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# Servitization of Manufacturing companies in emerging markets

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Securing a competitive advantage for manufacturing companies in economies with fierce rivalry has increasing become difficult. With financial success, company growth and differentiation being objectives manufacturers are continuously striving to achieve it has becoming more beneficial to manufacturer to servitize. Servitization is the process through which manufacturers integrate services to product offering as a means of adding value to the offerings, differentiate from the competitors or generate additional revenue. Current literature has predominantly focused on western world manufactures in developed markets with little insight into the process in emerging markets such as that of Kenya as used in this study. This study aims to examine the role of servitization in the pursuit of differentiation and achieving competitive advantage for manufacturing firms in emerging economies therefore, addressing this gap in current literature.

The study utilises two key frameworks which are servitization theory and organizational culture theory addressing the existing literature and its closely related concepts. Theses two frameworks are chosen as they serve as the basis for studying manufacturing companies undergoing a service transition. A theoretical lens is created based on the synthesis of these two frameworks from which the developed servitization capabilities can be drawn and providing a simple view of the empirical results.

The empirical section of this study includes the analysis of three unnamed manufacturing company. Primary data is collected through semi structured interviews with the managers from the case companies, the data is then analysed using context analysis.

The study finds several differences in the motivations, challenges, and effects of servitization with conceptual similarities between the manufacturing companies in developed markets i.e., Europe and north America with emerging markets i.e., Sub Saharan Africa and southeast Asia. The level of servitization in Kenya is also highlighted given the scope of the data collected in the study with varying levels of servitization capabilities noted amongst different industries and the viability of servitization amongst certain manufacturers assessed given their suitability towards servitization.

**KEYWORDS:** servitization, organizational configuration, organizational culture, emerging markets, product-service system,

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# 1 Introduction

The African continent is on a path to growth, consisting of several emerging markets, according to (Signe, L. 2018), as of 2015 business-to-business (B2B) spending was at \$465 billion and was forecasted to rise by 43.2% and reach \$666.3 billion by the year 2030. A high annual growth rate of 3.5% has been seen from the manufacturing sector in particular between 2005 to 2014. This has resulted in the increased production value in sub-Saharan Africa (SSA) from \$75 billion to over \$130 billion from 2005 to 2016. (Chambers et al., 2017) note that service account for a proportional and steadily growing share of overall sub-Saharan Africa economic output. 2015, saw the services sector accounting for 58.0 percent of sub-Saharan Africa gross domestic product (GDP), up by 10.06 percent from 2005. Granted that the continent is faced with issues of policy, inadequate infrastructure, skilled workforce, and sometimes unfavourable business environment (John Page, 2016). The continent is moving to stem such issue, the African Continental Free Trade Area (AfCFTA) is one such example poised as a single market for goods and services in Africa launched in March of 2018, with the aim to facilitate industrialization, unlock the potential of manufacturing and drive sustainable growth and jobs among other objectives. (Landry Signe 2019).

Servitization is regarded as an organisation innovation which necessitates the change from a manufacturing-oriented culture to a culture that is service-oriented. Manufacturing industries in western and the developed world are now adopting service-oriented models, recognised widely as a process of creating value to a product offering by adding services, servitization has been taken on as a strategy by firms across the globe to attain competitive advantage (Baines & Lightfoot, 2014). Servitization is utilised by manufacturers to accomplish various goals that stem from an array of motivational factors. Multiple viewpoints have been used to examine and research the concepts since its emergence in 1988, this has left several segments of the literature offered thus far in need of further exploration to enhance the knowledge and deepen the understanding in the servitization field. Product service systems a closely related concept to servitization which aims to achieve similar objectives have both been employed as a means of differentiation, diversification, and strategic economic growth. (Baines & Lightfoot, 2014). With the success of both being measured by the successful transformation to a customer-centric service firm from a product-centric manufacturing firm. It can be questioning how this phenomenon of service adoption by manufactures plays into the future of emerging markets manufacturing industries of Africa. How will it affect the development or growth possibly spinning of new forms of business model or would it be a case of leapfrogging as it has been the case with technology on the continent (Pilling, 2018)

## 1.1 Research Gap

An increasing number of emerging markets are set on becoming developed markets, now more than ever servitization is poised to play a significant part in this progress. As these emerging markets increasingly incorporate servitization which has a significant contribution towards becoming service driven economies (Gordon & Gupta, 2003). An increasing interest in research has stemmed from this growing adaptation of servitization leading researchers to investigate and delve deeper into servitization. Conventional servitization literature and topics related to it have primarily been based on western/ developed market. Even so emerging markets as those in Africa, Asia and Latin America exhibit substantial potential with regard to the service sector, which offers significant contribution from a product-service system and servitization perspective (Thawesaengskulthai & Pongpanich, 2016). More so these emerging markets seem to be absent from servitization literature or at the very least not considered in its current state. Thus, rises the inclination to further understand the process of manufacturing firms in emerging markets implementing servitization and how these challenges are addressed in the process of transformation.

Servitization is regarded as an organization innovation which necessitates the transition from a culture that is manufacturing-oriented to a culture that is service-oriented. The

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organizational culture and service orientation of human resource management emerges as factors for the successful servitization transition (Gebauer, 2008). Traditional manufacturers those who are cantered in developed markets have been faced with the challenge of developing and fostering a service culture moving towards a service-oriented mind-set and away from a manufacturing-oriented mind-set. (Oliva & Kallenberg, 2003, p. 163) note that the "transitioning from product manufacturer into service provider constitutes a major managerial challenge". Of which several studies have been made and frameworks developed to overcome the managerial challenges implicated by servitization, with and an investigative study concluding that by organizations involved in servitization adjusting company values and employee behaviour have all increased their service orientation in their corporate culture. (Gebauer et al., 2012)

This thesis therefore seeks to understand the factors influencing organizations in emerging markets to embrace servitization, how organizational culture comes into play and what are the ongoing changes taking place to facilitate the implementation of servitization.

This area being relatively under studied more so at the cross-section of emerging markets, servitization and organizational culture as studies thus far have focused more on developed markets(Baines, Lightfoot, Benedettini, et al., 2009). The gap in the research gap is illustrated in the Figure 1.

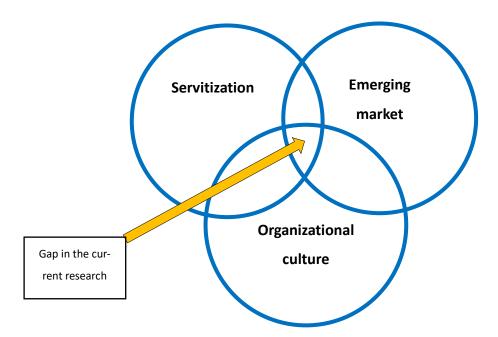


Figure 1: The research gap fulfilled by the thesis.

# 1.2 Research Questions and objectives

Despite of the lack of extensive knowledge in this particular area the thesis takes a step in to the unknown with the aim to bring forth significant empirical and theoretical contributions to the existing literature. Broadening the field of servitization and organizational culture in relation to emerging markets. To guide, ensure a comprehensive literature review and thorough research, the following objectives are to set to:

- Understand the drivers behind servitization for manufacturing firms and resulting benefits in emerging markets (i.e., Kenya).
- Understand the process taken by manufacturing firms in emerging markets (i.e., Kenya) when servitizing.
- Determine the effects of servitization on Organizational culture.

To aid in reaching these objectives the following research questions framed on the basis of existing research accompany these objectives:

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- How manufacturing companies in emerging markets are reacting to servitization trend.
- b- What are the differences of servitizing between emerging and developed markets?
- c- How servitization shapes the organizational culture of the manufacturing firm?

# **1.3** Thesis structure

The structure of the thesis commences with a reviewing of existing literature on servitization where servitization is defined, the thesis describes the levels of servitization as a means of delving deeper into the subject matter creating an in-depth view. This is followed by the discussion on the motivations fuelling servitization. After establishing what servitization is its process is described and what drives organizations to do it this section is summed up by the advantages that organizations gain, and challenges they face whilst incorporating servitization. Finally conclude with a view at service industry in emerging markets.

In the second section of the theoretical framework focus will be on organizational culture also known as corporate culture literature. Firstly, an introduction of culture and some definitions will be made this will be followed by defining organizational culture, elaborating its role in servitization and how it essential in leading to a successful service adoption by manufacturers. The section concludes with a synthesis of the two research fields providing a summary of both fields.

The ensuing third section elaborates on the research methodology, strategy, and the philosophical assumptions made. Moreover, the section describes the selection process for the case and explains the execution of the analysis. The fourth section discusses the results of the research. The fifth and final section concludes the paper by discussing the implications of the study and validity and reliability of the study.

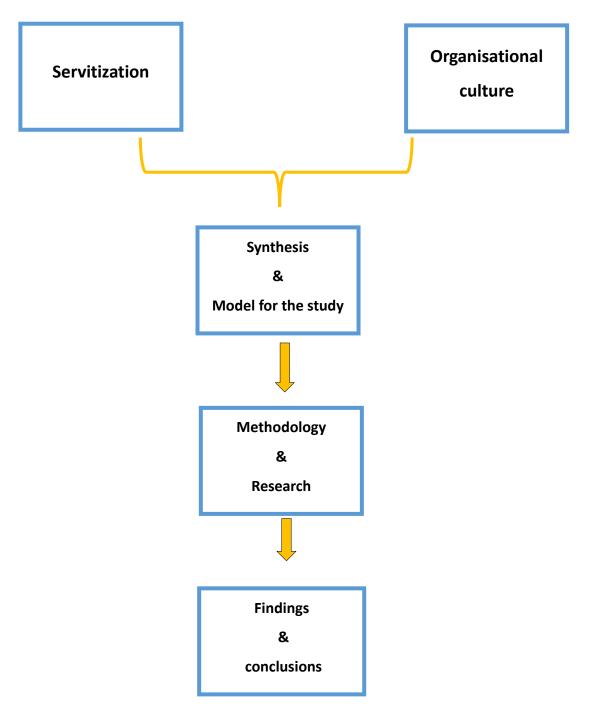


Figure 2: Structure of the thesis

# 2 Literature review

#### 2.1 Servitization

The bundling of services with goods can be traced back to the 1850s (Schmenner, 2009) notes that before this period the mix of manufacturing and service steps in the supply chain had been carried out by different and distinct economic actors however innovations leading up to the latter half of the 19<sup>th</sup> century led straight to servitization innovation of today. The deindustrialization process of developed markets begun in the 1950s, with Levitt (1972) stating that "*everybody is in service*" (p.42). It was not until 1988 when the term "servitization" would emerge as traced back to (Vandermerwe & Rada, 1988) in their work they attribute the driving force behind servitization to deregulation, technology, globalisation, and fierce competitive pressure. They argue that services are taking over the industrial landscape in their paper taking on an upbeat approach on the potential of services in manufacturing. This has become increasingly true with the turn of each decade. In the majority of OECD countries value added by manufacturing as a percentage of GDP stands at below 15 percent today have (Crozet & Milet, 2017)

The financial crisis of 2008 and the preceding recession led manufacturer to search for alternative streams of income this further pushed service integration. In the preceding years World Economic Forum's competitiveness report 2009- 2010 revealed that 40.6% of the 133 nations that were reviewed had a services sector GDP of over 60% with 70% of the nation's having a services sector GDP of over 50% meaning these countries have an economy dominated by services. With the additional growth in variety and complexity of business activities and spread of digitalisation the line between manufacturing and service have increasingly become elusive (Goldhar & Berg, 2010). Manufacturers have proceeded to innovate and create more sophisticated products and services increasingly base whole competitive strategies on service innovation. climbing up the value chain and avoiding competing on cost basis alone (Baines, 2015)

#### 2.1.1 What is Servitization?

The terms service and product are profoundly affixed throughout this paper, the term products as understood by manufacturers refers to a material artifact i.e., tangible, whilst service is as defined by Baines & Lightfoot, 2014 as an offering that is not a product i.e., intangible asset which makes for a complex understanding. For the purpose of this paper service will be referred to as an economic offering that does not result in the transfer of ownership of a tangible asset from the seller to the buyer. Servitization is widely defined in literature the term was conceived by two management scholars Vandermerwe and Rada in 1988 who were writing on "the increasing offering of fuller market packages or 'bundles' of customer focused combination of goods, services, support, selfservice and knowledge in order to add value to core corporate offerings" (Vandermerwe & Rada, 1988, p. 316) Servitization has evidently been described in several other ways with some definitions placing the delivery of the product-based services at the core which in turn has made the distinction between manufacturing and traditional service sector organizations unclear (White et al., 1999) or as "a trend in which manufacturing firms adopt more and more service components in their offerings". (Ren & Gregory, 2007). Table 1 shows the multiple definitions of servitization. Today servitization is generally recognized as the process of adding services to products thus creating value and in developed markets is regarded as being omnipresent in manufacturing companies (Baines, Lightfoot, Benedettini, et al., 2009)

Another comparable process to that of servitization is that of "productization", this process describes the development of the services component to also include a product. For example when you go to the barber shop and the barber not only uses the products while tending to your hair but also sell them to you as a means of increase the profit from the customer's visit. (Harkonen et al., 2015), with both cases resulting in productservice bundle which is a general description for the combination of products and services.

