

UTILIZATION OF VALUE STREAM ANALYSIS TO IMPLEMENT REDEFINED VALUE: A SOCIAL BUSINESS PERSPECTIVE

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ABSTRACT

The premise of value focuses on the customer while the integration of social and environmental value along with customer value holistically is missing. This paper redefines the conceptualization of value as a three dimensional construct encapsulating customer, social and environmental (CSE) value. Furthermore, in operations management, value stream analysis (VSA) has been utilized as an implementation tool of customer value only. However, this study addresses a gap in the literature by employing VSA as an implementation tool to execute the redefined CSE value in a social business setting. An exploratory research driven by semi-structured interview sessions with the employees of a social business in Bangladesh were conducted while embracing a qualitative research strategy to build new insights and theories. In consequence, this study offers strategic suggestions to existing social businesses as to how the redefined conceptualization of value can be implemented for the betterment of customer, society and environment.

JEL: M00, M1

KEYWORDS: Value Framework, Customer Value, Social Value, Environmental Value, Process Analysis, Strategic Process Mapping

INTRODUCTION

Various scholars such as Zeithaml (1988), Woodruff (1997) and Holbrook (2005) have stressed on the significance of value in business management. For instance, Zeithaml (1988) elucidated value in terms of what a customer gains in consequence of a cost. The aforementioned authors conceptualized value from a functional and tangible viewpoint. However, scholars such as Butz and Goodstein (1998) and Kotler, Armstrong, Agnihotri and Haque (2010) conceptualized an additional intangible antecedent of value in terms of emotional value. Hence, value can be defined as the summation of benefits (functional and emotional) that a customer receives at a given price.

The authors of this paper conducted an in depth literature review of previously published research papers on the significance of value. In consequence, wide arrays of scholarly articles were found where researchers conceptualized value from the perspective of the customer. Hence, value has been widely accepted as a uni-dimensional construct which incorporates the benefits a company provides to its customers (Albrecht, 1995; Day, 1990; Huber, Herrmann and Morgan, 2001; Slater, 1997; Zeithaml, 1988). However, the authors of this paper believe that the principle of value needs to evolve from a mere uni-dimensional construct into a multi-dimensional paradigm. Hence, this research paper conceptualizes value by encapsulating customer value along with social and environmental value.

Furthermore, from the perspective of operations management, value stream analysis (VSA) has been widely used as an implementation tool of customer value whereby, business processes are diagnosed and re-engineered to enhance value for the customers (Womack and Jones, 2003 and Bicheno, 2008). However, this research paper utilizes VSA to implement value not only for the customers – but for the environment and the society holistically. The novelty of this research paper addresses a gap in the literature by conceptualizing value as a three dimensional construct (customer, social and environmental). Moreover, previous scholars in the milieu of operations management have only utilized VSA to implement customer value (e.g. Browning, 2003, Kocakulah and Upson, 2005, Barber and Tietje, 2008, Doyle, 2009, Chen and Meng, 2010). However, this research paper addresses a gap in the literature by being the first to utilize VSA to implement a redefined value encapsulating the impact business processes can have on the customers, the society and the environment.

Moreover, this research is conducted in the context of social business. The social business paradigm conceptualizes the significance of addressing social and environmental problems in a sustainable set-up (Yunus, 2010). It provides entrepreneurs a novel school of thought to commence a business to facilitate social and environmental transformation. A social business integrates the dynamism of sustainability rooted in conventional profit maximization firms with the social and environmental conscience of non-governmental organizations (Yunus, 2010). Social business elevates the social and economic positions of the under privileged (Yunus, Moingeon, and Ortega, 2010). It is designed to encompass the under privileged to equally participate in the market based economic activities (Rahman and Hussain, 2012). According to the pyramid of economic prosperity, very few business enterprises target the bottom of the pyramid because it comprises of people with limited or no purchasing power (Prahald and Hammond, 2002). However, the social business paradigm includes the bottom of the pyramid and addresses their needs (Rahman and Hussain, 2012).

This paper first reviews the extant literature on the premise of value comprising of customer, social, and environmental value in the process of formulating the CSE value framework. Subsequently, a critical review of the literature encompassing value stream analysis is prepared. Furthermore, the methodological foundations of this research paper encapsulating the philosophical stance, the research approach and purpose, research strategy, and primary data method is explicated. Results are generated by utilizing value stream analysis as a tool examine the existing process map of the organization under study while also utilizing the aforementioned tool to implement CSE value in the process of generating a proposed process map. Lastly, the authors of this paper reveal areas for further study while also offering recommendations and concluding statements.

LITERATURE REVIEW

Customer Value

Customer value is a significant source of competitive advantage for businesses (Porter, 1985). Identifying and creating customer value is regarded as an essential prerequisite for long-term company survival and success (Porter, 1986; Woodruff 1997; Payne and Holt, 2001; Huber, Herrmann and Morgan, 2001). Scholars such as Heskett, Sasser, and Schlesinger (1997) and Kotler et al., (2010) revealed the importance of providing superior customer value through the implementation of the service profit chain as a thrust to enhance financial performance of the firm. In consequence, scholars in the milieu of marketing have published various research papers to empirically examine the value that companies create for their customers while providing key insights into how marketing practices should be customer centric (e.g. Graf and Maas, 2008; Sheth, Sisodia and Sharma, 2000).

Customer value signifies the benefits received by the customers as a result of purchasing a product or service at a given price (Evans, 2002). Fundamentally, benefits can be categorized under functional and

emotional benefits. Functional benefits are derived from the attributes of the product which satisfies the utility needs of the customer (Keller, 1993). On the contrary, emotional benefits are the positive feelings customers get from the purchase of a product (Keller, 2008). Such emotions are evoked via advertising and have been a significant element in the brand management literature (Clow and Baack, 2012). Hence, customer value can be defined as the summation of function and emotional benefits received by the customers at a given price. Furthermore, the general consensus encompassing the customer value literature reveals that customer value is determined by the customer and not the company (Belasco and Stayer, 1993; Woodruff and Gardial, 1996; Zeithaml, 1998). Hence, understanding the customer needs and wants is an essential parameter for businesses to determine what value customers are looking for (Kotler et al., 2010). In consequence, businesses can design products or services which satisfy the needs of the customers by delivering superior customer value (Kotler and Keller, 2009). This in turn will result in profitable exchange relationships between the company and the customer.

Social Value

As this research paper is prepared in a social business setting, the authors of this paper have reviewed the literature encompassing social business to signify the importance of social value. A social business cultivates *social value* which involves the pursuit of societal improvement by eliminating obstacles that thwart social development (Austin, Stevenson, and Wei-Skillern, 2006; Smith and Stevens, 2010). Hence, social value signifies the fulfilment of the basic and long standing needs of the bottom of the pyramid (Certo and Miller, 2008). Such needs encompass education, health, water, food, and etcetera that yield social wealth enhancement (Drayton, 2002).

