Improving Customer Service through FMCG manufacturing firms in Gauteng: A servitization approach

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Declaration

I **Jonas Mathi Mathabatha** (Student number: **1835911**) am a student registered for the degree of Master of Science Industrial Engineering in the academic year **2018 -2019**

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Abstract

This paper recognizes how FMCG manufacturing firms in Gauteng, deliver the best customer service in moving from product centric to service oriented. The cross-functional relationship between products and services is evolving and there is a need for FMCG manufacturing firms to embrace these service orientations in order to deliver superior customer service. Hence, the need to determine how customers can be fully integrated into manufacturing to measure the influence regarding the customer services outcome of the products and services is paramount. According to the findings of the study, the interviews conducted with Research and Development specialists on two categories in FMCG, namely the food and home & personal care sector, the findings reveal that servitization is important to most of the FMCG manufacturing firms and seen as creating value to their customers. While 65% of the participating FMCG manufacturers indicated to be on a servitization track, about 35% were found not pursuing the servitization journey due to limitations such as capital investment, negative return on investment and inadequate service strategies. The theoretical implications of the findings are that the limited interactions between suppliers and customers will thus have a negative impact on the enhancement of relationships meant to facilitate an improved customer sensing and information gathering

Keywords: Servitization, Customer service, Manufacturing

Publications from this study: The following conference paper has been published from this study:

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Dedication

I would like to acknowledge and thank to the following people for immensely contributing to the success of this thesis

- I would like to thank the Lord almighty for having granted me the grace to conduct and complete this research project
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Abbreviations	Explanation
FMCG	Fast Moving Consumer Goods
ROI	Return on Investment
IT	Information Technology
S&OP	Sales and Operations Planning

Chapter 1: Introduction

1.1 Research Background and context

Introduction

Interest in 'servitization' has grown rapidly over the last decade, with products and services increasingly being bundled together to improve value capture (Baines and Lightfoot, 2013:2-35). Servitization which will be defined later is the term given to a transformation where manufacturers increasingly offer services that are tightly coupled to their products. A move towards servitization is a means to create value-adding capabilities that are distinctive, sustainable and easier to defend from competition based in lower cost economies (Baines et al, 2007). The concept of servitization describes the shift of companies to becoming more service oriented (Vander Merwe & Rada, 1988:314). At least according to Kindstrom (2010:479), the limited interactions between suppliers and customers could contribute negatively to the enhancement of relationships meant to facilitate an improved customer sensing and information gathering, namely by being unable to deliver customer's value proposition.

Spring and Araujo, (2009:444) attest that the respective roles of products and services in delivering benefits to customers roles have become an increasingly studied issue, '' therefore a key feature of servitization strategies is a strong customer centricity. Customers are not just provided with products but broader more tailored 'solutions'. These deliver desired outcomes for specific customers, or types of customer, even if this requires the incorporation of products from other vendors'' (Baines et al, 2009: 547). This research has specifically focused on the FMCG manufacturing firms in the category of food and home and personal care in Gauteng, South Africa with the aim of identifying the consumers' influence on products preferences.

According to Sutter (2017) having a customer centric supply chain to meet personalised expectations will not only result in happy customers but also in happy shareholders where organisations are both satisfying customer's expectations and avoiding to incur unnecessary costs to the business. Going beyond this primary fulfilment, partners are further delighted when the organisation seeks opportunities, where feasible, to expand existing revenue streams from only manufactured products to include related services such are customer care.

Kastali and Van Loy (2013:169) articulates that manufacturing businesses operate in an ever more competitive, global economy where products are easily commoditised, innovating by adding services to the core product offering has become a popular strategy. Increasingly, durable goods manufacturers choose to innovate their offerings by providing services to accompany their existing products throughout the life cycle (Kastali and Van Loy ,2013:169).

While this practise is commonly in developed countries, there is not much published research found to be applicable in the South African context on servitization. The study is unique in the south African context as the country is still a developing nation and very few manufacturing firms have adopted the servitization strategy as a way of improving customer service through product and service offerings. Min et al (2015) have identified some of these factors and hinderances as having a role in the relationship between servitization strategy and business performance, such as resources slack and industry turbulence, the organisational parameters and their modelling roles, the strategic alignment as well as the socio-technical capability.

In international benchmarking, more corporations are adding value to their core corporate offerings through services. The trend pervading almost all industries, is customer driven, perceived by corporations as sharpening their competitive edges. Modern corporations are increasingly offering fuller market packages or ‘’bundles’’ of customer-focused combinations of goods, services, support, self-service and knowledge, however services are beginning to dominate (Vander Merwe & Rada ,1988:314). These services are done through servitization. This research seeks to find out the strategic implications (that) FMCG manufacturing firms in Gauteng, South Africa draw from servitization by incorporating their customers up front.

1.2 Problem Statement

Fournier and Avery (2011:193-207) have found that consumers have redefined their consumption from receiving goods and services passively to wanting to be proactive in collaborating with business supply chains. Prahalad & Ramaswamy (2004:4-9) allude that such consumers increasingly provide undesirable feedback to companies due to the restricted interaction and inclusion on manufacturers defining the consumer’s needs. Already, hundreds of websites are perpetuating activities that lobby against certain products, many targeting specific companies and brands. The above-mentioned authors found that part of the problem is that customers are not involved in determining the products, which are put out in the market by manufacturing firms.

Customers are not fully consulted by manufacturing firms on their preferences regarding the products they are putting out into the market; therefore, the limited interaction implies that manufacturing firms are not fully benefiting from customer’s input, hence creating less value for the customers. There is a need to determine how the customers can be fully integrated into manufacturing so that they can have influence regarding the outcome of products and services (Servitization).

1.3 Purpose statement

The purpose of the research is to recognize the extent to which consumers are involved in the value chain by evaluating the ability of service providers to deliver an outstanding customer service particularly in the FMCG manufacturing firms around Gauteng, South Africa.

1.4 Research Question

What strategic implications do FMCG manufacturing firms draw in servitization from incorporating their customers up front?

1.5 Research Objectives

1. To determine consumer's influence in the outcome of products manufactured at FMCG manufacturing firms.
2. To evaluate how the configuration of operations in FMCG manufacturing capitalises on the ideas customers provide for suggested products and services.
3. To determine the value proposition that FMCG manufacturing firms are offering clients.
4. To determine how much access up and down the supply chain FMCG manufacturing firms allow their customers.

1.6 Delimitations

- The study has been conducted in the context of food and home & personal care in the FMCG manufacturing firms in order to reduce the scope of the products /services to focused upon.
- All the sample participants in the study were selected from only research and development managers with at least two years' experience in the field.
- Only companies in the food, home and personal care manufacturing companies in Gauteng were considered
- Only a small number of consumers are consulted regarding product development and their preferences

1.7 Assumptions

- The study assumes that FMCG manufacturing firms in Gauteng are not exploiting downstream opportunities enough to can be able to deliver an outstanding customer experience.
- Research and development managers alone, selected as participants have sufficient knowledge based on the field experience to provide the information required to fulfil the purpose of this study.

1.8 Chapters Outline

1.8.1 Chapter one: Introduction

This chapter introduces the topic of the research and outlines a background, the research question and objectives as well as the delimitations and assumptions used

1.8.2 Chapter two: Literature review

The chapter reviews the relevant literature from the existing body of knowledge by critically reading conflicting and supporting literature from studies conducted previously

1.8.3 Chapter three: Research methods

This chapter outlines the research approach taken when conducting the research. This include the population sampling method, the measuring instruments, data collection techniques, the validity and the reliably of the data and the ethical clearance process approved by the school

1.8.4 Chapter four: Results and analysis

Chapter four includes the results and analysis thereof with regards to the findings on the based servitization of manufacturing. Analysis are displayed in tables, graphs and quotation statements from the interviews conducted, supported by existing research literature

1.8.5 Chapter five: Discussion

The chapter focuses on the discussion of the findings and comparisons with the literature.

1.8.6 Chapter six: Conclusion and Recommendations

This chapter provides significant conclusions based on the findings obtained during the research and comments on their significance.

Chapter 2: Literature Review

The following literature reviews the concept of servitization and considers the motivations and practices behind servitization, value proposition of servitization, elements of economic contexts influencing servitization and the benefits of servitization.

2.1 Servitization of Manufacturing

Companies actively seek new positions and sources of competitiveness in global distribution (Olsson et al. 2013). At the same time, business customers need have become more extensive, and the local characteristics of markets and business customers require local customization. As manufacturers strive for efficient distribution, servitization may also pose challenges to manufacturers in terms of the changing logic of action, evolving offerings and their increasing desire for customer closeness (Olsson et al. 2013).

Neely (2013) defines servitization as the innovation of organisation's capabilities and processes to better create mutual value through a shift from selling product to selling Product-Service Systems, whereas Kowalkowski et al. (2017:4-10) define it as it as ''The transformational processes whereby a company shifts from a product-centric to a service-centric business model and logic''

2.2 Servitization Motivations

Competitive motivations suggest manufacturers view their products as their primary resource 'Physical', with services as an important element of a differentiation strategy (Dachs et al. 2014: online). Services are therefore seen as an approach to creating advantage and market differentiation (Raddats et.al, 2016:572-579). Motivations to servitize were categorised as competitive, demand-based (i.e., derived from the customer) or economic by Raddats et al. (2016:572-579). They vary according to product complexity, although cost savings and improved service quality appear important demand-based motivations for all manufacturing (Raddats et al., 2016:572-579).

Wise and Baumgartner (1999, online) note that servitization is rolled out ''because manufacturers have an intimate knowledge of their products and markets, they are well positioned to carry out many downstream activities, from providing financing and maintenance to supplying spare parts and consumables. Exploiting the downstream opportunities, though, requires a new way of thinking about strategy''. This is a transition process of an organization that continuously innovate new services and benefits with its core product, which in the end signifies a firm as the value provider and lead towards better success (Ahamed et al., 2013).

(Bella et al., 2012) observed that there are economic motivations for servitization. According to Reinartz and Ulaga, (2008), economic motivations are often central for manufacturers, with changing the corporate focus from products to services widely considered a route to economic success. They mention the service as being an economic activity that brings a value to a customer by packaging and configuring the service in a way the customer prefers it. They allude to the fact that it takes skills, processes and extensive knowledge to apply specialised competencies in delivering service oriented practices by not comprising the value that needs to be created for the customer. Value is co-created through the mutual effort of firms, employees, customers, stakeholders, government agencies, and other entities related to any given exchange (Reinhardt and Ulaga, 2008).

Accordingly, this supports the operational needs of customers and enable new revenue streams to be developed (Raddats et al., 2016:572) and it is linked to the concept where manufacturers go “downstream,” that is, identifying and exploiting opportunities in the customer’s value chain (Wise and Baumgartner ,1999:online). Firms can therefore gain a competitive advantage through differentiating themselves from their competitors with service innovations by developing new services (kastalli and Van Looy ,2013).

Dachs *et al.*, (2014), Araujo and Spring (2006:797) and Ahamed et al. (2013) have observed demand based motivations for servitization. They found that meeting the rising customer demands, manufacturers are also finding it necessary to develop ‘advanced’ service offerings that can enable deeper customer relationships and address requirements that are more complex. This motivations ‘’appear important for all manufactures, with a popular focus on cost savings and improved service quality when an activity is outsourced’’ (Ahamed et al.,2013). This demand motivation is necessary and one of the key strategic choices of consideration for manufacturing firms in developed economies, particularly in customer oriented business world, so as to be competitive, sustainable, and differentiate itself for long run business perspectives (Ahamed et al.,2013).

Other authors like Woodruff (1997) and Adrodegari et.al (2017) have observed competition based motivations for servitization. These significant transformations are observed in organisations. This transformation sees an increase in more customer’s demands when it comes to services. In trying to meet the customer’s expectations Adrodegari et.al (2017) allude that ‘’increased competition in the capital goods sector challenges product-based competitive advantage, and manufacturers should embrace new strategies based on other sources of competitiveness. As a result, capital goods manufacturers are moving from product-centric offerings to services and solutions in order to increase and provide steady or balanced revenues during time, and to build sustainable competitive advantage. In particular, services represent one of the main elements to design such new strategies where firms' value propositions move from selling products to provide product-service-systems'' (Adrodegari et.al, 2017, p, 1-3).

2.3 Value Proposition

According to Keränen and Jalapa (2013, p 1307-1317), effective data management is considered "central to customer value assessment due to the need to collect and coordinate systemically a large amount of information to generate a detailed analysis for the customer". This research considered and adopted their framework, which summarises the key processes, and activities involved in customer value assessment in B2B (Business-to-Business) markets as illustrated below.

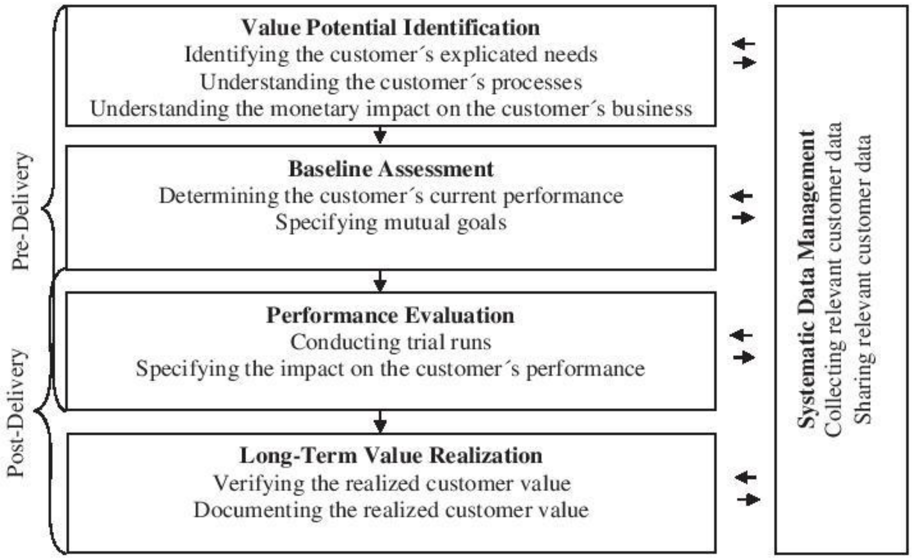

Figure 1 : A proposed framework for customer value assessment: Source (Keränen and Jalkala, 2013

Four components were identified by Keränen and Jalkala (2013) as depicted in figure 1 namely Value potential identification, Baseline assessment, Performance evaluation and Long term value realization. These are discussed further below;

2.3.1 Value Potential Identification

The first key process for customer value assessment is value potential, which is concerned with understanding how a supplier can add value to its customer's business (Keränen and

Jalkala, 2013). According to Ulaga and Eggert (2006), it is typically conceptualized as trade-off between the benefits and costs involved in exchange, which will be key to a company's long-term survival. This Concept of customer value ''becomes an important management tool only when it is shared within an organization. Those involved in creating and implementing customer value delivery strategies need a common framework for thinking about customer value'' Woodruff, (1997, p 143)

In order to make resonating value propositions that ensure an equitable return on the delivered customer value, suppliers need to be able to demonstrate that their offerings are actually delivering the promised value, however the assessment is a challenging task and in practice only few suppliers are able to make credible customer value assessments (Anderson et al. ,2006). Hence is vital for manufacturing companies to ''develop customer specific value propositions that are linked to specific customer needs (Adrodegari et.al, 2017, p 3)

2.3.2 Baseline Assessment

The baseline value assessment of the customer is the process of evaluating and communicating the value created for (and with) customers (Payne and Frow, 2005). Considering the value that customers attach to the offered products and services offering ''manufactures have to understand deeply their customer's needs and problems first, then develop a new value propositions more customer oriented which will enable them build business models which allow generating and delivering expected value (Adrodegari et.al 2017, p 3-4)

2.3.4 Performance Evaluation

Another key process for customer value assessment is performance evaluation, which is concerned with evaluating the usual value impact on customer's business. Specifying mutual outcomes including technical outcomes such as increasing efficiency or productivity and financial outcomes such as increasing cost savings or profitability (Keränen and Jalkala, 2013), usually follow determining the customer's current performance. According to Lindberg and Nordin (2008), buyers objectify complex offerings by transforming internal needs into clearly specified outcomes achieved with the supplier. The specified outcomes express the expected benefits from the supplier's offering and define the potential value the customer will receive. Sometimes a lack of time or intense competition forced the suppliers to neglect the outcome specification; however, suppliers usually put a lot of effort into specifying the mutual outcomes (Lindberg and Nordin, 2008).

2.3.5 Long Term Value Realization

Understanding how customers perceive value is considered a key competitive advantage (Ulaga and Eggert ,2006). Creating superior customer value is key to a company's long-term survival and success, Slater, (1997). According to Woodruff, (1997, p 140-141) ''Customer value concepts also differ as to the circumstances within which customers think about value, this could also centre on a consumer judgement. In that case, customers may consider value at different times, such as when making a purchase decision or when experiencing product performance during or after use. Purchase means choosing, and that requires customers to distinguish between product offer alternatives and evaluate which is preferred. In contrast, during or after use, customers are more concerned with performance of the chosen product in specific use situations''.

Customers may have different perceptions, taste, needs and preferences when it comes to being satisfied; hence, it is very important for service providers to dissect all possible components during customer value determination process in exploring possible expectations towards those who receive products and services offered. The figure below sourced from woodruff (1997), depicts the key important questions to consider/ponder when determining customer value.

