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SERVITIZE, DESIGN AND CO-CREATE VALUES THROUGH SOCIAL MEDIA

Master's Thesis in Industrial
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ABSTRACT

This study examines from service design perspectives to what extent designers understand the term “Servitization” and who is responsible for value definition. The study also dives into looking the impact and role of customers’ involvement in value definition and values co-creation. Further in the prevalent influence of current social media to what extent has social media impact and influence customers’ involvement for idea generation (Idealization process) in design process. Qualitative research method is applied to compare three case study organizations in service and manufacturing industries for proper persecutions.

Results of study indicate that lack of understanding of servitization mainly by service and products designers limits service innovation and leads to customers’ hostility. And design with the market rather for the market can only be achieved without limiting customer involvement. So, in order to reduce customers’ hostility and design with the market, social media creates a platform to reduce information alteration, cycle time, and increase customers’ involvement in design process by co-creating and transferring values definition from customers to designers. However, it also poses some threat if organizations cannot exercise active control. Finally, the study also establishes the difference between design and service design that when organization get proper understanding of, will improve design process significantly.

KEYWORDS: Servitization, Service design, Value definition & co-creation, Social Media and Customer Involvement.

1. INTRODUCTION

1.1. Introduction

Service-led Competitive strategies have become the sustainable competitive advantage and distinctive feature of manufacturing companies in today's homogenous market (Sring and Araujo 2009). Manufacturing companies are facing severe competition and survival challenges ranging from demand volatility, environmental changes; disruptive technologies, government policies and price competition from low cost economies. And, it is becoming relatively impossible for manufacturing companies to compete mainly through products offerings whose life-cycle are shrinking as technology evolves. Thus, manufacturing industry needs to find means and methods to thrive and achieve sustainable advantage in the evolving competition. Service integration provides the means and opportunities for manufacturing companies to thrive and achieve sustainable growth (Baines, & Lightfoot 2013; Slack, 2005; Oliva and Kallenberg, 2003; Wise and Baumgartner, 1999.).

Also, Baines and Lightfoot (2013) identify shift in consumers' perception from cost to value as another significant factor influencing multinational companies to integrate service strategy with products offerings. Since service-led-strategy has been adopted, companies have developed array of service portfolio. Companies such as Toyota, Xerox, Samsung, and Apple are using service strategy to sustain their competitive advantage and also to develop new products/service offerings. Services, such as quick customer responses, better delivery (Lean production system), and postproduction service systems such as installation, maintenance, repair, advice and warranty (after sales services) are strategic and sustaining competitive advantage of multinational companies. Further, Uchihira, Kyoya, Kim, Maeda, Ozawa and Ishii 2007: 2755; Pawar, Beltagui and Riedel 2008:469) buttress that customer purchase a product based on the expected value to be derived from the product or network benefit of the products rather than physical possession of the products. For example,

consumers purchase a mobile phone for the value of communication, but not for physical possession. A car is also bought for the value of mobility rather than just physical possession.

As manufacturers adopt service-led competing strategies to sustain competitive advantage, researchers have developed interest to further study the competitiveness and sustainability of the strategy. The strategy was term “servitization of manufacturing” by Vandermerwe and Rada (1988: 321) to describe the integration of services with products by manufacturing companies (Baines & Smart 2013). Baines and Smart (2013), indicate that servitization is not simply adding services to products but it also involves the process through which the service-led strategy is achieved. Hence, for servitization to be successful there must be adequate understanding of customer to co-create value, understand how service can be design according to the co-defined value and understanding of service delivery strategy. And as organization adopt servitization culture, value-adding capabilities is built which strengthen competitive advantage. (Baines, Lightfoot, Peppard, Johnson, Tiwari and Shehab 2009: 547).

Also, as the campaign for green production is intensifying by international organizations and customers are conscious in purchasing products of negative environmental impacts. Servitization provides means for manufacturers to reduce negative environmental impacts of products through dematerialization. Dematerialization is the “absolute or relative reduction in the quantity of materials required to service the economic functions in society”. Servitization in an organization creates the avenue to dematerialize products after the products life-cycle (Baines et al 2013: 36).