The key distinguishing feature between a social business and conventional business is the pursuit of *value*. In a conventional business, *financial value* maximization for the shareholders remains the chief motive. Even though the advocates of corporate social responsibility (CSR) have proposed businesses to encapsulate social, environmental and financial value in a triple bottom line measurement approach, ultimately financial value matters most (Yunus, Moingeon, and Ortega, 2010). Hence, the reconciliation of the triple bottom line approach is rather challenging. Scholars such as Burke and Longsdon (1996) and Husted and Allen (2007) have in fact established affirmative results suggestive of CSR in producing social and financial value. In consequence, conventional businesses are keen to launch CSR activities to address social issues. However, such projects require businesses to devote capital and human resources. Therefore, in the process of enhancing social welfare by means of CSR projects, profits for the shareholders may dwindle resulting in profit oriented shareholders feeling resentful unless corporate managers can demonstrate a healthy return of CSR investment in terms of financial value (Yunus, Moingeon, and Ortega, 2010). Hence, this necessitates a change in shareholder philosophy to enhance social welfare – from being a ‘*profit oriented shareholder*’ to a ‘*social oriented shareholder*’. In consequence, the chief motive of investors of a social business is to eradicate a social problem. Hence, social businesses cultivate *social value* in the quest to realize a world without poverty (Yunus, 2009). This impetus has given rise to various social businesses striving to address the most pressing needs of the society.

Environmental Value

The conceptualization and implementation of environmental management practices has received significant importance in the milieu of business management (Aragon-correa and Sharma, 2003; Banerjee, 2002; Vachon and Klassen, 2008). However, many corporate managers do not appreciate the importance of operating an environmentally conscious business. Some even believe that allocating company resources towards protecting the environment will reduce company profitability and competitiveness (Gingrich, 1995; Walley and Whitehead, 1994). In consequence, various stakeholders of a business such as the clients and the governments are demanding for environmentally conscious business practices (Vidal-Salazar, Cordon-Pozo, and Ferron-Vilchez, 2012). This calls for organizations to modify and re-engineer their business

processes to cultivate *environmental value*. The authors of this paper signify environmental value as “*the ability of an organization to have a zero impact on the environment*”. Furthermore, we suggest businesses to be proactive and *not* reactive in establishing environmental strategies in the quest to cultivate environmental value (Aragon-Correa and Sharma, 2003; Christmann, 2000). In other words, businesses should no longer integrate environmental strategies just to comply with environmental regulations and stakeholder requirements - but should encapsulate dynamic environmental practices that extend beyond industry standards, foresee future changes in social trends and regulations, and re-engineer business processes to prevent negative environmental impacts (Aragon-Correa, 1998; Aragon-Correa and Sharma, 2003; Hunt and Auster, 1990; Sharma and Vredenburg, 1998). Therefore, *environmental value* should become one of the strategic pillars of an organization whereby all the departments of the firm are accountable to cultivate environmental value in a proactive manner.

Various scholars such as Judge and Douglas (1998) and Klassen and McLaughlin (1996) have empirically established affirmative relationships between proactive environmental strategies and financial performance. In fact, most corporate managers who pursue environmental strategies promote their actions to establish a positive corporate image in the customer mindset (Chang, 2011). Scholars such as Russo and Fouts (1997) have confirmed that this in turn results in higher profitability for the firm. However, the authors of this paper suggest a mutually exclusive approach towards the establishment of environmental value. We suggest that, the **motive** of the business towards the creation of environmental value should be uni-dimensional towards protecting the environment, and **not** improving financial performance.

Figure 1: CSE Value Framework

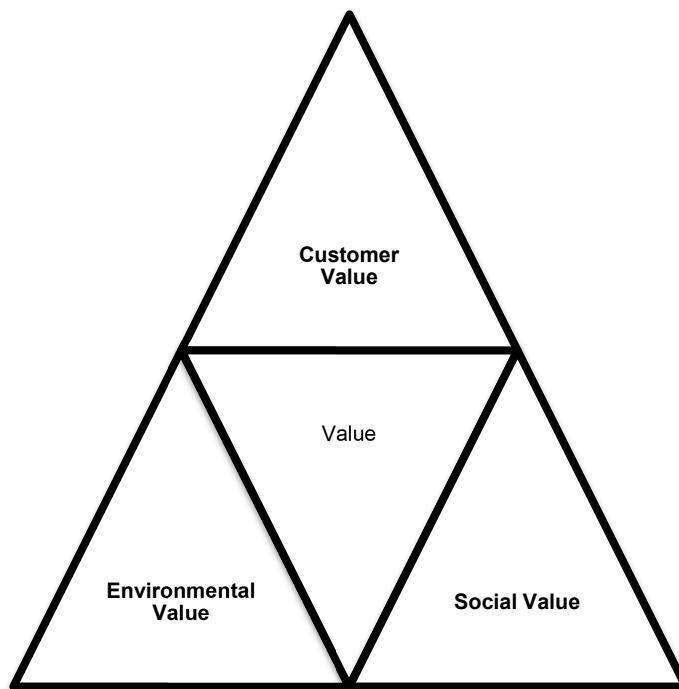


Figure 1 illustrates the CSE (customer, social, environmental) framework

Figure 1 above illustrates the CSE (customer, social, environmental) framework of value which signifies the re-defined value established in this research paper. As a result, social businesses should pursue customer, social, and environmental value in an integrated manner to address humanity’s most pressing needs. Subsequently, the authors of this paper review the literature encompassing value stream analysis (VSA) to implement and support the novel CSE framework as a strategic pillar for social businesses.

Value Stream Analysis

The concept Value Stream Analysis (VSA) was coined by the works of Womack and Jones (2003) who suggested VSA as an effective tool for the implementation of lean. It became popular through the books: *The Machine that Changed the World* and *Lean Thinking*. After its conceptualization, various studies have been done on the significance of VSA. It was the works of Bicheno (2008), Womack and Jones (2003) and Lian and Van Landeghem (2007) that established the concept of using VSA as an implementation tool. In consequence, their work demonstrated the effectiveness of the implementation of lean in different business scenarios. The versatility of VSA could also be seen from the works of Chen and Meng (2010) which showed its use in a Chinese business context. Moreover, scholars such as Seth, Seth and Goel (2008), Vinod, Arvind and Somanaathan (2010) and Seth and Gupta (2005) utilized VSA in different business contexts in India – including cottonseed manufacturing and camshaft operations. Furthermore, VSA has been utilized in process improvement in Electrical Manufacturing Systems (EMS) (Shen and Han, 2006), pipe manufacturing and supply industry (Arbulu, Tommelein, Walsh and Hershauer, 2003), upholstery furniture engineering process (Wang, Quesada-Pineda, Earl Kline, Buehlmann, 2011), house construction industry (Yu, Tweed, Al-Hussein, Nasser, 2009) and even in health management systems (Kocakülâh and Upson, 2004; Kim, Spahlinger, Kin, Billi, 2006; Tischler 2006; Barber and Tietje, 2008). However, the VSA tool has not been utilized in the context of a social business. Hence, this research addresses a gap in the literature by employing VSA in a social business set up.