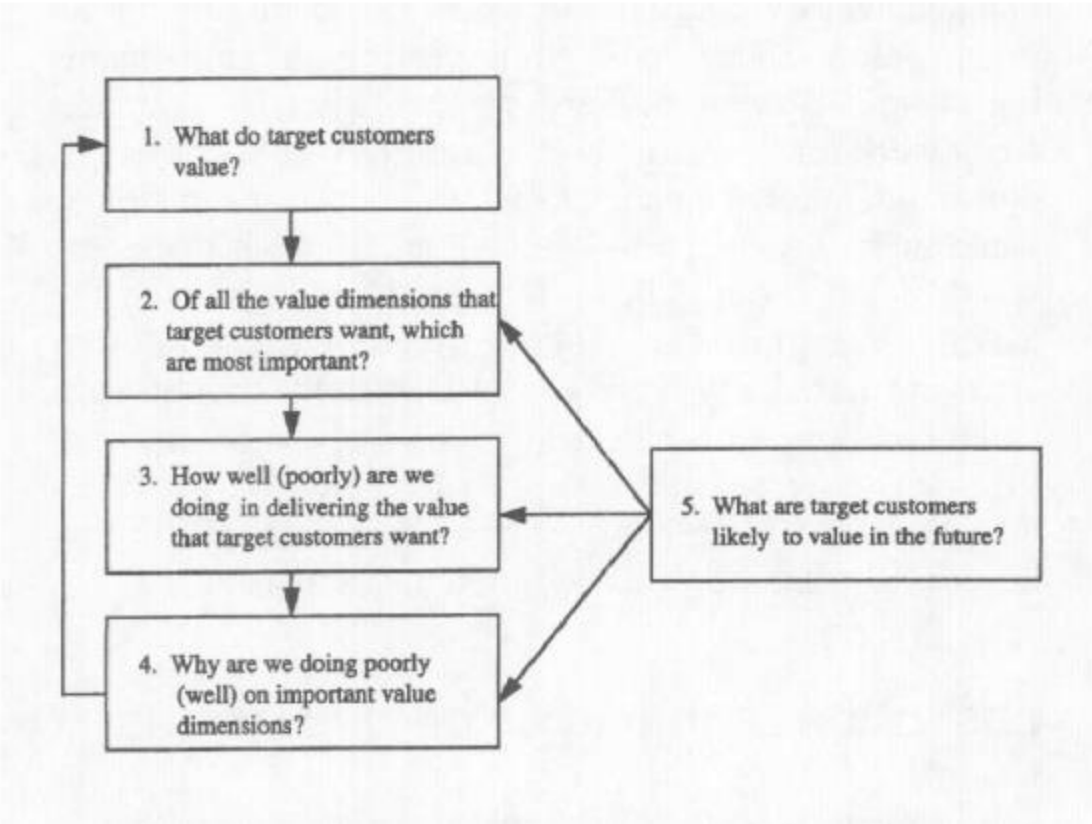

Figure 2 : Customer value determination process, source (Woodruff, 1997)

2.4 Elements of the economic context influencing servitization

From the literature reviewed in the previous sections, it explains that transforming from product centric business to service centred organisation happens because of a change in the economic outlook influenced by customers and products users' experience. The sections that follow below considers some of the elements of economic context influenced by servitization ranging from infrastructural development to development of business networks.

2.4.1 Infrastructural development

Miller et al., (2002) point out that a well-developed infrastructure is vital to efficient servitization, since it connects customer-facing, front-end units with the firm's back-end units and facilitates product service supply to meet customer demands**.** In order to properly deliver services to customers and earn higher financial benefits, manufacturing firms have to move downstream (Wise and Baumgartner, 1999) and invest in developing the channels through which they can respond promptly to customer needs, however this development may also present multiple difficulties which the manufacturer will need to take note of such as, ''first ,an investment decision to build an infrastructure that, in all likelihood will not generate revenues immediately, and is likely to dilute some of the operating ratios that investors will be monitoring, second, at the operational level two new capabilities are needed to be developed to run a distributed service network; the capability to diffuse knowledge across the network (certification of service centres, etc.) and the ability to manage large organisations of service personnel. Third, the network has to make an explicit decision about the degree of standardization of the service offer in order to balance between the transferability of services across markets vs customization for individual end-users'' (Oliva and Kallenberg, 2003, p 166-168).

2.4.2 Level of education and qualification

Szász et al., (2017, p 1015-1016) have found that ''Meeting the challenges of servitization requires a highly qualified and flexible human resource base, which is ready to facilitate a higher level of customer centricity, a more complex supply of product-service packages and a more relationship-oriented cooperation with customers and suppliers than typically found in traditional manufacturing firms''. According to Wise and Baumgartner (1999) acquiring these new skills and abilities requires considerable effort from a manufacturer, but is the only way toward reaping the financial benefits of servitization.

2.4.3 Intensity of competition

One frequently mentioned trigger for servitization is intensive competition, which forces manufacturing firms to offer services along with their core products (Szász et al., 2017). Competing strategically through service provision is becoming a distinctive feature of innovative manufacturing firms (Spring and Araujo, 2009:444). Nevertheless, servitization is not an easy strategic choice that a manufacturer needs to design carefully its services. In order to succeed with servitization, a manufacturer is likely to need some new and alternative organizational principles Ahamed et.al, (2013).

2.4.4 Technological development

According to Parry et al, (2016:228), technology in servitization allows firms to look beyond the voice of the customer and the user's stated requirements, but it can provide visibility to the use of resources within customer specific contexts. However maintaining this will require a servitization, which uses the adoption of technologies that allow the improvement of existing innovative and progressive approach to, and the development of new, integrated product–services which offer a route to sustaining competiveness (University of Cambridge, 2018). Geum, et al. (2011: 128), explains that the development of technology in servitization can play '' three different roles: it can act as an enabler, a mediator or a facilitator for product-service integration''.

2.4.5 Development of business networks

In developing business networks, manufacturing companies need ''to take steps to develop their relationships to meet these customer expectations, and take advantage of the input their customers can make into creating their new offerings. These relationship-building competences must be developed in all parts of the organization; the new competences should focus on proactivity, continuity, and the ability to capture specific customer needs. As services and service development become increasingly important, building, enhancing and retaining business networks will grow to become a critical activity across all parts of the organization, and at all stages of the offering life cycle. Supplier/customer interactions will need to increase, and the enhanced relationships thus created should facilitate improved customer sensing and information gathering'' Kindstrom, (2010 : 487-488).

2.5 Servitization Benefits

According to The Manufacturer (2017:online), ''As markets continually shift and competition continues to rise, the role of a manufacturer has changed drastically in the past few years. With a growing number of businesses stepping into the services field, manufacturing is clearly in the midst of an industry-wide servitization transformation, therefore servitization is expanding the capabilities of a manufacturing company to improve the experience of the end consumer''. In achieving this, according to Dinges et. al, (2015:9) a manufacturing organisation will require an innovative and progressive approach.

2.5.1 Consolidated Product Related Service Offering

The consolidation process is driven normally by a desire to sell more products and its goal is to improve the service performance (Oliva and Kallenburg, 2003:160). It is typical for organizations to find that services are an important component of the consumer satisfaction indicators, and to consider this integration the first step to improve the delivery of those services (Oliva and Kallenburg,2003:160). Furthermore, the consolidation of these services also comes with the development of a monitoring system to assess the effectiveness and efficiency of the service delivery (Oliva and Kallenburg ,2003:160).

2.5.2 Innovation: Aligning the needs of the manufacturer and customer

A number of manufacturers are turning to new forms of customer service to increase the value of their products and in doing so many are taking on responsibilities that were previously left to customers (Kruse, 2018). Aligning the needs of the manufacturer and the customer will have the benefits of increased customer loyalty (Baines and Lightfoot, 2013:2-35) and increased market values (Fang, et.al, 2008:1-14).

2.5.3 Servitization Strengthens Financial Stability

Manufacturers who servitize their products increase their product margins and establish a longer lived relationship with their customers (Kruse, 2018). Manufacturing firms that have implemented servitization have higher profit rates as compared to pure manufacturing firms, although this premium can decline depending on the number of services that are offered by a manufacturing firm (Neely, 2008). In manufacturing today, (Crozet and Milet ,2017:820) attest that the real money lies on the downstream and not necessarily in the production function.

2.6 Conclusion on Literature

Looking at the review of the literature, servitization has for some years gained momentum in discussions since (Vander Merwe and Juan Rada,1988:314) s first coined the term on their 1988 publication titled ''*Servitization of Business: Adding Value by Adding Services'.* Unbundling servitization, is simply a way of making services available and meeting the customer's preferences in a way that they prefer it. Though consumers expect their needs to be met, manufacturers also look in to the depth of margins, return on investment and the product market sense in transforming from product to service oriented. (Weeks and Benade ,2009) observes that ''this collective offering is also termed to be a "value proposition" as it provides client with a greater sense of value in the realisation of a specific need or problem that they need to address'' (Weeks and Benade, 2009, p390).

Apart from customer satisfaction, the review of the literature gives an overview that Servitization is the key driver for economic growth. FMCG manufacturing firms in Gauteng can benefit from the abundance of investment opportunities as well as key domestic and new players as (Malherbe, 2018) of Frost and Sullivan consulting believes in a 4-7% estimated growth in the Food manufacturing sector in South Africa by 2020. In the midst of evolving markets and economies, it is very important for fmcg manufacturers in Gauteng to prioritize their product configurations processes to allow maximum customer satisfaction thereby increasing their market share as well as revenues.

The literature reviewed suggest that servitization is costly and require much careful investment only when the configuration contributes positively to the change. Servitization and the customer value proposition is conceptualized as a trade-off between the fmcg manufacturers and the market share, the cost of manufacturing should be beared. The success of any value proposition is ultimately whether the benefits (of the product or service) outweigh the cost to the customer. The aim is to maximise the benefits that customers value most. The more differentiating, the better (Virgin, 2018).

The alignment of manufacturer's operational principles and the customer is as important when it comes to transforming from customer centric to service oriented. Although some part of the literature encourages innovation when it comes to product manufacturing at fmcg firms, other section encourages consolidation of product offerings were manufacturers are producing more skews with the aim of improving the service performance. Both processes leads to a servitized manufacturer and the question of meeting value proposition, customer's preferences, profit and margins remains an underlying factor. It seems like fmcg manufacturers are not willing to make the customer's happy on their loss when it comes to capital investment.

The customer is definitely on the driver's seat when it comes to servitization. From the literature, conclusion can be made that manufactures who put their customers upfront and at the centre of their configuration are most likely to increase the customer value in a long term and thus enhancing the customer loyalty. Customer loyalty and satisfaction can improve the business growth as opposed to impeding it. FMCG manufacturers who understand the importance of being customer centric are able to create a healthy culture and a commitment towards servitization.

According to the literature, technology is at the centre of innovation when it comes to servitization of manufacturing. Seeing beyond the customer's expectations is very important for all FMCG manufacturers. Towards a fourth industrial revolution, analysing customer's big data may require technological development, which is key if manufacturers wants to set themselves apart from others, most importantly making the customer happy.

2.6.1 Conceptual Framework summary

The below framework summarizes the literature reviewed in this research. Servitization of manufacturing first starts with the customer need and proceeds to manufacturer's ability to offer the required services or not. This framework below shows the processes involved in servitization, which ultimately leads to improved customer service. This means moving from product centric to service orientated. The research focused on two categories of manufacturing firms namely Food and Home & personal care, which the summary of the framework is based on.

FMCG manufacturing firms take into consideration the motivations to servitize as well as the benefits that it comes with. From the literature, a conclusion can be made that after a thorough evaluation of value proposition and some of the economic issues facing servitization, few manufacturers can be able to deliver the customer service as required by the customers. It is also noted that becoming a truly servitized manufacturer can take a longer time taking of the evaluation as to whether the configuration makes the commercial sense or not, capital investment a factor as well.

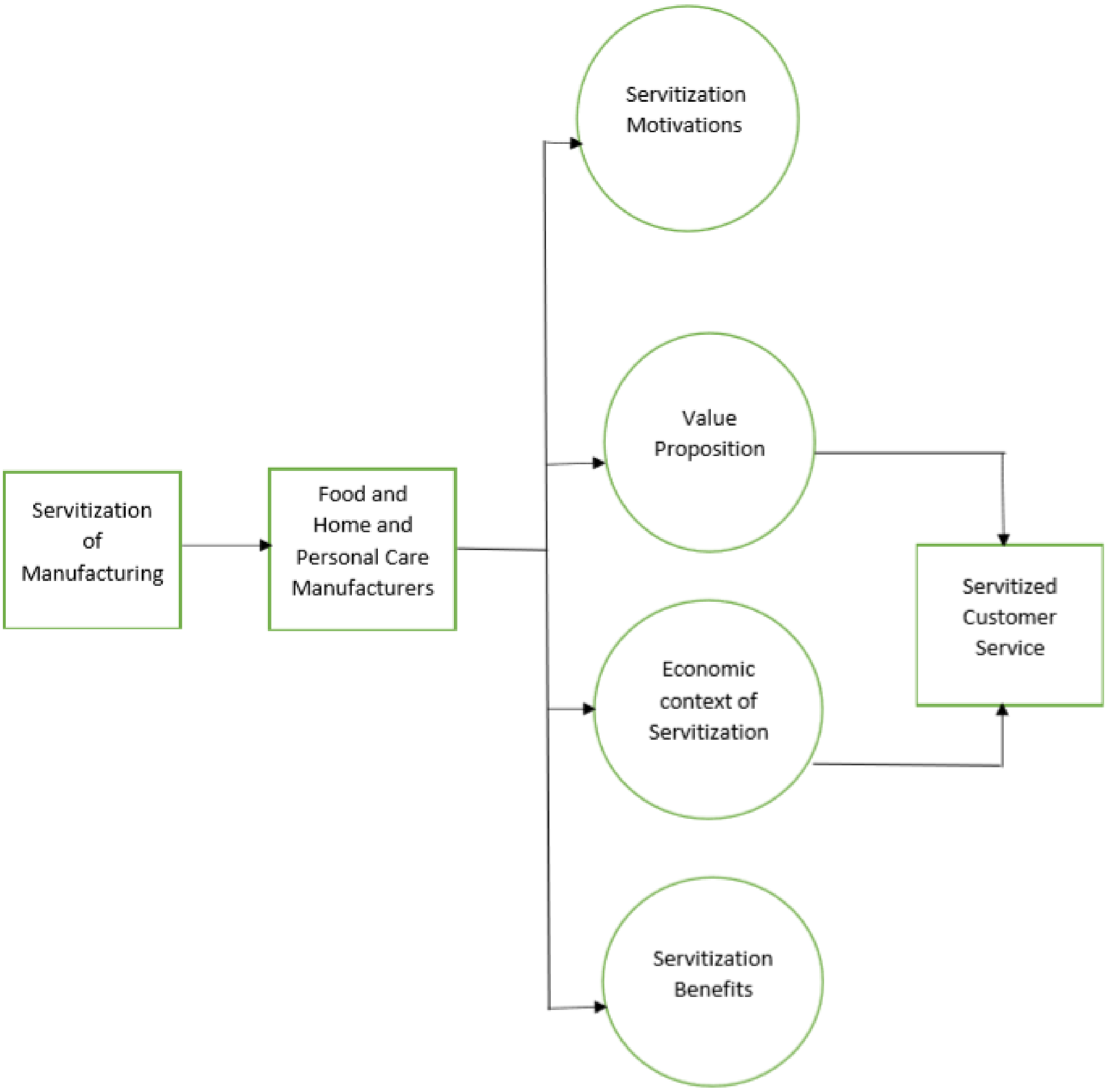

Figure 3 : Conceptual framework in relations to the literature reviewed, source (Author's Own)

The conceptual framework model was developed based on servitization processes which informed the researcher's area of industry focus and some literature reviewed in the context of food, home and personal care manufacturers. The model was categorically developed for evaluating servitization practices at manufacturing firms in Gauteng, South Africa. The process starts with the need for servitization based on the customer's preferences and response to products and services offered by manufacturers. Four areas which came out strongly and mostly influence the configuration of manufacturing (moving from product centric to service oriented) based on each firm's strategic objectives were namely, motivation to servitize, value proposition in terms of service offerings to customers, economic contexts of servitization as well as the servitization benefits which the manufacturing firms will benefit from as a result of being servitized. The in-depth consideration and review of these four factors is expected to inform how manufacturing firms could servitize their firms and improve their customer service offerings.

Chapter 3: Research Methods

3.1 Introduction

The research method employed in this study is explained in this chapter. The approach taken research design, sampling method used, research instruments applied, data collection and analysis procedures, reliability and validity of the data collected and ends by ethical clearance approval statement.

3.2 Approach

The instrument selected to obtain the in-depth information required was one-on-one open-ended interviews. This is because the type of information required for the study was information from experience of stakeholders represented by participants. To obtain this kind of information, it was considered that the best approach would be qualitative research method using in-depth interviews (Creswell, 2014:185).

3.3 Research Design

- The instrument selected to obtain the in-depth information required was one-on-one open-ended interviews.
- The researcher chose to conduct this type of interviews because participants could be assisted to understand the questions posed, with additional questions posed if required collect more detailed information (Becker, 2011). Subsequently more comprehensive and in-depth data were collected by introducing sub questions that emerged from themes identified by the interviewer during interviews. All interviews conducted were audio recorded and transcribed, provided interviewers gave consent to do so. Where consent to audio was not given, only notes were taken.
- Initially the questions which were to be asked were sent to participants beforehand with the letter of introduction so they could familiarize with them before the interview.
- To conduct the open-ended interviews, an interview guide with ten questions was designed to act as a template (see appendix one for this guide).

3.4 Sampling

Seven participants from food, home and personal care categories in manufacturing firms based in Gauteng participated in the study, each undergoing a semi-structured interview guided by the interview template.

Purposive sampling was done whereby the researcher selected individuals that purposefully informed an understanding of the research problem and central phenomenon in the study (Creswell and Poth, 2018: p158). Details of category of targeted people selected and types of FMCG are discussed further below.

Selection were made from operational point of view, with research and development managers (R&D) of at least two years' experience in the FMCG manufacturing firms being selected to be interviewed. The primary consideration of this sampling method was that, the researcher believed the type of selected participants would be able to provide the best information to achieve the objective of the study. The aim in selecting the companies was to incorporate the FMCG different components of manufacturing with a limit of at least two categories inclusive from food and home and personal care categories. The reason the researcher selected these two components was to get a broader context of servitization from different products within the FMCG manufacturing firms.

In terms of the sample size for the research, the concept of saturation point was employed on the study. Data were collected to a point where there was no new information obtained or it was negligible, then that stage determined the sample size of the research (Kumar, 2014: 248). For the purpose of this research, the researcher had seven interviews, and the saturation point was reached at five interviews. The new data were redundant in relation to the data already collected from interview one to interview five. The information was similar to all the other five interviews conducted. For example, interviewee six and seven mentioned the difficulties and flexibilities of configuring business practices instantly towards servitization, which was already coded from interviewees two, three, four and five from previous interviews, and hence no new data were identified. Five interviews have been audio recorded with permission, and two interviews not audio recorded as per the request of the participants.

3.5 Instrumentation

As indicated in section 3.3, a structured interview instrument was applied to this study. The researcher asked a predetermined set of questions to the participants, using the same wording and order of questions as specified in the interviews guide. The interview guide had open ended questions that were written down following recommendation from (Kumar, 2014: 178) for standardization of wording, meaning and interpretations found in data collections section that will follow. A copy of the interview questionnaire guide is available on the Appendices section of this report as Appendix one

3.5 Data Collection

The researcher collected data for this project by conducting face-to-face interviews with participants. These interviews involved semi-structured and open-ended questions that were few in number and were intended to elicit the views and opinions from the participants (Kumar, 2014: 190; 285). The interviews were audio-recorded using a mobile mp3 recorder and transcribed to assist the researcher in picking up common themes from the interview.

