERB (Pearson Correlation =0.585; P < 0.000). Our hypothesis was confirmed, leading us to conclude that ERB was indeed positively and significantly related to the SI.

#### 3.2 Tests for Moderator Effects on the Relationship of ERB and SI

The influence of EA on the relationship between ERB and SI was tested using process macro model in regression analysis. We developed a statistical diagram to measure the moderator effect as follows:

**Figure 2: Statistical diagram**



There are three pathways to measure the moderator named as b1, b2 and b3, which measures the direct effect of independent variable (X) on dependent variable (Y), direct effect of moderate variable (W) on dependent variable (Y) and the interaction path of independent variable, and moderator (XW). According to the study EA is denoted by W, X denotes ERB and Y denotes SI. Then, the regression analysis was done with the use of Process Macro Model.

Results of the moderator regression analyses are given in Table 7. R2 value indicates the 39% explanation of the dependent variable with the effect of moderator and independent variable. ERB and EA separately do not significant and Int\_1 and constant are significant as the process model significant explanation. These results show the influence of the EA aspect on the relationship between ERB and SI in the SPOs

**Table 7: Conditional effects of the focal predictor at values of the moderator**

EA	Effect	T value	P-value	LLCI	ULCI
3.5385	0.3619	6.3203	0.000	0.2491	0.4746
4.0000	0.4443	7.5956	0.000	0.3291	0.5595
4.3846	0.5131	7.4067	0.000	0.3767	0.6495

According to the process macro model, effect values are satisfied with the conditions of significance. That means all effects are within the lower level confidence interval and the upper-level confidence interval. The discussions in this section focus on the substantive interpretation of results. Such as bricolage broadly applied for the entrepreneurship and organization studies (Carlos and Pozo, 2018). Other studies have shown that entrepreneurs have a similar belief in reallocating existing resources (Senyard et al., 2011). According to Senyard (2011), there is a positive result indicate in bricolage with all forms of innovativeness.

Hooi (2016), suggesting the aim of bricolage is to generate innovation. And most of the researchers found, Bricolage processes and the development of innovative results have been studied in several applications, including the development of discontinuous innovation using innovativeness that has combinations of resources (Senyard, Baker and Davidsson, 2009). Most of the research finding for ERB and innovation categories are having a positive relationship with those variables and have an effect among the variables.

Those past literature has supported the findings of the study. As hypothesized, results confirm that ERB positively influence attaining sufficient amount of SI in social purpose organizations. Frequently, SI are now most popular innovation category in the countries like Sri Lanka as well as current business world. Investigating further, the study found few reasons for increasing level of SI. First, there is a positive relationship between education level and the increasing level of SIs according to the multi group analysis. Second, there are no difference between gender and the enterprise size with the SI level of their organizations.

According to Adomako et al., creativity is an essential part of EA and both are considered processes. That will emphasize EA also had some positive impact on creativity. It will indirectly affect innovation types. Some researchers have to use EA as the mediator. In Dayan, Zacca and Di Benedetto's (2013) study they revealed that intrinsic motivation and alertness to opportunity were the key mediators between contextual factors and entrepreneurial creativity. This will conclude that there is a mediator effect on EA on creativity. The results of hypothesized moderating effect of EA in this study was positive. EA was found positively moderates the relationship between ERB and SI. Along with the above finding this study observes, there is a higher level of SI in Sri Lanka and Sri Lankan social entrepreneurs ERB usage level is at a higher level.

#### 4. CONCLUSION AND RECOMMENDATIONS

This study intended to study the impact of entrepreneurial bricolage in nurturing social innovation within social enterprises. The study model was further enriched by introducing a moderator variable, "entrepreneurial alertness" to study the relationship. Overall, the results confirm that entrepreneurial resource bricolage positively influences SI and EA positively moderates the relationship. The study findings contributes to the theory as follows:

**Table 8: Summary of the finding according to the objectives**

Objectives	Findings	Contribution to theory
To identify the ERB influence towards the nurturing of SI in Sri Lanka.	ERB positively influences on the SI	By this, this paper mainly contributes to resource bricolage literature on two fronts: <ol style="list-style-type: none"> <li>1. Adaptation of bricolage concept in social enterprise research context.</li> <li>2. Identifying to which extent the concept contributes to nurture social innovation.</li> </ol>
To identify the EA moderating effect on the relationship between ERB and SI	There is a significant moderator role of EA on the relationship between ERB Therefore, entrepreneurs who have EA can increase the level of SI.	By this, the paper contributes to entrepreneurship literature by investigating the role of EA in nurturing SIs in social enterprise context.