In its very essence, VSA looks into identifying and then removing all those activities that are not adding any value to the end customer, the user, or the product or service (Womack, Jones and Roos, 1990; Rother and Shook, 1998; Hines, Howleg and Rich, 2004). Thus, as discussed in the work of Braglia, Carmignani and Zammori (2006), the heart, or the core attribute of the tool is the understanding of what customer value actually is, because only after the appropriate definition and scope of the value can the tool be used to increase value for the customer. According to Rother and Shook (1999), the concept of value stream comes whenever there is a product for a consumer involved. The surface level effectiveness of VSA can be seen from the better understanding of the concept of value in terms of flow of product and services throughout the production line and the supply chain and also the increased detectability of flaws all throughout the value chain (Bicheno, 2008). But the benefit of VSA does not stay limited to the production flow only. The flow improvements also extend to the flow of information among the stakeholders (Braglia et al., 2006). Due to these advantages, the understanding of the processes and the improvement suggestions that arise from VSA cannot only be used to implement lean, but can be used in product designing and redesigning exercises (Serrano, Ochoa and Castro, 2008) and also in future strategic planning for an organization (Gregory, 2003; Lasa, Laburu and de Castro Vila, 2008).

Furthermore, due to the versatility and effectiveness of the use of VSA, a good deal of work has been carried out in improving its conceptualization and implementation power. Such improvements can be categorized as backward integration to the core concept of value, and the others as forward integration towards the implementation phase. It was the works Hines et al., (2004), which, also after basing itself on the previous works of Browning (2003), suggested that one of the biggest problems of VSA was its focus on defining value only on the foundations of the cost parameter, and thus making VSA a cost minimizing tool. This tool was further brought into light by the work of Agyapong-Kodua, Ajaefobi, Weston and Ratchev (2012) as well. One of the means of countering this drawback was to go back to the very roots of VSA and look for what exactly creates ‘customer’ value (Braglia et al., 2006).

Other than the focus on the customer’s perception of value, Kocakülâh and Upson (2004) suggested that the concept of value for the customer will also take into consideration the flow of information all along the supply chain/value chain. There have been indeed quite a few other works, which suggested that the improvement of VSA can be effectively done through redefining the concept of concept of value – namely value for the customer (Doyle, 2009; Allen, 1993; Huber, Herrmann and Morgan, 2001; Piercy and Morgan,

1997). The other category of research related to the improvement of VSA, as mentioned in the outset of paragraph, was about forward integration, looking into improved means of implementation of VSA. The work of Agyapong-Kodua et al. (2012) suggests improvements in VSA tailored towards the quantitative aspects of the process in concern, and a similar stand is taken by the work of Braglia et al. (2006) and Serrano et al. (2008), both of which suggests the collaboration of VSA with the engineering tools to give a more concrete set of results. Finally, the work of Zokaei and Simmons (2006) summarizes the improvements on VSA that have been done so far, and it is evident from their work that most of improvement efforts of VSA have been directed towards the redefinition of value, mostly customer.

Based on the critical review on VSA, the effectiveness of VSA as a good implementation tool depends on the concept of value, and although various studies have been carried out in order to modify the concept of value, the final concept of value in VSA has always circled around the customer. However, this research paper will change the lens of VSA from *customer value* to *CSE value*. In consequence, an examination of business processes will be conducted not only to implement customer value, but to enhance social and environmental value in a cohesive manner. Hence, adding to the academic literature of VSA a completely new and strategic area of study. Such an approach has not been previously conducted by scholars, which further augments the novelty of this research paper.

DATA AND METHODOLOGY

This research paper strives to redefine the conceptualization of value in the milieu of social business. Furthermore, this study explores whether value stream analysis can be utilized to improve business processes while considering the redefined concept of value. Hence, from a philosophical standpoint, this research undertakes a subjectivist ontological stance as the authors of this paper believe in the continuous creation and re-creation of theory (Bryman and Bell, 2007). Furthermore, considering the sociological paradigms developed by Burrell and Morgan (1982), this research paper encapsulates the interpretive paradigm while considering the regulatory perspective. In consequence, this study will strive to offer strategic suggestions to existing social businesses as to how the redefined conceptualization of value can be implemented within the framework of the way things are done at present (Saunders, Lewis, and Thornhill, 2009).

This research utilizes the inductive research approach as the authors of this paper look to build theory which will crystallize during the data collection phase (Johnson and Clark, 2006). Furthermore, the purpose of this research is exploratory in nature as it is a valuable means to seek new insights and assess a phenomenon in a new light (Robson, 2002; Saunders et al., 2009). Hence, considering the nature of the research questions, the philosophical stance, the research approach and purpose, this study embraces a qualitative research strategy whereby primary data is collected via interview methods. The reason for the choice of interview methods as compared to case study analysis was due to the fact that case studies normally cover two sets of scenarios – i) learning from the challenges faced by an organization and generalizing the best possible solutions that the organization have either taken or could have taken and ii) learning from the success story of an organization in a context, and then generalizing the critical success factors so that they can be applied by other organizations in a similar scenario (Yin, 2008 and Dul and Hak, 2012). However, given the fact that this research is exploratory in nature, neither of the aforementioned scenarios fit into this context. Hence, a qualitative research conducted by interviewing experts is a better choice compared to case study analysis. Consequently, considering the research rationale and philosophical stance of this study, the action research methodology could also be executed. However, due to the limited access to the organization chosen for primary research (in terms of managerial control of implementing the recommended changes) or any consulting capacity relationship with the organization, the cyclical approach of analyzing the impacts of the research in order to validate the initial set of recommendations cannot be carried out (Costello, 2003 and Stringer, 2007).

The authors of this research have chosen “Mpower” which is a social business in Bangladesh to collect primary information. Furthermore, the employees of Mpower were approached and a non-standardized, semi-structured in-depth interview method was capitalized. This is because, this research being exploratory in nature, will require in-depth interviews to seek new insights in the milieu of operations management and social business (Cooper and Schindler, 2008; Robson, 2002). Moreover, a semi-structured interview method will help us probe answers which will add significance and depth to the data we obtain to address the research questions (Saunders et al., 2009).

To ensure the quality of the primary data, the authors of this paper incorporated the triangulation method which has been extensively utilized by various scholars (e.g. Gillham, 2000; Myers, 1997; Patton, 2002; Stake, 1995; Yin, 1994) to strengthen the data credibility in a qualitative research strategy framework. This research will utilize *data triangulation* and *investigator triangulation* approach (Stake, 1995). Hence, interviewing different employees of the organization will enhance the validity of the data (Yin, 1994). Furthermore, all the three authors of this paper will be involved in the data collection process. In consequence, at the end of the data collection process, the authors will compare the findings to develop a deeper and broader understanding of the study. This in turn will heighten the confidence of the findings provided that all three authors arrive at the same conclusion (Denzin, 1970).