In addition, the contribution of servitization to organizations’ bottom-line (profit) is enormous compare to products sales. Manufacturing companies that are struggling with products sales have increased profitability with the integration of service design, service offering and service delivery strategies in the product Life-cycle (Uchihira et al. 2007:

2755). Ping and Jia (2010), buttress this view by revealing that German Association of machinery and equipment manufacturing enterprises increased their revenues through services integration.

1.2. Problem statement

However, Uchihira et al. (2007) identify lack of design skills, mental models, design processes and organization inflexibility from product design paradigm to service design paradigm as the major reasons organizations cannot servitize customers. Raddats and Easingwood (2010) acknowledge that manufacturing companies are aware of servitization but are facing the problem of how to servitize and what is/are the right strategy to servitize. In same vein, the researcher has also identified lack of customers' knowledge and involvement as limiting factor to successful service design. As a matter of fact, many organizations remain transactional focus rather than relationship focus and this make such organizations to face severe challenges in the midst of opportunities.

In addition, lack of design skills, static mental model and organization inflexibility (Uchihira et al. 2007) are major challenge in services design where value definition remains a challenge for manufacturing companies i.e. who define values and strategies for delivering the value. Thus, the research statement for this study will be "how organizations can servitize and design valuable services. In this study, two companies are used as case studies, one from manufacturing sector (Samsany International Nigeria Limited see pg. 32-33) while the second company is from service sector in Finland (Fixura see pg. 33-34). Perception from the two industries is required in order to broad our scope of servitization through service design and to understand different challenges each company is facing under different environment.

1.3. African economies

African economies have become one of the fast growing economies in the world and it has become the second largest (figure 1) and most populous continent on earth (World Population Review 2013). The continent possesses many investments and business opportunities for potential entrepreneurs/investors who can strategically manage risks and design valuable products/service with and for citizens.



Figure 1: Real GDP Growth in selected countries, 2013.

According to a report by Chuhan-Pole, Caleron, Dennis, Kambou, Angwafo, Buitano, Korman and Sanoh (World Bank report 2014: 5), Sub-Saharan African economies remain robust, and economies activity rose by 1.2 percent in 2013 over the preceding year. The growth is as a result of expansion of manufacturing industry. Resource endowment and low

labour cost in the region makes it attractive for manufacturing industry to thrive. And resources rich countries in the region experience significant growth than less resources countries.

The need for strong investment and huge private consumption level are factors contributing to the fast growth of the region. This study portrays the potentiality of the economies as a result of increase in population and subsequently there is a substantial increase in domestic demand for products and services. Comparatively, the capital flow to sub-Saharan increased to 5.3 percent (figure 2) in 2013 above the developing economies 3.9 percent indicating investment viability of the region. (Chuhan-Pole et al., 2014: 5.).

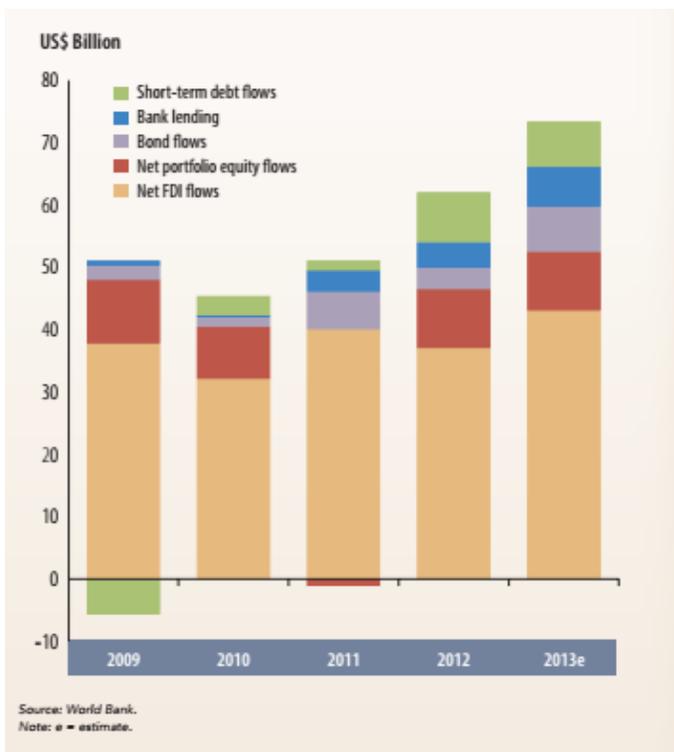


Figure 2: Composition of capital flow to Sub Sahara Africa.

