

Innovation, Growth and Change Systems of Products And Services in Organisations

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Abstract

Innovation is an intricate and vital requirement for the growth of products and services of organisations. The process of innovation should be holistically and critically looked upon as a series of change in a complex system not only of hardware but also of market environment, production facilities and knowledge and the social contexts of the innovation ventures. This study seeks to investigate diverse innovative mediums of boosting the market of products and services for organisational benefits via leading business models and designs. This paper gives an overview of innovation, products and services. Also, several approaches and models such as the D.I.S.R.U.P.T Model, servitisation, Product service systems, value proposition design and business model innovation techniques were investigated for the advancement of firms. Also, it is impossible to create innovate commodities and utilities without generating sound business ideas and more importantly, knowing the critical imperatives required to pitch such business ideas to prospective business investors and top key personalities. It was concluded that for sustained enterprise changes and sustained growth, strategic business models are needed and must be designed to suit the peculiarity of the concerned company.

Keywords: *Products, services, innovation, change, growth, organisations, business ideas and models*

I. INTRODUCTION

Overview of Innovation

There are a million and one companies already formed in the 21st century. Approximately one thousand or more deliver the same products and services that a certain company provides. What separates one firm from the other or makes a client loyal to a specific firm is the flexibility, dynamic products it provides to clients (Lovelock & Patterson, 2015; Wheeler, 2017). Innovative concepts precede innovation, hence the primary actions to be observed when considering innovation would be concerned with an extremely accurate approach for obtaining information from multiple sources (Kleinknecht, 2016) and in turn customers are believed to be at the core supply of such essential concepts that are branded innovatively through an efficient feedback mechanism within the technique of a brand-new product (Eskola, 2016). innovation relates to the development of something new, the modification of a product and its introduction into the market as a result of effective utilization of fresh ideas being injected into the industry of a new item to effectively solve problems (Deming, 2018).



Innovation in itself is a composite of several integrated factors which when misunderstood misplaces its value and true nature. Innovation is somehow complex to explain, uncertain, disorderly to an extent and subject to certain changes of many sorts. It is also difficult to measure and demands very close coordination and monitoring of adequate technical knowledge and excellent market judgement in order to satisfy economic. technological and other types of constraints all at the same time (Landau, & Rosenberg, 1986; Chima, 2016; Khanagha, Ramezan Zadeh, Mihalache, & Volberda, 2018; Herring, 2019).

Kline, & Rosenberg (2010) emphasized that commercial innovation is controlled by two distinct set of forces that interact with one another in subtle and unpredictable ways. On the other hand, are the market forces that is such factors as changes in income. relative prices and underlying demographics that combine to produce continual changes in commercial opportunities for specific categories of innovation. On the other hand, the forces of progress are the technological and scientific frontiers often suggests possibilities for fashioning new products or improving the performance of old ones or producing those products at lower cost. Successful outcomes in innovation therefore require the running of two gauntlets which are the commercial and technological (Schwab, 2017; Parker, 2018).

Since innovation by definition involves the creation and marketing of the new, these gauntlets singly and in combinations make the outcome of innovation highly uncertain process. And this has given credence to the process of innovation as an exercise in the management and reduction of uncertainty. Basically, the greater the changes introduced, the greater the uncertainty not only about technical performance but also about the market response and ability of the organization to absorb and utilize the requisite changes effectively. This strong correlation between the amount of change and the degree of uncertainty has important implications for appropriate the nature of

innovation in different knowledge states and at various points in the life cycle of a given product (Rosenberg & Landau, 1986; Micaëlli, Forest, Coatanéa, & Medyna, 2014; Costa-Cabral, 2018). Hence Kline, & Rosenberg (2010) re -affirms that the systems used in innovation processes are among the most complex known (both technically and socially) and that the requirements for successful innovation vary greatly from case to case. Consequently, the general discussion on innovation requires the exploitation of a number of dimensions and the use of caution in deciding what can be generalized. Hence, this study seeks to explore indepth the vast concepts and business model designs of products, services, innovation and ideas that is needed for organisations to continuously produce up-to-date, trendy and quality commodities that satisfy consumers over a sustained time period Ogbari, Ibidunni, Ogunnaike, Olokundun, & Amaihian, 2018).

II. LITERATURE REVIEW

Idea Generation: How to Create Product and Services Needed by Clients

Idea is the seed of a successful product or service. Without proper care and maintenance, it will not bloom. ideas are plenty, but only ideas that are opportunities should be pursued. Idea generation is strongly linked to creativity and goes hand in hand with "out of box thinking," moving away from normal or traditional paths. With respect to idea generation, it is vital to recognize that creativity is a characteristic that everyone is capable of, but the way people like to express themselves vary significantly. One person might like radical change, while others prefer slight incremental interventions (Zhu, 2016). Research according to Call, (2016) and McGuinness (1990) show that the generation of ideas within organizations is linked to three categories. Starting with the capacity of the individual to create thoughts that depend on private perception and initiative. Followed by the capacity to find credibility with the organization and last but



not least extensive search in the form, for instance, of structured R&D operations or departments.

Idea generation is feasible in many ways, for instance, own employees are very useful as they are genuinely engaged in daily processes and in that sense the one to discover possible defects. They interpret circumstances in distinctive ways and may come up with distinct ideas for a specific situation as they harness expertise from diverse backgrounds. The broader the diversity of experiences, the greater the potential for creative and dynamic thoughts. Education is also a significant component in regards to the generation of ideas. The development of fresh ideas and approaches requires sound knowledge, understanding and expertise (Mumford, 2000; Hiebert, Gallimore & Stigler, 2002; Damanpour & Schneider, 2008; Suskie, 2018). Several recognized ways of capturing ideas include customer-driven, market-driven. planned diversification and opportunistic diversification, close followers and technology-driven solutions that are all of today's relevance.

Customer-driven concepts relate to client understanding, what kind of client do I serve, and what are the trends in their behaviour? In addition. satisfaction levels are useful information instruments, what makes the client happy and what triggers discontent? Market-driven ideas arise through visible market modifications, market needs, strategy adaptation, and so on. Planned diversification is a scenario where ideas are generated from a conscious rational and strategic perspective in order to penetrate markets and gain superior position over competitors. be adding a new thing to a business process to add value and make it different from the original Opportunistic diversification results from a fresh idea that has been used to enter a fresh market, although diversification was not a primary objective. Close follower ideas are recognized by monitoring the contest and predicting the development of trends and new ideas. conclusively technology-driven ideas are the product of continuous technological

advancements and the accessibility of new technology, often described as technological push. (Conway and McGuinnis, 1986; Amabile, 1988; Zhou, & George, 2003; Chima, 2007; Suskie, 2018).