The organization under study is Mpower Social Enterprise which sprung from ClickDiagnostics Inc., a company founded by graduate students of Harvard University and MIT in 2008. Its journey began in Egypt and eventually spread out in countries like Botswana, Bangladesh, Ghana and Uganda. Mpower harnesses the power of information and mobile technologies to revolutionize the impact of development. Their services and products package consists of process analysis and information optimization, technology customization and development and mining and analysis of real-time data.

RESULTS

This section of the research paper utilizes the VSA tool to reveal the existing process map of the social business under study. In consequence, the existing process interfaces are discussed where value is being created. Furthermore, an improved strategic process map encompassing the CSE value framework is suggested. Lastly, a comparative discussion is prepared in order to signify the effectiveness of the proposed framework compared to the present value maximizing scenario of the firm.

The existing strategic process map of the organization under study is presented in Figure 2. Through semi-structured interview methods, the authors of this paper interviewed the top management officials at M-power and determined all the business process steps executed in the organization. As a result, a strategic process map could be established as shown in Figure 2 which sheds light on the details of every business process currently pursued at M-power to achieve their organizational goals and objectives.

The first step of the Mpower’s business process involves the pre-sales step. This step involves identifying prospective projects which strategically aligns with the organization’s core values. The next step involves an in-depth analysis of the client’s existing business process. At this stage, the weaknesses and gaps of the client’s business process are identified. In consequence, a basic structure of the proposed solutions – (the ‘to be’ process) are outlined whereby Mpower suggests how their strength in information and mobile technology can enhance the client’s business process in order to boost their impact on development programs. Subsequently, Mpower and the client go through a series of discussion sessions whereby the proposed improvements of the client’s business process are fine-tuned based on the requirements of the client, the capacity of Mpower and the costs involved. In consequence, after all the requirements from both parties are addressed, the project contract is signed. The next step involves the design phase whereby Mpower designs the information system solution product needed to enhance the business process of the client. Consequently, a pilot run of the product is implemented in order to signify the actual performance

of the product while identifying and troubleshooting any problems. Subsequently, a performance report from the pilot run is generated and shared with the client. Furthermore, if the client requires any further modifications, then according to the client's requirements, further adjustments to the product specifications are employed. As a result, the product is finalized and implemented in the client's business process. However, parallel implementation is utilized in order to ensure a smooth transition while implementing the new product in the client's business process. Parallel implementation involves real time debugging and troubleshooting, training of the staff and the measurement of the impact of the new product. In the final stage, Mpower remains an operational partner of the client by managing and monitoring the new product they implemented in the client's business process.

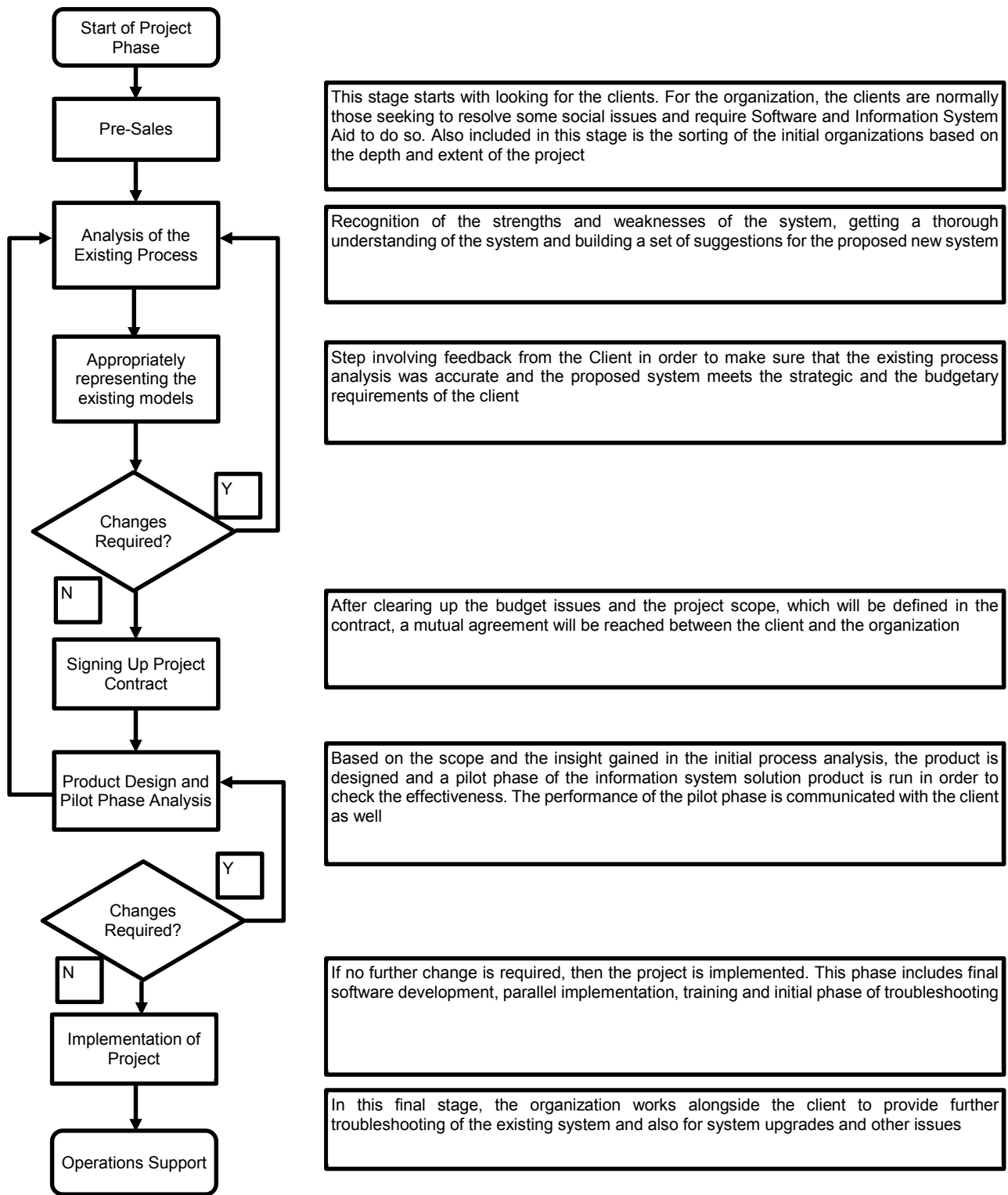
Based on the above description of the existing business process of Mpower, the following process map illustrated in Figure 3 presents the value created in each phase of Mpower's business process. The authors of this paper have chosen a social business in order to explore the effectiveness of the CSE value framework because of the fact that one of the core objectives of a social business is to create social value. Hence, it is eminent that for a social business, the end value in terms of customer will lead to social value.

After initially determining the strategic process map of the organization under study, the authors of this paper investigated the value created in each phase of the business process as shown in Figure 3. This investigation was done through the utilization of value stream analysis. As a result, this research verifies whether in each step of the business process, M-power creates customer value, social value, environmental value or a combination of the values under study.