As specified in the Table 8, we mainly contribute to bricolage, social entrepreneurship and social innovation literature on diverse fronts.

Based on the findings, it can be recommended that social entrepreneurs that apply the resource bricolage tend to nurture more innovations than of other social enterprises. Further, social enterprises should stay alert for the market trends and the changing nature of market needs since being alert for the external environment plays a significant role in nurturing social innovations within social enterprises.

## 5. LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Though this study was conducted in the quantitative method, it will only provide numerical data regarding the objectives. In addition, this model creates limitations on providing in-depth views of the participants. To this reason, future research can conduct studies on this in Mix analysis method by using quantitative and qualitative methods. Moreover, scholars can improve this study by using all forms of bricolage such as technological, capacity, capability, and people bricolage to the social entrepreneurs and to the other categories of entrepreneurs. Further, this ERB and SI relationship can measure by using various moderators and mediators to find out the effect. Scholars can use various variables to measure social innovation in Sri Lanka and they can use all kind of business social innovations without limited to social entrepreneurs' social innovations. However, more research is required to understand whether ERB and EA may be applied to social innovations and under what conditions.

## REFERENCES

- Acs, Z. J., & Sany, J. (2009). Measuring the Social Value of Innovation: The Cases of Muhammad Yunus, Grameen Bank and Bill Gates, Microsoft. *Measuring the Social Value of Innovation: A Link in the University Technology Transfer and Entrepreneurship Equation*, 19, 143. [https://doi.org/10.1108/S1048-4736\(2009\)19](https://doi.org/10.1108/S1048-4736(2009)19)
- Adams, D., & Hess, M. (2010). SI and Why it has Policy Significance. <https://doi.org/10.1177/103530461002100209>
- Adomako, S., Danso, A., Boso, N., & Narteh, B. (2018). Entrepreneurial alertness and new venture performance: Facilitating roles of networking capability. *International Small Business Journal*, 36(5), 453-472. <https://doi.org/10.1177/0266242617747667>
- Antadze, N., & Westley, F. R. (2012). Impact Metrics for Social Innovation: Barriers or Bridges to Radical Change? *Journal of Social Entrepreneurship*, 3(2), 133-150. <https://doi.org/10.1080/19420676.2012.726005>
- Baker, T., Miner, A. S., & Easley, D. T. (2003). Improvising firms: Bricolage, account giving and improvisational competencies in the founding process. *Research policy*, 32(2), 255-276. [https://doi.org/10.1016/S0048-7333\(02\)00099-9](https://doi.org/10.1016/S0048-7333(02)00099-9)