According to the survey, foreign direct investment (FDI) to Africa region rose by 16 percent to \$43 billion in 2013. Investors have spread their investment all across African economies, but consumer oriented project and service have taken a bigger share. FDI in Sub-Sahara Africa has attracted huge interest from different investors over the world and its flows 7.5 times and 10 times faster than high-income economies and global GDP respectively. (Chuhan-Pole et al., 2014: 7.)

However, the increase in population also brings along increase in poverty level and unemployment rate and consequently there is increase in crime rate, violence and terrorism. Borders proliferation among the nations of the continent makes it easier for people to migrate from one country to another. Despite the risks and underdevelopment rate in the regions, there have been significant improvements in the major sectors of the continent. The major sectors of economy activity are: agriculture, manufacturing, resources and services. And service sector which is yet to be fully developed and the potential is underutilized has contributed to the extent of development level in the economies with average growth rate of 5.3 percent per year. (Chuhan-Pole et al., 2014: 29.)

1.4. Overview of Finland service sector

Finland is located in the northern region of Europe with population 5.4 million. The economy comprises of three major industries- primary production (agriculture, forestry, & fishing), secondary production (manufacturing & construction companies) & service industry. According to Statistic Finland (2014) report in the figure 3 below:

Value added of industries quarterly (GDP production approach) 1990-2014
At reference year 2010 prices, seasonally adjusted figures

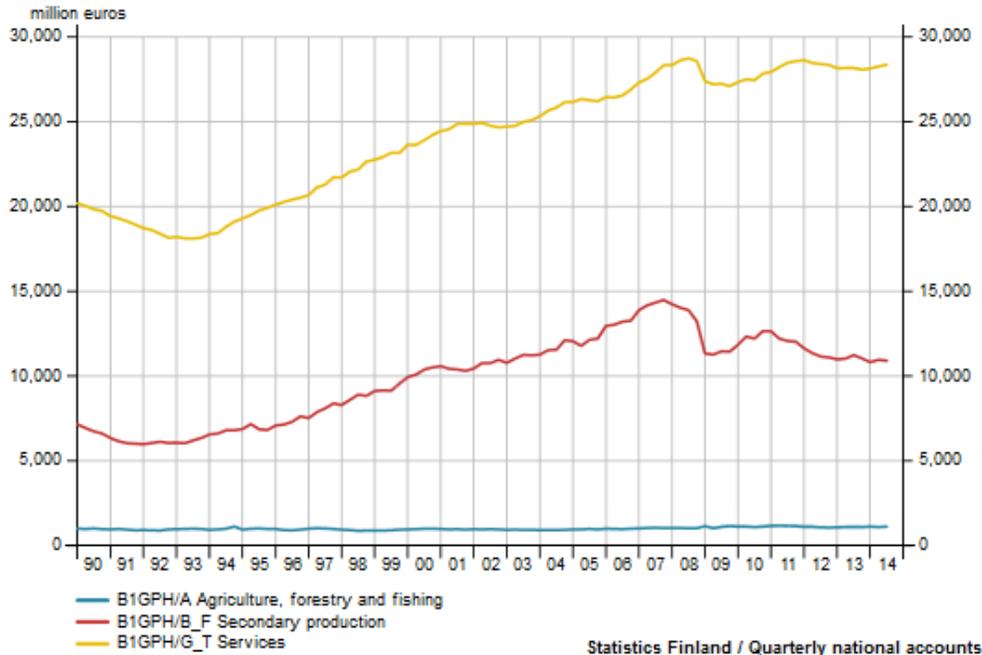


Figure 3: Service Industry growth

Primary production sector of the economy contributed 2.5 per cent growth in the third quarter over the previous quarters and 2.4 per cent for the year. And service industry recorded growth of 0.4 per cent in the third quarter over the previous quarters and 0.9 per cent over the previous year. However, further analysis revealed that private service sector added value amount to 0.9 per cent while public sector fell by 0.7 per cent. Also, secondary sector (manufacturing) experienced a contrast of 0.2 per cent over the previous quarters and 1.2 per cent over previous year (Finland Statistic 2014).