The stages where Mpower stresses on social value are pre-sales, existing business process analysis of the client, product design and pilot run, and finally the implementation and operational support stages. In the pre-sales phase, while choosing a project, Mpower picks the one which focuses on addressing social problems. Hence, Mpower's product encompassing information and mobile technology by function will be adding social value for the client. Subsequently, in the existing business process analysis of the client phase, Mpower focuses on social value that is to be enhanced in the existing system. In consequence, Mpower proposes resolutions by identifying and eliminating processes that are redundant and non-social value adding while introducing processes that will maximize social value. At this stage, Mpower communicates the significance of social value to the client. Therefore once a contract has been signed, the product design phase starts whereby an information or mobile technological product is designed to enhance social value in the business process of the client's organization. Afterward, a pilot run phase is employed to test the actual performance of the product in terms of its ability to maximize social value in the business process. At this stage, Mpower identifies and troubleshoots any problems which thwart the product's ability to enhance social value. In consequence, a performance report from the pilot run phase is generated which signifies how the product has enhanced social value throughout the business process of the client's organization. During the parallel implementation phase, Mpower executes the product in the client's business process while also troubleshooting, debugging and training the employees of the client's organization in order to realize the maximization of social value. Finally, in the operational support phase, Mpower provides further assistance to ensure consistency of the performance of their product in providing social value.

Hence, the above discussion presents how value is created in the existing business process of Mpower. In the subsequent section, this research paper utilizes value stream analysis and presents how the CSE value framework maximizes customer, social, and environmental value in the business process of Mpower. Figure 4 illustrates the proposed business process map whereby CSE value has been incorporated.

Figure 2: Existing Strategic Process Map of the Organization under Study



Figures 2 illustrates the existing strategic process map of the organization under study

Figure 3: Value Created in Each Phase of the Business Process of the Organization under Study

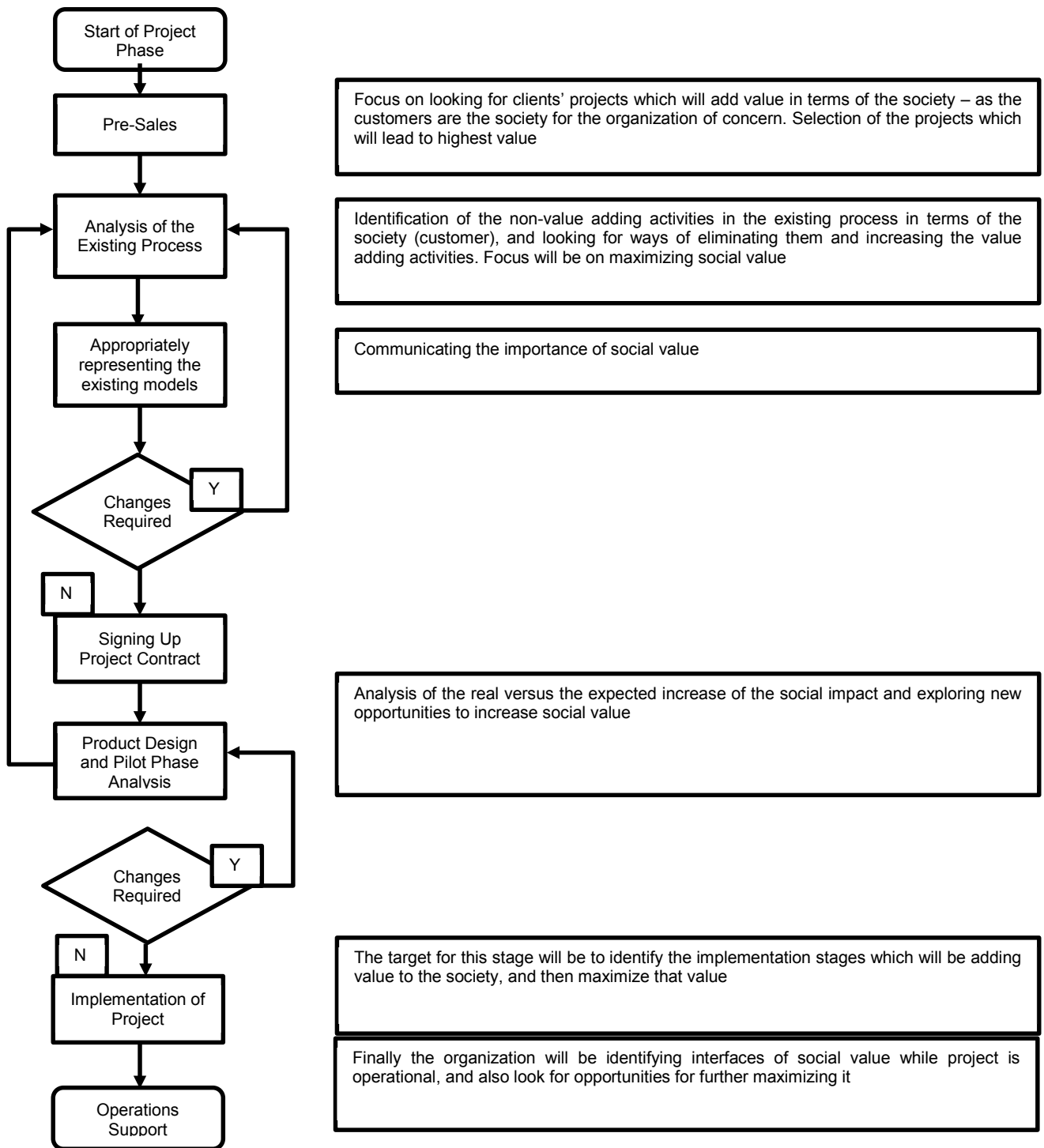


Figure 3 presents a process map illustrating the value created in each phase of Mpower's business process.