A similar term to that of servitization is "product-service system" this Scandinavian concept is more academic describing firms offering solutions that aim to increase customer satisfaction and market share but also having a parallel objective of decreasing product consumption through alternate use of product use other than through acquisition (Beuren et al., 2013). Product-service system is firmly rooted in sustainability. reduction of environmental impact (Baines et al., 2007) and access-based consumption where it is presented along with its philosophical basis, fostering business models of which customers are able and willing to pay for an item and buy consumption time with the item rather than purchasing and owning the item.

This either being that the customer chooses to do so because of environmental concerns or space limitation or due to the fact they could otherwise not afford it. (Durgee & Colarelli O'Connor, 1995)(Bardhi & Eckhardt, 2012). This slightly deviates the definition of Product-service system from servitization as emphasis is placed upon the 'sale of use' rather than the 'sale of product' (Tukker, 2004) Despite this deviation Baines et al.2007, identifies the link between product-service system and servitization as a combination of integrated services and products that during use create value. Which is why Productservice system is today seen as being encompassed in the theme of servitization.

Author /s	Definition
Vandermerwe and Rada (1988)	Market packages or bundles of customer-focused combination of goods, services, support, self-service, and knowledge
Desmet et al. (2003)	A trend in which manufacturing firms adopt more and more service components in their offerings
Tellus institute (1999)	The emergence of product-based services which blur the dis- tinction between manufacturing and traditional service sector activities.
Verstehen and Van den berg (1999)	Adding extra service components to core products.
Robinson et al. (2002)	An integrated bundle of both goods and services
Ward and Graves (2005)	Increasing the range of services offered by a manufacturer
Lewis et al. (2004)	Any strategy that seeks to change the way in which a product functionality is delivered to its markets
Ren and Gregory (2007)	A change process wherein manufacturing companies embrace service orientation and/or develop more and better services, with the aim to satisfy customer's needs, achieve competitive advantages and enhance firm performance

#### Table 1:Servitization as defined by various scholars (Baines & Lightfoot, 2014)

A new concept has emerged recently that of reversed servitization that is contrary to the traditional unidirectional servitization (Finne et al., 2013). In reversed servitization the management decide to withdraw the service strategy in favour of traditional manufacturing and increasing product dominance, resulting in a situation where companies take a step back from servitization. While it is to be expected that reversed servitization is brought on as a result of unsuccessful servitization this is not entirely the case as Finne et al, (2013) goes on to elaborate on the cases of Xerox and CapgoodCo.

In summary servitization is commonly defined as the addition of services from a customer centric view to existing products to create bundles of offerings whilst Productservice system takes on the addition of services from an environmental view with the aim to use servitization as a means of reducing the firms carbon footprint. Both these processes result in a firms increased profitability and employee numbers (Crozet & Milet, 2017). In practice the most commonly provided service by manufacturers is product delivery, the supply of spare parts.

#### 2.1.2 Process of servitization

T. Baines et al., (2020), have developed the servitization progression model as a means of explaining the process of servitization. This process is mapped out based on four identified stages of Organizational maturity: Exploration, Engagement, Expansion and Exploitation. When a company is in the exploration, they seek to develop their market understanding and investigate how a central part of their growth could be affected by advanced services. During the engagement stage a company shift focus to securing financial and Organizational internal backing. When a company is in the expansion stage effort is placed on creation of a larger market segment, scaling the company's portfolio of advanced service offerings, and developing cultural change initiatives. In the a company's exploitation stage the company has developed a mindset for designing their products paired with the delivery of advanced services and if focus is on the institutionalization of services over its various business units (Baines et al., 2020)

This stages in the process unfold based on a set of five internal and external factors, Organizational readiness, referring to the set of internal conditions that determine whether the process can begin or not (i.e., reliable products, robust processes, etc.); Organizational commitment, centres on the essential capabilities that impede or enable the progression based on internal factors that are common and act across all stages. It is widely recognized as a critical success component for any efforts towards change (Burnes, n.d.; Kotter & Cohen, 2008) for example awareness of competitors, resource availability, management buy-in, etc. Value network positioning, referring to external conditions of the value network structure that influence the progress for example relationships with vendors distributors, and dealers. Technology push, referring to the external digital technologies conditions that influence the progress for example the availability of digital technologies and accessibility of them etc., and customer pull, referring to the external environmental conditions of the of the market that affect progress for example strong relationships, customers requesting services, etc., (Baines et al., 2020) T. Baines et al., 2020, characterizes this process as a business growth model, continuing to note that the progression from one stage to another at a macro level seems unidirectional and linear, yet at each stage servitization progression activities are intuitive, organic, and repetitive. Tipping points punctuate the progression between each macro level stage with activities in the preceding stage needing to generate enough value that the company consents for advancing to the next stage. These tipping points are very significant with progression to the next stage not being guaranteed and if poorly executed may result in the process stalling or failing completely. The progression rate between these stages is determined by the five internal and external forces, of these factors Organizational readiness in the first two stages is apparent whilst the other forces exist in all of the four stages. Figure 2 provides a model for the interplay relationship between the stages and the forces as illustrated by (Baines et al., 2020)

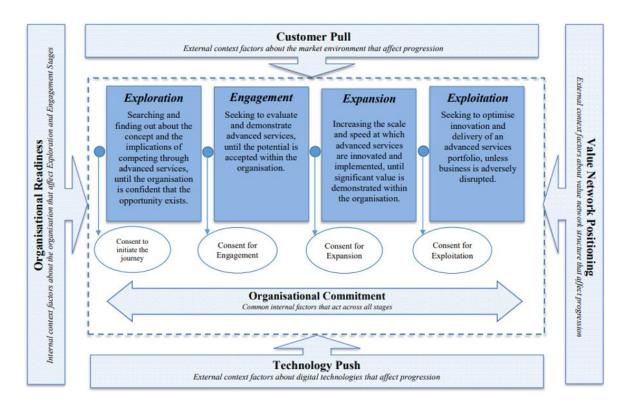


Figure 3: A depiction of the servitization progression model (Baines et al., 2020)

The process of servitization of a typical manufacturing company can therefore be explained by the servitization progression model in the following manner. The initiation of the process is triggered the concepts of advanced services and servitization become aware to the practitioners in the firm, depending on their Organizational commitment they commence exploring and reflecting the concept with relation to and with their firm. Once the firm is has ensured that there are no hindrances from other forces and their organization is sufficiently ready, they approach the management to gain consent to progress to the engagement stage. In this engagement stage there is a test for potential technologies/ technology push and search for the evidence of customer demand or pull and when satisfactory conditions prevail the firm may begin to experiment and pilot new service offerings. At this stage, the value network should also be realigned to be equipped to handle the new service offerings and with a positive outcome the value of servitization is demonstrated to the firm and allows them to move to the next stage. With a positive exploration stage executed the firm commences its expansion stage, here commercial offerings are made from the pilots and experiments with an increase in speed and scale on the implementation and innovation of advanced services. If these is successful then the firm continues developing offerings, scaling them and invests in initiatives that bolster the efficiency and reliability of their service delivery at scale at the final exploitation stage.

#### 2.1.3 Drivers of Servitization

Manufacturers are driven towards servitization for various reasons which vary on the financial situation, customer needs and competition strategies. Literature identifies key motivations of servitization, (Wise & Baumgartner, 2000)Identify the drivers of servitization as power off the distribution channel, attractiveness of downstream business and the importance of customer relationship, with these drivers making use of elements of service to differentiate the manufacturers offering and provide competitive advantage (Gebauer & Friedli, 2005). This competitive advantage gained through service has increased sustainability as it is less visible and is more dependent on labour, which makes it more difficult for competitors to emulate (Gebauer & Friedli, 2005). As compared to other strategies that are focused on technology superiority product innovation or price cutting thus this source of competitive advantage is more sustainable.

These reasons are repeatedly highlighted as the key motivations for manufacturers to servitize throughout literature with different variations (Tether & Bascavusoglu-Moreau, 2012)categorize this reason as aggressive and defensive on the basis of manufacturer seeking to increase revenue or market share. These drivers can further be categorised into four based on their common objectives, competitive strategy, economic strategy, external strategy, end customer relations strategy. Earlier research categorized these drivers as strategic, financial, and marketing(Mathieu, 2001)(Oliva & Kallenberg, 2003) (White et al., 1999) (Gebauer & Friedli, 2005) The table below provides an overview of the reasons considered most important and comparison on common basis of these objectives as written about by various authors in the field.

Competitive Strategy	Economic Strategy	External Strategy	Customer-Relation
			Strategy
Differentiate product from	Increasing revenue genera-	Environmental con-	Understand customer
competition.	tion	cerns	needs
Barriers to competition	Firm profitability	Regulations and gov- ernment standards	Tie in/lock in customers
Opportunity to sell other products and services	Profit on Product	Technology- big data analysis	Key customer demands
			Increase product customi- zation

Authors: (Baines, Lightfoot, Benedettini, et al., 2009; Gebauer et al., 2005; Lertsakthanakun, et al., 2012; Mathe & Shaprio, 1993; Neely, 2013; Olivia & Kallenberg, 2003; Tether & Bascavusoglu-Moreau, 2012)

### Table 2: Categorized drivers of servitization (adapted from Wanrong, 2017)

A precis of these drivers highlights the main motivation to servitize is attributed to the manufacturing company's ability to improve their response to customer needs. As they seek to offer customer-oriented solutions of their products and services so as to realize organizational objectives.

(Neely, 2013) economic strategies example often cited by governments of developed markets to highlight low cost product competitions, as there are numerous sources around the world for these kinds of products as to which manufacturers in markets that are developed with high costs of labour are forced to devise new solutions that differentiate and provides them with sustainable competitive advantage, Servitization is thus a means to transfer the focus to the innovative service solution and away from the product. Manufacturers in fields such as automotive, locomotive, and aerospace with products that have a high-cost product base can gain more returns from service than from sale of new products (Wise & Baumgartner, 2000)This is notwithstanding dropping of product sales as in the case of IBM and general Electric maintaining stables revenue.