Each interview conducted took between 30 min and 1hrs20min. Based on the literature reviewed, an interview guide was prepared against which the interviews were conducted. Some interviews were conducted at the participant's offices and others telephonically. To orientate the interviewee at the beginning of every interview, an introduction outlining the purpose of the study was done. A summarized copy of the interview analysis that came from the themes is included in the report on the appendices section as Appendix two. Below is the summary of the pilot study.

Table 1: Interview duration per participant

Participant	Firm	Job title	Gender	Interview duration	Audio recording
P1	F1	Packaging and Development head	Male	50:51 min	Done
P2	F2	National customer manager	Male	57:00min	Done
P3	F3	Grains Essentials executive	Male	01hrs:05min	Done
P4	F4	Executive Marketing, essentials	Male	56:40 min	Done
P5	F5	Essential foods executive	Male	01:00 hrs	Done
P6	F6	Research and Development head	Male	47:00 min	Not done
P7	F7	Director Supply Chain	Male	32:00 min	Not done

3.6 Data Analysis

In this research, a content analysis was used to analyse the content of interviews conducted. During the analysis, the main themes that emerged from responses given by participants were identified with assigned codes, and responses classified under the main themes emerged from the responses given by the participants. Some of the themes and responses were integrated into the text report of the research (Kumar, 2014:318).

3.6.1 Coding of themes

The themes and sub-themes of the research were built from the language that emerged from all interviews with different participants. This second cycle of coding was done after the first draft of the interviews notes were transcribed and organized on a word-to-word document. According to Saldaňa (2012:58) ''second cycle methods are coding strategies that ''require such analytic skills as classifying, prioritizing, require such analytic skills as classifying, prioritizing, integrating, synthesizing, abstracting, conceptualizing, and theory building'' Saldaňa (2012, p58). A descriptive coding model has been employed to this study. A descriptive code assigns labels to data to summarize in a word or phrase most often a noun-the basic passage of a qualitative data (Miles and Matthew, 2014). Due to the research ethics, the first stage cycle of coding has been withheld to being included in the research report since it includes confidential information on FMCG firms and other participants who were involved. Examples of descriptive coding on themes and sub-themes coded on this research are illustrated on the below table.

Table 2: Coding Table

Quotations	**Theme/Subtheme**
…the more service orientated becomes, the more 3rd party manufacturing they will require. Because you cannot have experience in all these fields in your business, it's not possible. So even with us we will outsource… …Consumer's feedback comes to us through an outsourced company.	3rd Party solutions
My role within the organisation is to serve what the market intend and dictates the direction in which the brand is taking	Market Research

…Our buy to use channel is we go to customers that service consumers and ask them what kind of products would you like us to create for you to help you service your customers?...	
…Many of them do give input to us with respect to their requirements on their own brand products that we manufacture for them. We value the inputs of our customers highly because they buy our products	Customer's inputs capitalised
	Product Development on Market research
…I need to make sure that am giving the right product, at the right time at the right price. So, a consumer complains report comes back an says okay, these are some of the things consumers have complaint about, and then we will break it down to whether it is re-packaging, manufacturing and etc… In addition to quality, we should adjust our certain manufacturing process that requires quality. The customers also want a certain quality packaging. So we need to procure packaging that is in line with our consumer's demand… On our side we have quality products, it's a pride of competitive price pool, and we have innovative products we offer to the market	Value Proposition
…consumers wants the best hygienic manufacturing practices…	Consumer's influence
At this point, it is not easy to be innovative on stable food on what the product needs to look like for us to change the manufacturing process to suit the customer's requirements. If it's something that comes out of the consumer's markets then we will definitely… Formulation changes in products, the consumer has huge influence from that by simply not buying it or buying it. We will work on the	Formulation in manufacturing

formulation of our product in the changing of our product manufacturing process because it is a standardised and not complex manufacturing process	
We need to differentiate ourselves in terms of packaging, quality, price and marketing. …We need to optimise our manufacturing process to be able to deliver the product at the customer is willing to pay for it… …we have a project where we have improved our packing to include the temper evidence..	Innovation in servitization
...you can't talk more about technology and advance product but now in markets, consumers will complain if you do not perform or simply not buy the product if they do not like it …we are doing very well because if you look at our product category we have average share of close to 30% on all of our main categories of the market size. So we are quite reactive, because to be number 1 you have to be the fastest, the most adaptive and creative. You are not number 1 because you are no 1. You have earned that position	Product/service performance
If you refer to configuration, it is a capital investment. It is driven by where the bakery is, that's one part of it and the other part is having a coastal imprint is very convenient for the import product A, because the further you are from the coast, the more expensive the product becomes.	Capital Investment
.. Our key drivers in our organisation is growing together suppliers, customers and our people… Having the correct skill of people at the correct places, because you need more people that are better equipped in communications. We	Highly qualified workforce

cannot operate our business more in Silos, we need people with communication skill, with the ability to communicate clearly and show what they need. Communication and information flow becomes a challenge.	
The flow of information can sometimes be too much and you find that it is not the correct flow of information. We have to simplify our information, not because people aren't not intelligent, they don't have enough time to sit and decide on the bunch of information they have. They need actionable information, with one look, knowing what to do.	Institutional knowledge on servitization
...Our journey was no 1, splitting up manufacturing from distribution. It was a big change to us due to the fact that previously the more managers would be …Often we will go to a feasibility study for any process that we want to change in our business	Strong Business infrastructure (Flexibility in manufacturing and Market response to servitization)
They simply not buy the product or they buy it and very eagerly Servitization is key to deliver innovation to customers and if the company is not customer centric today, it would not survive. It's very important. We rate ourselves highly in terms of servitization.	Negative Return on Investment

3.7 Reliability and Validity

According to Heale and Twycross (2015) reliability relates to consistency in the measure. It therefore ''applies that an instrument used to measure the motivation should have approximate responses each time a test is completed. Although it is not possible to give an exact calculation of reliability, an estimate of reliability can be achieved through different measures'' (Heale and Twycross, 2015: 66). A common equivalence method was applied through noting the consistency of the responses from the interviewees in the study. This is achieved for example, by noting where most of the themes interrelate with each other and are consistent with the feedback that is given.

The researcher undertook the commonly used construct validity method where the extent to which the research instrument measures the intended construct is noted. The researcher made sure that the interviewee respondents are able to communicate relevant topics and address complex questions by formulating research questions from section 2.3.5 (figure 2). The questions asked can be seen in Appendix 1. The validity of the responses was ascertained by comparing them to the previous literature and where there were similar themes, the responses were considered valid and categorised according to the common theme as the heading and those that were dissimilar were considered not valid. In addition, for the small sample size, validity was enhanced by using follow up questions to probe more the responses to the main questions in the initial interview. Further, validity in the small sample size, from a qualitative point of view, was enhanced by reaching saturation level. The researcher was hoping to conduct between eight and twelve interviews, however saturation was reached at the fifth interview out of seven conducted.

3.8 Ethical Clearance

Ethical clearance for the research was obtained from Wits School of Mechanical, Industrial and Aeronautical engineering ethics committee and informed consents were obtained from the participants prior to concluding the research. The ethics clearance number is MIAEC 046/18. Participants were made adequately aware of the purpose of the research and the reason for which the researcher requires the participation in the project and how it would directly or indirectly affect them. The consent was voluntary without any pressure from the researcher (Kumar, 2014: 190; 285)

Chapter 4: Results and Analysis

4.1 Study themes

Thirteen themes emerged from the data of interviews conducted. The data were analysed according to the approach described in section 3.2 of the report. The themes and subthemes

have been categorised as one of the following drivers and practises of servitization, challenges of servitization and effects of non - servitization. The themes and subthemes are summarised in table 3 below and are provided separately

Table 3: Research themes and sub themes from the interview

Theme 1 : Servitization drivers and practices	Theme 2: Challenges of Servitization	Theme 3: Effects on non-servitization

• Product development on market research
• Capitalising on customer's inputs
• Consumer's influence on manufacturing
• Innovation in Servitization
• 3rd party solutions
• Value proposition
• Service delivery and performance (product market shares)
	• Capital investment
	• Formulation in manufacturing
	• Highly qualified and flexible work force /human resource
	• Institutional knowledge of servitization
	• Strong business infrastructure
	    ◦ Flexibility in manufacturing process
	    ◦ Market responsive to servitization
		• Negative ROI (Return on investment)

4.1.1 Product development on market research

On the feedback from the participants, seven out of seven participants conveyed that their servitization process stems solely out of market research and not necessarily based on customer's innovative suggestions. Below is the quotation from participant 7 that capturers most of the respondent's feedback. The rest of the views are summarised into appendix two of quotations.

''Our new product development stems from market research. So we would go out and research the market and understand what the new needs of the customers are and what the future needs are. But we don't develop products based on the customer. It does not bear any weight'' (Participant 7)

4.1.2 Capitalizing on customer's inputs

Five out of Six participants indicated that they indeed capitalize on the ideas suggested by customers during the product manufacturing. The below quotation by participant two summarizes the majority view of other participants. See appendix two quotations for all responses

''*We do capitalize on the ideas suggested by customers. How do we configure? It could be any change. Often we will go to a feasibility study for any process that we want to change in our business. Depending on the costs obviously there is a focus on the degree of the investigation, if it's more strenuous or not. So from the word go, we need to make sure that there is enough of the customer's needs to change the business''* (Participant 2)

4.1.3 Consumer's influence on manufacturing

Four out of seven participants concede that consumers have a huge influence on their manufacturing processes while two other participants submit that it does happen but to an extent that the market is driving it. Below is the quotation from participant 4, which represents majority of the feedback in the theme. See appendix two quotation for all other responses

''We are a business that is heavy on fixed assets. We have huge market share with 20-30years life expectancy that are very expensive. Formulation changes in products, the consumer has huge influence from that by simply not buying it or buying it. We will work on the formulation of our product in the changing of our product manufacturing process because it is a standardised and not complex manufacturing process.'' (Participant 4)

4.1.4 Innovation in Servitization

Three out of six participants allude to the fact that the present offerings are supplemented by innovation in brining and maintaining other products already in the market. From their contribution, they imply that innovations serve what the market intends and dictates the direction in which the brand is taking. Below is a quotation adapted from participant 2 and participant 1's interactions respectively.

''If you look at our company now, I would summarise servitization as innovation; if you look at the condition of servitization is a development of a capability to provide services and solutions that supplement our current offerings. That supplication is called innovation. To expand innovation, we have Research and Development department that does quality research on our products, they look at what is new products, they conduct surveys among customers to see if there is any specific innovation that they would like to see coming forth.'' (Participant 2)

''But for me something like innovation says reduce the input and maintain the output, or even grow it. Innovation does not come as a cost. For me innovation should drive servitization, not servitization innovation. Because servitization will never understand the cost of innovation'' (Participant 1)

4.1.5 Third party solutions

Four out of the seven participants are of the view that there is a lot of variances through the orientation of transforming from product centric to service centric. See appendix two of the quotations for the comments.

''There is a lot of variance. We have learned that we cannot do everything by ourselves; we go to the 3rd party manufacturing. So for me, the more service orientated becomes, the more 3rd party manufacturing we will require. Because you can't have experience in all these fields in your business, it's not possible. So even with us we will outsource to the 3rd party company to complete that loop so we can get the consumer and the customer''. (Participant 4)

4.1.6 Value proposition

Five out of seven participants (See appendix two, quotations) speaks to their value proposition offering in the areas of variety of foods, competitive price pool as well as guaranteed and consistency of supply, while the other participant mentioned the aspect of offering innovative products. Below is the quotation from the discussion with participant 3 that summarize the majority feedback.

''I would say nutritional and affordable food. Nevertheless, most importantly, it is always available and are affordable. While we manufacture our range of stable food and of good,

quality and they are affordable. Our most important value offering is that it is always available. We have a very significant channel network'' (Participant 3)

4.1.7 Service delivery and performance (product market shares)

Five out of Seven participants (See appendix two, quotation) indicated that their organisations to some extend are able to keep up with service delivery at a minimal level ranging between 60% to 95% performance with an average market share of at least 30%, due to other factors such as promotional, festive and seasonal demands. Below is the response from participant 4.

'' On our service delivery we strive to get to 96%. Our performance can be fetchy, in certain line and areas, we get to 96% and exceed it. Sometimes we can come to 65% on special days like black Fridays and red Tuesdays, as we could not keep up with the order delivery. Out of 10, the average satisfaction of our customers is 7'' (Participant 4)

Below is the table that shows the level of target value delivered by manufactures as per current manufacturer's evaluations. The letter ''M'' represent manufacturing company with it's achieved target value measured by percentages.

Table 4: Current target value delivered according to different manufactures

M	M1	M2	M3	M4	M5	M6	M7
%	65%	95%	80%	65%	70%	65%	60%

The data obtained in table 4 shows the current servitization stage perceived by different manufacturing firms from manufacturing firm one to seven respectively.

4.1.8 Market responsive to servitization

Since demand-based motivation is imperative to manufacturing, during the research a strong theme of FMCG firms responding to servitization need arose. During the research, it has been revealed from most of the responses (See appendix two quotations) that an efficient responsive to servitization includes formulation in manufacturing, which may take a bit longer to implement due to internal processes and commercial viability of the change in process. A view that represent three out of five firms that have indicated their servitization status is quoted below from participant 6.

''So we are quite reactive, because to be number one you have to be the fastest, the most adaptive and creative. You are not number one because you are number one. You have

earned that position. It takes effectively six to eight months to effect the servitization change because of our internal research. Depending on the costs obviously there is a focus on the degree of the investigation, if it is more strenuous or not. So from the word go, we need to make sure that there is enough of the customer's needs to change the business'' (Participant 6)

4.1.9 Capital investment

One participant indicated (see Appendix two, quotation) that ''*servitization will never understand the cost of innovation'' (Participant 1),* and that means a significant amount of money is needed to roll out the service strategies. Below is comments from participant four and two respectively that speaks to other drivers of servitization.

''*In terms of drivers, you always want to be ahead of your competitors, so that's very important that servitization that you put in place should put you ahead of your competitors, so that you have a better product on competitive product offerings. The inhibitors could be when the request for servitization does not make commercial sense, as capital investment would be a blow as well''* (Participant 4)

''Business has to see that it is going to be more profitable and sustainable to do something in a realistic entity. We cannot just do something because it is nice to have. We have to be able to build a correct ROI (Return on Investment)'' (Participant 2)

4.1.10 Highly qualified and flexible workforce/human resource

While most of the participants alluded to the fact that they still see themselves as product centric/conventional manufacturers leaning towards servitization, five out of seven participants (See Appendix two, quotation) pointed to lack of qualified workforce and certain necessary skills needed to make processes efficient. Below is the quotation from participant 7, which summarizes the most responses.

''*Having the correct skill of people at the correct places, because you need more people that are better equipped in communications. We cannot operate our business more in Silos, we need people with communication skill, with the ability to communicate clearly and show what they need. Communication and information flow becomes a challenge. The flow of information can sometimes be too much and you find that it is not the correct flow of information. We have to simplify our information, not because people are not intelligent, they do not have enough time to sit and decide on the bunch of information they have. They need actionable information, with one look, knowing what to do''* (Participant 7)

4.1.11 Institutional knowledge of servitization

Given the nature of servitization, six out of seven participants (See Appendix 2, quotation) have highlighted the fact that institutional knowledge of servitization sometimes becomes an inhibitor in moving from product centric to servitized organisation. Below are the responses from participant 7 and 3 respectively.

''The inhibitors would be institutional knowledge around the concept of servitization and may be knowledge about the tools and how to implement something like (servitization) this properly to get the best value. Capacity would also be a challenge because that would require resources'' (Participant 3)

''It has to be driven on correct and transactable information. So an inhibitor would be, we do not have the correct information'' (Participant 7)

4.1.12 Strong business infrastructure

About six of seven respondents have indicated (see Appendix 2, quotation) that infrastructural development becomes they key inhibitor of servitization where the businesses are not able to transform promptly in making a way for a servitized organisation. Below is the quotation from participant 6 that captures most of the respondents

''Another challenge is flexibility in our environment. We have not had the flexibility to change the manufacturing process significantly overnight. It's a huge process for equipment's and mechanisms to change that overnight'' Participant 6

4.1.13 Negative return on investment

According to the four participants, they explained that getting value for their money was more important as well. Below is a quotation from participant 4, which summarizes four of the responses with similar standpoint.

''Some of the challenges are capital investment, sometimes some its equity requirements from customers but the capital investment that you need to make does not yield the return on investment because in our business, the scale of our economy is very important'' Participant 5.

4.2 Descriptive statistics of the research questions asked in order from 1 to 10

Question 1: Can you describe your organisation's servitization journey experience and where it stands currently?

This bar graph of figure 4 depicts the current servitization practice per FMCG Company featured indicating the current trends that led to the servitization progress respectively across the companies featured.

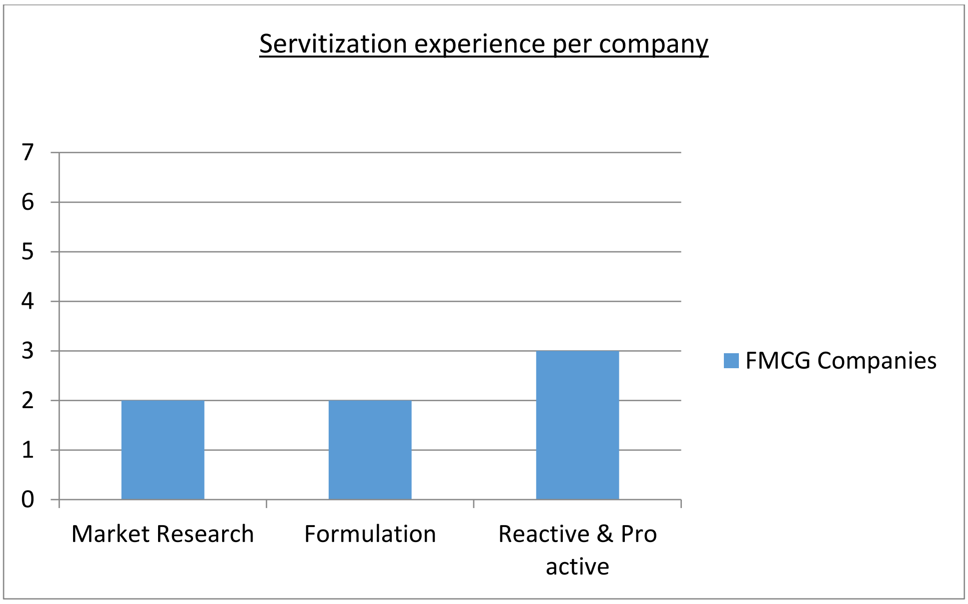

Figure 4 : A bar graph indicating the servitization progress on companies featured

In terms of servitization experience across the seven featured FMCG companies, the market research has influenced the servitization shift in two companies, product/formulation in manufacturing has influenced two companies whereas three companies were influenced as a result of being reactive and pro-active to the needs and demands of customers. This indicates that the trigger for the servitization experience of participating companies is more or less evenly distributed between the market research trigger, formulation feedback or by reactive and proactive response to market stimulus.