More so, research shows that innovation is a crucial source to generating ideas for new products and services needed by clients. From the table below, we see how these can erupt using the innovation approach from both internal and external sources as seen in the table below.

EXTERNAL	INNOVATION	COMMUNITIES	
	TOURNAMENTS	AND	
		MARKETS	
IDEA	TRADITIONAL:	APPROVAL	
GENERATION	INTERNAL R&D	CONTESTS	
	EFFORT		
INTERNAL	IDEA	EXTERNAL	
	SELECTION		

Table 1:	Selecting t	the Right	Innovation	Approach
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In motivating external groups to decide on topmost designs and ideas, managers give up their control to those who might possess unique incentives. Hence, one solution for organisations is to retain explicit residual control by deciding how much control they exert alongside concerned communities. This enables liberal expressions and hopes for sincere feedbacks with mutual respect and civilization needed to trigger active involvement. Notably, innovation incurs huge investment responsibilities, hence, the importance of first tackling company challenges such as revenues and developing core niche software applications. Also, the ability for ideas to attract outsides is unavoidably critical (King & Lakhani, 2013)

Integrative Research and Development (R&D) cross-fertilisation and product innovation tactics help companies modify or build fresh commodities to always satisfy evolving clientele necessities and priorities (Colombo & Rabbiosi, 2014; Krzeminska & Eckert, 2016). Developing collaborative goods and services boosts producers' differentiation and innovativeness (Zhang et al, 2016). Also, the manufacturer's ability to supply specific needs



tailored to suit consumer and industry demands (Cusumano, Kahl & Suarez, 2015) via proximate commodity producer-client relations has been referred to as servitisation (Baines & Lightfoot, 2013). Big time manufacturers servitise via internal development (Bustinza et al, 2015) given the availability of financial resources and inadequate open innovative techniques (Keupp & Gassmann, 2009). Hence, certain strategic alliances are proffered to add value and join collaborative product-service solutions (Love, Roper & Vahter, 2014).

Past authors considered linkage between service adoption and company performance as non-linear (Visnjic-Kastalli & Van Looy, 2013) and contingent upon external factors like value chain status (Bustinza et al, 2015). The essence of strategic unions in servitisation and goods innovation (Kohtamaki & Partanen, 2016), proof on influences of technological strategic integration on enterprise achievements is contradictory and inconsistent (Benedetti, Neely & Swink, 2015; Colombo & Rabbiosi, 2014; Nieto & Santamaria, 2007). Meanwhile, existing literatures on strategic collaborations mostly gravitate around vertical or mergers and horizontal acquisitions (M&A) (Quintana-Garcia & Benavides-Velasco, 2005).

Bustinza et al (2015) reveals that huge producers have started implementing servitisation by tactical associations and transactional relationships, but none investigate effects of concentric/conglomerate alliances as special collaborative types, which occurs when corporations relocate with identical input/output elements and include new items and amenities to their activities. Bustinza, Gomes, Vendrell-Herrero & Baines (2017) evaluated servitisation impacts through external strategic collaborations with Knowledge Intensive Business Service (KIBS) providers, which help to suffice for growth (Muller & Zenker, 2001); innovation Landry & Doloreux, 2009) (Amara, and transmission of cognition (Kohtamaki & Partanen, 2016; Junni, Sarala, Tarba & Weber, 2015). Therefore, enterprises can join forces in

downstream operations (such as distribution and advertisement) or upstream functionalities (like manufacturing and R&D).

III. THEORETICAL AND METHODOLOGICAL FRAMEWORK

Product/Services Analysis

According to Colledani, Silipo, Yemane, Lanza, Bürgin, Hochdörffer, Georgoulias, Mourtzis, Bitte, Bernard & Belkadi (2016), product-service offerings comprises three major classifications: use-oriented (where services and products are interlinked), product-oriented (with services as additional features) and result-oriented (functionality). Potential services encompass areas of waste management, adverse effects of depleted resources, human health and environmental degradation. Product Services System (PSS) partially solves these many problems (Casazza, Huisingh, Ulgiati, Severino, Liu & Lega, 2019). This value proposition targets capability (service delivery) rather than ownership (Bocken, Short, Rana & Evans, 2014). Due to the increasingly high amount of waste generated frequently, services that pertain to collecting, processing and recycling waste as well as services like green growth initiatives which minimise environmental dangers such as global warming.

PSS represents advanced services or physical goods bundled with intangible services, specifically customized to fit top individual necessities (Tukker & Tischner, 2006). In the process of raising rendered value, supplier's competitiveness is fostered. Basically, service transition ideology presumes that companies take one-path along a product-service continuum (Kowalkowski, Windahl, Kindström & Gebauer, 2015). That is, from essential product-based services to higher process-based utilities, eventually creating better solutions, hence the assumed greater comparative relevance of services and lesser tangible goods importance, also, clientele relationship gets more intimate and long-term. However, Kowalkowski, Kindström, Alejandro, Brege & Biggemann (2012)



observes that service expansion and growth is not always unidirectional in providing additional amenities. Windahl & Lakemond (2010) buttress this with the fact that ventures experiment simultaneously with several offers.

Frugal innovation is inclusive in maximizing value for overall community, shareholders and customers, while minimizing utilization of natural and financial resources in developing nations. Moreover, frugal innovations encompass frugal commodities and amenities which are successful in developing economies and find their way back to new regional markets in advanced countries. Both types of innovation help to deal with sustainability issues in production (Rosca, Arnold & Bendul, 2017; Olokundun, Ogbari, Peter, Borishade, Falola, Salau, & Kehinde, 2018).

