
How to Measure Sustainable Competitive Advantage: A Literature Review

I. W. M. Bandaranayake^a, M. D. Pushpakumari^{b*}

^{a, b*}University of Sri Jayewardenepura, Nugegoda, Sri Lanka

A B S T R A C T

In highly competitive and dynamic environment, today, organizations should outperform the competition to survive and flourish. Thus, Strategic Management suggests organizations should achieve sustainable competitive advantages (SCA) to be ahead of competition. Though SCA is a very popular and highly debated concept there is no any definition or accepted measurement criteria for SCA. Many researchers accept the fact that SCA is an organizational level construct. It is observed, different authors have different opinions on measuring SCA. Some authors have used organizations' outcome (financial and market indicators) to measure SCA. On the other hand, some authors have suggested that it could be possible to measure organizational SCA using the attributes of VRIN (Valuable, Rare, In -imitable, Non-Substitutable) resources as described in Resource Based View (RBV) of the firm. The aim of this research is to review literature on past studies which had attempted to measure the construct of SCA and find a set of variables which could be used to measure organizational SCA. It is observed, a limited number of literature is available to cater this requirement. The literature was searched using 'Google Scholar', for 'any time', with frame 'measure sustainable competitive advantage', where 21(15 effective) articles were found; and with frame 'measure sustained competitive advantage' 19 (11 effective) articles were found. It was found that innovation indicators, capabilities, resource features, product features, resource attributes, financial indicators and market indicators can be used to measure SCA. It is recommended to take measurements over a period of time to validate data over time, so as to cater the 'sustainable' quality of the construct.

Keywords: measure SCA, resource based view (RBV), sustainable competitive advantage (SCA)

*Corresponding author: pushpakumarimd@sjp.ac.lk

10th ICME at University of Ruhuna, Sri Lanka
02nd September 2021
ISBN: 978-624-5553-03-7

1. Introduction

In present day competitive environment, Sustainable performance of the business is a must (Haseeb, et al, 2019). The Strategic Management is concerned with how firms differentiate themselves from their competition to achieve Sustainable Competitive Advantage (SCA) (Danish, 2018). According to Day and Wensley (1988) Strategy serves two purposes; firstly, it seeks new edges in a market, and secondly, it slows down the wearing a way of present advantages.

The principles of SCA have been developed way back in 1937 by Alderson with the term 'competitive adaptation'. The term was used to distinguish unique characteristics among competitors (Hoffman, 2000). The concept of SCA was tossed by Day in 1984. Hamel and Prahalad (1989) and Dickson (1992) stressed the importance of creating new advantages to keep ahead of competitors (Hoffman, 2000). An organization achieves competitive advantage when it is able to create more value than its competitors (Leiblein, 2011). According to Coyne (1986) SCA can be considered an asset if it delivers lasting benefit, and supports achieving the firm's objectives derived from business strategies (Hillier,2005). SCA can be achieved by non-imitable and organizational specific unique and non-tradable 'procedures developed overtime' (Abideen, 2018). On the other hand, as highlighted by many authors (Barney et al., 2001) "competitive advantage is sustainable when rival firms give up plans to imitate the resources of the competitors or when barriers to imitation are high" (Abideen, 2018). According to Barney et al. (1991) RBV explains how organizations' internal sources create a firm's SCA (Bromiley, 2016). As per Haseeb et al. (2019) it is both internal and external strategic resources, which are rare, valuable, and inimitable intangible resources, that are the foundation of SCA. According to Barney (1991) "key conceptual contribution of RBV theory is a framework for the relation between resources and SCA" (Armstrong, 2007).

Despite the importance and the validity of SCA, many authors have highlighted problems associated with the definition and measurement of SCA. As argued by Abideen (2018) although firms need to seek SCA to generate superior profitability, this does not hold at all times. For example, when BT's (British Telecom) strategy is to increase its shareholder value, then at such a circumstance the relevant measure is that the total shareholder in return serves as an indicator to measure SCA (Hillier,2005). Different firms have different goals (Some firms might not increase profit in-order to block new entrants), and therefore SCA does not mean only the profitability (Bhatta, 2017). As quoted by Bromiley (2016) & Coff (1999) cautioned, in certain circumstances that firms can have SCA, but not profits if stakeholders misappropriate gains.