The pie chart of figure five below depicts the servitization status on participating FMCG companies which were summed up into three categories namely fully servitized, partially servitized or not servitized.

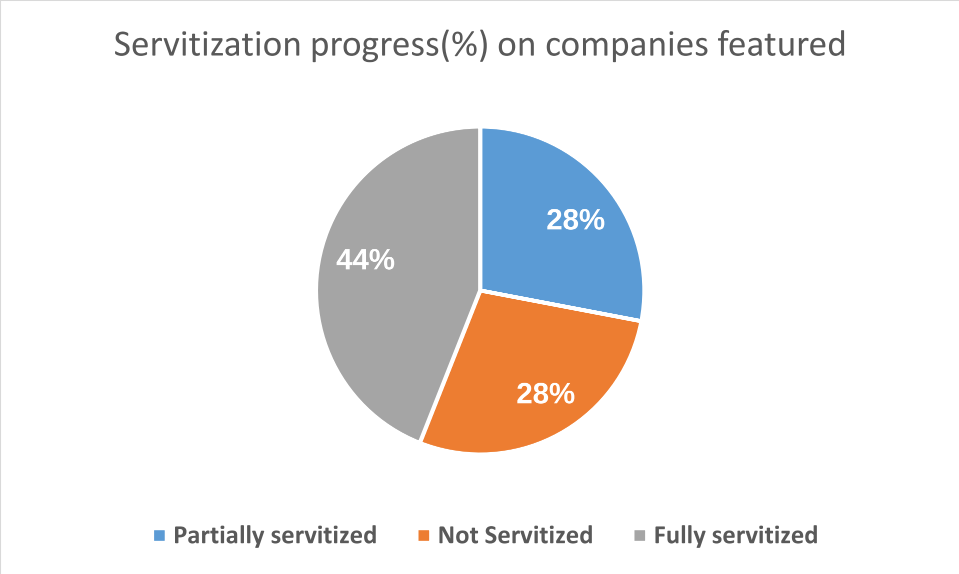

Figure 5 : A pie chart indicating servitization status on FMCG companies featured

The results shows that 44% of companies where fully servitized, 28% were partially servitized whereas 28% of companies were not servitized at all. The majority of participating companies were fully servitized.

Question 2: How do consumers influence the product manufacturing process part of your organisation?

The below bar graph on figure 6 shows how consumers have a direct influence on product manufacturing process on the seven FMCG companies featured.

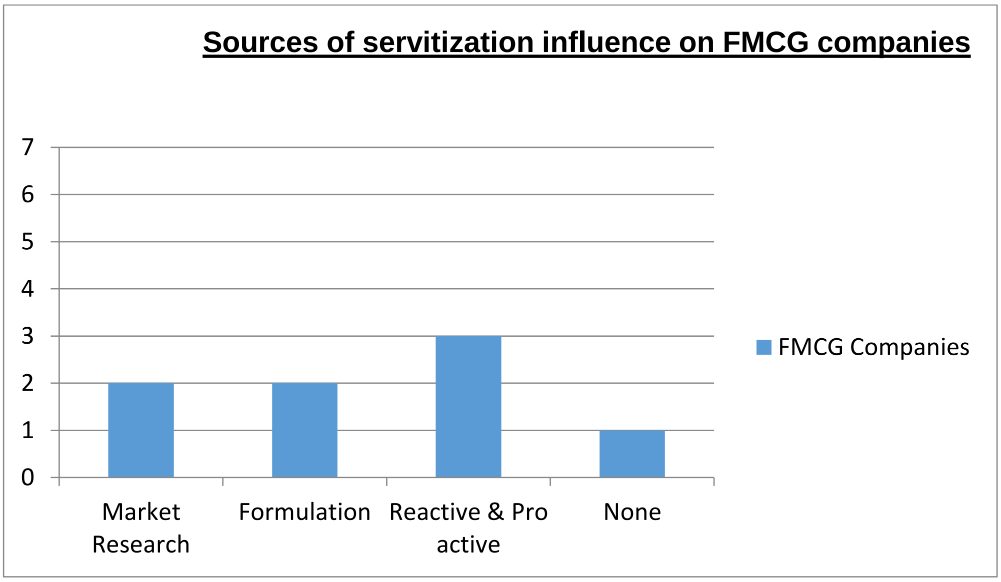

Figure 6 : A bar graph showing how consumers influence the product manufacturing process part of the organisation

Out of seven companies, two got the most influence from the market research conducted. Another two companies were influenced by the suggestions made by customers on the preferred formulas and variations that are used during manufacturing, three companies were influenced by being responsive and defensive on customer's preference and only one was not influenced by any factor.

Question 3: During your products manufacturing process, do you capitalize on the ideas suggested by customers? If yes, how do you configure your operations to include the ideas suggested?

The bar graph below shows the level of ideas from customers capitalized by FMCG manufacturing firms. The results were categorised into three categories High, Moderate and Low.

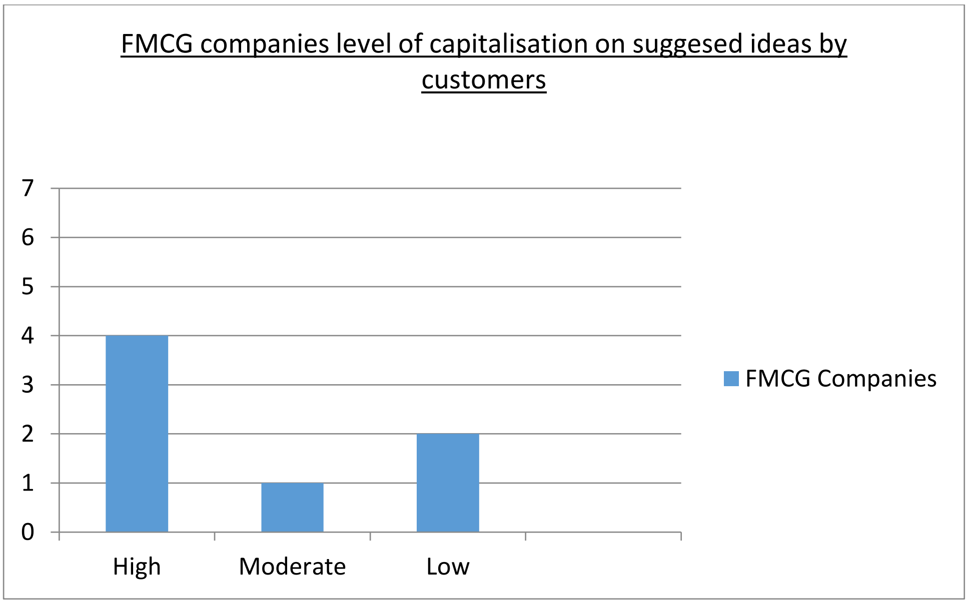

Figure 7 : A bar graph showing the level of how much FMCG companies capitalize on customer's suggestions

Four companies alluded a higher mode of capitalization, one on moderate and two on a lower mode of capitalization

Participants responded to whether they capitalised on customer suggestions or not, and the results are shown in Pie Chart, figure 8 below

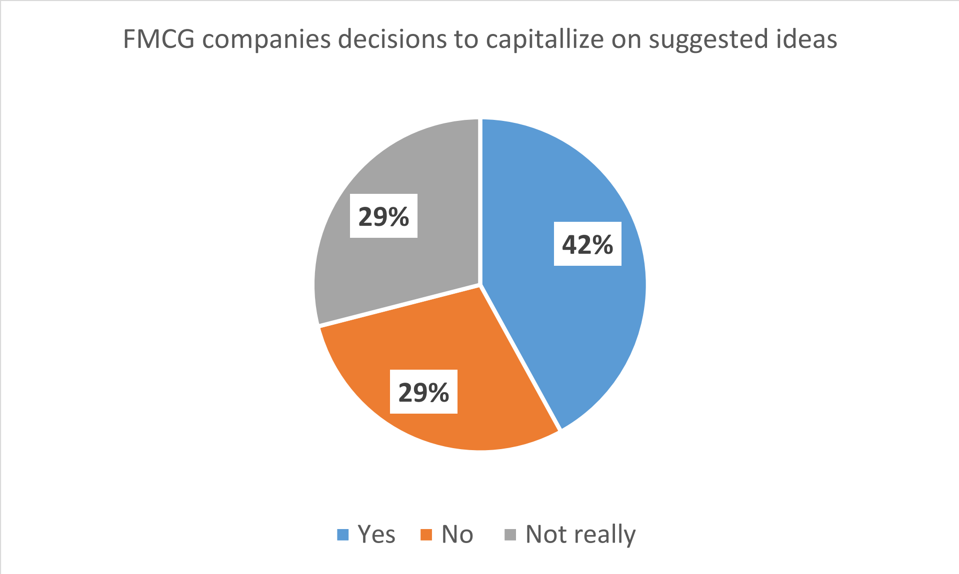

Figure 8 : Pie chart representing a proportion on decisions FMCG companies take on capitalizing on ideas suggested by customers

The pie chart shows that 42% of the participating FMCG manufacturing firms capitalize on ideas suggested by customers, 29% do not capitalize on ideas, whereas the other 29% were neutral on the decision to capitalize on the ideas or not.

Regarding how companies configure their operation to include ideas suggested by customers, three categories emerged from the responses, namely through feasibility studies, market research and customer feedback surveys. The pie chart in figure 9 below indicates the findings from the responses

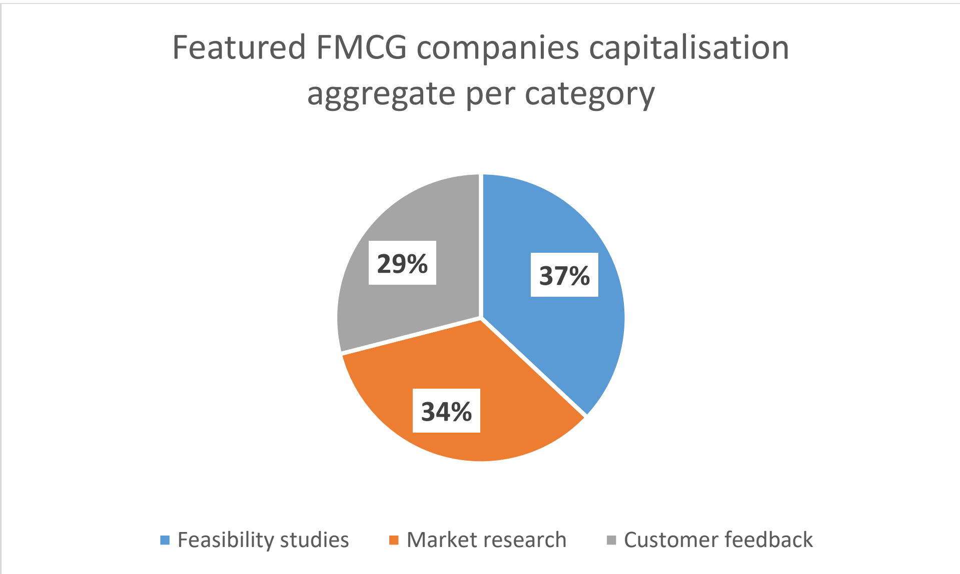

Figure 9: Operations configurations for FMCG companies that include customer's suggestion

The results indicate that the majority (37%) of the participating companies relied on customer feedback to capitalise on suggestions whilst the other one was 34 % through market research and 29% of information was captured through feasibility studies.

Question 4: What amount of say or influence do consumers have in your organisation when it comes to products manufacturing streamline/preference?

The bar graph 11 below depicts the amount of influence consumers and customers have on FMCG manufacturing firms primarily on the areas of product manufacturing and streamline /preference on products. The influence is categorised into three categories, High, moderate and low

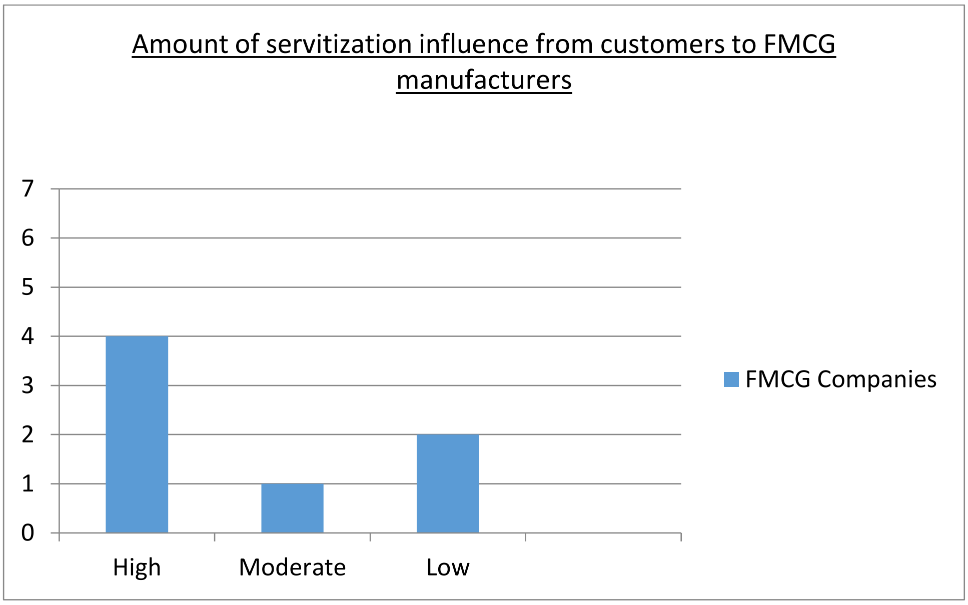

Figure 10: Bar graph depicting the amount of say/influence that customers have on FMCG manufacturing firms

Out of seven, four companies communicate to have a higher influence from customers; one company is influenced on a moderate level while two FMCG companies' influence is on a low level.

By studying the responses further, it was possible to determine through which components of the business the information form customers filters into the company. Four sources were identified namely through data collection, through internal auditing, via outsourced consumer communication or through the Sales and operation planning (S&OP) structures. The pie chart in figure 11 indicates the various population identified from the participating companies.

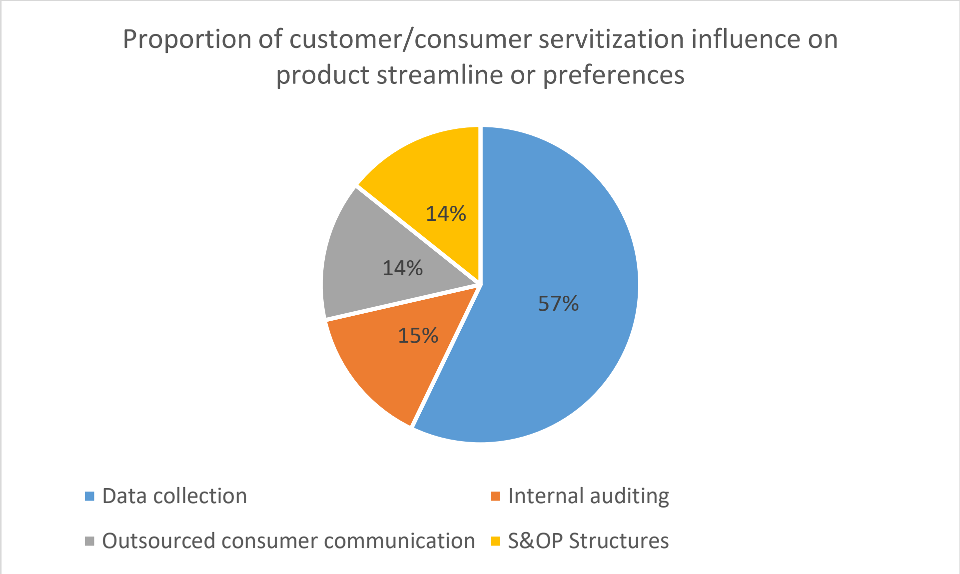

Figure 11: A pie chart representing a proportion of customer/consumer servitization influence on product streamline or preferences

Fifty-Seven percent (57%) of featured experience the influence coming through data collection, which is the majority of the participating companies

Question 5: What is the value proposition that your organisation is offering to its customers?

The below figure 12 graph shows the different value propositions offered by FMCG manufacturing firms to clients

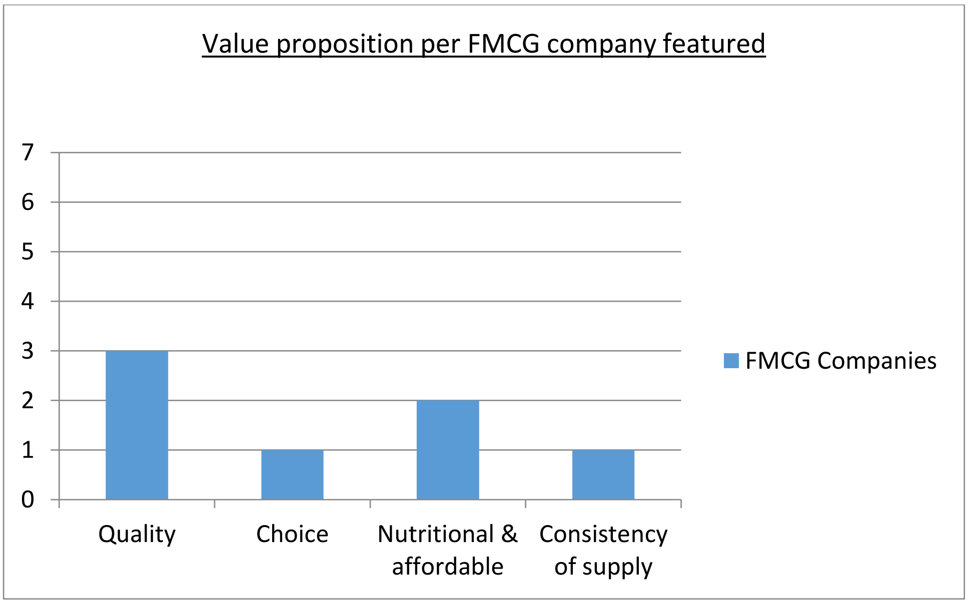

Figure 12: A Bar graph depicting different value propositions offered by FMCG firms to clients

Out of seven FMCG companies that participated in the study, three companies (43%) said to be offering their value proposition as quality, one offering choice, two offering nutritional and affordable products and one offering consistency and guarantee of supply.