Another factor driving manufacturers to servitize is product installed base costs with capital goods manufacturing industry being the main consideration for this factor as the products form the industry have high installed base cost and have long life cycles. As an example, Airbus in 2019, delivered 800 planes that were new whilst they had 10700 operational planes, this provides a ratio of 13:1 for every new plane there are 13 operational planes. This shows a significantly large opportunity for the manufacturer to provide maintenance and service to the aircraft throughout their complete service life of between 30-40 years. With a 4:1 ratio considered by manufacturers for product lifetime value meaning a product will use consumables and spares that are worth four times its initial cost. Thus, taking into consideration manufacturers market share such market opportunities are to be fully taken advantage of.

Customer relations strategy is another driving force of servitization, through which the business ideology of locking in your customer can be used to demonstrate it. Product's sold to consumers at or slightly above the cost of manufacturing in this business model with the main prophets generated from sales of spares or consumable of this product. For example, razors and razor blades or printers and printing ink cartridges. Neely, 2013, also point out that customers increasingly value service contracts that are stable, in such instances a fixed amount is charged to the customer for a given service and as a result

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transfers the cost to the service provider from the customer. Differentiating the product further from the competitors

Environmental concerns our increasingly becoming important drivers of servitization this is handled by you said servitization through which the transfer of ownership over physical asset is done from the customer to the manufacturer. for instance, the use of car sharing schemes DVD rentals, bike rentals and e-scooters. By sharing these assets these products leave a significant low environmental footprint. This goes along with the concept of digitalization of products that what traditionally physically produced e.g., physical books to digital books thus eliminating the need for physical production. Technology is therefore one of the biggest enablers of servitization as it provides for platforms end means to facilitate servitization as well as data to improve on existing means of servitization.

#### 2.1.4 Challenges of Servitization

In 1988 Vandermerwe and Rada presented the servitization theory they acknowledged limitations that affect the servitization process. Viewed from an outsider's perspective the servitization of a manufacturing firm is viewed as the change in the firms offering. However, this is fact the end result of the process as the significant organization change needs to occur so as to achieve this outcome. Over the last few decades several the challenges faced by manufacturers in their servitization process have evolved becoming a common theme in servitization literature. This literature highlights organizational strategy and transformation and service design, as being the three common servitization process challenges. Zhang & Banerji, 2017 identify five distinct constructs for which the barriers of servitization are categorized these are business model, organizational structure, development process, customer management, and risk management. Additionally this study takes into account the shift in Business model and the service & profitability relationship (Barnett et al., 2013; Kohtamäki et al., 2020; Shafer et al., 2005; Visnjic Kastalli & Van Looy, 2013)

#### 2.1.4.1 Organizational structure

This is the formal adoption of a mechanism of management and the allocation of work roles to support the business strategy implementation and control internal activities within a firm (Burgelman & Doz, 2001; Child, 1972). In servitization focus is on the change of the internal structures that support the transformation of a business, the cultural change more specifically the shifting of the organization's cultural mindset from manufacturing oriented to service oriented is viewed as a serious obstacle (Fang et al., 2008; Finne et al., 2013; Kotter & Cohen, 2008; Kowalkowski et al., 2017; Martinez et al., 2010; Oliva & Kallenberg, 2003). As the process of value creation is changed with value now being delivered through bundles. This necessitates good communication with both internal and external customers that is effective in order to make them aware of service offerings being developed (Alghisi & Saccani, 2015; Kinnunen & Turunen, 2012). Employees may have full understanding of product offerings but may lack in the understanding of integrated service offerings thus unable to communicate it effectively (Baines, Lightfoot, Benedettini, et al., 2009). To overcome this then the manufacturer needs to acquire or retain existing service specialist this is key as performance of the service offerings is directly linked to the service personnel the more skilled and proficient the higher the chances of servitization success (Brax, 2005)

#### 2.1.4.2 Shift in Business model

The core business logic is embodied in the business model of business explaining how a company seeks to create, develop, and deliver their value proposition to their customers (Shafer et al., 2005). In the servitization shift the unidirectional value proposition changes to value co-creation this process may be difficult due to the lack of thinking from a customer perspective in the organization leading to poor value proposition design that misalign with customer interest (Barnett et al., 2013; Brax, 2005; Pawar et al., 2009; Vandermerwe & Rada, 1988). Potential changes face resource utilisation when undergoing servitization for example leveraging materials and the workforce across several

departments and reconfiguring departments whilst acquiring new resources to align with them. (Barquet et al., 2013) . Pricing and costing mechanism also need to be realigned of the resulting value created by the services, often servitize price offerings are higher which increase the likelihood of customer disagreements (Barquet et al., 2013)

#### 2.1.4.3 Development process

This refers to the process of actualizing a deliverable from an intangible idea (Cooper & Edgett, 2003). An integrated development process is required for a servitized offering given that the offering is a combination of products and services. Existing development processes for servitized offerings are however are not adequate (Baines, Lightfoot, & Kay, 2009) with tools, techniques and methods needed to facilitate the development process being underdeveloped in servitization (Baines et al., 2007; Tukker, 2015) . In addition, a new batch of performance indicators are required for the integrated solution as the price is based on value creation therefore the deliverables must meet certain criteria throughout the whole process (Baines, Lightfoot, Benedettini, et al., 2009; Martinez et al., 2010). To make sure outputs match their high standards and requirements engaging with customers during the development process is crucial. Requiring the firm to work with the customer after the development increases the difficulty of receiving feedback, as service testing can only be done during consumption (Brax, 2005; Cooper & Edgett, 2003; Demeter & Szász, 2013).

#### 2.1.4.4 Customer management

Through effective interactions and communications, a firm is able to build and maintain a close relationship with customers, this is in effect customer management more specifically in servitization context where B2B customers are the main focus. As solutions buying is a relatively new manufacturers approach customers first with the idea to then explore the requirements as they try to match their customer demands (Johnstone et al., 2009). However, poor understanding of customer needs may occur due to the mismatch of the value designed by the manufacture with the value perceived by the customers (Demeter & Szász, 2013; Kinnunen & Turunen, 2012; Matthyssens & Vandenbempt, 2008; Trkman et al., 2015). The operations team effectiveness heavily influences the performance delivered by the integrated solutions as this is based on human performance, which is unstable, it may be disadvantageous for building long term relationships (Barnett et al., 2013; Homburg et al., 2003; Tukker, 2015). In order for service operators to be efficient it may require customer operational data of which some customers may rejects the information sharing due to commercial confidentiality (Matthyssens & Vandenbempt, 2008)

#### 2.1.4.5 Risk management

The term risk is defined as the likelihood of unexpected consequences or uncertainties such as failure or loss (Harland et al., 2003). Given the investment required to successfully implement servitization (Neely, 2008) investigated the financial implication concluding that the investment needs faced by servitizing companies may easily outweigh the financial returns at the initial stage of business transformation and although servitization offers manufacturers an option to grow their business the results may not always produce the anticipated returns (Gebauer & Friedli, 2005; Matthyssens & Vandenbempt, 2008; Neely, 2008). This process also increases the operational risks as numerous changes trigger multiple uncertainties when the decision is taken to servitize also service provision by a manufacturer does not increase the odds for business survival (Benedettini et al., 2016). Along with financial and operational risk, external risk from macro environmental factors can alter or influence the business landscape (Sharma & Mahajan, 1980)

#### 2.1.4.6 Service & Profitability relationship

Recent studies have showed that there is a non-linear relationship between a manufacturing companies service offerings and financial results. Although manufacturing companies initially experience a steep increase in their profitability upon adopting services, at a certain point profitability does not directly correspond with the addition of more services and as such the manufacturing company has to readjust in order to gain further profit (Visnjic Kastalli & Van Looy, 2013)A similar relationship has been found in recent studies between servitization and digitalization in a manufacturing firms financial performance with a resultant nonlinear U-shaped effect (Kohtamäki et al., 2020). Kohtamäki et al., 2013 also report that there is a nonlinear effect between the sales growth and service offerings with moderation of the resultant relationship being done by network capabilities.

#### 2.1.5 State of service industry in emerging markets

Developing markets experience higher growth rate than developed economies with 60% off the global market constituting of developing economies (J. Gordon & Gupta, 2003). Developed markets such as western states i.e., United Kingdom have approximately 70% off the economic development coming from the service sector as compared to 40- 60% in developing markets Cali et al. (2008). Gordon & Gupta, 2003 study showed that the service sector experiences as significant higher growth rate compared to other sector of the economy a factor which is unique to developing countries. Based on a study carried out by Kongsamut (2001) in which a total of 123 were analysed between 1970 and 1989 results showed that growth in the service sector paired with a simultaneous decline in agriculture sector resulted in the per capita gross domestic product growth

The current view as a result of this, is that for a country to transform from developing country to a developed country the service sector grows as the economy matures there by dominating the gross domestic product thus facilitating the transition. Therefore, the service sector contribution to the overall economic growth can be increased through increased servitization of manufacturing industries increasing the transformation rate of a country from developing to developed. Traditional services, such as transport or tour-ism currently dominate Africa's recorded service flows concurrently non-traditional service exports such as business services are predicted to continue to grow (Dihel, Nora; Goswani, 2016). Balistreri, Rutherford, & Tarr, 2009 notes that the Kenyan service industry is dominated by three key sectors Transportation, Telecommunication and Banking and Insurance sectors with the fourth sector consisting of a variety of industries. (Dihel,

Nora; Goswani, 2016) also note that the potential of service trade is has been discounted by policy makers as they seem intangible and regarded as non-tradeable as opposed to the manufacturing industry. As a result, continued reform needs to take place to ensure success of the servitization industry, with continued reforms Kenya could see 11% rise in service consumption medium term and a long-term gains could be as high as 50%. (Balistreri et al., 2009)

#### 2.2 Organizational Culture

The transformative nature of servitization necessitates the discussion and consideration of Organizational culture in a manufacturing companies process of transition as the shift from technology-led and features-led to service-oriented and value-based. Initial discussion on Organizational culture and analyses emerged in the 1980s, form research on comparative management, particularly on the Japanese management style which resulted in a surge of interest on Organizational culture as a decisive factor of Organizational success (Ouchi, 1981; Pascale & Athos, 1981; Peters and Waterman, 1982)

Scholars have increasingly taken into account and acknowledged the importance of Organizational culture when studying Organizational management matters and servitization, with some arguing that when planning Organizational change Organizational culture should always be considered (Alvesson & Sveningsson, 2008)Culture is a key determinant of strategy, modes of operating, and goals. It defines collective and individual behaviour, thought patterns, and values. The mind-set shift of people and integrating the cultures: of service and of product is part of the organizational culture transformation. As such these elements are interconnected and have to be taken into consideration if company's transformation is to be successful, changing one or a few of them in the Organizational culture is not possible and would not result in the required outcome (Schein, 2009)

Multiple research methods are presented by previous literature providing various means of researching Organizational culture these include cognitive research, comparative research, symbolic research, corporate research, and structural and psychodynamic Organizational culture research (Hofstede, 1991; Kilmann, 1985; Martin & Siehl, 1983; Peters and Waterman;,Schein, 2004). In this section we will take a look at these methods review Organizational culture, issues relating to it and why it is essential to consider when carrying out servitization transformation.

#### 2.2.1 What is organizational Culture?

To understand organizational culture, the underlying premise need to elaborated and define what an organization is and what culture is. The term Organization is viewed from three different system perspectives these are the rational system; that places emphasis on the formal structures of an organization, the natural system; that places more emphasis on interpersonal and informal structures that exist in an organization than the formal structures and the open system; that emphasises Organizations are strongly influenced by their environment.