Servitization involves procedures by manufacturing firms to adapt their business models in offering solutions in form of products and services customized to suit clientele needs (Baines, Lightfoot, Evans, Neely, Greenough, Peppard, Roy, Shehab, Braganza, Tiwari, Alcock, Angus, Bastl, Cousens, Irving, Johnson, Kingston, Lockett, Martinez, Michele, Tranfield, Walton & Wilson, 2007). Asides offering certain values, adopting servitization technique targets attaining adaptability, customization and expansion of commodity line (Ayerbe, Cirion, Torres, Gil & Laka, 2014; Wright, Pearce & Busbin, 1997). Ultimately, it is anticipated to maintain and offer new goods for existing customers in addition to reaching new clients with existent commodities (Raddats, Burton, Ashman, 2015). Hence, suitability and conceptualisation are key in this regard. Technology inclinations are also essential, which makes them favourable in advanced nations (Baines, Lightfoot, Benedettini, Whitney & Kay, 2010). Nonetheless, developing economies have displayed promising features for service innovations as servitization intensifies product usage, sales and value; immaterial consumption; enhances resource effectiveness; sustains customer loyalty; improvement and development of fresh commodities (Tukker, 2015; Reynoso, Kandampully, Fan & Paulose, 2015).

Initially, Vandermerwe & Rada (1988) linked servitization to aggregate goods. services. assistance and cognition of core product available. But recent research reveals that companies might have overextended themselves in shifting towards service (Zawislak, Zen, Fracasso, Reichert & Pufal, 2013). Extended product is a product-centric strategy which implies that product share of the offer is a rigid system that can be made flexible by adding services (Thoben, Eschenbächer & Jagdev, 2001). As observed, servitization has occurred concurrently with digitization (Lerch & Gotsch, 2015; Münster & Meiren, 2011)

Technological instability triggers product-centric mechanism in developed economies and affects service innovativeness in emerging nations, whose markets are regarded as ideal for disruptive creativity and execution (Paslauski, de Alencastro, Avala, Gaiardelli, Pezzotta, & Frank, 2017; Reynoso et al, 2015; Hart & Christensen, 2002). When technological push exceeds market pull, technology orientation induces greater commitment to Research and Development (R&D) (Zhou, Yim & Tse. 2005). Moreover, potentialities of environmental, social and financial dimensions of emerging countries aids its receptiveness to service offers (Vezzoli, Ceschin, Diehl & Kohtala, 2015). As much as there are technological disruptions, economic disruptions exist such as the great recession of 2008.

Industry / Market Analysis

Investigations on digital technologies has majorly concentrated on either elucidating the transformation of industries whose goods can be totally digitalized, such as newspapers, photos, movies, music, etc. or on particular impacts among several industries like consequential adjustment of supplier-customer relations (Pagani, 2013; Lucas & Goh, 2009; Huang, 2005). The missing link in literary texts is being enlightened of how digital transformations are manifested across industries



with physical essential commodities and the magnitude by which such transformation affects dominant business models of obligated industry agents (Lucas, Agarwal, Clemons, El Sawy & Weber, 2013). Tackling strains that emerge from interconnected digital and physical components of business models, which emanate from a pure physical globe (Bernhart, Schlick & Escobar, 2012; Berman & Bell, 2011).

Current markets are empowered with technology for consumers to have unlimited access to diverse information as well as to communicate with other customers and ventures worldwide. thus. empowering clients (Ernst, Hoyer, Krafft & Soll, 2010). Clients are willing and capable to suggest ideas for fresh items and amenities, which are yet to be satisfied by the market or better still enhance present offers. Clientele co-creation allows active participation of consumers in collaboration with companies to produce ideas that closely reflect the people's needs. Notwithstanding, such needs are rather complex and often difficult to be executed with traditional marketing research tools (O'Hern & Rindfleisch, 2017, 2009).

Value Proposition Design

The value proposition design is an approach in the business model which enables the client/ customers to be smartly served by incorporating applications of specialized competences, through deeds. processes, and performances that are enabled by smart products. Smart products in this instance deals with physical objects with embedded systems and interacting ability that enable the intelligent adaptation to customer needs and changes in usage situations for optimal utility in the current dynamic business terrain (Poeppelbuss & Durst, 2019). In developing value propositions, it must be organized strategically with creative discussions geared towards passionate involvement with complete vitality that extends beyond the usual focus on technology, goods and characteristics towards generating value for target clients and company in particular (Macey, Schneider, Barbera, & Young,

2011; Osterwalder, etal, 2014). The value proposition canvas has two major aspects; customer segment and value map.

i. Customer Segment

The customer segment describes a specific customer segment (Osterwalder, etal, 2014). It comprises the three fields of the customer profile from the Value Proposition Canvas: customer routines and jobs, customer pains, and customer gains. Customer routines and jobs describe the activities that potential customers in a segment want to successfully accomplish. They can also require particular outcomes to be accomplished, issues to be solved, or needs to be satisfied. They are developed from the customer's own point of view, which may vary considerably from that of the supplier. The context of customer routines and jobs must be analyzed in order to develop convincing smart service concepts (Osterwalder & Pigneur, 2010). The issue here is what other operations can precede or follow client jobs, e.g. what additional interactions are likely to occur with other people and systems and how they impact the efficiency of the activity. Customer pains are all things that interrupt prospective customers or clients from doing their jobs or stop them from effectively finishing them. They also define potential dangers such as possible adverse results from client jobs. Customer gains are the positive effects and service delivery results that customers need or want. They help them successfully complete their own jobs (Osterwalder, Pigneur, Bernarda, Smith, 2015). The corresponding benefits can be savings in time, costs and other expenses. They also include superior service quality and beneficial side effects for the client, such as increased understanding or reputation, which may even be unexpected.

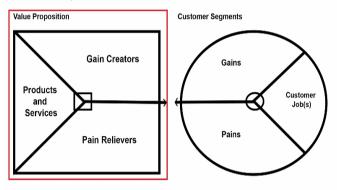
ii. Value Segment

The value segment or Perspective takes the value map from the left half of the Value Proposition Canvas which, according to research (Allmendinger, & Lombreglia, 2005; Beverungen, Müller, Matzner, Mendling, & Vom Brocke, 2019;



Osterwalder etal 2015), deals with the problems of Products and Services, Pain Relievers, and Gain Creators, highlighting the solution and value intention for the target customers. And most importantly there must be an assessment fit between the customers's egment and the value map, this fit is achieved when customers are enthusiastic about the keen provision in terms of services and products offered which fits well into their routines, jobs and situations.

The Value Proposition Canvas



Source: value proposition canvas Wadhwani foundation (2019)

Exploring New Models

Several authors have defined business model from various perspectives, to Timmers (1988) business models is described as a design of the product, service and information flow, including a description of the different business performers and their roles; a description of potential benefits for the different business actors; a description of sources of revenue. The business model defines the content, structure and governance of transactions to create value by exploiting business possibilities (Amit and Zott, 2001; Geissdoerfer, Vladimirova, & Evans, 2018).