- Best, B., Miller, K., Mcadam, R., & Moffett, S. (2021). Mission or Margin? Using Dynamic Capabilities to Manage Tensions in Social Purpose Organizations' Business Model Innovation. *Journal of Business Research*, 125, 643-657. <https://doi.org/10.1016/j.jbusres.2020.01.068>
- Burgers, H., Stuetzer, M., & Senyard, J. M. (2014). Antecedents, Consequences, and the Mediating Role of Bricolage in Corporate Entrepreneurship. In *Academy of Management Proceedings* (Vol. 2014, No. 1, p. 13473). Briarcliff Manor, NY 10510: Academy of Management. <https://doi.org/10.5465/ambpp.2014.13473abstract>
- Cajaiba-Santana, G., 2014. Social Innovation: Moving the Field Forward. A Conceptual Framework. *Technological Forecasting and Social Change*, 82, pp.42-51. <https://doi.org/10.1016/j.techfore.2013.05.008>
- Chalmers, D. (2013). Social Innovation: An Exploration of the Barriers Faced By Innovating Organizations in the Social Economy. *Local Economy*, 28(1), 17-34. <https://doi.org/10.1177/0269094212463677>
- Davidsson, P., Baker, T., & Senyard, J. M. (2017). A Measure of Entrepreneurial Bricolage Behavior. *International Journal of Entrepreneurial Behavior & Research*. <https://doi.org/10.1108/IJEER-11-2015-0256>
- Dawson, P., & Daniel, L. (2010). Understanding Social Innovation: A Provisional Framework. *International Journal of Technology Management*, 51(1), 9-21. <https://doi.org/10.1504/IJTM.2010.033125>
- Dwivedi, A. And Weerawardena, J., 2018. Conceptualizing and Operationalizing the Social Entrepreneurship Construct. *Journal of Business research*, 86, pp.32-40. . <https://doi.org/10.1016/j.jbusres.2018.01.053>
- Gaglio, C. M. And Katz, J. A. (2001) 'The Psychological Basis of Opportunity Identification: Entrepreneurial Alertness. *Small Business Economics*', CEUR Workshop Proceedings, 1225(February), pp. 41–42.
- Hagedoorn, J. (1996). Innovation and entrepreneurship: Schumpeter revisited. *Industrial and corporate change*, 5(3), 883-896. <https://doi.org/10.1093/icc/5.3.883>
- Hooi, H. C., Ahmad, N. H., Amran, A., & Rahman, S. A. (2016). The Functional Role of Entrepreneurial Orientation and Entrepreneurial Bricolage in Ensuring Sustainable Entrepreneurship. *Management research review*. . <https://doi.org/10.1108/MRR-06-2015-0144>
- Hölsgens, R., Lübke, S., & Hasselkuß, M. (2018). Social Innovations in the German Energy Transition: An Attempt to Use the Heuristics of the Multi-Level Perspective of Transitions to Analyze the Diffusion Process of Social Innovations. *Energy, Sustainability and Society*, 8(1), 1-13. <https://doi.org/10.1186/s13705-018-0150-7>
- Jayawardhana, K. And Weerawardena, J., 2014. Conceptualizing the Role of Market Learning in Social Innovation-Based Competitive Strategy.
- Jayawardhana, K., 2020. Open Innovation Orientation an Sustainability of SMES: Do Entrepreneurial Orientation And Resource Bricolage Matter? *Journal on Innovation and Sustainability RISUS*, 11(4), p.127-146. 2020. <https://doi.org/10.23925/2179-3565.2020v11i4p127-146>
- Jiao, H., Cui, Y., Zhu, Y., & Chen, J. (2014). Building Entrepreneurs' Innovativeness through Knowledge Management: The Mediating Effect of Entrepreneurial Alertness. *Technology analysis & strategic management*, 26(5), 501-516. <https://doi.org/10.1080/09537325.2013.872774>
- Kannampuzha, M. J., & Suoranta, M. (2016). Bricolage in the Marketing Efforts of a Social Enterprise. *Journal of Research in Marketing and Entrepreneurship*. <https://doi.org/10.1108/JRME-07-2015-0039>
- Kariv, D., & Coleman, S. (2015). Toward A Theory of Financial Bricolage: The Impact of Small Loans on New Businesses. *Journal of Small Business and Enterprise Development*. . <https://doi.org/10.1108/JSBED-02-2013-0020>
- Kincheloe, J. L. (2011). Describing the Bricolage: Conceptualizing a New Rigor in Qualitative Research. In *Key works in critical pedagogy* (pp. 177-189). Brill Sense.
- Kincheloe, J. L. (2011). On to the next level: Continuing the conceptualization of the bricolage. In *Key works in critical pedagogy* (pp. 253-277). Brill Sense. <https://doi.org/10.1177/1077800405275056>
- Klůvanková, T., Brnkaláková, S., Špaček, M., Slee, B., Nijnik, M., Valero, D., & Gežík, V. (2018). Understanding SI for the well-being of forest-dependent communities: A preliminary theoretical framework. *Forest Policy and Economics*, 97(C), 163-174. <https://doi.org/10.1016/j.forpol.2018.09.016>
- Krlev, G., Bund, E., & Mildemberger, G. (2014). Measuring what matters—Indicators of social innovativeness on the national level. *Information Systems Management*, 31(3), 200-224. <https://doi.org/10.1080/10580530.2014.923265>