Figure 4: Proposed Business Process Map with the Incorporation of CSE Value

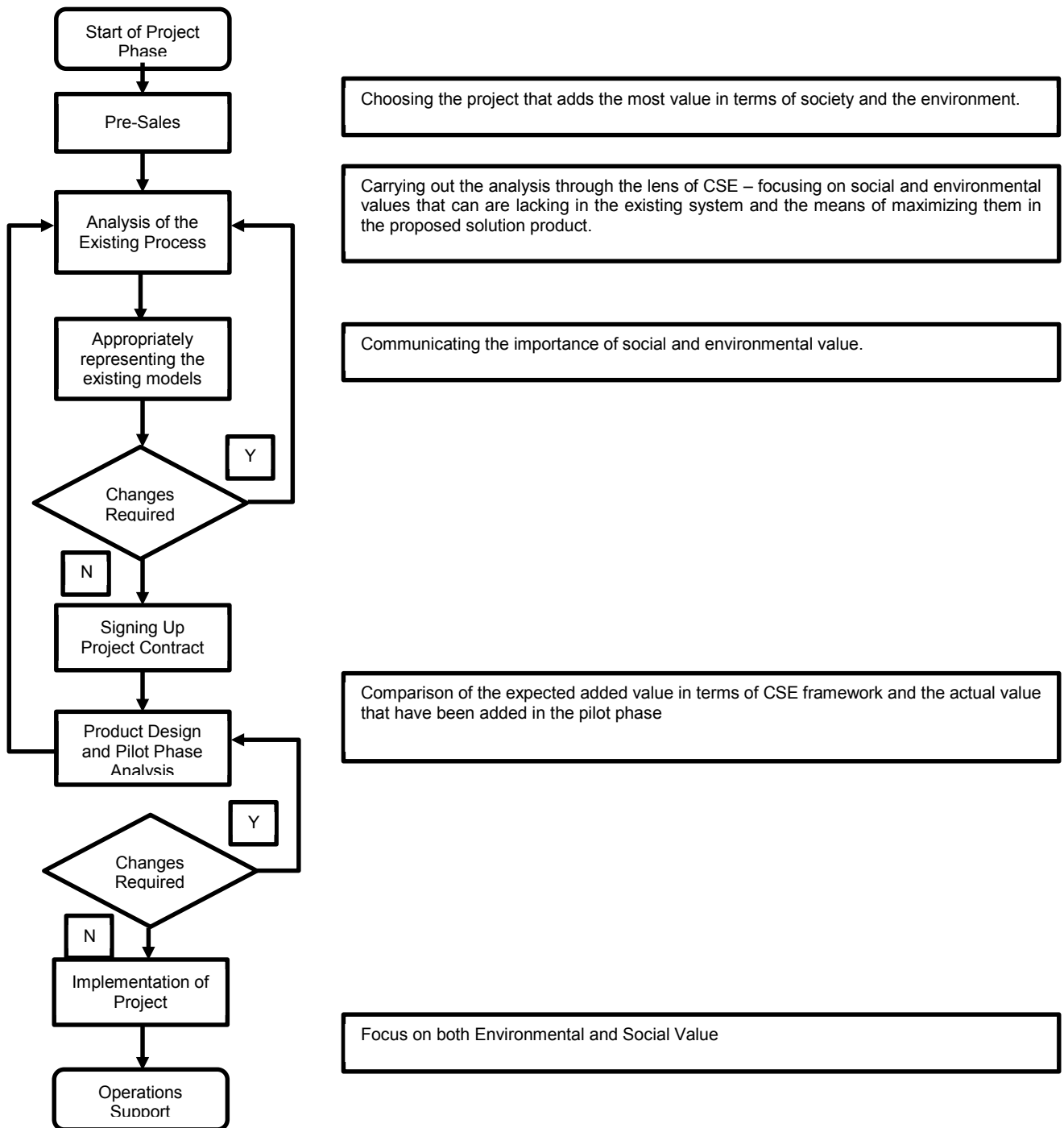


Figure 4 illustrates the proposed business process map whereby CSE value has been incorporated.

Once the values created in the existing phases of the business process at M-power was determined, the authors of this paper pursued a gap analysis and established a proposed business process map through the utilization of value stream analysis as shown in Figure 4 by implementing CSE value in each step of the business process in the organization under study.

The steps and the means of cultivating CSE value are similar to that of the existing process, which means that the changes necessary will not be radical in nature. Accordingly, in the pre-sales phase, Mpower should look for projects which can address social and environmental problems. Subsequently, during the analysis of the existing business process phase of the client's organization, Mpower should identify weaknesses and gaps of the client's business process in terms of social and environmental value. Accordingly, Mpower should formulate proposed solutions by identifying and eliminating processes that are unnecessary and non-value adding in terms of social and environmental value while proposing resolutions that will maximize social and environmental value. At this stage, Mpower should communicate the importance of social and environmental value to the client. Once a contract has been signed, Mpower should design a product that will not only enhance social value but also encompass environmental value as well. Consequently, during the pilot run phase, the actual performance of the product should be measured in terms of its ability to maximize social and environmental value in the business process of the client's organization. During this stage, Mpower should address any technical problems that prevent the product's ability to maximize social and environmental value. Furthermore, as far as the performance report generated from the pilot run is concerned, Mpower should illustrate how their product will enhance social and environmental value in the existing business process of the client's organization. During the parallel implementation phase, while installing the product in the client organization's business process, Mpower should troubleshoot, debug, and train the employees of the client's organization to effectively cultivate social and environmental value in the client organization's business process. Finally, in the operational support phase, Mpower should provide continuous support to ensure the reliability of the product in maximizing social and environmental value.

Hence, this research paper effectively utilized the VSA tool to implement the redefined CSE value in a social business. In consequence, a strategic "to be" process map incorporating the three dimensions of the CSE value framework has been suggested. This in turn will work as a strategic guideline for the organization while conducting its business operations to create value for the customer, the society and the environment holistically. As a result, this research paper has addressed a vital gap in the literature by effectively utilizing VSA to implement not only customer value but also social and environmental value in an integrated approach.

CONCLUSION

This paper effectively implemented the redefined CSE value in a social business through the utilization of the value stream analysis tool. Through semi-structured interview methods, the authors of this paper generated the existing process map of the organization under study. In consequence, a proposed process map was produced while executing the CSE value in the organization's business process. As a result, the CSE value framework proposed in this research paper provides a novel strategic thought process for social businesses. Furthermore, for existing and potential social entrepreneurs, the CSE value framework provides a lens through which business processes should be examined and improved to provide customer, social, and environmental value through the utilization of the value stream analysis tool.

The authors of this paper propose scholars to further examine the implementation of the CSE value framework through action research. In consequence, knowledge and practicality being the nucleus of action research will further present strong guidelines for businesses to implement the CSE value framework (Coghlan and Brannick, 2001). Furthermore, another area for future research is to quantitatively measure

the impact of the CSE value framework. Lastly, the implementation of this framework should be examined in the context of a conventional profit maximization firm.

REFERENCES

- Agyapong-Kodua, K., Ajaefobi, J. O., Weston, R. H., & Ratchev, S. (2012). Development of a multi-product cost and value stream modelling methodology. *International Journal of Production Research*, 50(22), 6431-6456.
- Albrecht, K. (1995). *Delivering customer value: it's everyone's job*. Productivity Press.
- Allen, D. (1993). *Developing successful new products: a guide to product planning*. London: Pitman.
- Aragon-Correa, J.A., (1998), *Strategic Proactivity and Firm Approach to the Natural Environment*, Academy of Management Journal, Vol. 41, No. 5, 556-567.
- Aragon-Correa, J.A., Sharma, S., (2003), *A contingent resource-based view of proactive corporate environmental strategy*, Academy of Management Review, Vol. 28, No. 1, 71-88.
- Arbulu, R., Tommelein, I., Walsh, K., & Hershauer, J. (2003). Value stream analysis of a re-engineered construction supply chain. *Building Research & Information*, 31(2), 161-171.
- Austin, J., Stevenson, H., Wei-Skillern, J., (2006), *Social and Commercial Entrepreneurship: Same, Different, or Both?*, Entrepreneurship, Theory and Practice, Vol. 30, 1-22.
- Banerjee, S.B., (2002), *Corporate Environmentalism: the Construct and its Measurement*, Journal of Business Research, Vol. 55, No. 3, 177-191.
- Barber, C. S., & Tietje, B. C. (2008). A research agenda for value stream mapping the sales process. *Journal of Personal Selling and Sales Management*, 28(2), 155-165.
- Bicheno, J. (2008). *The lean toolbox for service systems*. PICSIE books.
- Boeing, 2000. Lean manufacturing. Available from: <http://www.boeing.com/> [Accessed 25 January 2012].
- Braglia, M., Carmignani, G., & Zammori, F. (2006). A new value stream mapping approach for complex production systems. *International journal of production research*, 44(18-19), 3929-3952.
- Browning, T. R. (2003). On customer value and improvement in product development processes. *Systems Engineering*, 6(1), 49-61.
- Bryman, A., Bell, E., (2007), *Business research methods*, 2nd edition, Oxford: Oxford University Press.
- Burke, L., Longsdon, J.M., (1996), *How Corporate Social Responsibility Pays Off*, Long Range Planning, Vol. 29, No. 4, 495-502.
- Burrell, G., Morgan, G., (1982), *Sociological Paradigms and Organizational Analysis*, London: Heinemann.
- Certo, S.T., Miller, T., (2008), *Social Entrepreneurship: Key Issues and Concepts*, Business Horizons, Vol. 51, 267-271.