Organizations are conceived as systems of both internal relationships and as part of a larger system, which is the environments they conduct activities in and rely on for resources in the open system. This system places focus on the relationship and interdependencies between Organizations and environments and there are no clear boundaries between the two. Whilst the natural and rational systems clearly demarcate Organizations and their environments as separate entities taking on an organic and machine-like perspective, respectively. The open systems perspective is therefore organism like in nature with Organizations being adaptive and having interdependent systems that are comprised of multiple interrelated and likely conflicting subsystems that attempt to influence and meet the changing environmental demands (Scott 2002; Baum & Rowley, 2002).

Culture is an ambiguous concept from Kroeber and Kluckhohn (1952) study which analysed the definitions of culture, deducing that culture as a set of values created by humanity. Social sciences researchers characterise this concept with a wide meaning i.e. everything that does not occur naturally although human work creates it is a product of deliberate reflection and human activity (Savard & Mizoguchi, 2019; Torelli & Shavitt, 2010) . Numerous amounts of literature have been published on the subject however they do not assist in defining the concept rather there is a general consensus that the subject matter has a broad construct. From a management point of view Ł. Sułkowski (2012) points out the following terms emerge among the various definitions of culture

Term	Elaboration
Enumeric	Enumerating cultural processes in Organizations.
Normative	Concerning the creation of norms and rules of behaviour for mem- bers of Organizations
Historical	Focusing on continuity and accumulation of cultural achievements in Organizations.
Psychological	Focusing on adaptation and learning processes of Organization members
Genetic	Looking for the sources of culture and interpreting Organizational culture as a product of the cultural context (social or national culture)
Structural	Emphasising the importance of integration of Organizational cul- ture; its holistic, systemic character

#### Table 3: Emerging terms among various definitions of culture. (L. Sułkowski 2012)

Based on these two definitions we come to the infer that the aim or Organizational culture is creating beliefs, simplifications, and tools as a means of ensuring the Organization maintains internal cohesions and is able to respond to external demands. (Bate, 1994) notes that Organizational culture and Organizational strategy are linked intrinsically and interdependent. Thus, when implementing strategic change such as in servitization, cultural issues should be viewed with importance and taken into consideration.

To serve as a basis for this paper for understanding Organizational culture the Edgar Schein 2009 definition is used, in which he defines culture as.

"a pattern of shared tactic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (Schein, 2009, p. 27)

The organizational culture definitions determined by whether they relate to the way of acting or the way of thinking. This variation extends to the various disciplines of science

within which Organizational culture is analysed. A single definition for Organizational culture seems elusive, however three recurrent attributes arise from the varying views of management science, anthropology, psychology, and sociology. The first concept is that in order for something to be cultural it needs to be shared (Schein, 1991) however in her studies Martin (1992, 2002) indicates that this shared view is from an integration-ist perspective. One of three perspective, with the later to being differentiation and fragmentation perspective. The second concept is that Organizational culture is multi layered (Schein 1984, 1990, 1991) and the third is that it is a social occurrence that is affected by history and the environment (Hofstede et al., 1990; Smircich, 1983)

A broad agreement also exists among writers that at the time of an Organizations inception it reflects and responds to industry attributes such as customer requirements and the competitive environment, along with broader community values its employees hold and the behaviours & values of early leaders and founders (Schein 1985; Ott, 1989; G. G. Gordon, 1991). However, what happens after a number of years of operation is debated with scholars taking two distinct camps (scientific rationalists and anthropological stance) based on distinct paradigms and perspectives.

In the anthropological camp, organizations are cultures that describe something that an organization is (Bate, 1994; Smircich, 1983). In this stance group parameters such as concepts, boundaries, language etc... and provide the foundation for assigning power, status, punishment, rewards, and respect both define and circumscribe organizational culture (Schein, 1991). Culture dictates what a group monitors and pays attention to in the external environment and how the group should respond to this environment. Thus, for those with an anthropological stance Bate (1994) notes, organizational strategy and organizational culture are interdependent and intrinsically linked. In this paradigm culture cannot be separated from the organization or be changed or easily manipulated and is not created by leaders or primarily maintained by them. Early leaders' behaviours and beliefs over time have a probability of being translated into assumptions that subsequently guide the organization. These presumptions often take place at a sub-conscious

level which eventually all organization members come to share. This makes them not easily displaced by later leaders with new beliefs and organizational values. However later leaders may make use of rewards or penalties to influence change in their employees behaviour to align them with newly stated values these changes usually takes an extended period time before they influence the deeply seated cultural assumptions that members hold (Szydło, 2020).

In the scientific rationalists camp as described by Bate (1994), organizational culture is one of the many parts of an organization an aspect that is measurable and can be manipulated or changed like other organizational variables i.e., strategy, skills, structure, and employees (Peters & Waterman 1982). It is primarily viewed as a set of beliefs and values leaders articulate in directing the organization, which are then translated into suitable behaviours by employees and reinforced through sanctions and rewards. Thus, the scientific rationalist scholars describe culture in a definable manner "modularity design-and-build activity" associated often with procedures, rewards, and structures (Bate, 1994, p. 11). When discussing organizational culture, they do so from a manager's perspective as opposed to an employee's perspective, often placing emphasis on the leader's role in creation, maintenance, and transformation of culture (Hampden-Turner 1990, pp. 7, 9)

With numerous varying interpretations of Organizational culture, we are cautioned against oversimplify Organizational culture by Edgar Schein (2009: 21) he presents three underpinning levels of Organizational culture (Figure 1): behaviours and artifacts, espoused values, and basic underlying assumptions:

Artifact are presented on the surface and are visible Organizational structures and processes that can be felt, seen, or heard when entering the company e.g., the physical space and the language used. In order to build a common understanding and for people to function as a group (Schein, 2004, 2009) notes that a common language is a mandatory element. This level is easily observable but difficult to reconstruct as it relates to the underlying assumption of culture and cultural members interpretation differs from that of an outside observers'.

Espoused values, beliefs and norms influence the behaviour of Organizations' members, members use these values, beliefs, and norms as a way of depicting the culture themselves. These beliefs and values have gone through a social experience that is shared by the group and have been found to be effective and thus have become non discussable & non-negotiable assumptions. When dealing with problematic or new situations they may also function as a guide.

Basic underlying assumptions are at the deepest level of a culture, these assumptions are unconscious, members of the culture taken them for granted and are manifested through the artifacts and espoused values. Basic underlying assumptions are shared, non-debatable and mutually reinforced they give members of a culture in our case an organization cognitive stability and a sense of safety. Thus, changing basic underlying assumptions is extremely difficult (Schein 2004). Given this they are viewed as relatively stable therefore even though the Organizations methods and employees would change the assumptions would remain the same.

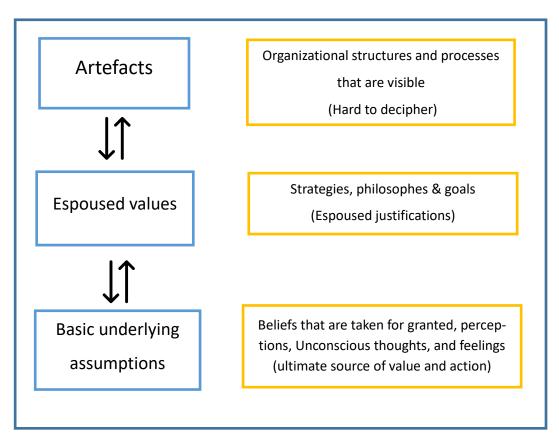


Figure 4: The Three Levels of Culture Schein (2009: 21)

# 2.2.2 Organizational culture management

Different schools of thought have different viewpoints on managing culture and the possibility to effectively alter or influence it. The complexities of managing organizational culture are discussed by Alvesson (2002) where he identifies three views; easily manageable, intertwined with management and to too strong to manage.

• Easily manageable

Five steps of managing culture are presented by Kilmann, (1985) he argues that to avoid a dysfunctional company culture, every company should manage and control their own distinct company culture. With norms stated by Sathe (1985) as most easily controlling culture and a cultures' strength can be measured by how manageable it is. • Intertwined with management.

In contrast Organizational culture is considered to be only partly manageable (Alvesson, 2002; Pfeffer & Salancik, 1978). While other factors determine actions and activities in the organization managers still have an influence on' attitudes, values and perceptions of their employees.

• Too strong to manage.

In this view culture is treated as more of a diagnostic tool that aids in decision making. The values and basic underlying assumptions of Organizational culture are stressed with culture being regarded as occasionally manageable and fairly resistant to change or control (Alvesson, 2002; Schein, 2004)

This research views organizational culture as complex and multi-layered with its process of change believed to take years. In order for effective change to take place then employees ideas and values have to be affected. Kinnunen (2011) notes that managers can manage organizational culture; this is seen as possible even though difficult, as they have the possibility to shape the cultural development and aid in ensuring the organizations objectives are understood and implemented by employees. Managerial activities aimed at implementing this are presented as follows.

#### 2.2.2.1 Employee Recruitment

Employees have values and attitudes that cannot be changed easily and should be considered by managers as they are part of the employee package. Managers need to ensure that they are in line with the Organizational culture. Hofstede et al (1990) notes that it is through the hiring process that member's values enter the organization and when hiring an employee from a certain age, nationality, level of education and sex the employee's values are also hired by the organization which are inter-related with the employee's demographic. Organizations should strive to select employees that are not only competent for the role but also culturally compatible (Brown 1995).

#### 2.2.2.2 Socialization

Socialization of new employees is a process in which they learn the organizations practises rituals, symbols, and heroes (Hofstede et al., 1990). This process can be utilised to strengthen, reorient, or change the organizational culture, if the development programmes and training are designed to deliver a consistent message (Brown, 1995)

#### 2.2.2.3 Communication and Participation

Willcoxson & Millet (2000) state that in order to gain long term results from the change process all organizational members affected by the cultural change should be included in the decision making and culture reconstruction. Additionally, communicating throughout the change process is stressed; all parties involved are made aware of what is required from them, this ensures gaining and maintain all stakeholders support (Kinnunen, 2011). To implement a cultural change participation and multi-functional engagement is required (Levin & Gottlieb, 2009)

## 2.2.2.4 Structures, policies, and resource allocation

All organizational structures have to be aligned with strategy when executing the transition process, thus policies and procedures should already be in place to surpass the challenges that are bound to rise during the change (Kinnunen, 2011). Resource allocation is crucial for management to spur change by providing time, money and also support. To effect change management may have to utilise multiple approaches. (Levin & Gottlieb, 2009)claim that the utilization of both symbolic levers that influence people's perceptions and attitudes, and instrumental levers targeted at how the work is performed, is required to effect change.

#### 2.2.2.5 Leadership and modelling

Heroes embody the critical aspect of their Organizational culture, to place emphasise on their importance of being an example for other employee Hofstede et al (1990) include heroes in their model of Organizational culture. Managers in the organization are viewed as having a reinforcing role in changing the existing values and behaviours of employees. During culture realignment organizational leaders need to act as sponsors (Willcoxson & Millett, 2000)

#### 2.2.2.6 Appraisal systems

Brown (1995) notes that when applying a performance appraisal system, an organization must consider carefully what to appraise, what appraisal methods are used, what kind of time orientation is used, and who conducts the appraisal. Employees can be appraised on the basis of results, behaviours, or traits this can be used to strengthen the desired organizational culture (Kinnunen, 2011). Appraisals should be recognised as a way to increase employee commitment and loyalty within an organization although only the most visible levels organizational culture can be influenced through appraisals and rewards however overtime a permanent change in culture is possible (Brown, 1995)

#### 2.2.3 Measuring organizational culture

There are different views as to how organizational culture can be measured these views are grounded in different schools of thought and philosophical orientations. (Jung et al., 2009) identifies 70 different instruments for measuring Organizational culture. The main instruments etic and emic research methodologies are identified by (Martin, 2002)

#### Etic

The etic research methodology approaches culture through predefined categories, which the researcher studies based on the results of previous studies. Concepts, dimensions, and variables that to be studied within the culture are then predefined by the researcher. After which a questionnaire is developed, and these dimensions and their

relations quantified. This type of research employs a quantitative research method, and a questionnaire is used to measure Organizational culture.