Another repercussion comes with the time. According to Haberberg et al. (2008) the term 'sustainable' means maintaining of resources for a "longer period of time into the future" (Abideen, 2018). Grant et al. (2010) stated, the concept of SCA can be described through durability and imitability. In that context, durability is the ability of competitors to duplicate or imitate capabilities on which the competitive advantage is developed (Abideen, 2018). Thus Bromiley (2016) suspected that the original RBV statements used SCA with a view to "profits in equilibrium". Bromiley (2016) explaining on RBV, related to the field of Operations Management mentioned, measuring SCA is troublesome. Bromiley (2016) highlighted three reasons for the difficulty. Firstly, only a few firms claim to process SCA. Secondly, as he suggested that "measuring valuable resources or factors, which firms cannot imitate poses serious problems both in demonstrating value independent of the factor's

impact on performance (i.e., avoiding tautology) and in measuring unique or nearly unique entities”. Thirdly, under the concept RBV, prescription is problematic because it is not possible to prescribe things that firms can readily implement, because such things can be imitated which again result in tautology (Bromiley, 2016). According to many authors RBV provides a better opening to find method to measure SCA.

As per many literatures, measuring of SCA is difficult and there is no accepted method to measure SCA. There exists a theoretical and empirical gap in literature on measuring SCA. The main aim of this paper is to identify variables that could be used to measure SCA of an organization through literature review.

1.1. Difficulties in measuring SCA

Despite the importance of the concept SCA in business field, “no one agreed upon measurement criteria to evaluate SCA” (Vinayan et al., 2012). Hoffman (2000) concerns that there is no solid ‘operational definition’ for SCA and argued that without it, measuring and understanding SCA empirically is not possible. “Current theory also has no agreed upon method of assessing whether an SCA has been achieved by a firm” (Hoffman, 2000). Bhatta (2017) stated that no any research had tried to measure sustained competitive advantage. Viewing differently Bromiley (2016) said, SCA also has problems when it comes to levels below the whole business because it inherently refers to the amalgam of the activities of the whole firm.

As quoted by Danish (2018), though RBV aims to explain SCA with the internal sources of a firm, literature establishes that only a few RBV papers had tried to explain SCA (Danish, 2018). Even in these few papers (which attempted to measure SCA), there are concerns over the validity of those measures (Bromiley, 2016). As per Danish (2018) & Newbert (2007) in his review of 55 empirical articles on RBV has found, only 2% of studies have used SCA as the dependent variable. Further he stated, they have measured ‘performance’ in 93% of the studies. Another review by Armstrong and Shimizu (2007) on RBV studies reveal, 4 out of 145 empirical studies have not “even tried” to measure SCA (Danish, 2018). Bromiley and Rau (2016) criticized RBV for vagueness on the SCA, inimitable resources, and its ‘tautological’ nature of valuable resources (Danish, 2018). RBV argued that a resource is valuable if it is rare, inimitable, and un-substitutable (Barney, 2001), and also if it is non-tradeable and immobile (Peteraf, 1993). According to Danish (2018), it raises a definitional problem. “How does one determine if a resource is valuable when it is non-tradeable and market cannot put a value to it?” (Danish, 2018). As per RBV, SCA comes from resources that are difficult to imitate. If firms try to imitate these resources, they should face fundamental uncertainty which leads to the ‘logical conclusion’ that firms that do have these inimitable resources themselves do not understand how these resources work. This concludes a firm “could not start doing business with what is known and develop resources that will provide sustained competitive advantage” (Danish, 2018). The “challenge for the firm is to understand which levers within the mechanism will produce sustainability and those that will not” (Hillier, 2005).