Chang, C., (2011), *Feeling Ambivalent About Going Green*, *Journal of Advertising*, Vol. 4, No. 4, 19-32.

Chen, L., & Meng, B. (2010). The application of value stream mapping based lean production system. *International Journal of Business and Management*, 5(6), P203.

Christmann, P., (2000), *Effects of "Best Practices" of Environmental Management of Cost Advantage: The Role of Complementary Assets*, *Academy of Management Journal*, Vol. 43, No. 4, 663-680.

Clow, K. A., Baack, D., (2010), *Integrated Advertising, Promotion and Marketing Communications*, Fourth Edition, Dorling Kindersley: India.

Coghlan D., Brannick, T., (2001), *Doing Action Research in your Own Organization*, London: Sage Publications.

Companies Link Profit and Growth to Loyalty, Satisfaction and Value, Free Press, New York, 1997.

Cooper, D.R., Schindler, P.S., (2008), *Business Research Methods*, 10th Edition, London: McGraw-Hill.

Costello, P.J.M (2003) *Action Research*, 1st edn, London : Continuum.

Day, G. S. (1994). The capabilities of market-driven organizations. *the Journal of Marketing*, 37-52.

Denzin, N. K., (1970), *The Research Act in Sociology*, Chicago: Aldine.

Doyle, P. (2009). *Value-based marketing: marketing strategies for corporate growth and shareholder value*. John Wiley & Sons.

Drayton, B., (2002), *The Citizen Sector: Becoming as Entrepreneurial and Competitive as Business*, *California Management Review*, Vol. 44, No. 3, 120-132.

Dul, J., & Hak, T. (2012). *Case study methodology in business research*. Routledge.

Evans, G. (2002). Measuring and managing customer value. *Work study*, 51(3), 134-139.

Gillham, B., (2000), *Case Study Research Methods*, London: Continuum.

Gingrich, N., (1995), *To Renew America*, New York: Harper Collins.

Goodstein, L. D., & Butz, H. E. (1998). Customer value: the linchpin of organizational change. *Organizational Dynamics*, 27(1), 21-34.

Graf, A., & Maas, P. (2008). Customer value from a customer perspective: a comprehensive review. *Journal für Betriebswirtschaft*, 58(1), 1-20.

Gregory, A. (2003). Look before you leap. *Manufacturing computer solutions*, February, 30-31.

Heskett, J. L., Sasser, W. E., & Schlesinger, L. A. (1997). *Service profit chain*. SimonandSchuster. Com

Heskett, J.L., Sasser, W.E. and L.A. Schlesinger, *The Service Profit Chain: How Leading*

Hines, P., Holweg, M., & Rich, N. (2004). Learning to evolve: a review of contemporary lean thinking. *International Journal of Operations & Production Management*, 24(10), 994-1011.

Holbrook, M. B. (2005). Customer value and autoethnography: subjective personal introspection and the meanings of a photograph collection. *Journal of Business Research*, 58(1), 45-61.

Huber, F., Herrmann, A., & Morgan, R. E. (2001). Gaining competitive advantage through customer value oriented management. *Journal of Consumer Marketing*, 18(1), 41-53.

Hunt, C.B., Auster, E.R., (1990), *Proactive Environmental Management: Avoiding the Toxic Trap*, Sloan Management Review, Vol. 31, No. 2, 7-18.

Husted, B.W., Allen, D.B., (2007), *Strategic Corporate Social Responsibility and Value Creation Among Large Firms: Lessons from the Spanish Experience*, Long Range Planning, Vol. 40, No. 6, 594-610.

Johnson, P., Clark, M., (2006), *Mapping the terrain: an overview of business and management research methodologies*, in P. Johnson and M. Clark, (eds), *Business and Management research Methodologies*, London: Sage.

Judge, W.Q., Douglas, T.J., (1998), *Performance Implications of Incorporating Natural Environmental Issues into the Strategic Planning Process: An Empirical Assessment*, Journal of Management Studies, Vol. 35, No. 2, pp. 241-262.

Keller, K. L., (1993), *Conceptualizing, measuring, and managing customer-based brand equity*, Journal of Marketing, Vol. 57, No. 1, 1-22.

Keller, K.L., (2008), *Strategic Brand Management: Building, Measuring and Managing Brand Equity*, 3rd edition, Singapore: Pearson Education.

Kim, C. S., Spahlinger, D. A., Kin, J. M., & Billi, J. E. (2006). Lean health care: What can hospitals learn from a world-class automaker? *Journal of Hospital Medicine*, 1(3), 191-199.

Klassen, R.D., McLaughlin, C.P., (1996), *The Impact of Environmental Management of Firm Performance*, Management Science, Vol. 42, No. 8, 1199-1214.

Kocakulah, M. C., & Upson, J. (2005). Cost analysis of computerized physician order entry using value stream analysis: a case study.(2004 Best Case Study Paper Award Recipient). *Research in Healthcare Financial Management*, Vol. 10, No. 1, 13 - 25.

Kotler, P., Armstrong, G., Agnihotri, P.Y., Haque, E.U., (2010), *Principles of Marketing: A South Asian Perspective*, 13th edition, India: Pearson.

Kotler, P., Kartajaya, H., & Setiawan, I. (2010). *Marketing 3.0: from products to customers to the human spirit*. John Wiley & Sons.

Kotler, P., Keller, K.L., (2009), *Marketing Management*, 13th Edition, New Jersey: Prentice Hall.

Lasa, I. S., Laburu, C. O., & de Castro Vila, R. (2008). An evaluation of the value stream mapping tool. *Business Process Management Journal*, 14(1), 39-52.

Lian, Y. H., & Van Landeghem, H. (2007). Analysing the effects of Lean manufacturing using a value stream mapping-based simulation generator. *International Journal of Production Research*, 45(13), 3037-3058.