Question 6: How well (poorly) are you doing in delivering the value that target customers want

In measuring how well or poorly the manufacturers are doing in delivering the target values which customers want, the figure 13 below depicts target value achieved by manufacturing firms, rated on a scale of 1 to 10. The figures were rounded off to the nearest digit. Exact figures are found on Appendix 8 on the target representation.

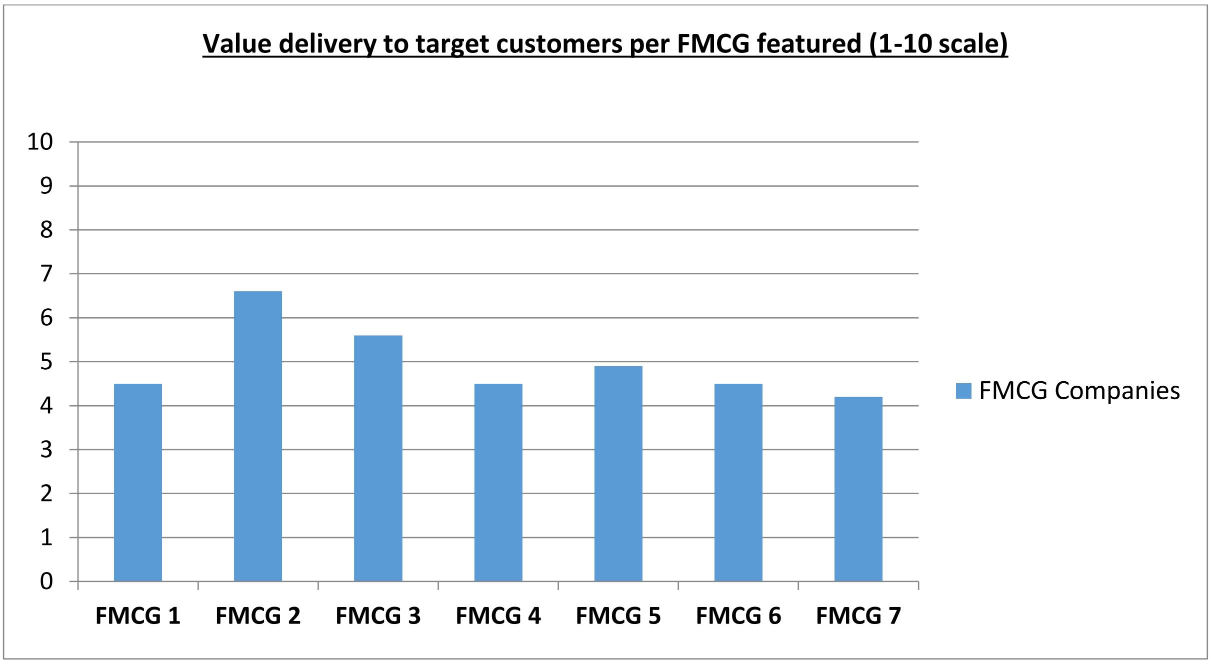

Figure 13: A bar graph depicting the customer target value achieved by FMCG firms

The results show FMCG firm 2 had the highest target value achieved whilst firm 1,4,6 and 7 were slightly almost the same.

The below table 6 depicts the current information/service level on how the different participating FMCG companies achieved their target value set from their customers.

Table 5: Current target value service level delivery per hundred (%) by FMCG manufacturers

Firm	FMCG 1	FMCG 2	FMCG 3	FMCG 4	FMCG 5	FMCG 6	FMCG 7
Percentage (%)	65%	95%	80%	65%	70%	65%	60%

FMCG participating companies had each a target service level value to achieve. Their current sittings as per their confirmation are as the following, firm is currently sitting at 65% target value, firm 2 at 95%, firm 3 at 80%, firm 4 at 65%, firm 5 at 70%, firm 6 at 65% and firm 7 at 60%.

Question 7: What structures, processes, procedures or methods have been used to ensure coherence in organisational response to the product -service system?

For FMCG manufacturing firms to ensure coherence in responding to the organisational service response, a number of sources of collecting and organising the customer's information have been used with other processes or methods followed. The below bar graph 14 shows the sources identified in coherence to responding to the organisation service.

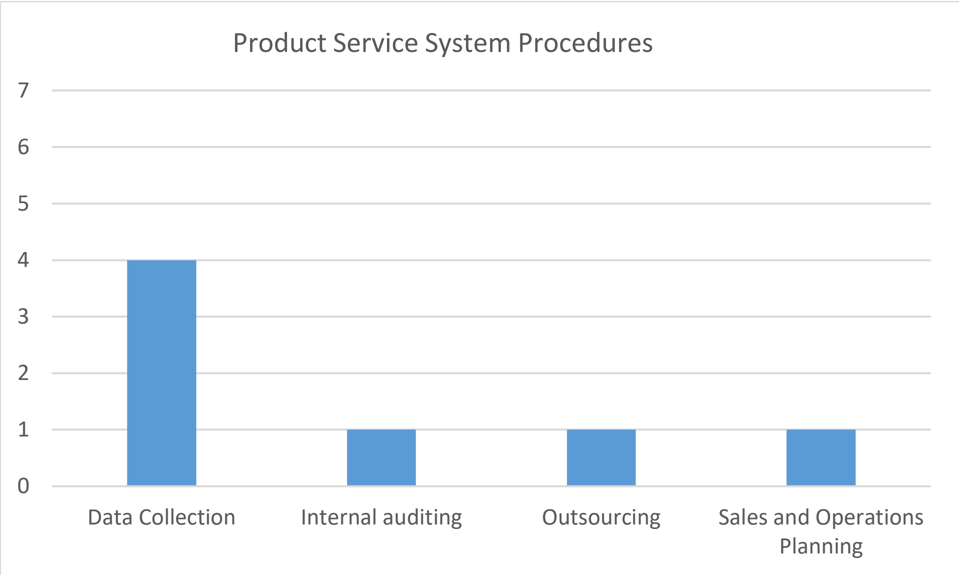

Figure 14: A bar graph depicting sources that informs structures and processes used by FMCG firms in coherence with Servitization

Out of seven companies, four companies used data collection, one conducted internal auditing, one outsourced their consumer feedback to a third party (3rd party) company that managed and handled the complaints, compliments and suggestions, whilst on the other hand one FMCG company has established internal Sales & Operational Planning (S&OP) to effectively look at the process in organisational coherence towards servitization.

The pie chart figure 15 below shows the proportional representation of the sources that informed structures and processes used in organisational coherence .

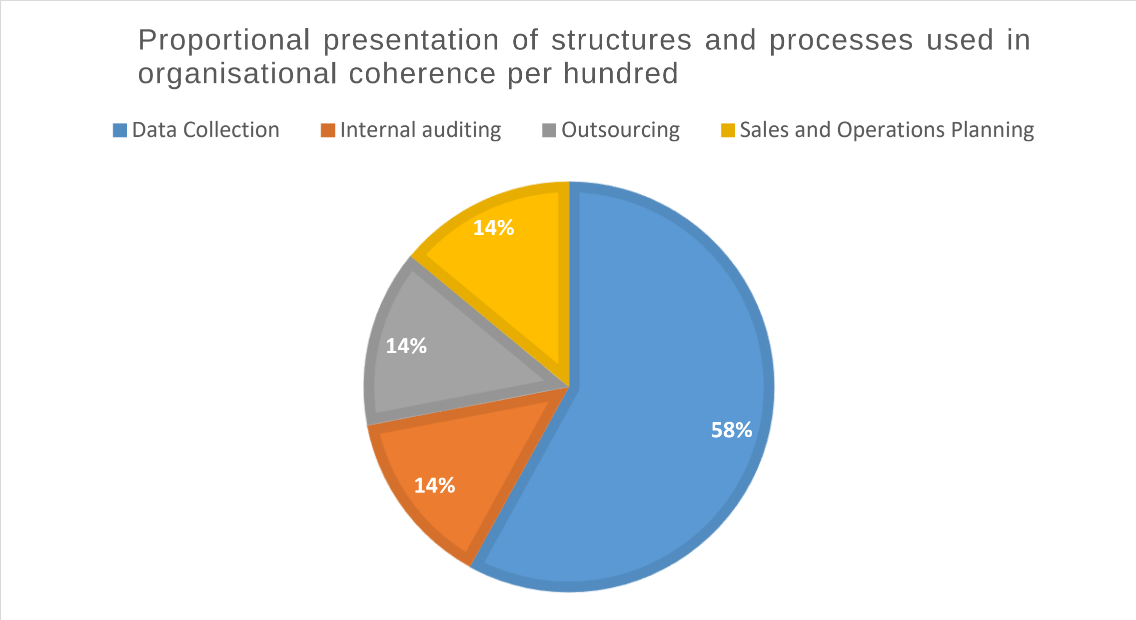

Figure 15: A pie chart depicting the proportional presentation of structures and processes used in organisational coherence per hundred (%)

On the FMCG firms featured regarding the organisational coherence ensuring servitization, Fifty eight (58%) of the firms said to have organised themselves around collecting data through research, fourteen (14%) percent of firms conducted an internal auditing, fourteen (14%) outsourced their information to the third party (3rd party) companies whilst the other 14% established their internal Sales and Operational Planning (S & OP) to focus solely on the organisational coherence in ensuring effective service strategies.

Question 8: What are the challenges confronted by your organisation when transforming from being a ''product-centered''/''conventional manufacturer" to being a ''servitized'' organisation?

The below figure 16 graph depicts the challenges that FMCG manufacturing firms experience from transforming from conventional manufacturers to servitized organisations. In order to effectively roll out the service strategies, organisations needs to have the correct mechanisms and strategies in place

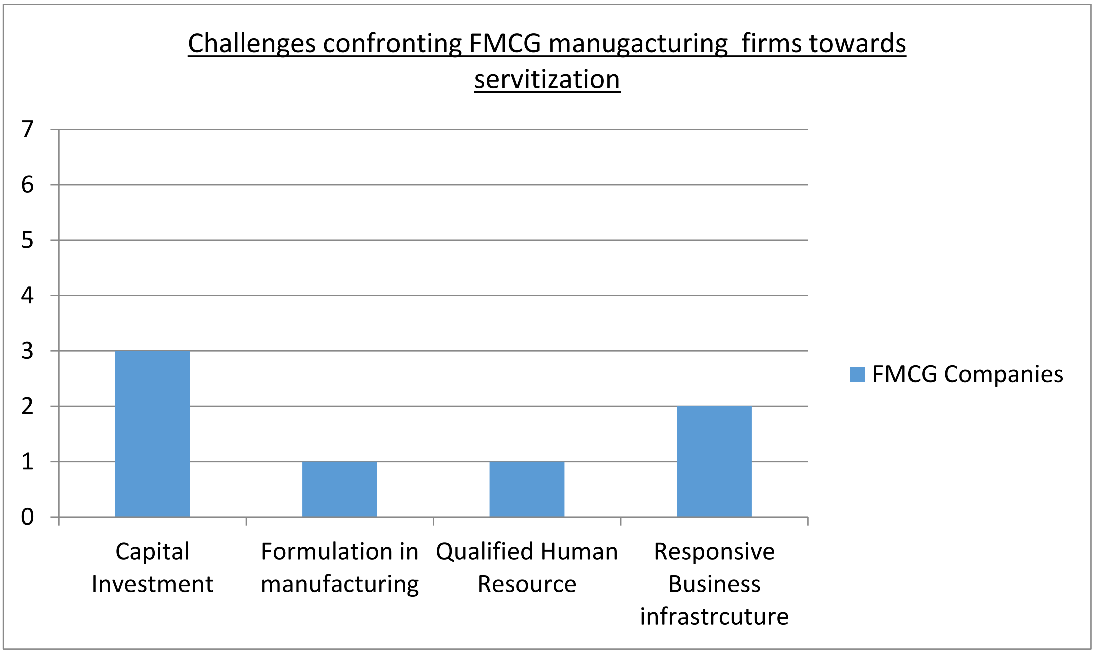

Figure 16:A bar graph depicting the challenges that confronts FMCG firms towards servitization

Out of seven FMCG firms, three were confronted with a challenge of capital investment, two firms faced with a challenge in formulation change to manufacturing their products, two firms have said to have challenges when it comes to qualified human resources whereas two have alluded to the issue of not having the right infrastructure in place to deal with servitization challenge. This shows that most of the participating firms found capital investment on the greater challenge in transforming from product centered to being a servitized firm.

A further breakdown of the challenges confronting FMCG firms towards servitization are depicted in the below figure 17 pie chart.

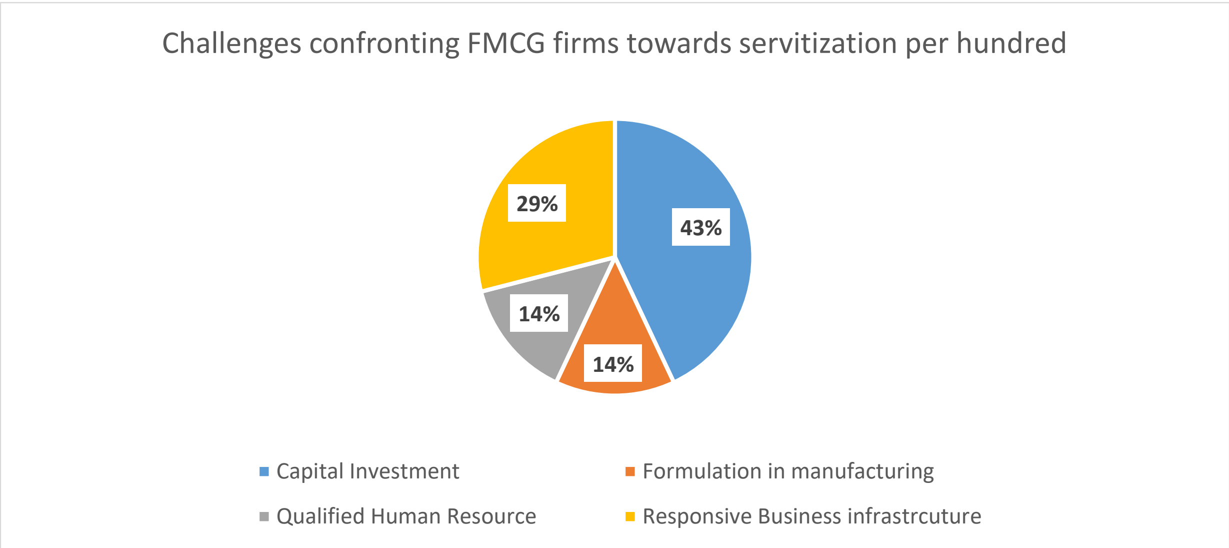

Figure 17:A pie chart depicting the proportion of challenges confronting FMCG firms towards servitization per hundred (%)

Forty three percent (43%), of FMCG manufacturing firms are faced with the challenge of not having enough capital to embrace servitization investments, fourteen percent (14%) of firms featured struggle with formulation change to their product manufacturing, fourteen percent (14%) of firms speaks to the challenge of not having highly flexible workforce/human resource to effectively respond to the servitization need and the rest of twenty nine percent (29%) of companies allude to the fact that their business infrastructure is not at a level where it could effectively execute the service strategies.

Question 9: Whether internal or external, what are the key drivers and inhibitors of servitization in your organisation?

The graph 18 below depicts the key drivers of servitization on FMCG manufacturing firms. Often they key drivers are the greatest influence when it comes to transformation in any organisation.

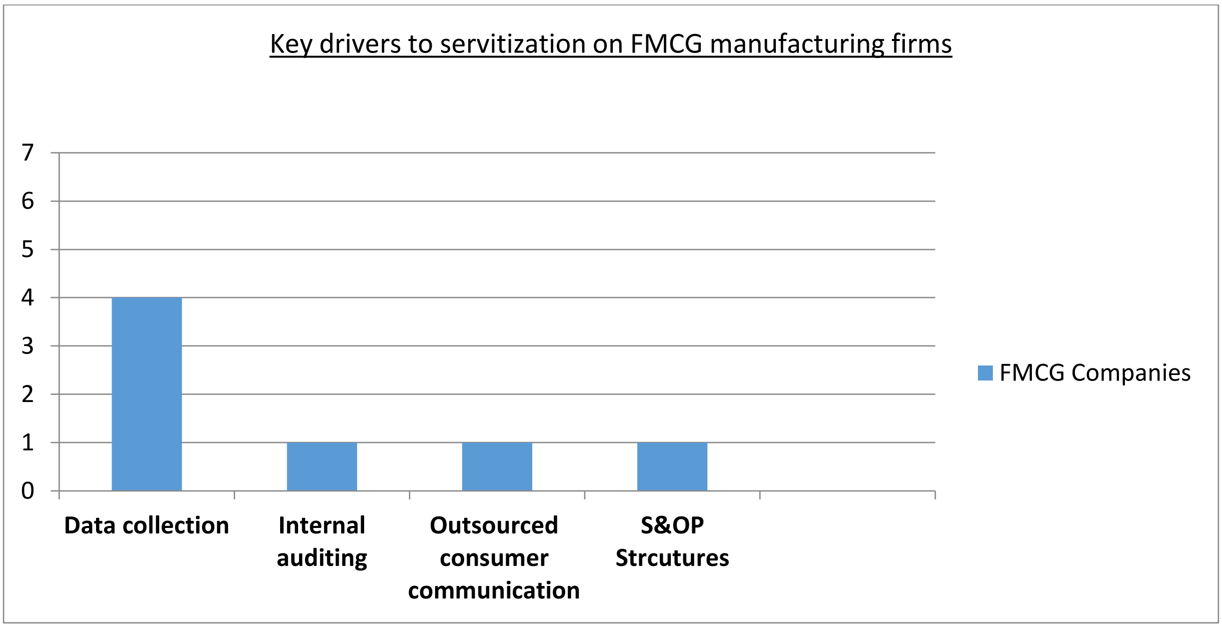

Figure 18: A bar graph depicting both internal and external key drivers and inhibitors of servitization in FMCG manufacturing firms participated

According to the results of the research, four companies alluded to be having their influence from customer data collected, one company relied on the company internal auditing, one manufacturer was driven from the sales and operation planning structures within the business and lastly one manufacturer relied on the data received from their outsourced consumer communication channels. Both internal and external drivers played an influencing factor in all the manufacturing companies, which were involved. In driving the change fifty-eight percent (58%) of the fmcg firms are influenced by customer data collection, fourteen percent (14%)

are influenced by their organisational internal audits, fourteen percent (14%) of manufacturers were influenced by the data acquired from the manufacturers outsourced third party and the last fourteen percent (14%) attributed from the sales and operations planning structures in the manufacturing firms. This shows that most of the participating firms were driven by data collection as a driver for servitization.

Question 10: In your view, what organisational restructuring is needed to deliver effective service strategies?