#### Emic

The emic research methodology does not approach culture through predefined categories instead during the research these categories are established. With input from the members of the organization being the basis of these categories. This research employs a qualitative method with observation, discourse analysis etc. Used to measure organizational culture.

To effectively reach research goals these approaches are combined to form a hybrid research method, as in their pure form they are rarely suitable to meet set research objectives. (Janicijevic, 2011). A hybrid mitigates the disadvantages and exploits the advantages of the pure methods, adapting a specific research design to the research object and the researcher's style (Creswell, 2009; Martin, 2002). However, there is no ideal instrument for organizational cultural exploration as the fit depends on the context it is applied in and the reason for use. The next chapter discusses different views on change in organizational cultures that have been presented by previous literature.

#### 2.2.4 Organizational culture change

As is with many aspects of organizational culture there is no singularly agreed upon method for conducting the change of organizational culture. However, at a general level it is agreed that people's values are related with organizational culture change and that this arouses strong opinions in those involved in the process. Culture change is also necessary for an organization to avoid culture-lag and maintain its competitive advantage due to shifts within the business environment or organization (Schein, 2004). Culture lag is described as a situation in which the external environment and the organizational culture no longer match (Bate, 1994) necessitating cultural revaluation. The process of organizational culture change can take years as mentioned earlier this is an aspect that is inherently ("is") part of the organization as opposed to something the organization "has". The underlying assumptions of the culture of the organization offers organization members with cognitive stability, meaning and security thus, displacing these deeply rooted and unconscious assumptions with new Organizational beliefs and values is not an easy task for managers as challenging and questioning these assumptions and triggers defensiveness and anxiety(Schein, 2004; Willcoxson & Millett, 2000). The methods of managing the development of Organizational culture previously discussed may be useful in changing Organizational culture.

The management plays a central role in successful cultural change implementation, (Bate 1994) argues that with culture change there is simultaneous change in structure and strategy, with the equation of strategy and culture change the role of management becomes more evident. Top management is vital as they possess sufficient power to enforce change, to succeed the leadership must be competent and ideally have an outsider perspective with the resources of an insider (Kotter and Heskett 1992). Two aspects for a successful culture change are distinguished by Schein., (2004) these are the management of anxiety that accompanies any relearning process and assessing whether there is genetic potential for new learning. Based on Bate (1994) view that changing culture is changing structure, the scope of the change becomes a key issue, as it is important when beginning to realign Organizational culture with operational strategy to understand the required scope of change. (Levin & Gottlieb, 2009)

The organizational maturity level is to be considered during organizational culture change planning. Schein (2004) argues if an organization is midlife then several subcultures have formed with its diversification and have become embedded in time. Embedding new assumptions in a young growing Organization is easier than a mature organization as the mature organization requires structures and processes to be rethought and perhaps rebuilt. Midlife organizational change may be triggered by failure to achieve the

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company goals due to change in organizational environment or a struggle of power between subcultures Schein (2004).

Organizational assessments of the culture's strength and weakness may aid in identifying aids or hindrances posed by the present culture and subcultures to the proposed cultural changes in midlife Organization. This is why Schein (2009) emphasises its importance, he continues to state that managers should consider means of; maintaining adaptive elements of the current culture and that are related to the organization's success, dealing with various subcultures, and identifying and changing the dysfunctional cultural elements or those that hinder the change process Schein (2009). Levin & Gottlieb (2009) also note that a situation overview that includes role assignment to managers, benchmarking and definition of the preferred Organizational culture is the first step in a culture realignment process. They recommend carrying out a cultural gap audit through interviews, surveys, and observation as a means of identify gaps between the current and the preferred culture.

## 2.3 Synthesis

In this section the two research streams, servitization and organizational culture, presented in the previous sections are combined. A synthesis of these two streams provides a model for examining servitization in emerging markets which is applied in the empirical section of this paper.

The previous literature review section identifies two keys hinderances: building a service-oriented culture and configuring the company to be in line with the new service strategy, after defining a path towards service business and creating a service strategy. Kinnunen (2011) identifies organizational culture and configuration as the challenges with the most impact on determining whether an organization is able to successfully implement a set service strategy or not. As these two dimensions bare the most influence over an organization and are perquisite for organizational challenges such as knowledge management, service offering, servitization phases etc.

This paper makes us of Kinnunen (2011) and Kinnunen & Turunen, (2012) servitization matrix as a basis for the model of the study. This matrix sets the premise for a detailed review of the servitization capability of an organization. Based on the two dimensions of organizational configuration and organizational culture The matrix as seen in figure 6 is used to screen manufacturing- or customer-centric organizational configuration as opposed to product- or service-oriented organizational culture. Enabling the evaluation of an organizational unit's capability to apply servitization.

In the upper left quadrant identified as "Satisfying Product Provider" is characterized by products that are oriented based on a customer centric model and are externally oriented with attention placed on customer relationship management. Services are treated as additional implements as emphasis is placed on manufacturing. A product-oriented or service-oriented product-service-system (PSS) should be considered by SBU when approaching this quadrant (Baines, Lightfoot, Benedettini, et al., 2009; Neely, 2007)

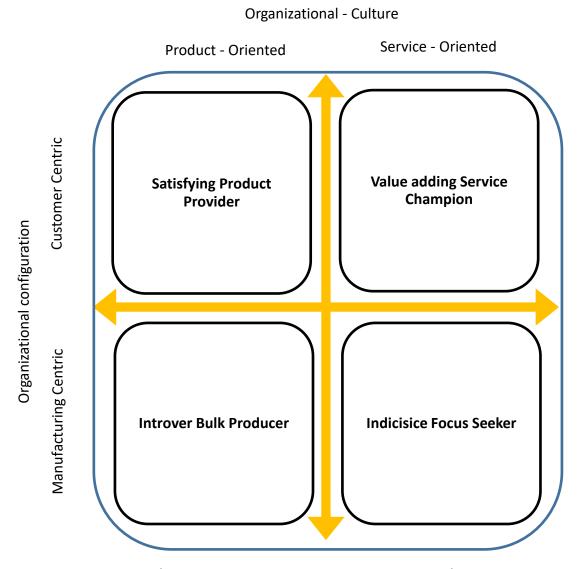


Figure 5: Illustration of (Kinnunen, 2011; Kinnunen & Turunen, 2012) four quarters of servitization matrix used to examine servitization capabilities.

The upper right quadrant identified as "Value-adding Service Champs", is characterized by a strong customer centric model and external focus, that fosters a service-oriented culture. (Kinnunen, 2011; Kinnunen & Turunen, 2012).Value is generated through flexibility customization and variety and as such use-oriented or result-oriented PSS should be considered therefore applying a business model that is relationship-based (Neely, 2007). Consequently, providing the most favourable basis for servitization. The bottom left quadrant identified as "Introvert Bulk Producer" is characterized by a strong manufacturing centric configuration with high internal focus and lack of service adoption or customer interest with the SBU competing on the basis of innovation and standardization (Kinnunen, 2011; Kinnunen & Turunen, 2012). As a result an integration-oriented PSS should be considered through distribution or merchandising, (Baines, Lightfoot, Benedettini, et al., 2009)

The bottom right quadrant identified as "indecisive focus seeker" is characterized by a service and customer relationship promoting culture whilst configured to produce standardized products. This results in internal conflict and indecisive behaviour that causes all the profits gained from the service to be consumed (Kinnunen, 2011; Kinnunen & Turunen, 2012) leading to the service paradox (Gebauer et al., 2005)

Based on this a theoretical lens is derived where emerging topics in organisational configuration; (company structure, job titles & service development, processes & role of technology, customer responsiveness, and facilities), and organisational culture; (number services, role of service and customer, customer relationship, company philosophy and company strategy focus) are combined to draw out the emerging themes that determine the organisations developed servitization practices. Overall based on Kinnunen (2011) and Kinnunen & Turunen, (2012) servitization capability matrix we are able to place and define where the organisation is categorized i.e. Value-adding Service Champs, indecisive focus seeker, Introvert Bulk Producer or Satisfying Product Provider

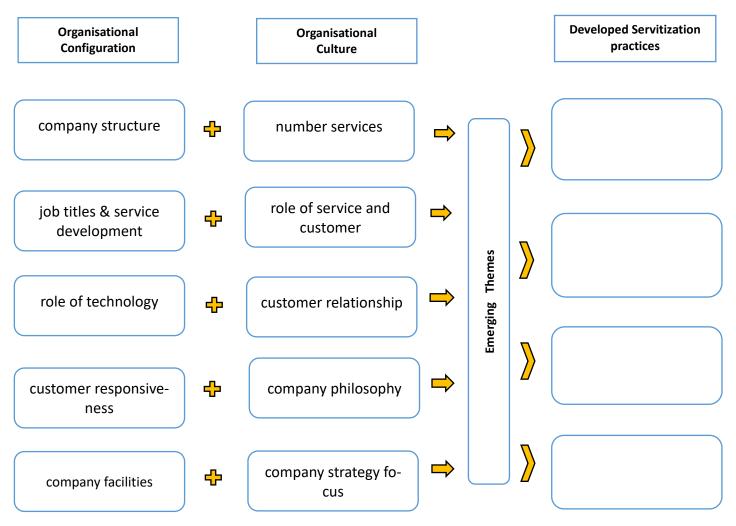


Figure 6: Theoretical lens.

# 3 Methodology

This chapter discusses the methodology choices made in this study by elaborating on the philosophical assumptions, research strategy, research method and justifying the approach taken in the empirical research. Additionally, a detailed description of the data selection, collection, and analysis are made with the chapter concluding with the discussion of the studies validity and reliability.

## 3.1 Philosophical assumptions

Research philosophy is made of beliefs and assumptions that the researcher makes and have an effect on the choice of research strategy, method, and data collection. These assumptions are always present, and it is crucial to recognize them to the best of one's ability to provide a factual backbone for the research. A credible research philosophy results from consistency in assumption which connects all the methodological sections of the research (Saunders et al. 2016: 124–125).

This study is best observed through subjectivist ontology and epistemology given the research objectives. Ontology can be defined as "the nature of reality" and refers to the personal approach to the subject taken by a researcher. Epistemology is concerned with the premise of knowledge and how it is constructed eluding to "how can we know what we know" (Eriksson & Kovalainen 2016: 14–15) and views reality as socially constructed based on social interaction, binding it to its context with several realities existing at the same time. Thus, a single reality does not contain universal facts as different views are held by different people about the reality. Subjectivism also assumes that the researcher is not fully objective as their values affect the data analysis, thus questioning the researcher values and their effect on the analysis is part of the process of analysis (Eriksson & Kovalainen 2016: 14–15; Saunders et al. 2016: 127–130.)

Individual realities and unintentional biases are often formulated by researchers through iterations of interpretations of what they have studied or observed. Along with the tendency of researchers to study subjects that they find appealing, which affects how the research is interpreted and justified (Chowdhury, 2014). The broader research philosophy of this thesis is interpretivism as sociology and subjectivist ontology & epistemology as the perspectives are bound heavily to subjective reality and concepts tightly connected to interpretations, (Chowdhury, 2014).