1.5. Research questions

In order to have a comprehensive understanding and a systematic approach to undertake this research, the following research questions are the vacuum this study hope to fill by finding the right answers. Note that it is not the questionnaire for the study but it is the compass that guides the structure of the questionnaire.

RQ1. What is servitization and service design?

RQ2. What forms of value is designed or created?

RQ3. How social media influence customer involvement?

RQ4. What are the challenges facing servitization and service design?

These above questions will guide the course of this study as RQ1 will give overview definitions and explanations of servitization, service, service-strategy, and product-service-system (PSS) according to literatures. Banies et al. (2013) states that lack of understanding of servitization by manufacturers inhibit the adaptation and right application. And suggests the introduction of servitization must be founded upon the foundation of understanding of the term. Thus, this study will follow suite to define the term servitization. RQ2 will review forms and types of values designers/producers design during design process. And RQ3 will explore how social media influences customer involvement for co-creation. While RQ4 will inquire into the challenges that inhibit manufacturers and designers to servitize and value co-creation (Service design)

1.6. Study purpose

The objective of this study is to explore servitization understanding from service designers' and producers' perspectives. Though the term "Servitization" has been use frequently in sales and marketing field but less discuss in design field that actually produce and

manufacture customers' experiences either tangible or intangible forms. Since customers are in custody of values and only transferring ownership to manufacturers and designers (Baines et al. 2013), thus, customers' involvement is very crucial to designing valuable services. Hence, this study will explore whether social media has influence customers' involvement positively or negatively. That is, since social media has been considered virtual world and organizations are establishing their presences in the virtual; what impact has social media contributed to designing valuable services and how organizations have taken advantages of this channel. Also, the researcher has taken the initiative to extend the objective a bit further as someone that understands African economies and see the need for better services and servitization.

Also, this study will research into challenges inhibiting designing value services that servitize. That is outside all the presume challenges as outline in the theoretical study, what are the practical challenges service designers/producers are facing. Further as stated by Raddats and Easingwood (2010) that lack of simplified approaches discourage servitization adaptation. The study will want to know the approaches case study organizations are using to solve challenges. Additionally, the by-aim of the study is to contribute to the existing knowledge in the context of industrial management. The structure of this study is divided into two parts namely: theoretical and empirical parts. The theoretical part comprises related chapters on servitization and service design concepts while the empirical part focus on the practical approach of the subject matters.

1.7. Scope of study

It is understood that servitization cross across all spectrum in economies, marketing, technology, sciences and management; servitization in this context will be studied from the industrial management point of view. Thus, servitization will be explained from perspective of service design and social media will be considered as useful for this study only if the

organization uses it. That is, if organization uses any of the forums to generate design ideas that will further be discussed and analysis by designers and manufacturers to produce tangible and intangible customer experiences. Again, the scope of the study under service design is limited to idealization phase of design process with customer involvement for co-creation. The study does not extent the scope to other phases of design process but the crucial stage in getting design right.

1.8. Research Design

For the purpose of simplicity and better understanding as different people have viewed design and design processes as complex and complicated, this study is structured in a linear research approach as shown in the Figure 1 to simplify the most important concept of design and design processes.



Figure 4: Linear research approach

Recent publications such as journals, textbooks, blogs, and conference papers have been studied to form the theoretical background of the study. The background studies have been able to establish deep understanding of the subject matters that are interconnected within the scope of this study. The hypotheses for this study are as follows:

H1. Service/Product producer understands servitization

H2. Customer involvement leads to servitization

H3. Social media influence customer involvement

The operationalization of the concepts as seen in the background study of this research justifies operationalization of hypotheses. However further validation will be conducted for reliability. Case study method is adopted as sampling method because of the nature of the study that involves production of goods/services. The choice of data collection, interpretation and validation is seen under methodology.