According to Finnie (2000) Customer interface, core strategy, strategic assets and value network are key elements of the business model. These fundamental elements are interlinked by three parts: client advantages, business configuration and company borders. In a more elaborate term, Magretta (2002), emphasise that a business model is a conceptual apparatus which backs up quality of a good and indicates how a firm carries out its operations, makes profit and seeks to accomplish set objectives. It incorporates every business policy and process.

Business model innovation (BMI) has experienced a recent rise in business practices and academic research (Jolink & Niesten, 2015; Schaltegger, Lüdeke-Freund & Hansen, 2012). However, business models must constantly be upgraded and re-evaluated to attain sustainable innovations. Hence, less is known about successfully adopting sustainable business models (SBMs). Thus, it is important to formulate unified theoretical views for comprehending BMI that aid increased corporate, social, environmental and economic performance (Evans, Vladimirova, Holgado, Van Fossen, Yang, Silva & Barlow, 2017). Undoubtedly, boosting sustainability incorporates changes, innovation or adaptations (Faber et territorial al. 2005). Innovating within sustainability implies vital business capacity, regardless of being linked to disruptive, radical or incremental innovations (Adams, Jeanrenaud, Bessant, Overy & Denyer, 2012). Nonetheless, clarity is lacking among terminologies of SBM, BMI and business models (Boons & Lüdeke-Freund, 2013). This is coupled with poorly established theoretical roots (as reflected in scarce empirical analysis and case studies) in business studies or economics (Teece, 2010) and no overall consensus on the boundaries, categorisation and characterisation of these concepts (Spieth, Schneckenberg & Ricart, 2014). As a result, these all cause distorted opinions and substantially reduces progressions in these fields (Zott, Amit & Massa, 2011).

Sustainable innovations imply new technologies, procedures, operations, thoughts and systems (Szekely & Strebel, 2013). It demands higher integrated thinking and re-aligning of numerous business dimensions like culture, leadership, cognition management, stakeholder interactions and capabilities (Adams et al, 2012). For Schaltegger & Wagner (2011), it is those things



perceived to ensure significant and realistic enhancements by building superior manufacturing processes, goods and utilities as well as exerting dominant market, political or social influences. Stubbs & Cocklin (2008) observe that BMI for sustainability are likely to be adhoc with no systematism. Developing SBMs are complicated and multidimensional. Owing from uncertainties surrounding results and processes of BMI, companies are generally reluctant to implement BMI in actual world scenarios (Thompson & Mac-Millan, 2010). Notwithstanding, some researchers proffer experimenting, trials and errors as learning techniques needed for uncovering fresh business models and grasping its analysis (McGrath, 2010; Baden-Fuller & Morgan, 2010). But such necessitates sufficient resources (that is, financial capital) and substantial riskiness (or failure). Thomke, vonHippel & Frank (1998) suggests simulation as a low-risk and cost-effective experiment, which allows environment to test business models without physical and financial inputs in real-life. A business model serves as intermediary between diverse agents in the actual world value network. Hence, simulation terrain for BMI must portray human decisions and behaviour. More investigations and experts are approving the implementation of behavioural models like agentbased models (Vanhaverbeke & Macharis, 2011) and system dynamics (Duran-Encalada & Paucar-Caceres, 2012; Kampmann & Sterman, 2014; Abdelkafi & Täuscher, 2015) for simulation of BMI and other business undertakings.

IV. CONCLUSION

This study presented an overview of innovation, which is very much needed for products and services in organisations. It was discovered that market/commercial, technological and scientific forces interact to determine innovation levels. Also, asides the unique features of a product, there are managerial, consumer and social dimensions of a product. Notably, product differentiation and market segmentation are two ways of positioning products in the market. Moreover, distinct characteristics of services were explored, including of ownership perishability, lack transfer, heterogeneity. inseparability and intangibility. Additionally, classification of services was investigated. However, it was observed that an organisation cannot sustain products and services without generating fresh ideas on commodities that are needed by customers. Accordingly, key imperatives needed for successfully pitching one's ideas to potential key industry leaders were discussed. This included positive and negative stereotypes, prototypes of pitchers and different kinds of people that ideas are often pitched to, as well as how to go about pitching to a person or n audience, as the case may be. Therefore, to be creatively innovative, several approaches such as the D.I.S.R.U.P.T model for creating life-changing product services. Hence, for the methodology, servitisation was identified for service/product analysis, co-creation activities related to businessto-business (B2B) and business-to-consumer (B2C) were recognised for market/industry analysis. Moreover, business models of value proposition design and new models of Product Service Systems (PSS) and Business Model Innovation (BMI) were explored for advancing innovative ideas of products and services in firms, markets and industries (Schaltegger et al., 2012; Tukker, 2015; Vezzoli et al, 2015; Evans et al., 2017).

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REFERENCES

- [1] Abdelkafi N. & Täuscher, K. (2015). Business models for sustainability from a system dynamics
- [2] perspective. Organization and Environment https://doi.org/10.1177/1086026615592930.
- [3] Adams, R., Jeanrenaud, S., Bessant, J., Overy, P. & Denyer, D. (2012). Innovating for Sustainability. A Systematic Review of the Body of Knowledge. *Network for Business Sustainability: Ontario.*
- [4] Allmendinger, G., & Lombreglia, R. (2005). Four strategies for the age of smart services. *Harvard business review*, 83(10), 131.
- [5] Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in organizational behavior*, *10*(1), 123-167.
- [6] Amara, N., Landry, R. & Doloreux, D. (2009).
 Patterns of innovation in Knowledge-Intensive Business Services. *The Service Industries Journal*, 29, 407–430.
- [7] Amit, R., & Zott, C., 2001. Value creation in ebusiness. *Strategic Management Journal*. 22, 493e520. https://doi.org/10.1002/smj.187.
- [8] Ayerbe, A., Cirion, I., Torres, A., Gil, G. & Laka, J. (2014). Thinking products in a different way: What is needed for product servitization. *In 3rd International Business Servitization Conference Servitization*, pp. 13-14. 2014. Bilbao. Spain.
- Baden-Fuller, C. & Morgan, M. S. (2010). Business models as models. *Long Range Planning 43*(2/3), 156–171.
- [10] Baines, T. & Lightfoot, H. (2013). Made to Serve: Understanding What It Takes for a Manufacturer to Compete through Servitization and Product–Service Systems. *Hoboken, NJ: Wiley*.
- [11] Baines, T. S., Lightfoot, H., Benedettini, O., Whitney, D., & Kay, J. M. (2010). The adoption of servitization strategies by UK-based manufacturers. *Proceedings of the Institution of Mechanical Engineers, Part B: journal of engineering manufacture, 224*(5), 815-829.
- Baines, T. S., Lightfoot, H. W., Evans, S., Neely, A., Greenough, R., Peppard, J., Roy, R., Shehab, E., Braganza, A., Tiwari, A., Alcock, J. R., Angus, J. P., Bastl, M., Cousens, A., Irving, P., Johnson, M., Kingston, J., Lockett, H., Martinez, V., Michele, P., Tranfield, D., Walton, I. M., & Wilson, H. (2007). State-of-the-art in productservice systems. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of*

Engineering Manufacture, 221, (10), pp. 1543-1552.