Bromiley (2016) & Bhatta (2017) have argued even RBV scholars have not clarified what the ‘sustained’ in SCA means (one year or twenty remains unclear). Bromiley and Rau (2016) argues that most RBV studies do not specify what sustained means in sustained competitive advantage” (Danish, 2018). Hillier (2005) suggests, Porter links time to the meaning of the word ‘sustained’. What this ‘time’ means is vague. However, it can be

concluded that “any competitive advantage lasts for only as long as there is a gap” (Hillier, 2005). “If the competition can and will fill the gap, then by definition the advantage is no longer sustainable.” (Hillier, 2005). As quoted by Vinayan et. al., (2012), Montgomery and Porter (2009) have highlighted the fact that the “only way to sustain a competitive advantage is to upgrade it”

As per Hillier (2005), by the definition itself all the firms cannot gain SCA, and it does not mean the failure of a particular firm as well. Opponents of SCA argue, only a 5% or 10% of firms have to claim having SCA and practically “half the firms in an industry would be better off being average” (Bromiley, 2005), thus why should scholars focus exclusively on explaining the performance of that top 5 or 10% of firms. In support of the same idea Forsén (2015) argued that today’s SCA of a firm (if there is any) will sooner or later diminish. Therefore, sustaining an existing advantage might hinder development of new competitive advantages.

1.2. Research problem

SCA is an important concept in Strategic Management field which describes how a firm should prosper in a competitive environment. It is observed, different authors have used different variables/constructs to measure SCA. Despite the importance of the concept of SCA in business field, no one agreed upon a single measurement criterion to evaluate SCA. The purpose of this study is to review literature on the measurement of the construct SCA and find commonalities and differences among them, and identify commonly used variables/constructs. It would help academics and researches to easily use in exploring organizational SCA.

2. Literature review: measurements for SCA

In this section it is intended to summaries findings from the literature, with relevance to SCA, the measurement of SCA, related theories and criticisms related to SCA and its measurements. The discussion is based on two areas. Firstly, the identification of variables, and secondly, the data gathering mechanisms.

2.1. Financial indicators for measuring SCA

Fonseka et al. (2013) has analysed the effect of different financial capital sources on competitive advantages using 6750 firm-year observations from 2000-2009 in Chinese markets. ‘Persistence of abnormal profitability’ (“The proportion of a firm’s abnormal profitability that persists systematically in any time before time (Acquaah, 2003; Mueller, 1986) is used to measure sustained competitive advantage” (Fonseka et. al., 2013). In another study Hillier (2005) attempted to analyses the SCA of British Telecom (BT). He observed that Primary goal of BT is to increase shareholder value, and that ‘BT is a cash stock not a growth stock’. These were measured by BT’s financial performance. Lee et al, (2005) attempted to investigate the relationships of entrepreneurship, marketing capability, innovative capability, and sustained competitive advantage. According to them, Porter (1990) has suggested ‘index of financial performance’ to measure competitive advantage. Lee (2005) has used firm’s profitability and core competencies, to measure sustained competitive advantage. The firm’s profitability is measured by evaluating its consecutive 5-year business performance (Lee, 2005). Martin and Mykytyn (2010) used the methodology and variables developed by earlier researchers for their initial investigations. Kettinger and his colleagues have developed “relative profitability and market share measures which were used to classify firms as sustainers and nonsustainers” (Martin & Mykytyn, 2010). Kettinger et al, (1994)

studied Sustainability and Performance in Information Systems, and used a longitudinal study to measure changes in performance measures to identify SCA. They based their argument on ideas of Porter (1980) and Porter and Millar (1985) which says that relative profitability measures conform to accepted frameworks of competitive advantage. They have used Return on Investment (ROI), Return on Sales (ROS), and cash flow to investment in their study. Soh (2005) in their correlational study to establish the relationship between a firm's intangible resources and its SCA, used ROA to measure SCA. Ngila (2016) mentioned, among other indices to measure SCA in retail supermarkets, increased profits, customers and revenue could be used.