The below figure 19 bar graph depicts the organisational restructuring needed to deliver effective service strategies on manufacturing firms featured.

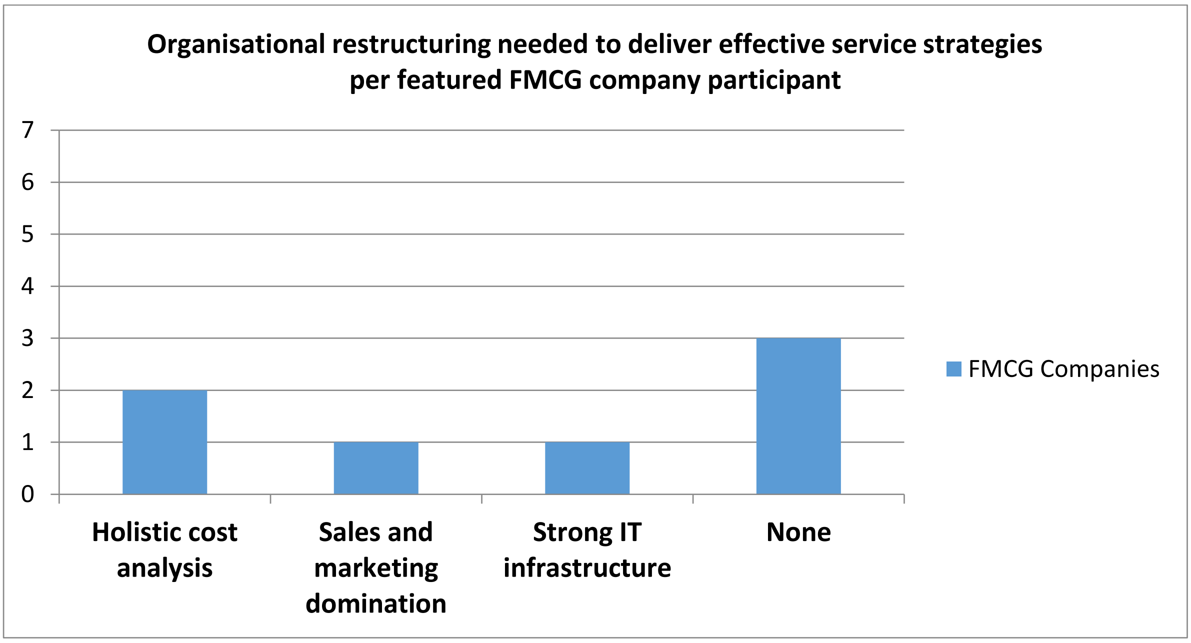

Figure 19: A bar graph depicting the effective service strategies needed for organisational restructuring

A configuration in a manufacturing process will ultimately need to cater for the customer's needs by being fully efficient and effective. The FMCG manufacturing firms that participated in the study looked at organisational restructuring strategies such as Holistic cost analysis, sales and marketing dominance and effective Information Technology (IT) infrastructure whilst few were still in their old ways of functioning. Two firms alluded that they needed a holistic cost analysis; one firm said they needed to look at where their sales and marketing is dominance, one manufacturer attributed to the fact that they needed effective Information Technology infrastructures whilst three of the manufacturing firms did not say what organisational restructuring they needed at the time.

Twenty-nine percent (29%) of the manufacturers alluded that their organisation needed holistic costs analysis in order to effect the servitization, fourteen percent of the manufactures included mentioned that their effective service strategy would be to focus on where they are dominant with their sales and marketing. The other fourteen percent of the firms indicated that they needed a strong Information Technology (IT) infrastructure to be able to move swiftly to becoming service oriented whilst the rest of the forty-three percent (43%) of the featured manufacturers said at that current time they needed no effective strategies but to continue business as usual.

Chapter 5: Discussions

The research results are discussed taking into considerations how customers influence the outcome of products manufactured at FMCG firms to how the decision is taken to servitize their business.

5.1 Servitization decisions

Majority of participants concede that consumers have a huge influence on their manufacturing processes while two other participants submitted that it does happen but to an extent that the market is driving it (figure 4). This supports the study by Adrodegari et.al (2017) who state that ''manufacturers have to understand deeply their customers needs and problems first, then develop more value propositions more customer oriented which will enable them build business models which allow generating and delivering expected value'' Adrodegari et al (2017:1-3). The influence was driven through information from the market research, feedback on formulations, customer preferences or complaints (figure 6), with no particular bias or channel used. Clearly some companies were proactive to obtain information from their customers about their products actually reaches the company in one way or another. The difference lies in whether companies capitalise on this customer feedback or not and how they do so. This leads to the decision to servitize or not. The majority of participants (42%) indicate that they capitalise on ideas suggested by customers (figure 8) with 29% neutral. There were reasons why some companies do not capitalise on ideas, these include capital investment, formulation in manufacturing, qualified human resources as well as ineffective responsive business infrastructure (figure 16).

5.2 Exploring downstream value chain

Manufacturers who have explored their downstream opportunities in creating value for the customers have found themselves offering value propositions that serves their customers. This ties with the findings of Wise and Baumgartner (1999) and Ahamed et al, (2013). Wise and Baumgartner (1999:online) noted that exploiting the downstream opportunities in servitization requires a new way of thinking about strategy. According to Ahamed et al, (2013) this transition process of an organization requires to continuously innovate new services with benefit to its core product, which in the end signifies a firm as a value provider and leads towards better success. The study has found the propositions as quality, choice, nutritional and affordable as well as consistency of supply. Meanwhile majority 43% (figure 12) of the firms said to be offering their value propositions as quality and the standards in all firms being choice and consistency of supply. It is clear from the study that quality is not to be compromised when moving towards service oriented business. This quality observation ties to the findings of Raddats et al (2016) who says quality appears as an important demand based motivation for all manufacturing. It is also clear that some firms want to consistently meet the customer's supply so as to maintain the customer base and improve their overall customer service.

5.3 Commercial viability of servitization

Since demand-based motivation is imperative to manufacturing, during the research a strong theme of FMCG firms responding to servitization need arose. It has been found from most of the responses that an efficient response to servitization includes consumer feedback, market research and feasibility studies (figure 9), which may take a bit longer to implement due to internal processes and commercial viability. If given a chance, the findings of (Reinartz and Ulaga, 2008) attest to these motivations that they are often very central to manufacturers, with changing the corporate focus from products to services which are widely considered to be a route to economic success. On the level of how much manufacturing firms decide to configure their operations, a great number (37%) of firms (figure 9) concede that they consider the customer feedback on a higher mode (figure 7). Most of firms allude to the fact that the suggestion or feedback must be commercially viable to be taken into consideration in order to configure the operations whilst the process may take a bit longer to implement. This is clear that some manufacturers are simply not throwing their products and services in the market without a convincing and in-depth understanding of how they may be attractive to the customers. One of the participants indicated that ''consumers simply buy or not'' (see appendix 2, participant 4) for more detailed response.

5.4 Servitization status at FMCG

When evaluating the current service level in terms of target value per manufacturing firms featured, most of firms seems to be in a stable condition on an average of 65% (table 6). This to the researcher's observation indicate the target as being stable enough to still have a room to improve by engaging customers more towards moving from product centric to service oriented. (Reinartz and Ulaga, 2008), in their findings also attest that it is a mutual effort to meet the exceptional customer service thereby working closely with different entities and stakeholders which include customers in order to meet the servitization capabilities.

5.5 Data imperatives

Data is a very important aspect of every business in understanding it's overall performance, loopholes, threats as well as maintaining and implementing good service strategies. In coherence with sources that informs the structures and processes used by FMCG firms to servitize, a greater percentage 58% (figure 14 & 15) of featured firms relies strongly on a data collection to keep up with the needs and demands of the customers. Amongst others, they also rely on internal audits, outsourcing some of their information gathering function to 3rd parties' companies as well as using the findings of the internal sales and operational planning team. To the researcher's view, all these structures seems to be necessary and important as they can all assist firms to measure the validity and reliability of the data collected thereby comparing and verifying internally collected data with externally collected data. The findings of (Anderson et.al 2006) which states that in order to make resonating value propositions that ensure an equitable return on the delivered customer value, suppliers need to be able to demonstrate that their offerings are actually delivering the promised value, supports and resonate with these organisational coherence findings. It is imperative that data is compared to avoid unilateral strategies being implemented towards servitization. The findings of Lightfoot et.al (2012:1405) are also in agreement with this data comparison thereby saying that, the servitization of manufacturing is associated with the market delivery of combined manufactured products with services, the more established communities need to better recognise the diversity emerging within the entire servitization research landscape and ensure future specialisation in their communities is pursued in a more informed manner.

5.6 Enablers and inhibitors of servitization

Some firms may not find it easy to servitize due to other challenges and limiting factors. In the first part of the discussion it was stated that these challenges are capital investment, formulation in manufacturing, qualified human resource and responsive business infrastructure (figure 16). Majority (43%) of the firms are confronted heavily by capital investment (figure 17), followed by responsive business infrastructure (29%) and the least being the qualified human resource which makes up (14%) across all the firms that participated in the study. According to one participant (see Appendix 2, participant 1) stated that ''servitization will never understand the cost of innovation''. It does make sense for some companies to invest on something that will be profitable as well as sustainable rather than investing in a configuration which does not promise any positive yields on return of investment. This capital investment finding supports the findings of (Reinartz and Ulaga, 2008), that the changes from products to services should widely be considered whey they make a route to economic success. Business infrastructure (figure 17) seems to be the 2nd biggest challenge in servitizing. Changes in formulations (pack sizes, flavours, packaging etc.) have a direct link with the state of infrastructure used. Some firms may continuously need to change their infrastructure to keep up with the formulation changes in order to meet the customer's demands, whilst others can maintain the same infrastructure for many years as their products are always standardised and not a complex manufacturing process (See Appendix 2 comments, participants 4). This is supported by the findings of (Vargo, et.al 2008) when they say value is created collaboratively by consumers and manufactures in interactive configurations of mutual exchange, it is very important that the configuration contribute a greater economic sense for the manufacturers to pursue the formulation request. From the study, (29%) of firms' infrastructures (figure 17) are not at a level where they can effectively execute the service strategies.

5.7 Servitization capabilities

Institutional knowledge of servitization from the findings of the research can be seen as a drive and a positive advantage if understood throughout the whole organisation. Most firms are not able to drive servitization because they simply do not have the correct tools, concepts and information (see Appendix 2, participants 7 and 3 comments). It seems as if the correct and transactable information can be the inhibitor to servitize. This ties together with innovative strategies. Innovation also plays a central part in the process of servitization. Some participants alluded to the fact that the present offerings are supplemented by innovation in brining and maintaining other products already in the market. It is clear from their observations that innovation serve what the market intend and dictates the direction in which the brand is taking. Both institutional knowledge and innovation requires a qualified workforce and ties with the findings of Szász et al (2017:1011) which says ''Meeting the challenges of servitization requires a highly qualified and flexible human resource base, which is ready to facilitate a higher level of customer centricity, a more complex supply of product-service packages and a more relationship-oriented cooperation with customers and suppliers than typically found in traditional manufacturing firms'' (Szász et al., 2017:1011). It is therefore clear that a lack of these institutional knowledge and a qualified workforce could affect the correct flow of information across the business when looking into transforming from a customer centric business to service oriented business. One participant mentioned that ''the flow of information can sometimes be too much and you find that it is not the correct flow of information'' (See Appendix 2, participant 7) for more comments.

5.8 Conclusion on discussion

According to the findings of the study, servitizing may not be a complex issue if the correct service strategies and value propositions are defined. It has been noted through the data collected that most manufacturing firms puts the customers in the forefront of their business processes and this may be seen as a positive start to becoming a service oriented manufacturers. The study struggled with finding the specialised and related local literature which is limited due to the not much researched topic in south Africa. The constraints were mitigated by reviewing a broader literature in the body of the subject and including that in the study.

Chapter 6: Conclusions and recommendations

This Chapter considers what the research has achieved in view of the objectives and research question, the theoretical implications of the findings, the study limitations and recommendation for future studies.

6.1 The objectives and research question

6.1.1 **Objective one**: To determine consumer's influence in the outcome of products manufactured at FMCG manufacturing firms

The first objective was to determine consumer's influence in the outcome of products manufactured at FMCG manufacturing firms. This objective was met in that majority of the firms concede to the customers being their centre of the business and everything they do. It was also noted that a greater part of service strategies used are a pro-active response to customer's influence through different feedback mechanisms. Therefore, consumers have a huge influence in the outcome of the products and services offered at FMCG manufacturing firms.

6.1.2 **Objective two**: To evaluate how the configuration of operations in FMCG manufacturing capitalises on the ideas customers provide for suggested products and services.

The second objective was to evaluate how the configuration of operations in FMCG manufacturing firms capitalises on the ideas customers provide for suggested products and services This objective was met in that the current level of servitization status at majority of the manufacturing firms are sitting at a minimum of 65% responsive to the formulation in manufacturing. It was noted that a greater part of the configurations happens only when they make commercial sense, therefore 65% is satisfactory in a sense that majority of configurations were influenced by the needs of customers.

6.1.3 **Objective three**: To determine the value proposition that FMCG manufacturing firms are offering to clients.

The third objective was to determine the value proposition that FMCG manufacturing firms are offering to clients. This objective was met in that some of the value propositions were outlined and found from what different manufacturers were offering. A greater number of firms share the same value propositions whilst other exclusive value propositions stands out from the rest of the manufacturers. Some of those value propositions offered include quality, choice, nutritional and affordable products as well as consistency and guarantee of the supply.

6.1.4 **Objective four**: To determine how much access up and down the supply chain FMCG manufacturing firms allow their customers

The fourth objective was to determine how much access up and down the supply chain FMCG manufacturing firms allow their customers. This objective was met in that all companies encouraged collaboration with their customers to define the end product or services offered. A conclusion can be made that a fair amount of access is always given to the customers up and down the supply chain at FMCG manufacturing firms.

6.1.5 Research question: What strategic implications do FMCG manufacturing firms draw in servitization from incorporating the customers up front?

The research question was to find whether if there are any strategic implications which manufacturing firms draw in servitization from incorporating their customers upfront. The study answered the research question in that it detailed some of the implications which remains part of strategic adoption challenges considering the pros and cons of their implementation. When manufacturing firms incorporate their customers upfront, implications such as capital investment, the right infrastructure and unskilled personnel arise. This confirms that manufacturing firms encounter strategic implications, these implications come with a huge cost as most of the firms indicated that they can only invest in configurations which will yield a positive return on investment, whilst on the other hand they want to continue to make their customers happy. In this case, there both positive and negative implications in the process of servitizing and they all boil down to what reliable strategies are implemented whilst incorporating the customer upfront.

6.2 Findings and theoretical implications

The purpose of this study was to evaluate the strategic implications in which the FMCG manufacturing firms draw in servitization from incorporating their customers upfront. According to the findings of the study, servitization is paramount to most of the FMCG manufacturing firms and seen as something that creates value to their customers. While 65% of the participated FMCG manufacturers said to be on servitization track, about 35% found not pursuing the servitization journey due to limitations such as capital investment, negative return on investment and inadequate service strategies.

The theoretical implications of the findings according to Kindstrom (2010:479) is that ''the limited interactions between suppliers and customers will thus have a negative impact on the enhancement of relationships meant to facilitate an improved customer sensing and information gathering''. While 60% of the participated firms does it well with research and development efforts, about 40% of the companies are not able to implement service strategies effectively due to the standard formulation and consistent type of products they produce in the food categories (i.e. bread, rice and maize.).

Whilst the other objective of the research was to evaluate how FMCG manufacturing firms configure their operations to include the suggestion made by customers, the findings of the research revealed that most FMCG manufacturing firms find it difficult in terms of being flexible in changing the manufacturing processes significantly upon demand. They have alluded to the fact that it is a huge process altogether and firstly the change needed to be commercially viable as some of the systems used are brought from outside of South Africa and are costly to use. About 35% of the FMCG firms that participated have expressed an institutional knowledge of service strategies as an inhibitor and therefore having lack of servitization, champions within their companies have cost them loss in customers and not getting the service levels on a desired scale.

Not enough FMCG's are applying servitization in depth, many focus on traditional research and development (R&D) of the product or processes e.g. product design or manufacturing process design instead. On average of 47 % of FMCG firms featured, use market research to determine/gauge the depth of customer's needs out there.

According to the analysis of the study, servitization is costly to adopt and implement. FMCG's that constantly seek to improve their customer service should be prepared to part ways with a significant portion of capital investment to achieve maximum customer service. The findings reveals that the cost of moving from product centric to service oriented may not be easy as the process is customer led, often manufacturers will have to find themselves taking risks to implement servitization strategies which shows projected growth in terms of profit and revenue should the market responded positively to the services offered. Most manufacturers seem to consider customer's suggestions for servitization only when they make commercial sense. Servitization as driven by a conscious strategy to provide product-service centric services becomes a differentiating factor in the marketplace (Kavanaugh, 2019: online).

Because of standardised nature of products in some FMCG's, formulation to service orientation becomes a challenge, as some products are too standard in their nature. Some manufacturers will configure by offering more pack sizes, user-friendly packaging, more measurements or more content at a reasonable fee. This type of configuration in servitization is also an added factor that could satisfy the customer since most customers would like to see value for money on the products and services they receive from manufactures.

FMCG manufacturers suggest that Innovation should drive servitization, as it is cost effective to do so. They reiterate that servitization is paramount but it also does not understand the cost of innovation. This suggest to the researcher that servitization strategies at FMCG firms should be formulated in line with the manufacturer's market share and revenue capital with acceptable cost containments in order to have a healthy financial/cash flow within the firms. Capital investment is one of the hindrances to servitization

Institutional knowledge of service strategies is an inhibitor to servitization and therefore having lack of servitization champions within FMCG manufacturing firms cost a loss in customers and not getting the service levels on a desired scale. This suggest that manufacturers should consider or prioritise centres of excellence in line with the mission and vision of the companies to instil a culture of learning and putting the customer at the forefront of the business always. Partners, employees, value chains and end users will better understand the value of configuration and moving from product centric to service oriented when they are equipped with the value of servitization and its overall benefits to the businesses. The current and average customer satisfaction in Gauteng FMCG manufacturing firms is stable, but many attest to the fact that there is still more to be done towards an effective servitized firms.

The findings of the study suggest that a value proposition, which cannot be defined from the customer's perspective, cannot hold.

Allowing the customer into the up and downstream supply chain could have both positive and negative effects. Customers are more selective when choosing the brand and services, which they want to purchase. According to the finding of the study, a responsive manufacturer offering great services is likely to capture the market with their servitization strategies.