- [13] Baldassarre, B., Calabretta, G., Bocken, N. M. P., & Jaskiewicz, T. (2017). Bridging sustainable business model innovation and user-driven innovation: A process for sustainable value proposition design. *Journal of Cleaner Production*, 147, 175-186.
- [14] Beckmann, M., Hielscher, S. & Pies, I. (2014). Commitment strategies for sustainability: how business firms can transform trade-offs into winwin outcomes. *Business Strategy and the Environment*, 23, 18–37.
- [15] Beltagui, A., Sigurdsson, K., Candi, M., & Riedel, J. C. (2017). Articulating the service concept in professional service firms. *Journal of Service Management*, 28(3), 593-616.
- [16] Benedetti, O., Neely, A. & Swink, M. (2015). Why do servitized firms fail? A risk-based explanation. *International Journal of Operations* & *Production Management*, 35, 946–979.
- [17] Berman, S. J. & Bell, R. (2011). Digital Transformation: Creating New Business Models Where Digital Meets Physical. *IBM Institute for Business Value*, 1-17.
- [18] Bernhart, W., Schlick, T. & Escobar, J. S. (2012). The Connected Vehicle Ecosystem: the Race for the Future Profit Pools is on. Automotive Insights. *Roland Berger Strategy Consultants*, 14-19.
- Beverungen, D., Müller, O., Matzner, M., Mendling, J., & Vom Brocke, J. (2019). Conceptualizing smart service systems. *Electronic Markets*, 29(1), 7-18.
- [20] Bocken, N. M., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of cleaner production*, 65, 42-56.
- [21] Boons, F. & Lüdeke-Freund, F. (2013). Business models for sustainable innovation: state-of-theart and steps towards a research agenda. *Journal of Cleaner Production*, 45, 9–19.
- [22] Bustinza, O. F., Bigdeli, A. Z., Baines, T. & Elliot, C. (2015). Servitization and competitive advantage: the importance of organizational structure and value chain position. *Research-Technology Management*, 58, 53–60.
- [23] Bustinza, O. F., Gomes, E., Vendrell-Herrero, F. & Baines, T. (2017) Product–service innovation and performance: the role of collaborative partnerships and R&D intensity. *RADMA and John Wiley & Sons Ltd.*
- [24] Call, D. A. (2016). Examining How Knowledge Managers Facilitate the Process of Knowledge Creation in Organizations.



- [25] Casazza, M., Huisingh, D., Ulgiati, S., Severino, V., Liu, G., & Lega, M. (2019). Product Service System-based Municipal Solid Waste circular management platform in Campania Region (Italy): a preliminary analysis. *Procedia CIRP*, 83, 224-229.
- [26] Chesbrough, H. & Rosenbloom, R. S. (2002). The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies. *Industrial and Corporate Change*, 11(3), 529– 555.
- [27] Chima, G. U. K. (2007). Organisational leadership strategies companies in a developing economy: Strategies towards Organisational Growth and Profitability. Lambert Academic Publishing heinrech-bocking-Str.6-8,66121saarbrucken, Deutschland/Germany. ISBN: 978-3-659-22712-7.
- [28] Chima, G. U. K. (2016). New Leadership Approach: Paradigm Shift (1st ed). Lagos, Nigeria:
- [29] Lumen Impact Communication 2084089. ISBN: 978-978-953-790-7.
- [30] Colledani, M., Silipo, L., Yemane, A., Lanza, G., Bürgin, J., Hochdörffer, J., Georgoulias, K., Mourtzis, D., Bitte, F., Bernard, A., & Belkadi, F. (2016). Technology-based product-services for supporting frugal innovation. *Procedia CIRP*, 47, 126-131.
- [31] Colombo, M. G. & Rabbiosi, L. (2014). Technological similarity, post-acquisition R&D reorganization, and innovation performance in horizontal acquisitions. Research Policy (Forthcoming).
- [32] Conway, H. A., & McGuiness, N. W. (1986). Idea Generation in Technology Based Frims. *The Journal of Product Innovation Management*, 4, 276-291.
- [33] Costa-Cabral, F. (2018). Innovation in EU competition law: The resource-based view and disruption. *Yearbook of European Law*, *37*, 305-343.
- [34] Cusumano, M. A., Kahl, S. J. & Suarez, F. F. (2015). Services, industry evolution, and the competitive strategies of product firms. *Strategic Management Journal*, 36, 559–575.
- [35] Deming, W. E. (2018). *The new economics for industry, government, education.* MIT press.
- [36] Den Ouden, E. (2012). Innovation Design: Creating Value for People, Organizations and Society. *Springer: London*.
- [37] Duran-Encalada, J. A., Paucar-Caceres, A.(2012). A system dynamics sustainable business model for Petroleos Mexicanos (Pemex): case

based on the Global Reporting Initiative. *Journal of the Operational Research Society*, *63*, 1065–1078.