2.2. Performance measurement and RBV as a basis for measuring SCA

Referring to many authors (Grant et al., 2010; Hitt et al., 2007), Abideen (2018) identified core competencies as the direct source of SCA among many others. Lynch (2009) explains "core competencies are special skills and technologies that enable a firm to provide a specific value added to the customers, as they provide the foundation of core products and services which are at the centre of a firm's activities" (Abideen, 2018). Almuslamani's (2019) questionnaire is directly adapted from the RBV theory.

Within the Inter-Organizational Networks, Knowledge Transfer and Business Alliances, explicit and tacit knowledge transfer serves as a source of competitive advantage (Danish, 2018). As per Fonseka (2013) superior performance can be gained from unique resources (Barney, 1991), "reconfiguration and integration of existing resources" (Eisenhardt & Martin, 2000; Teece et al., 1997), and the "ability to respond appropriately to the environment" (Mintzberg et al., 1987).

According to Ray et al. (2004) 'process performance' can be used to measure SCA as an alternative to financial indicators (Abideen, 2018). This can be justified because on one hand, the 'process performance' measure complies with foundations of RBV, and on the other hand the "multiple business processes themselves are a source of SCA, and therefore process performance is the direct measure of SCA (Abideen, 2018). Abideen (2018) attempted to examine the relationship between corporate entrepreneurship, innovation and sustained competitive advantage in the Nigerian manufacturing firms. SCA is measured by the construct of 'Process Performance' and this measure is grounded on resource-based view (RBV) and business performance measurement system (BPMS). Abideen (2018) has used five indicators to measure Process Performance; Order Acquisition, External Communication, Internal Cohesion, Strategic Adaptability, Cost Control and has been further operationalized into a set of specific 24 questions. In contrast, Aidar (2018) highlighted that Bromiley and Rau (2014) had questioned the use of RBV to explain the relationship between management practices and performance, and proposed the Practice-based View instead. When it comes to practice, performance indicators are easily observed and can be accepted by both academics and practitioners (Bromiley & Rau, 2014). In addition, to avoid selecting the wrong dependent variable, it is recommended to use performance construct dimensions and its respective indicators based on the satisfaction perspective of the stakeholders within the context studied (Aidar, 2018). According to Aidar (2018) many authors (Gibson et al., 2007), have commended "performance indicators that are more directly linked to the resource in question which would be the management practices in the current research" (Aidar, 2018).

Almuslamani (2019), in his study, argued that organizational resources and capabilities could be used to measure SCA. They used the measurement scale adapted from

Mahdi (2015), referring to Barney (1991). Ngila (2016) investigated the effects of organizational capabilities on sustainable competitive advantage for retail supermarkets in Thika Town Sub-County, Kenya. The argued the validity of the distinction of products or services to measure SCA more than other metrics. Gwinji's (2018) study on Internal Marketing and SCA, a Case of The Construction Industry in Gauteng, South Africa, measured SCA using King and Zenithal (2001)'s questionnaire. It includes Capability, Innovation, Ethics and Employee Involvement (Gwinji,2018). Haseeb et al. (2019), analysed the Role of Social and Technological Challenges in Achieving a SCA and Sustainable Business Performance. Six items were used to measure sustainable competitive advantage, and they were adapted from De Villiers. Bavarsad (2015) analyzed the impact of entrepreneurial marketing on SCA and organizational innovation capabilities. Here SCA is the dependent variable, and to measure SCA, 5 dimensions of Day and Wensley (1988) was used.

2.3. Personnel involvement in measuring SCA

Euuwijk (2009) assessing training on PsyCAP, stated SCA literature has shifted towards people due to the increase of technological innovations and the unstable organizational environment. Based on the 'Positive Organization Behaviour' (POB) movement, Luthans and Youssef (2004) said it is possible to use psychological capital to measure SCA within an individual. Similarly, Shipton et al. (2013) used a four-item scale developed by Theoharakis and Hooley (2008) to measure sustained competitive advantage in an empirical, cross-nation study to find if there is a global model of learning organizations.