Myers, M. D., (1997), *Qualitative Research in Information Systems*, MIS Quarterly, Vol: 21, No: 2, pp.241.

Patton, M. Q., (2002), *Qualitative evaluation and research methods*, 3rd Edition, Thousand Oaks California: Sage Publications, Inc.

Payne, A., & Holt, S. (2001). Diagnosing customer value: integrating the value process and relationship marketing. *British Journal of Management*, 12(2), 159-182.

Piercy, N. F., & Morgan, N. A. (1997). The impact of lean thinking and the lean enterprise on marketing: threat or synergy?. *Journal of Marketing management*,13(7), 679-693.

Porter, M. E. (1985). Technology and competitive advantage. *Journal of Business Strategy*, 5(3), 60-78.

Porter, M. E. (Ed.). (1986). *Competition in global industries*. Harvard Business Press.

Prahalad, K.C., Hammond, A., (2002), *Serving the World's Poor Profitably*, Harvard Business Review Publishing Corporation

Rahman, M., Hussain, M., (2012), *Social Business, Accountability, and Performance Reporting*, Humanomics, Vol. 28, No. 2, 118-132.

Robson, C., (2002), *Real World Research*, 2nd Edition, Oxford: Blackwell.

Rother, M. and Shook, J. (1998), *Learning to See: Value Stream Mapping to Add Value and Eliminate Muda*, The Lean Enterprise Institute, Cambridge, MA.

Rother, M. and Shook, J. (1999), *Learning to See*, The Lean Enterprise Institute, Cambridge, MA.

Russo, M., Fouts, P., (1997), *A Resource-Based Perspective on Corporate Environmental Performance and Profitability*, Academy of Management Journal, Vol. 40, No. 3, 534-559.

Saunders, M., Lewis, P., Thornhill, A., (2009), *Research methods for business students*, 5th edition, Harlow: Pearson Education Limited.

Serrano, I., Ochoa, C., & Castro, R. D. (2008). Evaluation of value stream mapping in manufacturing system redesign. *International Journal of Production Research*, 46(16), 4409-4430.

Seth, D., & Gupta, V. (2005). Application of value stream mapping for lean operations and cycle time reduction: an Indian case study. *Production Planning & Control*, 16(1), 44-59.

Seth, D., Seth, N., & Goel, D. (2008). Application of value stream mapping (VSM) for minimization of wastes in the processing side of supply chain of cottonseed oil industry in Indian context. *Journal of Manufacturing Technology Management*, 19(4), 529-550.

Sharma, S., Vredenburg, H., (1998), *Proactive Corporate Environmental Strategy and the Development of Competitively Valuable Organizational Capabilities*, Strategic Management Journal, Vol. 19, No. 8, 729-753.

Shen, S. X., & Han, C. F. (2006). China electrical manufacturing services industry value stream mapping collaboration. *International Journal of Flexible Manufacturing Systems*, 18(4), 285-303.

- Sheth, J.N., Sisodia, R.S., Sharma, A., (2000), *The Antecedents and Consequences of Customer Centric Marketing*, Journal of Academy of Marketing Science, Vol. 28, No. 1, 55-66.
- Slater, S. F. (1997). Developing a customer value-based theory of the firm. *Journal of the Academy of marketing Science*, 25(2), 162-167.
- Smith, B.R., Stevens, C.E., (2010), *Different Types of Social Entrepreneurship: The role of Geography and Embeddedness on the Measurement and Scaling of Social Value*, Vol. 22, No. 6, 575-598.
- Stake, R. E., (1995), *The art of case study research: perspectives and practice*, London: Sage Publications.
- Stringer, E.T. (2007) *Action Research*, 3rd edn., London : SAGE 2007.
- Tischler, L. (2006). Bringing lean to the office. *Quality progress*, 39(7), 32.
- Vachon, D., Klassen, R., (2008), *Environmental Management and Manufacturing Performance: The Role of Collaboration in the Supply Chain*, International Journal of Production Economics, Vol. 111, No. 2, 299-315.
- Vidal-Salazar, M.D., Cordon-Pozo, E., Ferron-Vilchez, V., (2012), *Human Resource Management and Developing Proactive Environmental Strategies: The Influence of Environmental Training and Organizational Learning*, Wiley Periodicals, Vol. 51, No. 6, 905-934.
- Vinodh, S., Arvind, K. R., & Somanaathan, M. (2010). Application of value stream mapping in an Indian camshaft manufacturing organisation. *Journal of Manufacturing Technology Management*, 21(7), 888-900.
- Walley, N., Whitehead, B., (1994), *It's Not Easy Being Green*, Harvard Business Review, Vol. 72, No. 3, 46-52.
- Wang, C., Quesada-Pineda, H., Earl Kline, D., & Buehlmann, U. (2011). Using Value Stream Mapping to Analyze an Upholstery Furniture Engineering Process. *Forest products journal*, 61(5), 411-421.
- Womack, J. P., & Jones, D. T. (2003). *Banish waste and create wealth in your corporation*. New York: Free Press.
- Womack, J. P., Jones, D. T., & Roos, D. (1990). *The Machine That Changed the World: The Story of Lean Production: How Japan's Secret Weapon in the Global Auto Wars Will Revolutionize Western Industry*. New York, NY: Rawson Associates.
- Woodruff, R. B. (1997). Customer value: the next source for competitive advantage. *Journal of the academy of marketing science*, 25(2), 139-153.
- Woodruff, R. B., & Gardial, S. (1996). *Know your customer: new approaches to customer value and satisfaction*. Blackwell Business.
- Yin, R. K. (2008). *Case study research: Design and methods* (Vol. 5). SAGE Publications, Incorporated.
- Yin, R. K., (1994), *Case Study Research*, Thousand Oaks California: Sage Publications.

Yu, H., Tweed, T., Al-Hussein, M., & Nasser, R. (2009). Development of lean model for house construction using value stream mapping. *Journal of Construction Engineering and Management*, 135(8), 782-790.

Yunus, M., (2009), *Creating a World Without Poverty: Social Business and the Future of Capitalism*, New York: Public Affairs

Yunus, M., (2010), *Building Social Business: The New Kind of Capitalism that Serves Humanity's Most Pressing Needs*, New York: Public Affairs.

Yunus, M., (2013), *Nobel Prize Winner Muhammad Yunus: The Key to Super Happiness*. [Online Video], Available from: <http://www.forbes.com/sites/erincarlyle/2013/06/07/nobel-prize-winner-muhammad-yunus-the-key-to-super-happiness-video/>. [Accessed: 15 June 2013]

Yunus, M., Moingeon, B., Ortega, L.L., (2010), *Building Social Business Models: Lessons from the Grameen Experience*, Long Range Planning, Vol. 43, 308-325.

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *The Journal of Marketing*, 2-22.

Zokaei, A. K., & Simons, D. W. (2006). Value chain analysis in consumer focus improvement: a case study of the UK red meat industry. *International Journal of Logistics Management*, The, 17(2), 141-162.

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