- [38] Elsbach, K. D. (2003). How to pitch a brilliant idea. *Harvard business review*, 81(9), 117-123.
 Ernst, H., Hoyer, W. D., Krafft, M., & Soll, J. H. (2010). Consumer idea generation. *Working paper, WHU, Vallendar*.
- [39] Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M., Silva, E. A., & Barlow, C. Y. (2017). Business model innovation for sustainability: Towards a unified perspective for creation of sustainable business models. *Business Strategy and the Environment*, 26(5), 597-608.
- [40] Evans, S., Rana, P. & Short, S. (2014). Final Set of Tools and Methods that Enable Analysis of Future Oriented, Novel, Sustainable, Value Adding Business-Models and Value-Networks. *Deliverable D2.6. Sustain Value project.*
- [41] Feick, L. F., & Price, L. L. (1987). The market maven: A diffuser of marketplace information. *Journal of marketing*, *51*(1), 83-97.
- [42] Finnie, W. C. (2000). Leading the revolution: an interview with gary Hamel. *Strat. Leader*, 29.
- [43] Gafni, H., Marom, D., & Sade, O. (2019). Are the life and death of an early-stage venture indeed in the power of the tongue? Lessons from online crowdfunding pitches. *Strategic Entrepreneurship Journal*, *13*(1), 3-23.
- [44] Gallo, A. (2010). How to get your idea approved. *Harvard Business Review*.
- [45] Geissdoerfer, M., Vladimirova, D., & Evans, S.
 (2018). Sustainable business model innovation: A review. *Journal of Cleaner Production*, 198, 401-416.
- [46] Geissdoerfer, M., Vladimirova, D., Van Fossen, K., & Evans, S. (2018). Product, service, and business model innovation: A discussion. *Procedia Manufacturing*, 21, 165-172.
- [47] Gengler, C. E., & Mulvey, M. S. (2017). Planning pre-launch positioning: Segmentation via willingness-to-pay and means-end brand differentiators. *Journal of Brand Management*, 24(3), 230-249.
- [48] Girotra, K. & Netessine, S. (2013). OM forum business model innovation for sustainability. *Manufacturing and Service Operations Management*, 15(4), 537–544.
- [49] Hart, S. L., & Christensen, C. M. (2002). The great leap: Driving innovation from the base of the pyramid. *MIT Sloan management review*, 44(1), 51.
- [50] Hart, S. L. & Milstein, M. B. (2003). Creating sustainable value. *Academy of Management Executive*, *17*(2), 56–67.



- [51] Herring, H. (2019). Connecting Generations: Bridging the Boomer, Gen X, and Millennial Divide. Rowman & Littlefield.
- [52] Hiebert, J., Gallimore, R., & Stigler, J. W. (2002). A knowledge base for the teaching profession: What would it look like and how can we get one? *Educational researcher*, 31(5), 3-15.
- [53] Hill, T. P. (1977). On goods and services. *Review of income and wealth*, *23*(4), 315-338.
- [54] Hoffman, D. L., Kopalle, P. K., & Novak, T. P. (2010). The "right" consumers for better concepts: Identifying consumers high in emergent nature to develop new product concepts. *Journal of Marketing Research*, 47(5), 854-865.
- [55] Homburg, C., Schwemmle, M., & Kuehnl, C. (2015). New product design: Concept, measurement, and consequences. *Journal of Marketing*, 79(3), 41-56.
- [56] Hoyer, W. D., Chandy, R., Dorotic, M., Krafft, M., & Singh, S. S. (2010). Consumer cocreation in new product development. *Journal of service research*, 13(3), 283-296.
- [57] Huang, C.Y. (2005). File Sharing as a Form of Music Consumption. *International Journal of Electronic Commerce*, 9(4), 37-55.
- [58] Jolink, A., Niesten, E. (2015). Sustainable development and business models of entrepreneurs in the organic food industry. *Business Strategy and the Environment*, 24(6), 386–401.
- [59] Junni, P., Sarala, R. M., Tarba, S. Y. & Weber, Y. (2015). The role of strategic agility in acquisitions. *British Journal of Management, 26*, 596–616.
- [60] Kampmann, C. E. & Sterman, J. D. (2014). Do markets mitigate misperceptions of feedback? *System Dynamics Review*, *30*(3),123–160.
- [61] Keiser, S., Garner, M. B., & Vandermar, D. (2017). Beyond design: The synergy of apparel product development. *Bloomsbury Publishing USA*.
- [62] Keupp, M. M. & Gassmann, O. (2009). Determinants and archetype users of open innovation. *R&D Management*, *39*, 331–341.
- [63] Khanagha, S., Ramezan Zadeh, M. T., Mihalache, O. R., & Volberda, H. W. (2018). Embracing Bewilderment: Responding to technological disruption in heterogeneous market environments. *Journal of Management Studies*, 55(7), 1079-1121.
- [64] King, A., & Lakhani, K. R. (2013). Using open innovation to identify the best ideas. *MIT Sloan management review*, 55(1), 41.

- [65] Kline, S. J., & Rosenberg, N. (2010). An overview of innovation. In Studies On Science And The Innovation Process: Selected Works of Nathan Rosenberg (pp. 173-203).
- [66] Kleinknecht, A. (2016). Innovation patterns in crisis and prosperity: Schumpeter's long cycle reconsidered. Springer.
- [67] Kohtamaki, M. & Partanen, J. (2016). Cocreating value from Knowledge-Intensive Business Services in manufacturing firms: the moderating role of relationship learning in supplier–customer interactions. *Journal of Business Research*, 69, 2498–2506.
- [68] Kotler, P. (1980). Strategic planning and the marketing process. *Business*, *30*(3), 2-9.
- [69] Kotler, P., Burton, S., Deans, K., Brown, L., & Armstrong, G. (2015). *Marketing*. Pearson Higher Education AU.
- [70] Kowalkowski, C., Kindström, D., Alejandro, T. B., Brege, S., & Biggemann, S. (2012). Service infusion as agile incrementalism in action. *Journal of Business Research*, 65(6), 765–772.
- [71] Kowalkowski, C., Windahl, C., Kindström, D., & Gebauer, H. (2015). What service transition? Rethinking established assumptions about manufacturers' service-led growth strategies. *Industrial marketing management*, 45, 59-69.
- [72] Krzeminska, A. & Eckert, C. (2016).
 Complementarity of internal and external R&D: is there a difference between product versus process innovations? *R&D Management*, 46, S3, 931–944.
- [73] Landau, R., & Rosenberg, N. (Eds.). (1986). *The positive sum strategy: Harnessing technology for economic growth*. National Academies Press.
- [74] Lay, G., Schroeter, M. & Biege, S. (2009). Service-based business concepts: a typology for business-to-business markets. *European Management Journal*, 27(6), 442–455.
- [75] Lerch, C., & Gotsch, M. (2015). Digitalized product-service systems in manufacturing firms:
 A \ case study analysis. *Research-Technology Management*, 58(5), 45-52.
- [76] Linder, M. & Williander, M. (2015). Circular business model innovation: inherent uncertainties. Business Strategy and the Environment https://doi.org/10.1002/bse.1906
- [77] Love, J. H., Roper, S. & Vahter, P. (2014). Learning from openness: the dynamics of breadth in external innovation linkages. *Strategic Management Journal*, *35*, 1703–1716.
- [78] Lovelock, C. H. (1980). Towards a classification of services. *Theoretical developments in marketing*, 72(6), 72-76.