2.4. Importance of time factor in SCA measurements

According to Coley (2004) SCA is an externally-focused measure and has to measure along time lines. The "over time" element was measured in comparison to similar successful brands (Coley, 2004). Coley (2004) concluded 'supplier executional leadership competency', specifically leader-follower dynamics as the key to SCA. He argued that 'network level competencies' can be developed and deployed to maintain sustaining stakeholder value in supply networks (Coley, 2004). Some authors have stressed the importance of taking measurements over a period of time. Fonseka (2013) used 3-year average IROA as the persistence of firm-specific abnormal profitability, and profitability was measured by evaluating its consecutive 5-year business performance (Lee & Hsieh,2010).

3. Methodology

A desk study was carried out to investigate past literature on measuring SCA. First it was decided to use articles on standard journals. Armstrong and Shimizu (2007) had identified Academy of Management Journal, Administrative Science Quarterly, Journal of International Business Studies, Journal of Management, Journal of Management Studies, Management Science, Organization Science, and Strategic Management Journal as journals which share a high standard of 'methodological rigor'. Therefore, research articles were searched in those journals by the words: 'measure sustainable competitive advantage', 'measure sustained competitive advantage' and 'measure sustained performance'. In Journal of Management only 3 articles were available and on Management Science only 1 article was found when searched with the phrase "Measure Sustained Competitive advantage". All other journals such as the Journal of Management Studies, Academy of Management Journal, Administrative Science Quarterly, Journal of International Business studies, Organization Science and Strategic Management Journal, revealed zero results. Same way, when searched with the phrase "Measure Sustainable Competitive Advantage", in Journal of Management and in Management Science 2 results and 1 result were found respectively; and all other

articles revealed zero results. Once searched with the phrase “Measure Sustained Performance” Journal of Management had 2 results and all other journals had zero results. Therefore, to understand the objectives of the study better, the “Google Scholar” was used. When searched using ‘Google Scholar’ with the frame ‘Measure Sustainable Competitive Advantage’, with ‘any time’ and ‘anywhere in the article’, 21(15 effective) articles were found; and with the frame ‘Measure Sustained Competitive Advantage’, 19 (11 effective) articles were found. Further, other important and seminal papers were also used in the review.

3.1. Data gathering method

Fundamentally two aspects were identified for gathering data. When referring to Table 1, 17 studies have used perceived values to measure the SCA and only 7 studies have used statistical data for their measurements. Most of the statistical data are comprised of financial and marketing indices.

Table 1 summarizes the contents of reasech articles reviewed above. It includes the authors, published year, field of study, the frequency of measuring variables used, and nature of the data collected for the studies.

Table 1: Components of Instruments Used to Measure SCA in Different Studies

Author	Field	Measuring Variables										Data Collection Method		
		Capabilities, Processes, Competencies	Customer Perception	Direct Question	Ethics, Values	Financial Indicators	Innovation	Market Indicators	Organizational Strategies	Product Features	Quality of Service	Resource Attributes	Perceived Values	Statistical Data
Mykytyn et al., (2002)	Patents in IT Field	X	X					X			X	X		
Coley (2004)	Consumer-driven supply-network related firms	X				X		X			X			
Hillier (2005)	Telecommunication Industry (BT)				X								X	
Jain (2008)	ERP implemented Firms in India	X				X	X					X		
Lee and Hsieh (2010)	Taiwan manufacturers in 2009	X			X							X	X	
Martin and Mykytyn (2010)	Business method patents				X		X						X	
Vinaya et al., (2012)	Malaysian Manufacturing Industries											X		
Fonseka et al., (2013)	China's highly regulated market				X								X	
Shipton et al., (2013)	Chinese Markets	X								X	X			
Kaluyu et al., (2014)	Public and private Universities in Kenya	X				X						X		
Bavarsad et al., (2015)	Precious metals, Gold, Diamonds and Precious stone	X				X						X		
Neboh (2015)	Courier Services of University of KwaZulu-Natal		X									X		
Soh (2005)	Fortune's World's Most Admired companies				X								X	
Kurniawan (2016)	Pharmaceutical industry in East Java.	X						X				X	X	
Ngila and Muturi (2016)	Supermarkets In Thika Town Sub-County, Kenya				X		X	X				X		
Mbha (2017)	Financial service providers in low-income markets in	X					X	X				X		
Abideen et al.,(2018)	Nigeria Manufacturing Firms	X		X	X			X				X		
Aidar (2018)	Hotel industry in Brazil			X	X	X			X			X	X	
Gwinji (2018)	Construction industry in South Africa	X		X	X							X		
Almuslamani (2019)	SMEs & Large manufacturing companies in Bahrain	X								X		X		
Haseeb et al., (2019)	SMEs in Malaysia	X			X							X		
		13	1	1	2	7	7	5	2	4	1	3	17	7