2. SERVITIZATION & SERVICE DESIGN

Under this section, all fundamental concepts, principles and theories according to literatures, will be examined and reviewed for foundational understanding of the subject matters (servitization and service design). Appropriate definitions of the subject matters from different perspectives of scholars, researchers and academia within the content of this study will be given and all necessary related concepts and field will be explained. At the end of this section, researcher and readers are expected to have theoretical understanding, digest and elucidate on the concepts and principles explored and explained. This understanding will guide the researcher and reader to further structure and conduct the empirical study and be able to compare the theoretical with the empirical in order to make a valid and reliable conclusion.

2.1. Servitization

Vandermerwe and Rada used the servitization term in 1988 to describe processes by which manufacturing companies are strengthening their competitive advantage by integrating services to products offering in order to give values to customers. Vandermerwe et al. (1988: 321) propose that for manufacturing companies to be competitive in the market with severe competition, they must shift focus from pure products offering to combination of products and closely related service such as maintenance, installation, repairs and to bundles offerings consisting of innovative-products, advance-services, product-security, support, knowledge and self-services. (Baines et al 2008b: 555.)

Thereafter, the subject has received attentions from scholars, businesses, academia and government who belief that servitization is still a source of developing competitive strategy

(Wise et al. 1999, Oliva et al, 2003; Grönroos 2007; Galbraith 2002 and Slack 2005). Baines et al. (2008b:547) indicates that servitization create and increase value adding capabilities of an organization. He further explained that servitization is the channel through which manufacturers continually innovate products and service offering, build internal and external capabilities and strengthened competitive advantage (Baines et al. 2013: 6). That is, when manufacturers inculcate the culture of servitization, such organization will build internal and external competitive capabilities. This will enable continuous innovation of products, services and processes that will give customer optimal value which will affect the organization bottom-line (profitability) positively and the organization will gain competitive edge (Jacob & Ulaga 2008; Wang 2010).

However, some literatures try to define the concept of servitization from different perspectives such as functional product (Lewis, Staudacher and Slack 2004), specific product-service offering (Tukker 2004) but they all come to the same ideology as Vandermerwe and Rada (1988) illustrated.

Vandermerwe and Rada (1988) *“Market packages or ‘bundles’ of customer-focused combinations of goods, services, support, self-services and knowledge”*

Verstrepen and van Den Berg (1999) *“Adding extra service components to core products”*

Ren and Gregory (2007) *“A change process wherein manufacturing companies embrace service orientation and/or develop more and better services with the aim to satisfy customer’s need, achieve competitive advantages and enhance firm performance”*

Baines et al. (2008b:547) *“servitivation is a means creating additional value capabilities for manufacturing companies”*.

Bandinelli & Gamberi 2012: 87 “*The process of creating values by adding services to products*”

Baines et al. (2013:5) “*servitization in manufacturing companies is increasingly offering integrated-services with products*”

From the perspectives above, it can be implied that Vandermerwe and Rada (1988), see servitization as a compounded economic benefits offering by manufacturers to customers. They assume that unless manufacturers can provide bundle of economic benefits continually with optimal value to customers such manufacturer will lose customer and cannot be competitive. Verstrepen and Den Berg (1999) in their view defined servitization from product–service–system where service is integrated into product. Their views support the traditional manufacturers who view service as just an add-on to product. Conversely, Baines et al., (2013: 5) view service and product different. Baines et al., (2013: 5) explain that service is more than add-on; manufacturers should integrate both service and products together in order to optimize customers’ experiences.

Also, Baines et al. (2008b: 547) and Ren et al (2007) definitions view servitization as the process and mean of creating additional values capabilities within manufacturing companies. That is, before any organization can offer value–adding services, such organization must possess or build value–adding capabilities. Such capability can only be built when the organization see servitization as a business model rather than just add-ons. And this understanding will help the organization to implement servitization culture or products-service-organization that operates products-service-system (Baines et al. 2013). Baines et al. (2008b: 556) explain that servitization strategy involve strong customer centricity and Oliva et al. (2003) buttress this view by illustrating a need of shifting service offering from products-service oriented to user’s process oriented. And also a shift into

customer interaction mode from transaction-based to relationship-based (Baines et al. 2008b: 556).