Theory development is split into three approaches that are Induction, deduction, and abduction. When using deduction, the researcher uses theory as the primary source of knowledge formulating a framework and hypothesis that is then tested in the empirical research proving the hypothesis or disproving it (Saunders et al. 2016: 125–130) In contrast induction uses the empirical material collected in the research and utilises it to formulate a theory based on the findings (Eriksson & Kovalainen 2016: 15; Saunders et al. 2016: 125–130). Abduction combines these two approaches, with the researcher shifting between theory and empirical research in an iterative process (Eriksson & Kovalainen 2016: 15; Saunders et al. 2016: 125–130).

The use of abductive approach is denoted given the nature of this study. As the model used to collect the data is built based on the existing literature which then identifies common themes and patterns that are used to further develop the theory through this empirical research. Thus, this iterative approach offers the most value for this study as well as providing a basis for further studies (Saunders et al. 2016: 144–149.)

#### 3.2 Research Method

Two primary means of data collection exist that is quantitative and qualitative means with qualitative means relying on numerical data whilst qualitative relies on non-numeric data. Considering the nature of this study conducting a qualitative approach is more suitable with a low volume of respondent whose responses provide more context and responsibility to the overall results in terms of validity and reliability. As opposed to a quantitative approach which requires a high volume of respondents to ensure validity, whose responses are restricted to predefined questions (Saunders et al. 2016: 318 – 388).

Qualitative means of data collection can be divided into primary and secondary data with the data including various types such as text, videos, audio, speech, and pictures. Primary data does not exist beforehand, and the researcher collects this data for example through interviews or observation. Secondary data is material that has been collected by someone for instance documents or marketing material (Saunders et al. 2016: 175, 318, 354, 388.)

Semi-structured interviews were the means through which primary data in this research was collected as they provide responses with a clear unifying outline making the results comparable whilst allowing for the possibility to openly discuss the core questions set and the important aspects around them. Through choosing correct wording for each situation and asking to follow up questions the interviewee is able to expound more on the topic potentially providing further insight that may have not been highlighted in the core interview questions. This therefore allows for a conversational tone that is more informal in the interview process. (Eriksson & Kovalainen 2016: 94– 95.),

#### 3.3 Case Selection

The research initially aimed at conducting a single case study basing the study on a company with several years of experiences in manufacturing in Kenya, a sizeable product range and regional if not, national coverage. With a demonstrated history of service integration. Due to the current global pandemic several of the approached manufacturers were unavailable to participate in the study at this time sighting ongoing project and restructuring. Given the limited time frame of the study a different approach was taken choosing to approach several senior managers of whom worked for specific manufacturing companies that fit the studies research criteria and interviewing them on their personal time.

Conducting interviews with managers that are responsible for different key areas offered variation, in order for the results to not only reflect managerial practices that solely focus on a particular set of certain practices. This ensures that developed servitization practices are captured across several organizational echelons.

## 3.4 Data Collection

The primary source of data was collected through semi-structured interviews conducted through one-on-one conversations with different managers, with a few questionnaires answered by respondents. The interviews were conducted virtually through online meeting platforms and voice over internet protocol (VoIP) services, recognising the challenges posed by virtual meeting such as drops in connection, electricity supply or equipment failure. Each participant was requested to have a mobile phone on standby to switch to direct voice calls should there be need to.

The interviews commenced with a description of the research and its domain to ensure the interviewees fully understood the research premise. The interviewees were then asked to elaborate on their daily work tasks and routines to allow for a better understanding of the interviewees daily roles. A dialog-based environment was encouraged with the interviewees by letting them know they could freely ask questions or bring up any relevant topics based on the subject matter. A total of five interviews were carried over online meetings and VoIP calls. By starting the interviews in this manner, it allowed for a less formal session in which the interviewees clearly understood the research subject and the interviewer to understand their professional domain.

As mentioned, a few of the interviews reached out to were unable to find the time to schedule the interviews and requested the possibility to participate via questionnaire.

To overcome this hurdle the interview questions were typed into a google forms questionnaire document and sent to the recipients which received two responses. With a 5day period given to answer and respond to the study questions which was followed up by a short VoIP call to discuss their responses. The interviewees and questionnaires were conducted during September and October of 2021

#### 3.5 Data Analysis

Analysis of the data is done through relational content analysis through which the gathered data is observed and conceptualized in relation to the context of the research (Weber, 1990). Conceptual content analysis applies semantic analysis whereby first the concepts are first identified through condensation, then the data is coded into meaning units (Weber, 1990; Mills, Durepos & Wiebe 2010). Which are then further categorized into groups from which themes can be formed.

The emerging groups are examined by organisational configuration; (company structure, job titles & service development, processes & role of technology, customer responsiveness, and facilities), and organisational culture; (number services, role of service and customer, customer relationship, continuation in philosophy and company strategy focus) (Eskola & Suoranta, 2008). Then reviewed on two levels that relate to the emerging market and the company. This means of data analysis allows for the case to be observed as its own entity with different practices through which qualitative means is the best form of analysis

#### 3.6 Validity and reliability

Reliability refers to the capability of the research to be repeated whilst validity of a research considers whether the research measures what it was intended to measure and considers if the data analysis is accurate (Saunders et al. 2016: 202–203.) Saunders er al. (2016: 398– 399) points out an issue with semi structured interviews in that they are not meant to be repeated as the data only repeats at the time of its collection and given some time the results may differ. To overcome this, this study details the data collection and analysis process with the approach being describes to the extent it can be anonymously presented, repeated, and the connection between the theory and empirical sections easily discernible (Saunder et al. 2016: 202–203, 398–399; Silverman 2001: 231.)

# 4 Findings

In this section the findings of the empirical study are presented in a structured manner. First, with a presentation of the companies after which the results are reviewed by drawing emerging themes from organisation configuration and culture. Which are then combined and filled out in the theoretical in chapter 2.3 to determine the key findings as per the research agenda.

## 4.1 Case presentation

The participants in the research study are part of three organizations; a medium sized animal feed manufacturer (company A), who serve both individual customers and businesses. A plastics manufacturer (company B), who primarily serve businesses with limited offering for individuals with. And (company C), a manufacturer of energy efficient fossil fuel cooking appliances that serve both individual customers and businesses with national outreach in Kenya and operations in some sub-Saharan Africa countries. All the companies have operated for over eight years within their respective industries and are well established.

## 4.2 Emerging market findings

#### 4.2.1 Motivations to servitize

A majority of the interviewees identified a service solution mix of products and services as the next step in the future development of their companies, as they estimated that products and services would become increasingly important in operations. Indicating the recognitions of the potential of services business among the interviewees and with the company, as services are viewed as reinforcing the company's operating strategy and a fit with the mission and vision. The drivers to servitize identified by the respondents could similarly be categorized as per the table 2 in chapter 2.1.2 in four groups these being Economic, Strategic, Customer-Oriented and Technology. Grouping and comparing these drivers allows for the identification of the category that has most influence in a manufacturers' decision in Kenya to servitize. Table 5 compiles these motivations

Drivers	Competitive Strategy	Economic Strategy	External Strategy	Customer-Relation Strategy
	Differentiate product from competition	Revenue generation	Knowledge availability	Understanding the customer needs
	Chance to sell more	Diversification	Change in value chains	Lock in customers
	Response to competition	Reduction in product cost	Technology availability	Customer demands
		Profitability		Increase product customization
				To satisfy customers

#### Table 4: Reason for servitizing as identified by interviewees

From the research we can see that the stated benefit gained from servitization by the interviews are similar with the reasons service literature has identified; strengthening the company's position in the market as well as the company relationship with its customers along with increasing product sales differentiating as discussed in section 2.1.3.

Servitization literature reviewed in the theoretical section highlights the key motivators to servitize with Table 3 summarising and categorizing them in relation to their common intent. Comparing our findings in Table 5 with Table 3 we can see that customer related drivers are the predominant factors leading manufacturers towards service adoption. Similarly economic motivators come in second in importance as is highlighted in the literature based on developed markets. Differences between the literature and the research findings emerge when comparing the competitive strategy motivators, literature highlights "Differentiation" as one of the key important motivations under this category (Baines, Lightfoot, & Kay, 2009). However, and "Opportunities to sell other products" and services and "Barriers to competition" (Baines et al., 2007; Baines, Lightfoot, & Kay, 2009) are not found to be competitive strategy motivators in the research findings,

Technology and knowledge availability are considered to be a key motivator of service adoption as without these two factors manufacturing companies in emerging markets lack the means and know how to successfully implement a servitization. This is however not highlighted to the same significance in existing literature indicating a fundamental difference between the developed and emerging markets. From these findings we can deduce that manufacturing firms in emerging markets are to a great extent limited by the growth of their respective market when servitizing. Servitization is however viewed as vital and supports the global notion of transformation for manufacturers towards a service-oriented firm.

#### 4.2.2 Challenges in servitization

Several challenges were identified by the interviewees as barriers towards servitization with the first being employment related challenges. They have faced difficulty recruiting employees with experience in servitization or with the exposure to product and servicerelated business necessary to transition to a more service-oriented business. Employing employees with the correct competencies to facilitate the transition has been hurdle as different competencies are required for service delivery compared to product delivery. More employees are also required to ensure that the services are effectively delivered to the customers whilst regular training is required to maintain the level of service delivery and ensure consistent performance "We have an industrywide shortage we can't seem to find qualified people and for the few that are there it costs an arm and a leg to recruit them. This ends up increasing product costs"

The second challenge brought up the interviewees in creating a service strategy, which primarily is viewed as vital by scholars in service literature. Most of the implemented services had been developed on ad-hoc basis without a centralised structured service strategy in place.

"The services we offer to our customers have primarily been as a result of trying to increase revenue and at the same time make it easier for our customers to buy our products"

Through implementing a companywide service strategy, it can be perceived that the interviewees could be able to assert the position and status of service within their company. This would lead to the companies creating a proper structure and allocating the necessary resources towards service implementation and execution as opposed to the reactive ad-hoc approach currently taking place.

Interviewees also brought up organisational culture procedural and financial challenges. Cultural related challenges can be linked to insufficient understanding of service concepts by the employees of the manufacturing company. This creates hesitancy in the shift from product-oriented culture as the employees are not able to acknowledge the potential of service business.

"Convincing some people has not been easy as some consider spending money on service less valuable and that the resources used could be put into product development instead"

"Selling the solution requires a total shift in mindset from product sales mindset and this requires that key personnel have enough training and a clear understanding... its takes time for this shift in attitude"

Interviewees stated that procedures challenges arise with the adoption of services as the companies have to adapt their processes, practices and functions to a service or half service-based approach. Organizational structure, systems, contracts, and support of product customization are examples of issues brought up by the interviewees signalling the changes needed in the business processes

"It's a different way of doing business and we have to take into account how we conduct our daily activities and how our processes can support it"

Some interviewees mentioned the customer financial implications associated with acquiring the necessary resource to facilitate the servitization of the firm.

To a great extent the challenges that the interviewees expressed are aligned with issues stated in service literature and discussed in the literature review section. These challenges can be categorized to form a general analysis of the challenges brought up by the interviewees and the associated number of times brought up depicting the most common challenge. This is depicted in table 6 below.

Challenges	External	Procedure	Financial	Organisational
	Lack of skilled experts to recruit	Processes for customi- zation of products	Expenses associated with service implementation	Lack of service strategy
	External company communication	Change of business sys- tems		Adoption of service culture
		Contractual agreements		Required service delivery competencies

#### Table 5: Servitizing challenges as identified by interviewees

The challenges identified in the research are to a great extent similar to those identified in servitization literature. The need for customisation, special competencies for service delivery and service systems as element of service design described in service literature are identifiable in the research findings. (Mathieu, 2001; Oliva & Kallenberg, 2003). These present themselves in the form of procedural and employment related challenges in this study. With the growing nature of an emerging market there is a lack of sufficient individuals with expertise in the service domain, which necessitates training individuals on service delivery and technology to ensure successful servitization transformation. This also resultant effect on the culture and structure of the organization (Gebauer et al., 2005; Miller et al., 2002)

#### 4.2.3 Effects of Servitization

The outcomes depict the effects that have resulted from the servitization process that and can be a learning point in what to expect from implementing a servitization strategy. When questioned about the outcomes the interviewees identified the positive financial performance gained as a result of the service sales &product sales and the achieving competitive advantage, these are also key motivators for servitization implementation by firms. Ren & Gregory., 2007 state these factors in their definition of servitization with the aim to satisfy customer needs. The increase in customer satisfaction and acceptance ties into the customer management strategy as a key driver of servitization. This indicates a positive outcome from the servitization in a bid to attain customer satisfaction (Johnstone et al., 2009).