Source: Composed by Author (2021)

4. Discussion

According to Table 1, it is observed that studies were carried out in different disciplines and different contexts. Out of 26 articles the 5 articles: Bhatta et al. (2017) concluded that they do not believe in SCA. Bromiley et. al., (2016) stated that SCA (or even temporary competitive advantage) does not equalize firm profitability and it exists at the level of the business of the firm; and could not directly translate into the normal level of Operations Management research.

According to the explanation given by Bromiley et al. (2016) what 'sustained' in RBV remains unclear, but it may consider a view to "profits in equilibrium" (Bromiley et. al., 2016). Whether to measure competitive advantage separately from firm performance also remains unclear, despite many researchers who tried to measure SCA (Aidar et al., 2018) has used performance indicators to measure SCA. Hillier et al. (2005) used financial indicators to measure SCA.

Bavarsad et al. (2015) and Mykytyn et al. (2002) have used indicators such as Innovation, Capabilities, and Resources to evaluate the SCA. These questions are in line with the RBV theory. Both Bavarsad et al. (2015) & Kaluyu at al. (2014) have adopted the questionnaire developed by Day and Wesley's (1988) which was based on innovation and capabilities. Vinaya et al. (2012) approach is more comprehensive and includes Supply Chain Management, Product differentiation and Innovation, Organizational Responsiveness and Cost Leadership.

Some authors have stressed the importance of taking measurements over a period of time. Fonseka (2013) used 3-year average IROA as the persistence of firm-specific abnormal profitability, and profitability is measured by evaluating its consecutive 5-year business performance (Lee & Hsieh, 2010). Another specific measurement concept was introduced by Martin and Mykytyn (2010) as the 'relative profitability and market share'.

Authors like, Ngila (2016), who investigated the effects of organizational capabilities on sustainable competitive advantage for retail supermarkets in Kenya, used a mixed method. He used the distinctiveness of products or services to measure SCA. At the same time, he used increased profits, customers and revenues as well (Ngila, 2016).

When consider the methodology, many authors (Hillier et al., 2005) have firstly used a pilot survey to identify measures of SCA. Mykytyn et al. (2002) & Jain et al. (2008) have used quantitative approaches. Coley et al. (2004) have used both the qualitative and quantitative approaches; and Martin and Mykytyn et al. (2010) have taken a qualitative approach to their studies. Qualitative research, similar to the one conducted by Mbha (2017) directly raises the questions from respondents about the SCA and the respondents are expected to have a good knowledge on SCA.

5. Conclusion

Literature suggests there is no commonly agreed method or framework to measure SCA. The objective of the study was to identify commonly used variables/constructs to measure SCA. Different authors have used various approaches and variables to measure SCA. However it is apparent that most of the researchers have used RBV as the base for their studies. This may be due the popularity of the RBV theory. It can be concluded that innovation indicators, capabilities, resource features and product features could be used to measure the perceived

SCA, since they have been used in many studies. Indicators of supply chain management can also be considered in line with the development of competencies for an organization. Financial and market indicators are objective statistics and can be considered as reliable sources of information than the perceptions used by RBV proponents.