- Langevang, T. And Namatovu, R., 2019. Social bricolage in the aftermath of war. *Entrepreneurship & regional development*, 31(9-10), pp.785-805. <https://doi.org/10.1080/08985626.2019.1595743>
- Lopes, D. P. T., dos Santos Vieira, N., Barbosa, A. C. Q., & Parente, C. (2017). Management innovation and SI: convergences and divergences. *Academia Revista Latinoamericana de Administración*.
- Martinez, F., O’Sullivan, P., Smith, M., & Esposito, M. (2017). Perspectives on the role of business in SI. *Journal of Management Development*. <https://doi.org/10.1108/JMD-10-2016-0212>
- Minniti, M. (2004). Entrepreneurial alertness and asymmetric information in a spin-glass model. *Journal of Business Venturing*, 19(5), 637-658. <https://doi.org/10.1016/j.jbusvent.2003.09.003>
- Molecke, G., & Pinkse, J. (2017). Accountability for social impact: A bricolage perspective on impact measurement in social enterprises. *Journal of Business Venturing*, 32(5), 550-568. <https://doi.org/10.1016/j.jbusvent.2017.05.003>
- Mulgan, G., Tucker, S., Ali, R., & Sanders, B. (2007). Social Innovation: what it is, why it matters, how it can be accelerated.
- Nandan, M., Jaskyte, K. And Mandayam, G., 2020. Human Centered Design as a New Approach to Creative Problem Solving: Its Usefulness and Applicability for Social Work Practice. <https://doi.org/10.1080/23303131.2020.1737294>
- Neumeier, S., 2017. Social innovation in rural development: identifying the key factors of success. *The geographical journal*, 183(1), pp.34-46. <https://doi.org/10.1111/geoj.12180>
- Noor, F. A., & Noor, F. A. (2012). This document is downloaded from DR-NTU, Nanyang Technological University Library, and Singapore.
- Pick, D., Weber, P., Connell, J., Geneste, L. A., & de Klerk, S. (2015). The creative industries: an entrepreneurial bricolage perspective. *Management Decision*. <https://doi.org/10.1108/MD-03-2014-0169>
- Puhakka, V. (2011). Developing a creative-cognitive model of entrepreneurial alertness to business opportunities. *Journal of Management and Strategy*, 2(4), 85. <https://doi.org/10.5430/jms.v2n4p85>
- Quandt, C., Ferraresi, A., Kudlawicz, C., Martins, J., & Machado, A. (2017). SI practices in the regional tourism industry: Case study of a cooperative in Brazil. *Social Enterprise Journal*, 13(1), 78-94. <https://doi.org/10.1108/SEJ-12-2015-0038>
- Ruebottom, T. (2011). Counting Social Change: Outcome Measures For Social Enterprise. *Social Enterprise Journal*. <https://doi.org/10.1108/17508611111156628>
- Sadik-Rozsnyai, O. (2016). Willingness to Pay For Innovations: An Emerging European Innovation Adoption Behavior. *European Journal of Innovation Management*, 19(4), 568-588. <https://doi.org/10.1108/EJIM-01-2016-0003>
- Saji, B. S., & Ellingstad, P. (2016). Social Innovation Model for Business Performance and Innovation. *International Journal of Productivity and Performance Management*. <https://doi.org/10.1108/IJPPM-10-2015-0147>
- Samo, A. H. (2016). Entrepreneurial Alertness among Business School Students. *International Journal of Humanities and Social Science Studies*, 3(1), 127-137.
- Samo, A. H., & Hashim, N. (2016). The Impact of Entrepreneurial Alertness on Entrepreneurial Intentions. *Journal of International Business Research and Marketing*, 1(6), 7-11. <https://doi.org/10.18775/jibrm.1849-8558.2015.16.3001>
- Salunke, S., Weerawardena, J., & coll-Kennedy, J. R. (2011). Entrepreneurial Bricolage and Service Innovation-Based Competitive Strategy. *Journal of Business Research*, 66(8), 1085-1097.
- Salunke, S., Weerawardena, J., & mcoll-Kennedy, J. R. (2013). Competing Through Service Innovation: The Role of Bricolage and Entrepreneurship in Project-Oriented Firms. *Journal of Business Research*, 66(8), 1085-1097. <https://doi.org/10.1016/j.jbusres.2012.03.005>
- Senyard, J., Baker, T., & Davidsson, P. (2009). Entrepreneurial bricolage: Towards systematic empirical testing. *Frontiers of Entrepreneurship Research*, 29(5), 5.
- Senyard, J. M., Davidsson, P., Baker, T., & Steffens, P. R. (2011). Resource Constraints in Innovation: The Role of Bricolage in New Venture Creation and Firm Development. *Proceedings of the 8th AGSE International Entrepreneurship Research Exchange*, 609-622.