In order to foster a comprehensive understanding of servitization, Baines et al. (2013: 30) indicate that the benefits of servitization depend on the types of services design, services offering, complementary of product and services innovation, capabilities and delivery strategies. And, Baines et al. (2013: 59) explain the synchronization of product and service manufacturing companies' views of servitization in the figure below:

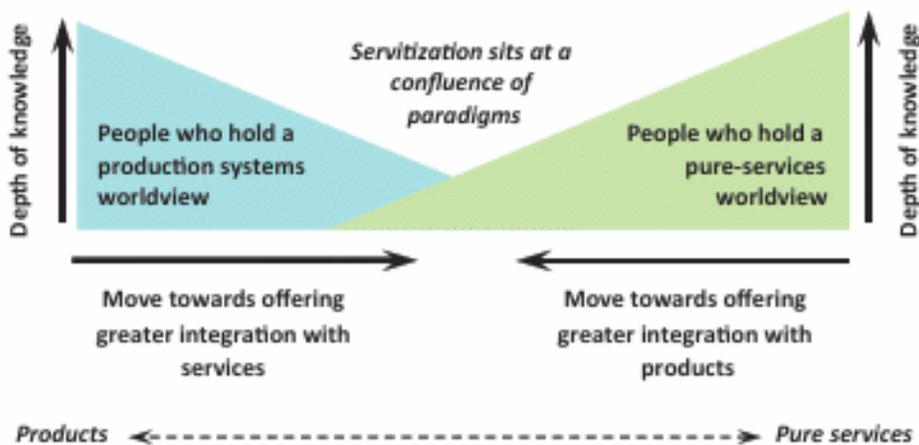


Figure 5: Clashing worldviews of product and service.

According to the figure above, traditional manufacturers believe that products should be the main objective of manufacturing companies, if organization wants to remain competitive and service is just add-ons to products. Such believe have formed the paradigm of products manufacturers to focus on the services that are directly connected to production such as installation and maintenance of machines. But, less concerned about other services after

production and spends little to nothing of resources in developing competitive service for products' life cycle.

Conversely, pure-services manufacturers believe that depth understanding of services creates competitive advantage. Thus, services providers seek values only in services and enabling technologies. Servitization concept finds a confluence and complementary points of products views and pure-service views to create sustainable competitive advantage. (Baines et al. 2013: 59).

According to Baines and Lightfoot (2013) servitization is not a substitute for product and service innovation neither is it an alternative to strategic competence development; but is a channel of continuous strengthening and sustaining competitive advantage. And Matthyssens & Vandenbempt (2008: 317) describe manufacturing companies that continuously innovates products and service as servitizing companies whose customers often enjoy optimal value. And consequently optimizing revenues and create a stream of additional revenues (Geaur et al. 2010; Gebauer & Friedli 2005: 317).

2.1.1. Services

Service is the major component of servitization and it has been defined from different perspectives from technology, to business, marketing, and manufacturing. In manufacturing, services have been identified as a mean and source of product differentiation in homogenous market (Raddats 2011: 332). Quartel, Steen, Pokraev and Sinderen (2006) have identified various perspectives from which services can be viewed. Firstly, Services as interaction. This perspective defines service “as economy activities that does not result in ownership”. Quartel et al., (2006) explain that there is no possession or transfer of tangible products between the provider and consumer; however, there is transfer

of knowledge (intangible assets) from one party to another during the point of interaction that is capable of influencing customers' value perception. This process influences customers' perception, demand, and loyalty of a product.

Secondly, service as capability. This is a holistic view of organization's capability in rendering service. Quartel et al., (2006), explain that service can also be defined according to organization capabilities. Products offering can give generic capabilities to render services. For example, an information technology company has the generic capability to render or offer technological services to customers. And, organizations with strategic competitive products have generic capability to provide some intangible benefits to environment in form of services.

Also, Johnstone, Dainty and Wilkinson (2009: 521) describe service as heterogeneous range of activities. This definition supports the view of Sasser, Olsen and Wychoff (1978) who describe services as intangible economic activities during which production and consumption cannot be separated at a point. This is the idea Quartel et al. (2006) refer to as service as interaction. Indicating that during the moment of interaction service is being produced and consumed at the same time.

Further, Sasser et al. (1978) identified the characteristics of services as intangibility, heterogeneity, inseparability and perishability (IHIP). And, Baines et al. (2008a: 496) and Quartel et al. (2006) refer to service as performance of economic activities of an organization and of products an organization delivers. That is, actual performance of product or operation can be viewed as service. For instance, when a product performance as expected or an operation function as required, the customer refer to such performance or operation as good service.