- [79] Lovelock, C., & Patterson, P. (2015). *Services marketing*. Pearson Australia.
- [80] Lucas, H. C. & Goh, J.M. (2009). Disruptive Technology: How Kodak Missed the Digital Photography Revolution. *Journal of Strategic Information Systems*, 18(1), 46-55.
- [81] Lucas, H. C., Agarwal, R., Clemons, E. K., El Sawy, O. A. & Weber, B. (2013). Impactful Research on Transformational Information Technology: An Opportunity to Inform New Audiences. *MISQ* 37(2), 371-382.
- [82] Macey, W. H., Schneider, B., Barbera, K. M., & Young, S. A. (2011). Employee engagement: Tools for analysis, practice, and competitive advantage (Vol. 31). John Wiley & Sons.
- [83] Magretta, J. (2002). Why business models matter. *Harvard Business Review*, 80(5), 86–92.
- [84] Magnusson, P. R., Matthing, J., & Kristensson, P. (2003). Managing user involvement in service innovation: Experiments with innovating end users. *Journal of Service Research*, 6(2), 111-124.
- [85] McGrath, R. G. (2010). Business models: a discovery driven approach. *Long Range Planning* 43(2), 247–261.
- [86] McGuiness, N. (1990). New Product Ideas Activities in Large Technology Based Frims. Journal of Product Innovation Management, 7, 173-185.
- [87] Micaëlli, J. P., Forest, J., Coatanéa, E., & Medyna, G. (2014). How to improve Kline and Rosenberg's chain-linked model of innovation: building blocks and diagram-based languages. *Journal of Innovation Economics Management*, (3), 59-77.
- [88] Muller, E. & Zenker, A. (2001). Business services as actors of knowledge transformation: the role of KIBS in regional and national innovation systems. *Research Policy*, 30, 1501– 1516.
- [89] Münster, M. & Meiren, T. (2011). Internetbasierte Services im Maschinen- und Anlagenbau. Internet-Based Services in Mechanical and Plant Engineering. *Stuttgart: Fraunhofer-Verlag*.
- [90] Nambisan, S., & Baron, R. A. (2009). Virtual customer environments: testing a model of voluntary participation in value co-creation activities. *Journal of product innovation management*, 26(4), 388-406.
- [91] Nieto, M. J. & Santamaria, L. (2007). The importance of diverse collaborative networks for the novelty of product innovation. *Technovation*, 27, 367–377.

- [92] Ogbari, M. E., Ibidunni, O. S., Ogunnaike, O. O., Olokundun, A. M., & Amaihian, A. B. (2018). A comparative analysis of small business strategic orientation: Implications for performance. *Academy of Strategic Management Journal*, 17(1), 1-15.
- [93] O'Hern, M.S. & Rindfleisch, A. (2009). Customer Co-Creation: A Typology and Research Agenda. In Review of Marketing Research, 6, Naresh K. Malholtra, ed. Armonk, NY: M. E. Sharpe, 84-106.
- [94] O'Hern, M. S., & Rindfleisch, A. (2017). Customer co-creation: a typology and research agenda. In Review of marketing research (pp. 108-130). *Routledge*.
- [95] Olokundun, M., Ogbari, M., Peter, F., Borishade, T., Falola, H., Salau, O., & Kehinde, O. (2018). Survey data on teaching strategies and product innovation: A focus on selected university students in Nigeria. *Data in brief*, 18, 248-254.
- [96] Osterwalder, A., & Pigneur, Y. (2010). Business model generation: a handbook for visionaries, game changers, and challengers. John Wiley & Sons.
- [97] Osterwalder, A., Pigneur, Y., Bernarda, G., & Smith, A. (2014). Value proposition design: How to create products and services customers want. John Wiley & Sons.
- [98] Osterwalder A, Pigneur Y, Bernarda G, Smith A. Value Proposition Design: How to Create Products and Services Customers Want. John Wiley & Sons; 2015.
- [99] Pagani, M. (2013). Digital Business Strategy and Value Creation: Framing the Dynamic Cycle of Control Points. *MISQ*, *37*(2), 617-632.
- [100] Parker, S. C. (2018). *The economics of entrepreneurship*. Cambridge University Press.
- [101] Paslauski, C. A., de Alencastro, C. G., Ayala, N.F., Gaiardelli, P., Pezzotta, G., & Frank, A. G.
- [102] (2017). Services Extending Products: a comparative analysis in emerging and developed countries. *Procedia CIRP, 64,* 127-132.
- [103] Drucker, P. (1994). The theory of the business.
- [104] Poeppelbuss, J., & Durst, C. (2019). Smart Service Canvas–A tool for analyzing and designing smart product-service systems. *Procedia CIRP*, 83, 324-329.
- [105] Porter, M., Hills, G., Pfitzer, M., Patscheke, S. & Hawkins, E. (2012). Measuring Shared Value: How To Unlock Value by Linking Social and Business Results. FSG: Boston, MA.
- [106] Prahalad, C. K. & Ramaswamy, V. (2004). Co-Creation Experiences: The Next Practice in Value Creation. *Journal of Interactive Marketing*, 18(Summer), 5-14.