It was found that researchers and practitioners can use perceived values of higher order constructs such as innovation, capabilities, product features and resource attributes to measure SCA. Further it is also possible to use statistical data such as Financial Indicators and Market Indicators to measure SCA. It is recommended to take measurements over a period of time to validate data over time so as to cater the 'sustainable' feature of SCA.

5.1. Significance, limitations and further research

The significance of the study is that it attempted to address the ambiguous area of measuring SCA in the Strategic Management Studies. The main hinderance remains unsolved as mentioned by many authors, and there is no accepted definition for SCA. The literature review was limited to the 'Google Scholar' data bases. Therefore, this study is confined with existing limited number of researches found in the Google Scholar. In this literature review authors contributed in finding variables that could be used to measure SCA of an organization. Even with limited literature authors could identify an ample number of variables to be used in future empirical research on measuring organizational SCA. Future empirical reasech and conceptual studies need to formulate an accepted definition for SCA. Further it is recommended to formulate a framework to measure the SCA.

References

- Abideen, S. O., Olusola, O. J., Olufunmilayo, O. A., & Bolatito, O. (2018). Entrepreneurship, innovation and sustained competitive advantage in the nigeria manufacturing firms, *American Journal of Business, Economics and Management*, 6 (2), 16-28.
- Aidar, A. M. F. B. (2018). *Management practices as capabilities: Identifying specific practices and testing their effects on hotel performance* (thesis, fundação getulio vargas escola de administração de empresas de sao paulo, Brazil).
- Almuslamani, H. A. I., & Daud, S. (2019). Strategic human resource practices & organizational culture in SMEs and large manufacturing companies in Bahrain, *International Journal of Innovation, Creativity and Change*, 8 (7), 66-80.
- Armstrong, C. E., & Shimizu, K. (2007). A review of approaches to empirical research on the resource-based view of the firm, *Journal of Management*, 33(6), 959-986.
- Barney, J. (1991). Firm resources and sustained competitive advantage, *Journal of Management*, 17 (1), 99-120.
- Bavarsad, B., Hosseini, S. A., lafari, S., & Hozhabri, A. A. (2015). *Analyzing the impact of entrepreneurial marketing on sustainable competitive advantage in SMEs*, Paper presented at 9th International Conference on Commerce with focus on e-Business.
- Bhatta, P. (2017). *Conceptualizing paths of growth and significance of entrepreneurial orientation for the emerging and young born globals and born again globals from small and open economy: business to business perspective* (MSc. Thesis, Faculty of Social Science and Business Studies, Business School, University of Finland).
- Bromiley, P., & Rau, D. (2016). Operations management and the resource-based view: another view, *Journal of Operations Management*, 41 (1), 95-106.
- Coley, L. S. (2004). *Sustaining Competitive Advantage: return on leadership competency (ROLC) in a consumer-driven supply-network* (Thesis, Department of Marketing, College of Business Administration, University of Cincinnati).
- Danish, M. (2018). *Tacit knowledge transfer in inter-organizational networks a social network analysis of Formula 1*, (Ph. D thesis, University of Bath).
- Day, G. S., & Wensley, R. (1988). Assessing advantage: a framework for diagnosing competitive superiority, *Journal of Marketing*, 52(2), 1-20.