Service and product sales effects contribute towards the profitability of the manufacturing companies, which offers evidence on the positive impact of the economic strategies that Table 1 mentions.

The interviewees point out to the substantial strategic changes that take place with organisational and cultural changes. Dubruc et al., 2014 however notes that sufficient time should be provided to diffuse the change from strategic level to operational level in the transformation to service-oriented culture. Along with the efficient resource use, Implementation of easier contact systems for customers, and increased necessity of services these are effects that each company can respectively connect to the specific challenges and motivations.

Servitization is noted to have several challenges by the case companies however no negative effects of servitization such as the service paradox in manufacturing a scenario, in which the growth of services fails to reach their target due to rising cost and insufficient returns. (Gebauer & Friedli, 2005) are discussed with the participants having a positive outlook on servitization. Evidently there is a risk in servitizing that is seemingly overlooked or may not be well understood.

Employment which is identified a key challenge towards servitization is an also a significant outcome of the process. In the bid to servitize firms have initiated employment of personnel deemed to possess the desired competencies to fulfil and successfully implement services. This process has led to increased employment opportunities with human resource systems adapting to accommodate the flow of personnel

## 4.3 Findings at the company Level

#### 4.3.1 Company A

From the Company A's it is derived that the company can be viewed as a product provider with services perceived as a reactional means to dealing with customer issues related to product sale and fulfilling customer needs. Service definition is vague in the company with everyday operations given as service examples.

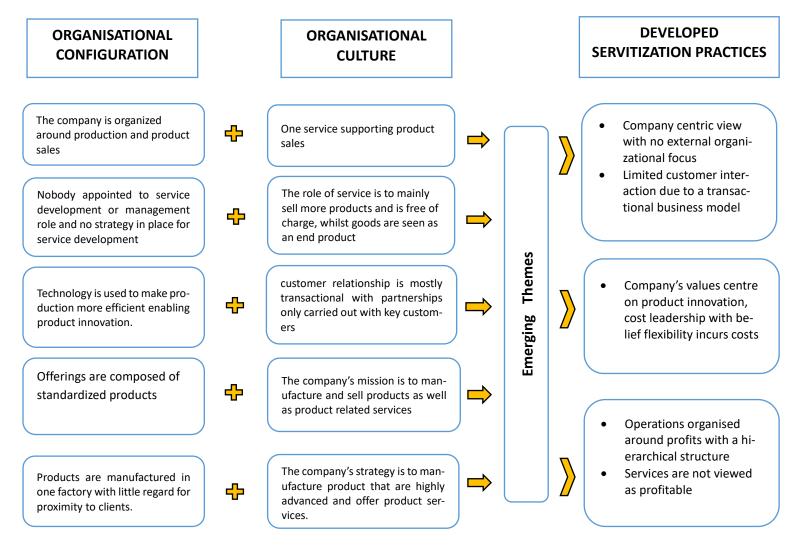
"... we usually try to offer some services usually after the customer has ordered product and generally regard this as after sales services" The company's operations were viewed by the interviewees to be product sales oriented with product solution occasionally being offered to specific partner customers. The performance of the company is measured primarily through evaluation of product quality and how well they match the specifications. Company A's can seemingly be categorized in the exploration stage in their process of servitization with little organizational readiness and or commitment to servitize (Baines et al., 2020; Burnes, n.d.; Kotter & Cohen, 2008)

"...in situation where a customer needs an out of the ordinary order but if there is enough quantity to warrant the order then we will make the customized order"

"When the customer commends our product quality then we know we have done well"

The company mission is regarded as being a provider of product solution that are made of high-quality ingredients and services that relate to the product. The products superiority provides the competitive edge in the market. The company uses traditional sales channels and distributors making value added based pricing a challenge. As is identified in previous literature the company is seeking to develop their market understanding and investigate how a central part of their growth could be affected by offering services.

The importance of service is acknowledged by the interviewees and its relative need in the future as customer needs become increasingly complex and require more product related service. The company culture can therefore be derived as product oriented as services and customers play a minor role in the operations. Organizational culture change in company A is viewed as difficult given the companies maturing at Schein., 2004 notes mature organization requires structures and processes to be rethought and perhaps rebuilt in order to facilitate cultural shift. Based on the interviewees description the companies organizational configuration is centred around product and product sales. The company does not have a service strategy in place, solely offers solutions based on standardised products even through customer knowledge is deemed significant and there is nobody assigned to service management. Technology utilization in production innovation is recognised as important. Based on this the figure 8 is filled out with the derived findings.





#### 4.3.2 Company B

In company B the idea of service is not easily explainable by the participants based on everyday activities. The company has relatively few services that support product sales and only one service-based product that the customer pays for.

#### "Services are means primarily to elongate the life of our products"

The interviewees described their operations as consisting primarily of product sales with relationships fostered only with key customers. Services and the customers have a minimal role to play in the company's operations. Company B's can seemingly be categorized in the engagement stage in their process of servitization (Baines et al., 2020)

Performance is measured through the ability to deliver on the promises made on the delivery, quality, quantity, functionality etc.... of the product to the customer, this ensures that the company maintains its relationships with its clients and brand image in its operational market. The interviewees regard the company mission as that of serving the customer. A product service mix that would reveal the value gained by the customer was seen to have the potential to be highly beneficial to the company.

The company delivers additional value through operations that are manufacturing centric such as quick delivery, product quality and production flexibility. These benefits reached by using company B's products are designed to deliver value to their customers. High quality products and solutions are valued in the company with future competitiveness in the market based on product services with integrated solution offerings identified as a means to achieve differentiation within the market. The company's organizational culture is therefore primarily product oriented however the company's organizational culture change could be triggered by the opposing product and service-oriented culture as stated by (Schien., 2004) given the midlife maturity level. Based on the interviewees description the companies organizational configuration is centred around regions and customer segments. The company does not have a service strategy in place, nobody is assigned to service only technical support and production development. This unstructured service configuration does not allow for the implementation of long-term service change as the organizational communication through the change process is a key determinant of success as all members affected by the change should be informed and included in the decision making process gaining long term results then the multi-functional engagement (Levin & Gottlieb, 2009)

Technology is used to gain production efficiency and is viewed as an enabler of innovation. However, customer knowledge is considered to form the basis of designing a solution. Service business was regarded as important however it was not seen as easily implemented as part of the company operations. Based on this the figure 9 is filled out with the derived findings.

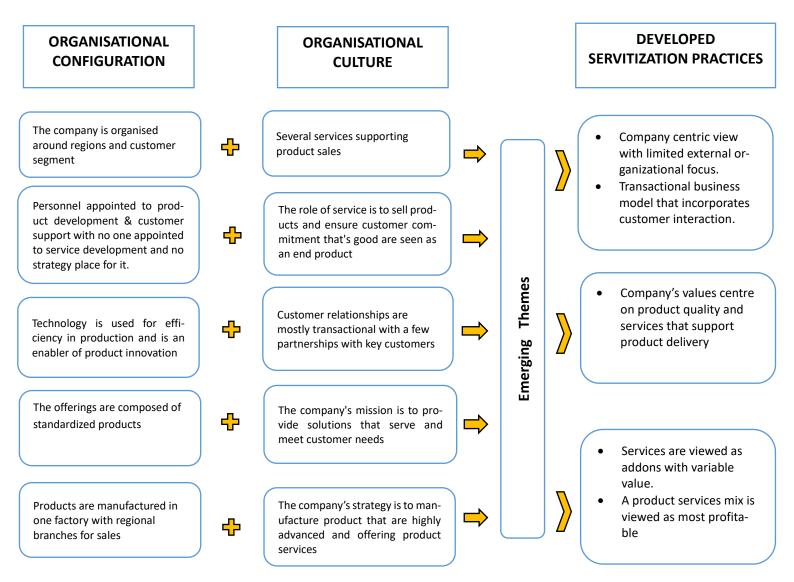


Figure 8: Company B theoretical lens results

#### 4.3.3 Company C

Company C interviewees positioned the company between a service provider and products provider. The company offers several products to its customers along with services products and services that are offered for free to increase the number of sold products. Company B's can seemingly be categorized in the expansion stage in their process of servitization (Baines et al., 2020) "If the service is not too costly then It is valuable for us to incorporate it as it ensures then our customers are happier. Things such as customer service play a big role in customers coming back or recommending us"

Given the niche market in which the company operates in, the company has to take into consideration the needs of some of their clients and customize their products accordingly. Therefore, some of the solutions offered by the company are a result of studying customer challenges, co-development, or feedback from their clients. Although the company was yet to officially enter into a customer partnership relationship they were seen as actively engaging in said activities.

"We don't offer our products as a solution, but we build our product as a solution this is in our design strategy"

The company primarily measures performance based on product functionality this shows that the company does not have a strong oriented service culture. A proper appraisals structure would allow for the employees to be appraised on the basis of results, behaviours, or traits strengthening the desired organizational service culture (Kinnunen, 2011).

The customer promise was viewed as that of delivering value through functionality by offering unique solutions and product that serve the customers' needs. With the company's future market competitiveness dependent on the company's wide range of products and the related services. From this we can deduce company C's strategy as that of placing emphasis on customer partnership building and developing the company's offerings through a customer driven approach.

"In every product group we have different competitors mostly from cheap imports, but nobody is offering the same product as ours " Based on the interviewees description the companies organizational configuration is organised partly according to customer segments and partly by production sites. The company does not have a dedicated person overseeing service development although the solutions are created when a customer need arises. The interviewees view technology as an enabler of innovation and the foundation to which the company offers integrated customer solutions. They perceived the service development strategy as important even though they did not have on and saw this as something that would require more resources to form. Based on this the figure 10 is filled out with the derived findings.