6.3 Servitization impact on FMCG manufacturing companies

The findings of the research provide research and product development managers and manufacturing specialists/practitioners at FMCG manufacturing firms with valuable insights with regards to servitization practise within their firms. It is very important that the FMCG manufacturing firms takes interest in their servitization process/journey as this could be a one competitive edge and advantage in delivering the best customer service, being consistent with the value offered to their clients as well as expanding the customer base.

The existing literature, Spring and Araujo, (2009:444) allude to the fact that the key feature to servitization strategies is a strong customer centricity where customers are not just provided with products but rather more tailored solutions. In contrast to the finding of the research, few of the manufacturing firms that confirmed their current non-servitization strategies should take an advantage into exploring and leaning more towards becoming service oriented businesses in order not to lose their customers into more servitized markets.

6.4 Practical implications for managers

Manufacturing firms have both short and long-term organisational strategies which give direction with regard to processes implementation and business operations. Management in manufacturing firms may have the challenge of dealing with the constant rapid change due to competition and customers' evolving needs. The alignment and configurations needed to meet such high demands may mean that management at manufacturing firms may have to deviate from their normal business processes to welcome demand service-oriented strategies. Some of the implications include acquisition of certain skilled human resources, expenditure via capital investment and developing expertise in the knowledge of servitization.

Rogers (2009:197) found that corporate strategy is essentially about making choices and trade-offs in the allocation of resources. That may require management to make uncomfortable choices of restructuring the organisation and the manufacturing processes to meet customers' demands. Most manufacturing firms may face a shortage of skilled and experienced individuals to affect the strategy change and infrastructure investment may not bring about change effectively even with a contributing factor of capital and cashflow injected in the manufacturing firm. Rogers (2009:197) agrees, noting that achieving a competitive advantage and using management process based on the notions of continuity and incremental improvement is becoming a difficult proposition. It is therefore imperative for FMCG manufacturing firms to allow and prepare for disruptive methods from time to time as they configure from product service to service oriented.

6.5 Limitations and recommendations

The study has some limitations. An important limitation is with regard to the sample size as the study used only a small sample of participants and specifically in the Gauteng region. The second limitation would be that the study only focused on two categories (food, home and personal care) of products at manufacturing firms but not all FMCG categories incorporated. And last, the previous studies of servitization concepts in South Africa is very limited and therefore, literature and history in the context of FMCG manufacturing industry specifically is available to an extent.

6.6 Recommendations for future research

This study of seeing how FMCG manufacturing firms improve their customer service through a servitization concept only focused on FMCG firms in Gauteng province, South Africa. The similar future research can be done on a nationally scale to include a broader scale of FMCG firms in South Africa as a whole, since this may have an impact on the generalisation of the finding. A larger sample size including a diverse portfolio of participants and firms would also make a different as information would be gathered from both downstream and upstream in different organisations as well. All these leaves a room for future research to expand on.

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APPENDICES

Appendix 1: Interview guide

Interview Questions on Research: ***Improving Customer Service throughout manufacturing firms, a servitization approach***

Good day

Thank you for taking some time and agreeing to meet with me for this interview. As explained to you the purpose of my research in the participation information sheet sent to you previously, I will just recap the purpose and the process and will ask you the follow up questions as part of the interview.

1. Can you describe your organisation's servitization journey experience and where it stands currently?
2. How do consumers influence the product manufacturing process part of your organisation?
3. During your products manufacturing process, do you capitalize on the ideas suggested by customers? If yes, how do you configure your operations to include the ideas suggested?
4. What amount of say or influence do consumers have in your organisation when it comes to products manufacturing streamline/preference?
5. What is the value proposition that your organisation is offering to its customers?
6. How well (poorly) are you doing in delivering the value that target customers want?
7. What structures, processes, procedures or methods have been used to ensure coherence in organisational response to the product -service system?
8. What are the challenges confronted by your organisation when transforming from being a ''product-centered''/''conventional manufacturer" to being a ''servitized'' organisation?
9. Whether internal or external, what are the key drivers and inhibitors of servitization in your organisation?
10. In your view, what organisational restructuring is needed to deliver effective service strategies

That brings us to the end of the interview. Thank you once again for taking time to meet with me. You have been very helpful.

Appendix 2: Interview Analysis

Question 1: Can you describe your organisation's servitization journey experience and where it stands currently?

1. **Participant 1**

''There is a lot of variance. Companies have learned that they cannot do everything by themselves; they need to go to the 3rd party manufacturing. So for me, the more service orientated becomes, the more 3rd party manufacturing they will require. Because you cannot have experience in all these fields in your business, it is not possible. So even with us we will outsource to the 3rd party company to complete that loop so we can get the consumer and the customer''

2. **Participant 2**

''If you look at our company now, I would summarise servitization as innovation, if you look at the condition of servitization is a development of a capability to provide services and solutions that supplement our current offerings. That supplication is called innovation''.

3. **Participant 3**

''For the term is new, am not aware of the term servitization but however, in some case, we are involved in showing that we understand the customer's requirements in certain products and product quality. So that we can supply them with the best quality products at the best price and all the basic groceries and am sure you always receive. So the journey, I don't understand where it starts and where it ends, I don't think that we exceptionally are sophisticated''

4. **Participant 4**

''Looking at our supply chain, looking at the past 5 years. We have taken our supply chain and Logistics out of operations and made it a separate business managed by a separate executive, due to the fact that our customers' requirements are different to each other than to what probably were probably more homogenous was a couple of years ago. Our journey was no 1, splitting up manufacturing from distribution. It was a big change to us due to the fact that previously the more managers would be milling essentials and would be sent out''

5. **Participant 5**

''My role within the organisation is to serve what the market intend and dictates the direction in which the brand is taking. It is being much driven by the market and consumer research. How are you going to engineer your product to meet the current/future requirements from the consumer? We have not gotten a lot of directions specifically from our customers''

6. **Participant 6**

''That is more managed on a specialised route planning level and that is implemented through a whole lot of planning that is managed through a provision of different customers that need different products at different times. 10 years ago, we would have loaded the truck and it would deliver to customers in a more chronological order. Now we've got a whole bunch of software that does route planning based on customer's delivery planning time. We optimize our routes''

7. **Participant 7**

''If the customer give an idea for example, the idea is take to the business to do a feasibility study to see if that idea is commercially viable or not. We need to be sure always when we manufacture new product that millions of customers are going to buy it. We cannot develop a product and 10 people buy it''

Question 2: How do consumers influence the product manufacturing process part of your organisation?

1. Participant 1

‘’Customers do not actually do that and it is actually sad because you have all world full of ideas. Therefore, to capitalize, we had not had an instance where we would. In addition, it is very difficult precedent to start because if we do you probably have to pay that person for every loaf of bread you bake have never seen an idea from a customer. Our new product development stems from market research. So we would go out and research the market and understand what the new needs of the customers are and what the future needs are. Nevertheless, we do not develop products based on the customer. It doesn’t bear any weight’’

2. Participant 2

‘’And in that quality, we should adjust our certain manufacturing process that requires quality. The customers also want a certain quality packaging. Therefore, we need to procure packaging that is in line with our consumer’s demand. In terms of pricing, the customers also expect to pay a certain price. We need to optimise your manufacturing process to be able to deliver the product at the customer is willing to pay for it’’

3. Participant 3

‘’So. We serve all the large retailers in SA and many of them do give input to us with respect to their requirements on their own brand products that we manufacture for them. So, in that regards, to greater or less extend, depending on the sophistication of the retailer, we do get quite a lot of inputs from our customer/retailer base. We are still regarded from a product manufacturing process as the custodians and then experts in that. Very few customers will challenge us in terms of how we manufacture our products’’

4. Participant 4

''A consumer has 1 big way in which they influence us, but it is almost like the reactive influence and not a pro-active influence. They simply not buy the product or they buy it and very eagerly. They do give feedback, but most times, we seek it. Manufacturers and brand owners must go and ask their consumers. If you going to sit down and wait for calls from consumers, it's not going to work. It is a very specific type of consumer that will phone you with a pro-active suggestion. Especially a commodity product, you can't talk more about technology and advance product but now in markets, consumers will complain if you do not perform or simply not buy the product if they do not like it''

5. **Participant 5**

''There is about the process of manufacturing something and one thing that is driven by the practicability of usage. For example, a container that is more pourable, reseal able, with no resistant to breaking and so forth. At this point, it is not easy to be innovative on stable food on what the product needs to look like for us to change the manufacturing process to suit the customer's requirements. If it's something that comes out of the consumer's markets, then we will definitely look at the attributes''

6. **Participant 6**

'' I need to make sure that am giving the right product, at the right time at the right price. So, a consumer complains report comes back an says okay, these are some of the things consumers have complaint about, and then we will break it down to whether it is re-packaging, manufacturing and etc. That's how they influence our manufacturing process''

7. **Participant 7**

''A consumer has 1 big way in which they influence us, but it is almost like the reactive influence and not a pro-active influence. They simply not buy the product or they buy it and very eagerly''

Question 3: During your products manufacturing process, do you capitalize on the ideas suggested by customers? If yes, how do you configure your operations to include the ideas suggested?

1. **Participant 1** ‘’I have never seen an idea from a customer. Our new product development stems from market research. So we would go out and research the market and understand what the new needs of the customers are and what the future needs are. However, we do not develop products based on the customer. It does not bear any weight. Customers do not actually do that and it is actually sad because you have all world full of ideas. Therefore, to capitalize, we had not had an instance where we would. In addition, it is very difficult precedent to start because if we do you probably have to pay that person for every loaf of bread you bake. So it is a business decision whether you would want to capitalize on it or not. But I have not been part of any project where a customer has given us an idea and we have gone with it’’

2. **Participant 2** ‘’Where we get suggestions from customers, for e.g., when they complain that the seal on the product is not sufficient to open, that feedback will be given to manufacturing plant immediately and they will adapt their manufacturing process to correct it according to the customer’s idea if it’s valid and makes commercial sense, we can implement it. Categories are made based on the feedback that we get from consumers, and it’s distributed internally into correct departments’’

3. **Participant 3** ‘’We do capitalize on the ideas suggested by customers. How do we configure?. It could be any change. Often we will go to a feasibility study for any process that we want to change in our business. Depending on the costs obviously there is a focus on the degree of the investigation, if it’s more strenuous or not. So from the word go, we need to make sure that there is enough of the customer’s needs to change the business’’

4. Participant 4

‘’We had some engagements with the consumers and they asked if they could have the resalable bags. Does it influence our operations? It did, we continued with our machines to put one of those bag closures on the packages. It does influence our operations. Most of the time we go out into the market to find out the consumer feedback as it is very rare for them to suggest on their own’’

5. Participant 5

‘’We do capitalize on the ideas suggested by customers. Consumer’s feedback comes to us through an outsourced company. This type of initiatives is sparked by customer complains. That is where customers complain and make suggestions. If you refer to configuration, it is a capital investment. It is driven by where the bakery is, that is one part of it and the other part is having a coastal imprint is very convenient for the import of the wheat, because the further you are from the coast, the more expensive the product becomes. We have customized and configured our business to internal customers through the bakery’’

6. Participant 6

‘’Customers do not actually do that and it is actually sad because you have all world full of ideas. Therefore, to capitalize, we had not had an instance where we would. In addition, it is very difficult precedent to start because if we do you probably have to pay that person for every loaf of bread you bake. So it is a business decision whether you would want to capitalize on it or not. But I have not been part of any project where a customer has given us an idea and we have gone with it’’

7. Participant 7

‘’There is an internal customer-supplier relationship between the maize and the bakery. 60% of the wheat that are milled is sold to the bakery, which is the internal customer. If you refer to configuration, it is a capital investment. It is driven by where the bakery is, that is one part of it and the other part is having a coastal imprint is very convenient for the import of the wheat, because the further you are from the coast, the more expensive the product becomes. We have customized and configured our business to internal customers through the bakery''

Question 4: What amount of say or influence do consumers have in your organisation when it comes to products manufacturing streamline/preference?

1. **Participant 1**

''So we serve all the large retailers in SA. In addition, many of them do give input to us with respect to their requirements on their own brand products that we manufacture for them. Therefore, in that regards, to greater or less extend, depending on the sophistication of the retailer, we do get quite a lot of inputs from our customer/retailer base. We are still regarded from a product manufacturing process as the custodians and then experts in that. Very few customers will challenge us in terms of how we manufacture our products''

2. **Participant 2**

''Consumers have high amount of influence. If the request received from the consumer is commercially viable, it will be implemented. At the end of the day, that is the true test. You make a business that will want to sell a profit on. We value the inputs of our customers highly because they buy our products. So in terms of the influence they have, it is a high amount of influence, as long as the amount is commercially viable''

3. **Participant 3**

''In terms of that, we have been on 100%, on a scale of 0-10. Either directly or indirectly we will be on 100% otherwise, we wound't be in business. I know that this is an obvious answer, but I suppose in any manufacturing business if you are selling a product to an end user, you need to make sure that you meet the requirements of that end user. Although we may not interact directly with consumers and our customers based, it has limited inputs. We are in touch with the requirements by making sure that we conduct our customer and consumer research on set frequency basis and we are continuously benchmarking equivalent products in the market, we are always looking at a change internationally to keep guidance in terms of where things are going and we adapt our offering based on all of those. Sometimes we help the customer understand what the needs are and sometimes the customer guides us in terms of what the needs are''

4. **Participant 4**

''We are a business that is heavy on fixed assets. We have huge share with 20-30years life expectancy that are very expensive. Formulation changes in products, the consumer has huge influence from that by simply not buying it or buying it. We will work on the formulation of our product in the changing of our product manufacturing process because it is a standardised and not complex manufacturing process. There is not many different ways in which you can meal down wheat to flower, same with maize, etc. There hasn't been huge changes in the manufacturing process of maize''

5. **Participant 5**

'' The product is all about availability and we have discontinued products that do not meet a minimum throughput or efficiency on our production line. Maybe a marketing and a consumer driven products, but because its efficiency, it does not render the product to be economically manufactured based on volumes''

6. **Participant 6**

'It was not customers that came to us and said we do that, it was a group of market research of users and the feedback we received was we want the temper evidence. We sat around with the team and we have asked how soon we can implement because what the customer wants, the customer gets. It takes us between 6-8 months to implement. Facilitating NPD (New Product Development), you look at your supply Chain including your whole value chain because you are going to have to ensure that when you run out of the old stock of boxes, new ones kicks in. Because you do not have to have stock to write off. This whole NPD process can take anything between 6-9 months''

7. **Participant 7**

'' We have very much sophisticated MRP (Material requirements planning systems) and this is not my area of expertise but in terms of understanding, order quantities within various customers, we very rarely would run short of supply. Unless if it is failure on our system or failure on something we do not have control on such as strike, natural disasters. We have very sophisticated mechanism to understand volume requirements at our customer base and we also train on that to understand our season and monthly dynamics around our demand**''**

Question 5. What is the value proposition that your organisation is offering to its customers?

1. **Participant 1**

''Our Value proposition is Choice. We have many skews, much different use, shelve keeping units, which means that we have heavy absorbents, pads, liners, maternity pads. Therefore, our value proposition is Choice and variety. It is not just the cheapest thing one and that's it''

2. **Participant 2**

''On our side we have quality products, it's a pride of competitive price pool, and we have innovative products we offer to the market, maize meal that is ready in 5 minutes''

3. **Participant 3**

‘’I would say nutritional and affordable food. However, most importantly, it is always available and are affordable. While we manufacture our range of stable food, are of good quality, and are affordable. Our most important value offering is that it is always available. We have a very significant channel network. We do deliver some of the best customer service and have space for improvement. I would say we are very close to proving the correct customer service to the needs of our customer. We certainly understand the needs of our customers’’

4. **Participant 4**

‘’The value proposition that we are offering to them is guaranteed and consistency of supply because they are depending on us to have this products on their shelves. We deliver on time and what is ordered. Our billing instruction is correct and we deliver at the time of the day when they need it and it that quantity’’

5. **Participant 5**

‘’So we customize the way in which we print the stickers for them. We do specific conformance before we sent loads off, so that the quality and the standard of the product is correct. So it’s just a professional supply chain so that they know that the product is safe’’

6. **Participant 6**

‘’ We do deliver some of the best customer service and have space for improvement. I would say we are very close to proving the correct customer service to the needs of our customer. We certainly understand the needs of our customers’’

7. **Participant 7**

‘’ We have a software integration with the DC’s so they order directly into our system and with the quantities they need. We do customized supply to them. In addition, we do configurations they need. Our different customers may require different pallet sizes and we do that for them differently. It’s very important that the DC’s know what’s inside’’

Question 6: How well (poorly) are you doing in delivering the value that target customers want?

1. **Participant 1**

‘’So we are quite reactive, because to be number 1 you have to be the fastest, the most adaptive and creative. You are not number 1 because you are no 1. You have earned that position. So how well are we doing? We have been no 1 for several years. We have been doing quite well with product A, which is high tear product. If you think about our bread which is high commodity /everyday product. Amounts of bread we do, which I would not mention amount of loaves we do, but our customer complains we have on our weekly basis exceeds six sigma. Therefore, there is so little quality complains on our bread in the market. If you have, more complains than the number of bread you are selling then you have a problem. Therefore, I think as a company, quality was something that we focused on. In addition, I think, quality again as a dire and fancy servitization word sterns together. No matter what a customer demands, it must be of quality. So our value proposition which is choice, quality I don’t even mention it because it’s a given’’

2. **Participant 2**

‘’I think we are doing very well because if you look at our product category we have average share of close to 30% on all of our main categories of the market size. We have such a high penetration of our products. We are definitely doing very well because that our customer’s vote to buy in purchasing our products. I would say we are on 95%’’

3. **Participant 3**

‘’On a scale of 1-10, we are probably on about 8 or 9’’

4. Participant 4

‘’On our service delivery we strive to get to 96%. Our performance can be fetchy in certain line and areas we get to 96% and exceed it. Sometimes we can come to 65% on special days like black Fridays and red Tuesdays as we could not keep up with the order delivery. Out of 10, the average satisfaction of our customers is 7’’

5. Participant 5

‘’We will never sell anything that is not of quality. Now our bread/maize or sweets confectionary, all these are of high quality. You get your markets people come in with sub-quality, lower price, but they do not sustain. They come in, hit the market, and die out. For us, we stay on high quality level because that is sustainable for customers moving forward, on a scale of 1-10, I would say we are currently on 6’’

6. Participant 6

‘’In terms of that, on a scale of 1-10, I would say we are currently on 8’’

7. Participant 7

‘’I think our service strategies is not that bad, I would say we are currently six out of ten’’

Question 7: What structures, processes, procedures or methods have been used to ensure coherence in organisational response to the product -service system?