However, researchers have challenged the validity and reliability of these characteristics of services (Vargo and Lusch 2004). Lovelock and Gummesson (2004) suggest that though

the IHIP characteristics were true at the early stage of service evolution, but as services evolve and technology develops, customers' experience of service in use or service output can be tangible. And standardization of services as required by the regulating organization brings service homogeneity. Also, outsourcing has provided a channel by which service can be separated. The Outsourcing of some services which an organization does not have the capability to provide or which an organization wishes to delegate solves inseparability of service myth. (Araujo and Spring 2006; Lovelock 2004.)

In addition, Sampson (2012: 10) objects the definition of service as intangible by explaining, that services and products are inseparable elements. One element requires the involvement of the other element for its completion. Services business includes some forms of resources during the service process and manufacturing also includes processes. Sampson (2012), further argue the distinction between product and service to be the line of ownership is inaccurate, by indicating restaurant services business as examples of services where the customers take ownership of the tangible goods. Further, Sampson (2012) supports the view of describing service as operation or performance (Baines et al. 2008a: 496) and interactive process in conjunction with resources from customers either in form of information or physical appearance (Quartel et al. 2006).

2.1.2. Fundamental service values

The objective of service designers/providers is to deliver valuable experiences to customers. And unless value is defined and co-created with/by customers, designer will face challenges of right alignment of fundamental service value to meet the required customers' values. Though, the value definition varies from customer to customer and it is the responsibility of provider/designer to collate and synthesize various definitions, to designing the right core service value (Grönroos 2008; Payne, Storbacka & Frow 2008.). According to Polaine et al. (2013), there are different characteristics of services as

described by scholars and practitioners, but all characteristic possess one to two or mixture of generic fundamental service values. There are three fundamental service values namely: care, access and responses. Care service is a form of service that add-value by caring for people or things. Healthcare, hotel, and restaurant are one of the examples of service care for people, while auto maintenance, clothes cleaning, and items repair are examples of service care for things. Many manufacturing companies focus and deliver this form of fundamental service value alongside products and such services focus on care for product throughout its' lifecycle. Fundamental service care value is what has contributed to the competitiveness of manufacturing companies against low cost economies. (Polaine et al. 2013: 29.)

Access value service is another fundamental value of service. This explains the access giving platforms of service to people or things for things that could not have been accessed. For example, Internet provides platform for people to access information anywhere in the world. Google provides access to database of information, Spotify provides access to music library, Flickr provides access to photo albums and Facebook provides access to social interactions. Access value service basically enables people to access to a bit or portion of large infrastructures and technology and organizations have been able to establish subservice from the large service and give customers the benefits of access value. The internet infrastructures have provided a valuable access to people by establishing virtual communities and networking among the communities. The access service value by Facebook and other social networking sites also provides sub-access service value to other organizations that as well create access to customers to connect and engage in co-creation. (Polaine et al. 2013: 30.)

The third fundamental service value has identified by Polaine et al. (2013) is the service that fulfills a response from people or things. For instance, the lean production system by manufacturing companies is a response to waste management and lead-time management is a response to quick delivery or airline inflight entertainment is response to customer

relaxation and refreshment. Sometimes, the response service value is anticipated for future occurrence and people can buy right to them. For example, insurance companies are examples of anticipated responses service where the value of the response service will be consumed at the occurrence of anticipated risks. (Polaine et al. 2013: 30–31.).

2.1.3. Product–service–system (PSS)

PSS is the derived competitive business and operation model for manufacturing companies that want to be competitive. At the early stage of industrialization, traditional manufacturing companies are transaction focus. That is, manufacturers produce products and transfer absolute ownership along with related services costs such as maintenance, repair, transportation, installation, and disposition to customer. Notably, related and hidden service costs throughout the products life cycle are greater than the nominal/market cost of products.