- Senyard, J., Davidsson, P., & Steffens, P. (2015). Bricolage and Firm Performance: The Moderating Role of the Environment. In Australian Centre for Entrepreneurship Research Exchange Conference 2015 Proceedings (pp. 857-971).
- 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>
- Sunley, P., & Pinch, S. (2012). Financing social enterprise: social bricolage or evolutionary entrepreneurialism? *Social Enterprise Journal*. <https://doi.org/10.1108/17508611211252837>
- Sullivan Mort, G., Weerawardena, J., & Carnegie, K. (2003). Social entrepreneurship: Towards conceptualization. *International journal of nonprofit and voluntary sector marketing*, 8(1), 76-88. <https://doi.org/10.1002/nvsm.202>
- Sharma, L., 2019. A Systematic Review of the Concept of Entrepreneurial Alertness. *Journal of Entrepreneurship in Emerging Economies*. <https://doi.org/10.1108/jeee-05-2018-0049>
- Sillanpää, V. (2013). Measuring the Impacts of Welfare Service Innovations. *International Journal of productivity and performance management*. <https://doi.org/10.1108/IJPPM-08-2012-0094>
- Svensson, P. G., Andersson, F. O., Mahoney, T. Q., & Ha, J. P. (2020). Antecedents and outcomes of social innovation: A global study of sport for development and peace organizations. *Sport Management Review*, 23(4), 657-670. <https://doi.org/10.1016/j.smr.2019.08.001>
- Svetlik, I., Stavrou Costea, E., & Lin, H. F. (2007). Knowledge Sharing and Firm Innovation Capability: An Empirical Study. *International Journal of manpower*. <https://doi.org/10.1108/01437720710755272>
- Szutowski, D. (2012). 3. Classification of Innovations in Tourism Companies–Systematic. *Dynamika przemian rynku turystycznego*, 33(4), 782-783.
- Teasdale, S., Sunley, P., & Pinch, S. (2012). Financing Social Enterprise: Social Bricolage or Evolutionary Entrepreneurialism? *Social Enterprise Journal*. <https://doi.org/10.1108/17508611211252837>
- Tang, J. (2008). Environmental Munificence for Entrepreneurs: Entrepreneurial Alertness and Commitment. *International Journal of Entrepreneurial Behavior & Research*. <https://doi.org/10.1108/13552550810874664>
- Tang, J., Kacmar, K. M. M., & Busenitz, L. (2012). Entrepreneurial Alertness in the Pursuit of New Opportunities. *Journal of business venturing*, 27(1), 77-94. <https://doi.org/10.1016/j.jbusvent.2010.07.001>
- Taylor, S.P., 2017. What Is Innovation? A Study of the Definitions, Academic Models and Applicability of Innovation to an Example of Social Housing in England. *Open Journal of Social Sciences*, 5(11), pp.128-146. <https://doi.org/10.4236/jss.2017.511010>
- Thompson, N., Kiefer, K., & York, J. G. (2011). Distinctions not Dichotomies: Exploring Social, Sustainable, and Environmental Entrepreneurship. In *Social and Sustainable Entrepreneurship*. Emerald Group Publishing Limited. [https://doi.org/10.1108/S1074-7540\(2011\)0000013012](https://doi.org/10.1108/S1074-7540(2011)0000013012)
- Urban, B. (2017). Corporate Entrepreneurship in South Africa: The Role of Organizational Factors and Entrepreneurial Alertness in Advancing Innovativeness. *Journal of Developmental Entrepreneurship*, 22(03), 1750015. <https://doi.org/10.1142/S1084946717500157>
- Uy, M. A., Chan, K. Y., Sam, Y. L., Ho, M. H. R., & Chernyshenko, O. S. (2015). Proactivity, Adaptability and Boundary less Career Attitudes: The Mediating Role of Entrepreneurial Alertness. *Journal of Vocational Behavior*, 86, 115-123. <https://doi.org/10.1016/j.jvb.2014.11.005>
- Valliere, D., 2013. Towards A Schematic Theory of Entrepreneurial Alertness. *Journal of Business Venturing*, 28(3), pp.430-442. <https://doi.org/10.1016/j.jbusvent.2011.08.004>
- Witell, L., Gebauer, H., Jaakkola, E., Hammedi, W., Patricio, L., & Perks, H. (2017). A Bricolage Perspective on Service Innovation. *Journal of Business Research*, 79, 290-298. <https://doi.org/10.1016/j.jbusres.2017.03.021>
- Yu, X., Li, Y., Su, Z., Tao, Y., Nguyen, B. And Xia, F., 2019. Entrepreneurial Bricolage and Its Effects on New Venture Growth and Adaptiveness in an Emerging Economy. *Asia Pacific Journal of Management*, pp.1-23. <https://doi.org/10.1007/s10490-019-09657-1>