1. Participant 1

‘’So to summarize, which structures? We have incoming data collection, processes, internal auditing of the problem. The procedures would be according to FSSC 22000. FSSC 22000 it’s known cross functionally between the departments to make it a priority. We have an in-house structure and not a 3rd party to deal with that. The team working on it is as fast and they pressure side you to get things done. To be honest I had to resolve three (3) packaging problems in a year while at premier. And I could resolve those problems within 12 hours''

2. Participant 2

''On that one, we have an outsourced company that deals with that. That external company manages our consumer communication. So when the consumers contact the company, they are directed to that company, which has processes in place to manage and direct those complaints into our business departments. If there is suggestion from our customers, it is channelled through a relevant department based on the type of product the suggestion was made from. We have Research and Development department that asses all of that and improve the products where necessary. This process co-ordinates very well within the company''

3. Participant 3

''Our business is exceptionally dynamic, we pride ourselves at being responsive to the economic environment and the macro environment and the consumer demand, changing of the demand, but when it comes to very rigid and formalised structures, there it's not something that you can place and say this is servitization strategy or this is servitization structure. We have built into our daily/weekly/monthly/quarterly tactical flat strategies. So we evaluate consumer research feedback and our customer complaint, which is quite a strong system in place at the moment. We have frequent and regular meetings with our customer base. Obviously appointed account managers to all the key customers. In that regard I think, everything come together in the sub-standard management mechanism that we have in place to collate and ensure that we are always aligned''

4. Participant 4

''Servitization for us as suppliers of commodity products is to do everything dearer. Number 1, quality and deliveries. Customers want the right quantity of products, the right quality at the right time. Our services and processes are all geared towards delivery of those three (3) things. The right product, right place at the right quantity and at the right time. Because it's a paper work for flat. There is nothing relatively new, but the ability to print the invoices correctly and our customers printing invoices at their own facilities. Those are things that our ability to put the admin systems that our customer can be doing business efficiently for 24 hour period''

5. **Participant 5**

''Servitization for us as suppliers of commodity products is to do everything dearer. Number quality and deliveries. Customers want the right quantity of products, the right quality at the right time. Our services and processes are all geared towards delivery of those three things. Right product, right place at the right quantity and at the right time. Because it's a paper work for flat''

6. **Participant 6**

'' There is nothing relatively new, but the ability to print the invoices correctly and our customers printing invoices at their own facilities. Those are things that our ability to put the admin systems that our customer can be doing business efficiently for 24 hour period''

7. **Participant 7**

''To be honest I had to resolve 3 packaging problems in a year while at premier. In addition, I could resolve those problems within 12 hours. We have built a network around suppliers because am only fast and strongest as my supplier. If I do not have the bread bag in time then I cannot put the bread inside the bag. Moreover, it's a big bag it's it's not a quality I can't. Come back to your massive words, suppliers, that is how you raise your good level of servitization by your good suppliers, that will react, that are innovative, that are cost effective(not cheap) , and that can service quicker than the international crowd''

Question 8: What are the challenges confronted by your organisation when transforming from being a ''product-centered''/''conventional manufacturer" to being a ''servitized'' organisation?

1. **Participant 1**
''Currently we are product centered. Business out there has a core strength; our manufacturing footprint is one of the most strength. We can make the same bread here and in Cape Town. We make white and brown bread, but servitization will say, I want glutton free bread. Now the questions says, will we change into a servitized organisation? I think a healthy company will have two feet, one in the pool and one outside the pool, because servitization means it keeps evolving and changing quickly, now you don't want glutton free. It will always keep changing because of market changes, but your core manufacturing competencies is still your advantage because of your economies of scale''

2. **Participant 2**
''Some of the challenges are capital investment, sometimes some its equity requirements from customers but the capital investment that you need to make does not yield the return on investment because in our business, the scale of our economy is very important. We are a servitized corporation as we speak, there is definitely not too much pressure because you are already there''

3. **Participant 3**
''We are leaning towards more servitized. We were very much product centred when we established the company. But we have been a brand and highly brand orientated. We've become more servitized. We lean more towards servitized. I think the biggest challenge we would admit to be not really having a descent consumer feedback system that gives us an understanding of what the likes are as oppose to only the dislikes another challenge is flexibility in our environment. We haven't had the flexibility to change the manufacturing process significantly overnight. It's a huge process. Equipment's and mechanisms to change that overnight''

4. **Participant 4**

‘’Having the correct skill of people at the correct places, because you need more people that are better equipped in communications. We cannot operate our business more in Silos, we need people with communication skill, with the ability to communicate clearly and show what they need. Communication and information flow becomes a challenge. The flow of information can sometimes be too much and you find that it is not the correct flow of information. We have to simplify our information, not because people are not intelligent, they do not have enough time to sit and decide on the bunch of information they have. They need actionable information, with one look, knowing what to do’’

5. **Participant 5**

‘’Because you only get a customer complaint and we do not have a customer compliment. So generally, speaking consumers and customers complaint, they never really tell you when they are happy. So I think with suspect to that one of our challenge is to put the finger on what really does make the customer 100% happy. And because we are a massive company and we produce products on a national footprint and in high volumes, if we are to change the change of our products we need to be very certain that there would be a majority demand for that change’’

6. **Participant 6**

‘’How much are customers willing to pay? We all want something for nothing, so people are quick to say this will be nice, so if you do not understand the costs buy and the complexities you are adding to it. Servitization is that you want it this way and the people want it this way. Some consumers can say for example, give us low GI but then they become not loyal in buying. Servitization is all about I want it this week and I do not want it next week. It is all about change. Change management is a new discussion’’

7. Participant 7

‘’Since it is not a norm for companies for companies to change processes overnight, there are procedures and strategies that needs to be revamped in order to align with the sew strategies. It is not easy as that may take a longer period of time to change, whereas the customer wants to see the need met instantly’’

Question 9: Whether internal or external, what are the key drivers and inhibitors of servitization in your organisation?

1. Participant 1

‘’Our key drivers in our organisation is growing together suppliers, customers and our people. Then my deliveries are on time. Now by growing together with my suppliers I can do that. Now, growing with my people, we can do that. If you need skills things, we have money for training because that is part of our vision and mission. Let us get you train up to do the following ABC, so we up skill people. Now we are growing our suppliers and our people. However, for me something like innovation says reduce the input and maintain the output, or even grow it. Innovation does not come as a cost. For me innovation should drive servitization, not servitization innovation. Because servitization will never understand the cost of innovation’’

2. Participant 2

‘’In terms of drivers, you always want to be ahead of your competitors, so that’s very important that servitization that you put in place should put you ahead of your competitors, so that you have a better product on competitive product offerings. The inhibitors could be when the request for servitization does not make commercial sense, as capital invest would be a blow as well. In terms of external, the retail customers that we deal with are also a key driver to servitization. We are satisfied that we are at the right level of servitization. Some of the attributes in driving servitization in our company is quality’’

3. Participant 3

‘’The key driver would certainly be profitability benefit of it. Reduce costs, improves efficiency, improve sales, and improved loyalty with customer relationship. The inhibitors would be institutional knowledge around the concept of servitization and may be knowledge about the tools and how to implement something like (servitization) this properly so as to get the best value. Capacity would also be a challenge because that would require resources’’

4. Participant 4

‘’It has to be driven on correct and transactable information. Therefore, an inhibitor would be, we do not have the correct information. In addition, a key driver would be money. Business has to see that it is going to be more profitable and sustainable to do something in a realistic entity. We cannot just do something because it is nice to have. We have to be able to build a correct ROI (Return on Investment) sum. In terms of what we will get in return in doing it’’

5. Participant 5

‘’Our competitors are adding differentiation and not value. We are a leader in certain things Starting our business we look at our demand vs my cost and say it is better to import from china. However, that is where the government should come in and say we will work here, we will substitute and keep the jobs and money in South Africa, then it works. So that’s servitization for me in a nutshell’’

6. Participant 6

‘’In terms of external, the retail customers that we deal with are also a key driver to servitization. We are satisfied that we are at the right level of servitization. Some of the attributes in driving servitization in our company is quality. That is why sometimes some of the competitors will have a bit cheaper maize than ours’’

7. **Participant 7**

‘’Once we have the inhibitors of the on boarding costs then you can prove your point that you are actually making it sustainable on a longer term and over time profitable. Your information and communication should be equal at the same time. You cannot expect somebody doing something in 30 years in a certain manner to change management. We should actively have a change management program in place, and bringing in people that has experience or attitude to drive it. We probably will need a couple of people or more. We have to have a system and support for your staff in place to be able to do the process’’

Question 10: In your view, what organisational restructuring is needed to deliver effective service strategies?

1. **Participant 1**

‘’For me, holistic cost analysis. So, let us call it, operations accountants. There is not a lot these people around. These are people with strong financial background, and strong manufacturing background, strong Logistics background, strong customer service background. They can sit and say this thing we did, let us run the numbers, and was it worth our while, was it worth the consumer, was it worth the retailer, who made the money out of this. Do we do this again?’’

2. Participant 2

‘’From our perspective, our organisation is structured to be product centric. In terms of the way we setup innovation channel and also our Research & Development procedures, in my opinion there is no organisational restructuring needed because we already delivering effective service strategies. Servitization is key to deliver innovation to customers and if the company is not customer centric today, it would not survive. It is very important. We rate ourselves highly in terms of servitization’’

3. Participant 3

‘’Perhaps the only thing that is outstanding is really making sure that all best practices of servitization are embedded on to the business currently. Whether that requires restructuring or not, am not so sure certain. I do not think our business is so behind, but I do think that we can benefit from the increased insights into the latest growth of servitization best practice. I think the better key is access to data and improved manipulation of data so that one can be more responsive to it.’’

4. Participant 4

‘’You have to give your sales and marketing people enough clouds to influence production. You have to elevate the voice of the customer and the consumers through the marketing. You have to elevate that into the business. To have a strong IT structure in the business that works properly. You have to restructure in a sense of getting more people into the operations of the business. To put a decent plan of management system in place. To employ people that buys into the idea’’

5. Participant 5

''I am of the view that we are structured effectively. We have a very focused and key customer relationship in place already. We interact with our consumer based through social media, through our customer complaint systems''

6. Participant 6

''Marketing says this is the new thing and the company make it happen but no one says how much complexities if you add it to my supply chain, my value chain? Was this a good monetary decision or No? Therefore, servitization comes down to monetary decision because we are here to make money. We are not here to keep people happy but we are here to make quality. From all articles that I've read about servitization. It created a branding but not more success. People like menials wants to be stimulated and move to the next stimula''

7. Participant 7

''I think servitization is a process because it involves money and money. You can replace machine quickly and rewire the people through. I would say, in my company, we are only halfway there. For me cross-functional departments should be separately managed at a different cost centre so that they can put a pressure on the operations to manufacture what they actually need and not the other way round. I would probably think that splitting out our core functions would do''

Appendix 3: Letter of Consent

Letter of Consent

I, ____, agree to participate in the MSc research entitled ***Improving Customer Service through manufacturing firms in Gauteng: A Servitization approach*** to be undertaken by student **Jonas Mathabatha** under the supervision of **Dr Bruno Emwanu**, and certify that I have received a copy of this letter of consent.

I acknowledge that the research has been explained to me and I understand what it entails, as follows:

1. I agree to allow access to my company and manufacturing facilities for the purpose of this research.
2. There will be one interview, which is expected to take no more than 1.5 hours.
3. The interview will be audio taped, and transcribed for analysis by the researcher.
4. The processes of my company will be mapped.
5. I have the right to withdraw my assistance from this project at any time without penalty, even after signing the letter of consent.
6. I have the right to refuse to answer one or more of the questions without penalty and may continue to be a part of the study.
7. I may request a report summary, which will come as a result of this study.
8. I am entirely free to discuss issues and will not be in any way coerced into providing information that is confidential or of a sensitive nature.
9. Pseudonyms will be used to conceal my identity, and that of my company, my employees, my suppliers and my customers. The information disclosed in the interviews will be confidential.
10. Audio-tapes and transcripts will be kept securely stored during the research and after the research has been completed.
11. The Faculty of Engineering and the Built Environment of the University of the Witwatersrand and the School of Mechanical, Industrial and Aeronautical Research Ethics Committee (non-medical) of the University approved this project.
12. If I have any questions or concerns about my rights or treatment as a participant, I may contact the Chair of the School of Mechanical, Industrial and Aeronautical Research Ethics Committee at (011 717 7343) or Bruno.emwanu@wits.ac.za

Signed:

____

Date:

____

Questions concerning the study can be directed to:

Dr Bruno Emwanu

Tel: 011 717 7343 and Email: Bruno.emwanu@wits.ac.za

Appendix 4: Participant information sheet

24 July 2018

Dear (*Participant occupation/Name*)

Re: Participation in Research on Improving Customer Service through FMCG manufacturing firms in Gauteng: A Servitization Approach

Thank you for offering, via your response to participate in follow-up interviews. I am a full time MSc student in the School of Mechanical, Industrial and Aeronautical Engineering at the University of the Witwatersrand, under the supervision of Dr Bruno Emwanu. My MSc title is: ***Improving Customer Service through FMCG manufacturing firms in Gauteng: A Servitization Approach****.*

The gist of my problem research is that customers are not being fully consulted by manufacturing on their preferences regarding the products they are putting out into the market, therefore the limited interacting implies that manufacturing firms are not fully benefiting from customer's input, hence creating less value for the customers. Therefore, I would like to determine how customers are integrated into manufacturing by FMCG manufacturing firms and to find out the depth of influence they have regarding the outcome of products and services (Servitization) in FMCG manufacturing firms.

I would like to formally invite you to participate in this study. As a Manager of the well-established **food/home care** manufacturing company in South Africa, your knowledge and experience would contribute significantly.

The study will be conducted between July 2018 and October 2019. Involvement in the study would entail one face-to-face interviews with you, as the Manager, at your convenience. During these interviews I would like to understand how products manufacturing and development works and understand how you incorporate your customers' suggestions into that. The interviews would be conducted at your company.

Participation in the study is voluntary, and you may withdraw at any time. Anonymity (regarding company name and any owner/manager/employee names) and confidentiality of information provided will be assured and respected. I would like to record the interviews, so I can later transcribe them. Your consent at the time of the interview will be requested. If you do not wish the interviews to be recorded this will be respected. The interview will take approximately 1hr and not exceed 1hrs and 30min.

The results of the study will form part of my MSc dissertation report, also may be presented in academic papers and at conferences. A summary of the results of the research will be made available to you on request.

Please contact me if you have any questions regarding the research and participation in the study.

I look forward to hearing from you.

Yours faithfully

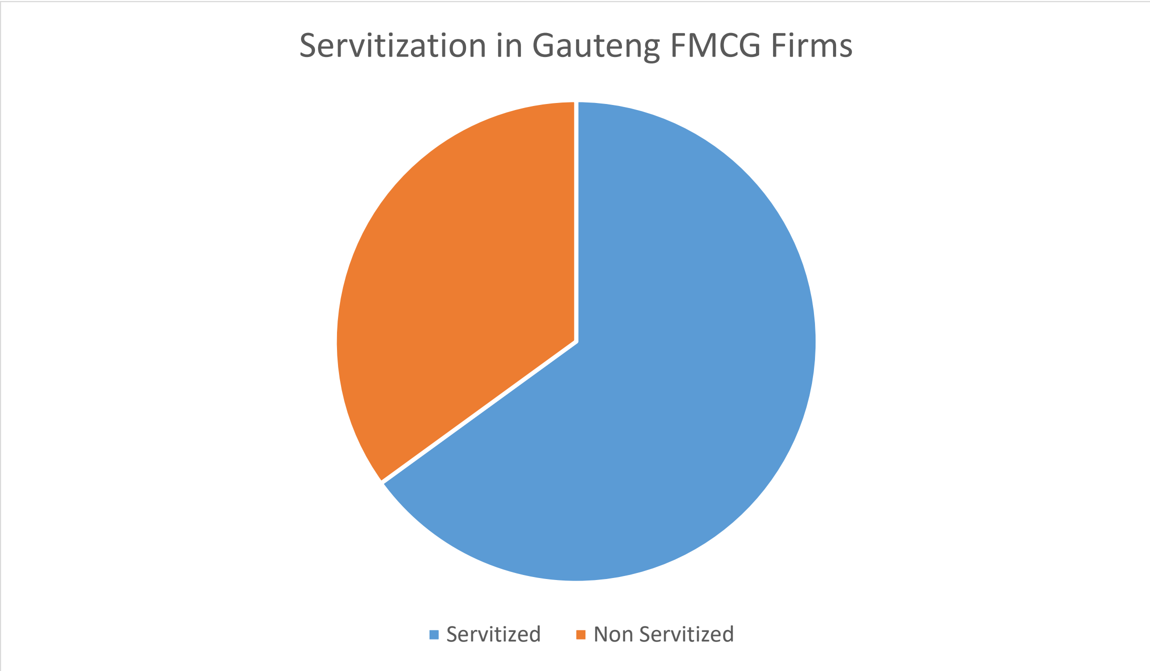
Jonas Mathabatha

Email: 1835911@students.wits.ac.za

Supervisor: Dr Bruno Emwanu Tel: 011 717 7343 Email: Bruno.emwanu@wits.ac.za

Appendix 5: Pie chart on Servitized and Non-Servitized organizations.

Blue color represents 65% servitized FMCG firms and peach represents 35% non-servitized firms.



Appendix 6: Study themes and sub-themes

Theme 1 : Servitization drivers and practices	**Theme 2: Challenges of Servitization**	**Theme 3: Effects on non-servitization**

• Product development on market research
• Capitalising on customer's inputs
• Consumer's influence on manufacturing
• Innovation in Servitization
• Value proposition
• 3rd party manufacturing
• Service delivery and performance (product market shares)
	• Capital investment
	• Formulation in manufacturing
	• Highly qualified and flexible work force /human resource
	• Institutional knowledge of servitization
	• Strong business infrastructure
	    • Flexibility in manufacturing process
	    • Market responsive to servitization
		• Negative ROI(Return on investment)
		•

Appendix 7: Keywords

1. Servitization
2. Manufacturing
3. Customer Service
4. Customer satisfaction
5. Value proposition
6. Service delivery
7. Product development
8. Innovation
9. Capital investment
10. Formulation
11. Product
12. Strategy
13. Configuration
14. Customization
15. Third party
16. Service Oriented
17. Product Centric
18. Fast Moving Consumer Goods

Appendix 8: Current representation of customer's target value

Current representation of customer's target value delivered per FMCG manufacturing firms rated on a scale on 1-10. The table below shows the current representation of customers target value per FMCG firm on a scale of 1-10.

Firm	FMCG 1	FMCG 2	FMCG 3	FMCG 4	FMCG 5	FMCG 6	FMCG 7
Scale	5	7	5	4	5	4	4