- Eeuwijk, E. (2009). *Assessing the effects of 'Personal Effectiveness' training on psychop, assertiveness, and self-awareness using the self-other agreement*, Faculty Social Sciences, Utrecht University, Utrecht, the Netherlands.
- Fonseka, M. M., Jiaotong, X. X., & Tian, G. (2013). Does accessibility to different sources of financial capital affect competitive advantage and sustained competitive advantages? evidence from a highly regulated chinese market, *The Journal of Applied Business Research*, 29(4), 963-982.
- Forsén, N. (2015). *Competitiveness of finnish small and medium-sized enterprises – a follow-up study*, (Master's thesis, faculty of technology, University of Vaasa, Finland.
- Grant, R. M. (1996). Towards knowledge-based view of the firm, *Strategic Management Journal*, 17(0) 109-122.
- Gwinji, W. A. (2018). *Internal marketing as a strategy to achieve sustainable competitive advantage: A case of the construction industry in Gauteng*, (Master's thesis, University of the Witwatersrand, South Africa).
- Haseeb, M., Hussain, H. I., Ko, S., Androniceanu, A., & Jermisittiparsertand, K. (2019). Role of social and technological challenges in achieving a sustainable competitive advantage and sustainable business performance, *Sustainability*, 11(14), 1-23.
- Hillier, S. (2005). *Can BT's strategy deliver sustainable competitive advantage* (MBA Thesis, University of Nottingham).
- Hoffman, N. P. (2000). An examination of the "Sustainable Competitive Advantage" concept: past, present, and future, *Academy of Marketing Science Review*, 2000, (4).
- Jain, V. (2008). *A framework for sustainable ERP value*, (Thesis, the school of business of the George Washington university, United States.
- Kettinger, W. J., Grover, V., Guha, S., & Segars, A. H. (1994). Strategic information systems revisited: A study in sustainability and performance, *MIS Quarterly*, 18(1),31-58.
- Kaluyu, V., Wambugu, H. W., & Gichunge, E. (2014). Significance of quality assurance mechanisms in University, *European Journal of Business and Management*, 6 (24), 158-164.
- Kurniawan, B. P. Y. (2016). Confirmatory factor analysis of innovation and marketing performance in creating sustainable competitive advantage herbal medicine-based pharmaceutical industry, *Advances in Environmental Biology*, 10(4), 268-272.
- Lee, J. S., & Hsieh, C. J. (2010). A research in relating entrepreneurship, marketing capability, innovative capability and sustained competitive advantage, *Journal of Business & Economics Research*, 8(9),109-120.
- Martin, N. L., & Mykytyn, Jr, P. P. (2010). Business method patents and sustained competitive advantage, *Journal of Computer Information Systems*, 2(1),66-71.
- Mbha, N. (2017). *The antecedents of sustained competitive advantage in low-income markets A financial services analysis*, Gordon Institute of Business Science, University of Pretoria.
- Mykytyn, P. P., & Mykytyn, K. (2002). Computer software patents: a dilemma in competitive advantage IT research, *Communications of the Association for Information Systems*, 8(7), 109-131.
- Neboh, N. D. (2015). *Perceptions of professional service staff on the effects of outsourcing of courier services*, University of Kwazulu-Natal, College of Law and Management Studies School of Management, Information Technology and Governance.
- Ngila, F. M., & Muturi, W. (2016). Effect of organizational capabilities on sustainable competitive advantage in retail supermarkets: A case of supermarkets in Thika town sub-county, Kenya, *International journal of Social Sciences and Information Technology*, 2(9), 961-977.
- Sethi, V., & King, W. R. (1994). Development of measures to assess the extent to which an information technology application provides competitive advantage, *Management Science*, 40(12), 1601-1627.
- Shipton, H., Zhou, Q., & Mooi, E. (2013). Is there a global model of learning organizations? an empirical, cross-nation study, *The International Journal of Human Resource Management*, 24(12), 2278-2298, doi: 10.1080/09585192.2013.781431.

- Soh, A. (2005). *A correlational study of the relationship between a firm's intangible resources and its sustainable competitive advantage*, ProQuest, (Thesis, Walden University, Minneapolis, Minnesota).
- Vinayan, G., Jayashree, S. & Marthandan, G. (2012). Critical success factors of sustainable competitive advantage: A study in Malaysian manufacturing industries, *International Journal of Business and Management*, Canadian Center of Science and Education, 7 (22), 1833-3850.
- Weerawardena, J. (2003). Exploring the role of market learning capability in competitive strategy, *European Journal of Marketing*, 37(3/4), 407-429, doi: 10.1108/03090560310459023.
- Wernerfelt, B. (1984). A resource-based view of the firm, *Strategic Management Journal*, 5, 171-180.