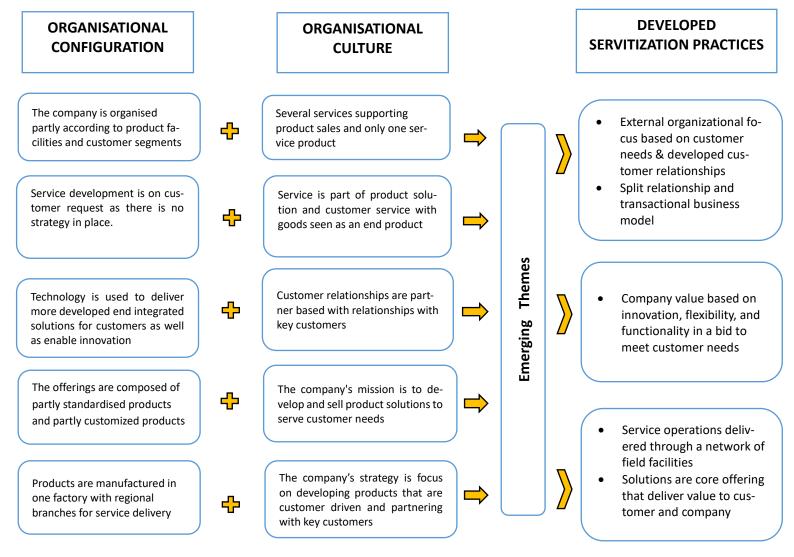


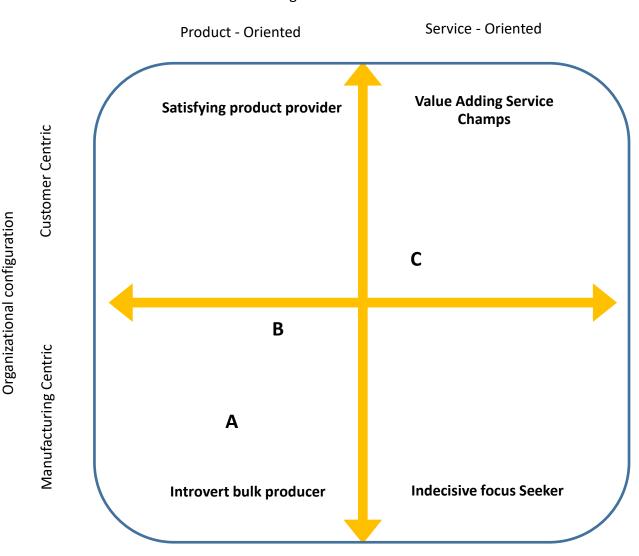
Figure 9: Company C theoretical lens results

## 4.4 Synthesis

Company A has a product-oriented culture and is heavily centred on manufacturing with its focus revolving around the manufacturing and selling of their products. With the employees lacking in the understanding of integrated service offerings which as stated by (Baines, Lightfoot, Benedettini, et al., 2009) makes them unable to communicate any service offerings effectively. In addition, the company has a structure that does not support the development of service business. Thus company A is positioned in the bottom left quadrant of (Kinnunen, 2011; Kinnunen & Turunen, 2012) servitization matrix as an introvert bulk producer. Given the nature of the animal feed products manufactured by the company it may be challenging to develop services to support the products. However, the company could take initiative to servitize by interacting with customers to identify their role in their processes and gain their contribution.

Company B has more a manufacturing centric than customer centric configuration this is due to the fact that customer knowledge is predominantly used to sell and manufacture products. This positions the company primarily as an introvert bulk producer but is closer to the top left quadrant as a satisfying product provider. Utilising customer knowledge has allowed the company B to align with customer interest ensuring a strong value proposition design. To facilitate the servitization of the company it would require a shift from value proposition to value co-creation, utilising customer input on their operations using that to innovate their product and service offerings. (Barnett et al., 2013; Brax, 2005; Pawar et al., 2009; Vandermerwe & Rada, 1988). Pricing and costing mechanism also need to be realigned of the resulting value created by the services (Barquet et al., 2013) This would possibly maintain the focus on products whilst moving the company to a more customer centric configuration.

Company C has a more customer centric than manufacturing centric configuration, this is due to the company's operations being relatively externally oriented. Through interactions and communications the firm has to a degree been able to build and maintain a relationship with customers, allowing for the company to match customer demand (Johnstone et al., 2009) and make them aware of service offerings (Alghisi & Saccani, 2015; Kinnunen & Turunen, 2012). The accompanying company structure is configured slightly more towards solution offering with the company partially adopting an integrated development process for their services and products. (Baines, Lightfoot, & Kay, 2009) This therefore positions the company in the top right quadrant as a value adding service champ. To facilitate further degree of servitization, the company will need to further integrate the development process and take service into consideration when measuring performance and employ and retain people to service specialist whilst utilising technology to further develop their solution offering (Brax, 2005)



**Organizational - Culture** 

Figure 10: Servitization positioning of companies

The three companies operate in different markets and by cross examining the responses the similarities and the differences become more apparent with regard to the whole emerging market. The interviewees responded to market trends and had realized that some level of service provision would be required on their part to stay competitive within their respective industry. Although this revelation had not yet led to an open discussion and creation of a service strategy in the companies. The interviewees were aware of the realities of the manufacturing industry that require heavy investment and selling a certain amount of product to remain in business.

Lack of a service strategy has led to slow service business development as resources aren't allocated to this area whilst facing resistance from peers who are unresponsive to service business due to fear of that traditional manufacturing would be phased out. A companywide service strategy and understanding of service operations would see the companies employees view service as a value generator and not a competitor to manufacturing

The capabilities the companies have to servitize in the case emerging market based on the gathered research is low, as only one company is found to be actively engaged in the servitization practices as a value adding service champ. This shows a low level of servitization of manufacturing companies within the country. Although the value of service is recognised steps to servitize have not been widely adopted compared to manufacturing companies in developed markets. Business leaders can gain insight from this into how they can change, develop, or create their service strategy in an emerging market. Posing the key question of whether the services are developed inhouse or will it require outside knowledge to ensure sufficient knowledge and resources are allocated in implementing a successful service strategy. It is also important to note that servitization cannot be generalized and requires different approach and actions from each company.

# 5 Conclusion

#### 5.1 Theoretical implications

Manufacturers are increasingly considering servitization due to the rise in competitionbased pricing. By adding services to their offerings, it enables manufacturing companies to compete on the basis of value as opposed to cost-based competition. Servitization is therefore seen as a strategic change that requires several internal shifts in order to be implemented successfully. Previous literature has examined this phenomenon from a developed markets manufacturers approach with little to no focus on emerging market manufacturers. The goal of this study has been to examine manufacturers in emerging markets, asses their servitization capabilities in a bid to understand the level of servitization in emerging markets. describe the degree of sensitization on a scale of low to high with two intermediate levels based on the customer-manufacturer/supplier interface (Martinez et al., 2010). Through this process the challenges and motivation for servitization of manufacturing firms in emerging is highlighted.

The findings reveal that economic and customer-based motivations are the key drivers of servitization withing the researched market. These drivers have been found to be primarily similar to servitization drivers in existing literature. From the findings we can categorize theses reasons as defensive on the basis of manufacturers motivations mostly seeking to increase their market share (Tether & Bascavusoglu-Moreau, 2012) The primarily challenges facing servitizing companies in emerging markets was however found to be unique with employment related challenge playing a key role due to the lack of service competencies. Employment and financial gain were the significant effect of servitization which are highlighted in previous literature with the latter being reported as the most important as substantial financial gain is seen as a successful indicator in the servitization process in an emerging market.

Introvert bulk producers represent the majority of manufacturers in this study this companies represent the stereotype stereotypical manufacturer who have a manufacturing centric configuration, are product oriented and concentrate solely on internal manufacturing operations. Our case companies A & B although primarily Introvert bulk producers they have varying degree of servitization tendencies taking interest in their customer service group and potential service development. Contrary to the transactional business model that does not have appreciation for service (Baines, Lightfoot, Benedettini, et al., 2009; Nuutinen & Lappalainen, 2012). This shows that the companies are willing and able to servitize but have not taken sufficient initiative to be categorised otherwise. We can therefore conclude that majority of the Kenyan manufacturing companies are conversant with the servitization trend and capable of instituting service-based operations in their organizations. With the initiate falling upon the management to create and commit to servitization strategy irrespective of the industry their companies are in.

The study enriches current literature by illuminating on the servitization process and strategy taken by manufacturing companies in emerging markets. By providing evidence of service integration in several industries, outlook on the national level of servitization and a brief idea of how manufacturing companies in emerging markets understand the strategy of servitization. Several similarities between emerging and developed market companies arise with distinct differences are pointed out in the study. This research broadens the scope on existing servitization literature to reveal the current state and level of servitization in emerging markets. The provided theoretical lenses can be used to determine developed servitization capabilities in manufacturing companies. Paired with (Kinnunen, 2011; Kinnunen & Turunen, 2012) servitization matrix assessing the degree of servitization across several manufacturing industries in a region or country is made possible.

#### 5.2 Managerial implications

The concept of servitization has been considered elusive as manufacturing companies have traditionally viewed services as a necessity offered to customers that is unprofitable and only serves as a means of generating more product sales. The increase in competition and decreased product sales is leading to manufacturing companies in emerging markets to consider the potential of service business.

Managers can learn from the expected challenges highlighted in this study to prepare their organisations to overcome the hurdles of transitioning to a more service-oriented business. Training and recruiting employees for service delivery in advance, instituting recruitment systems that foster service delivery and examining knowledge and technology availability that support the service delivery should be a carefully investigated whilst considering the transition with the employment related challenges playing a principal role in determining success emerging markets as highlighted in this study.

Whilst taking into consideration the internal company changes that are required so as to increase the rate of success of servitization and exploit the potential benefits. It is therefore necessary for management to define a service strategy, allocate the necessary resources towards the process and define clear service business goals that their team can aim for. It is also key to assign a person to the role of service development to steer the process and take responsibility for its continued development.

The implementation process of servitization remains fairly vague considering the amount of attention it has received in recent years. It is therefore important for manager of a manufacturing company to assess their current situation and determine their strategic motivations to servitize in order to identify the degree of change that is required and the servitization gaps. Through this situational analysis managers can consider this the prerequisite for initiating the implementation process of servitization.

#### **5.3** Suggestions for further research

This study was conducted with managers representing unnamed companies more detailed information could be retrieved when replicating this study with companies actively participating in the study providing greater organizational context. This would provide the necessary provisions for a key area that would offer further perspective into the actions, interpretation, and decision making of the organizations members and the management that is organizational identity. Allowing for better comprehension of company practices and its effect on the organizational change process (Lin, 2004).

The project scope could be widened with participants representing other manufacturing industries in Kenya such as textile, cement, steel, and food industries this would require more resources to execute but would provide a detailed perspective of each industry and wholistic view of the servitization in the emerging market.

## 5.4 Limitations

The study's primary limitation was the limited co-operation with the participants case companies due to the COVID-19 pandemic. Which caused lack of time and resources on their part, given the pressure the organizations are facing. Full cooperation from the case companies would have served the study better as secondary sources such as company records could be utilised to draw more conclusive results. Contacting management officials and eliciting interest in the participants in this study and companies they represent makes it difficult to replicate the study without fully knowing the context of the participant although given the premise of the study it is understandable that they choose to be unnamed. Also, a larger participant pool would have served this study better offering a more elaborated view from multiple industries carrying out a quantitative analysis (Brown, 1995)

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# Appendices

# **Appendix 1. Interview questions**

- 1. Background questions
  - Your background and work history: in which positions have you worked at company.
  - What is your position at the moment?
- 2. Service, services, solutions
  - Would you see Company as a solution provider, a service provider, or an equipment/product provider?
    - Why so?
  - How about in the future, where would you like to see company?
  - What kind of changes would enable company to gain a solution provider's position in the market?
    - Areas where Company excels.
    - Areas for improvement
- 3. Current situation in services
  - What kind of product and services does company offer its customers?
    - Are there services that are given away for free?
  - What kind of service have you considered offering in the future?
  - What were the drivers and motivations behind these services?
- 4. Strengths and weaknesses in service business
  - What would you see as Company's strengths (in services or otherwise)?
  - What kind of services related challenges does Company have?
    - What are the most critical challenges?
  - What do you see as solutions to these problems?

## 5. Competition

• How did the competition change with servitization and what it was like before in this industry?

## 6. Organizational resources

- How is the service development organized at the moment?
- What kind of knowledge and competence does the service business require?
  - Do you think Company has enough of these (knowledge/competence)?
- How about other resources?
  - Facilities
  - Equipment
- What factors are key when transitioning into service business and while in service business?
- How did your company's culture shift during the servitization process?

#### 7. Organizational configuration

- How Is your organization structured?
- Do you have dedicated personnel appointed to service development?
- Does Company have a partner strategy on services?
- 8. Future
  - Could you name three most critical challenges & opportunities that Company will face in the near future (in service business in particular)
  - Do you have any ideas how to handle these?