- [107] Quintana-Garcia, C., & Benavides-Velasco, C. A. (2005). Agglomeration economies and vertical alliances: the route to product innovation in biotechnology firms. *International Journal of Production Research*, 43, 4853–4873.
- [108] Raddats, C., Burton, J., Ashman, R. (2015). Resource configurations for services success in manufacturing companies. *Journal of Service Management*, 26(1), pp. 97-116.
- [109] Regan, W. J. (1963). The service revolution. Journal of marketing, 27(3), 57-62.
- [110] Reynoso, J., Kandampully, J., Fan, X., & Paulose, H. (2015). Learning from socially driven service innovation in emerging economies. *Journal of Service Management*, 26(1), 156-176.
- [111] Rosca, E., Arnold, M., & Bendul, J. C. (2017). Business models for sustainable innovation–an empirical analysis of frugal products and services. *Journal of Cleaner Production*, 162, S133-S145.
- [112] Rosenberg, N., & Landau, R. (Eds.). (1986). *The Positive sum strategy: harnessing technology for economic growth*. National Academies Press.
- [113] Rusko, R., Härkönen, K., & Liukkonen, S. (2016). Coopetition at Elevator Pitch Events? A Case Study of Micro-activities at a Business Innovation Event. *Journal of Innovation Management*, 4(3), 79-100.
- [114] Schaltegger, S., Lüdeke-Freund, F. & Hansen, E. (2012). Business cases for sustainability and the role of business model innovation. *International Journal of Innovation and Sustainable Development*, 6(2), 95–119.
- [115] Schaltegger, S. & Wagner, M. (2011). Sustainable entrepreneurship and sustainability innovation:
- [116] categories and interactions. *Business Strategy and the Environment*, 20(4), 222–237.
- [117] Schwab, K. (2017). *The fourth industrial revolution*. Currency. categories and interactions. *Business Strategy and the Environment, 20*(4), 222–237.
- [118] Singh, M. R. P. (n.d). Lesson: 1 Concept and Nature of Service. Retrieved from: http://www.ddegjust.ac.in/studymaterial/mba/m m-411.pdf
- [119] Spacey, J. (2017). 12 Types of Product Concept. Simplicable. Retrieved from: https://simplicable.com/new/product-concept
- [120] Spann, M., Ernst, H., Skiera, B., & Soll, J. H. (2009). Identification of lead users for consumer products via virtual stock markets. *Journal of Product Innovation Management*, 26(3), 322-335.

- [121] Spieth, P., Schneckenberg, D. & Ricart, J. E. (2014). Business model innovation – state of the art and future challenges for the field. *R & D Management*, 44(3), 237–247.
- [122] Sternberg, R. J. & Lubart, T. I. (1995). Defying the Crowd: Cultivating Creativity in a Culture of Conformity. *Free Press*.
- [123] Stubbs, W. & Cocklin, C. (2008). Conceptualizing a 'sustainability business model'. Organization Environment, 21(2), 103– 127.
- [124] Suskie, L. (2018). Assessing student learning: A common sense guide. John Wiley & Sons.
- [125] Szekely, F. & Strebel, H. (2013). Incremental, radical and game-changing: strategic innovation for
- [126] sustainability. *Corporate Governance*, *13*(5), 467–481.
- [127] Teece, D. J. (2010). Business models, business strategy and innovation. Long Range Planning 43(2/3), 172–194.
- [128] Thoben, K. D., Eschenbächer, J., & Jagdev, H. (2001, June). Extended products: evolving traditional product concepts. In Proceedings of the 7th International Conference on Concurrent Enterprising: Engineering the Knowledge Economy through Co-operation, Bremen, Germany (pp. 27-29).
- [129] Thomke, S., vonHippel, E. & Franke, R. (1998). Modes of experimentation: an innovation process – and competitive – variable. Research Policy, 27(3), 315–332.
- [130] Thompson, J. D. & MacMillan, I. C. (2010). Business models: creating new markets and societal wealth. *Long Range Planning*, 43(2/3), 291–307.
- [131] Timmers, P. (1998). Business models for electronic markets. *Electronic markets*, 8(2), 3-8.
- [132] Tukker, A. (2015). Product services for a resource-efficient and circular economy–a review. *Journal of cleaner production, 97*, pp. 76-91.
- [133] Tukker, A. & Tischner, U. (2006). Product-services as a research field: Past, present and future. Reflections from a decade of research. *Journal of Cleaner Production*, 14(17), 1552-1556. sustainability. *Corporate Governance*, 13(5), 467–481.
- [134] Ukenna, S., Idoko, E. C., & Ogbari, M. E. (2018). Drivers of sustainable consumption in a developing Sub-Saharan African setting: Nigerian academic staff perspective. *Int. J. Sustainable Society*, 10(3), 203-224.
- [135] Vandermerwe, S. & Rada, J. (1988). Servitization of business: adding value by adding



services. European Management Journal 6(4), pp. 314-324.

- [136] Vanhaverbeke, L. & Macharis, C. (2011). An agent-based model of consumer mobility in a retail environment. *Procedia – Social and Behavioral Sciences*, 20, 186–196.
- [137] Vezzoli, C., Ceschin, F., Diehl, J. C., & Kohtala, C. (2015). New design challenges to widely implement 'Sustainable Product–Service Systems'. *Journal of Cleaner Production*, 97, 1-12.
- [138] Visnjic-Kastalli, I. & VanLooy, B. (2013). Servitization: disentangling the impact of service business model innovation on manufacturing firm performance. *Journal of Operations Management*, 31, 169–180.
- [139] Von Hippel, E. (1986). Lead Users: A Source of Novel Product Concepts. *Management Science*, 32(July), 791-805.
- [140] Wheeler, A. (2017). *Designing brand identity: an essential guide for the whole branding team.* John Wiley & Sons.
- [141] Windahl, C. & Lakemond, N. (2010). Integrated solutions from a service-centered perspective: Applicability and limitations in the capital goods industry. *Industrial Marketing Management*, 39(8), 1278–1290.
- [142] Wright, N. D., Pearce, J. W. & Busbin, J. W. (1997). Linking customer service orientation to competitive performance: does the marketing concept really work? *Journal of Marketing Theory and Practice*, 5(4), pp. 23-34, 1997.
- [143] Zawislak, P. A., Zen, A. C., Fracasso, E. M., Reichert, F. M., & Pufal, N. A. (2013). Types of innovation in low-technology firms of emerging markets: an empirical study in Brazilian Industry. *RAI Revista de Administração e Inovação, 10*(1), 212-231.
- [144] Zhang, Y., Gregory, M. & Neely, A. (2016). Global engineering services: shedding light on network capabilities. *Journal of Operations Management*, 42–43, 80–94.
- [145] Zott, C., Amit, R. & Massa, L. (2011). The business model: recent developments and future research. *Journal of Management*, 37(4), 1019– 1042.
- [146] Zhou, J., & George, J. M. (2003). Awakening employee creativity: The role of leader emotional intelligence. *The leadership quarterly*, 14(4-5), 545-568.
- [147] Zhou, K. Z., Yim, C. K., & Tse, D. K. (2005). The effects of strategic orientations on technology- and market-based breakthrough innovations. *Journal of marketing*, *69*(2), 42-60.

[148] Zhu, P. (2016). *Thinkingaire: 100 Game Changing Digital Mindsets to Compete for the Future* (Vol. 8). BookBaby.