However, as competition from low economies intensify and technology advance, manufacturing companies adopted PSS business and operation model. Unlike the product centric production system that is transactional and manufacturers have little to nothing form of interaction with customer; PSS is relational. Under PSS, related and hidden service responsibilities are not necessary transferred to the customer even when the customer takes physical possession. The retention of these services responsibilities and ownership have helped manufacturing companies to build capabilities and capacities to providing bundle of service package for customer in return for monetary benefit throughout products life cycle. PSS creates and deliver value–in-use not just a product. (Baines and Lightfoot 2013: 7–8.)

There are three strategies for PSS implementation. The first strategy is when manufacturing company that produce product or services design and integrate complimentary services to its conventional offerings. These complimentary services should support and increase the

value-in-use of product or service offerings throughout product life cycle. Secondly, manufacturers can develop capabilities and capacities to provide advanced services for solving complex and technical problem for clients or clients' customers. And finally, the moving of manufacturing companies into pure service providers independent of their products such as consulting. For example, IBM providing consulting services. (Baines and Lightfoot 2013: 5; Johnstone et al. 2009: 523.)

However, for manufacturer to achieve all the benefits of PSS aforementioned and to successfully apply above strategies there is a need to go downstream (customers). Since, the purpose of PSS is to create and increase value-in-use and in customers' perception, thus, the value must be co-defined and co-created with customers. (Wise and Baumgartner 1999: 133; Brady, Davies and Gann 2005.). PSS as relational model thrives on the customers' interaction. The need for customer participation to co-create value is higher when compare to product centric of traditional manufacturers. And organization that engages its customers, suppliers, partners in co-defining and co-creating values develop and achieve strategic competitive advantage. (Pawar et al. 2009: 470).

Also, successful implementation of PSS requires a mindset and culture of product-service-organization (PSO). When organization thinks PSS as a business model that generates revenue but not just add-ons, then such organization will cultivate PSO culture and engage in product and service innovation. (Baines, Lightfoot, Benedettini & Kay 2008:548.)

2.1.4. Services Perception

According to literatures there are different ways by which serviced can be perceived. Wise and Baumgartner (1999) classified these channels into four categories namely: embedded services– these are form of complimentary services built into products. For example, an additional application built into a smartphone and in-flight entertainment. Comprehensive

services are services an organization offers around its product to the markets. For example, Apple's sale services for prospective customers to test/experience products before making buying decision and also to rectify technical products related problems. Integrated solutions are channel by which company look beyond its traditional products base to determine customers' needs and expectations, for example, IBM providing consulting solution. And distribution-control services where organization can take control of its products delivery such Coca-cola is using in supermarket. (Baines et al. 2008b: 559–560.)

Also, Mathieu (2001a) study identified two sources of design for manufacturing companies: services supporting products and services supporting the customers. Service supporting products are services that manufacturing companies design and establish to support the product life-cycle for example maintenance centers, warranty, technical advice, repair and replacement. This view support integrated solution point of Wise and Baungartner (1999). These forms of services are directly related to products' functionalities. Services supporting the customers are forms of services that aids easy access and usage of the product to customer such as delivery, customer service centers, and customers' feedback channels via telephone, email and social media. In addition, Mathieu (2001b) further explains that service should be viewed as independent entity of the company's product offerings. That is, services offering should be treated as independent business model through which a new form of business ideas can grow. (Mathieu 2001a: 51.).

2.2. Service Design

Service design has become a strategic and unique competitive strategy for manufacturing companies and service providers to achieve market leadership and sustainable growth amidst homogenous market. Service is described to be the source of differentiation, product

value enhancement, customer satisfaction optimization, additional revenues and competitive strategy against products offerings from low cost countries (Baines et al. 2013). However, studies have revealed that most service especially industrial services failed to achieve their intended objectives (Coyre 1989; Neely 2007). And Polaine et al. (2013) indicate that the reason these services failed is because service providers are applying product design mind-set to service design; and, such approach will lead to customer-hostility rather than user friendly. In product design, the approach is transactional where the manufacturers focus on product functionality and ownership transfer while service design is relational system approach that focus on relationship building to create values. (Baines et al. 2009.).

Since the failure of service design has been attributed to lack of understanding and wrong approach to service design (Baines et al. 2013; Polaine et al. 2013), hence, it becomes imperative to review the knowledge and understanding of the subject matter. According to Moritz (2005); Hartson & Pyla 2012: 252–253), service design and design are two different but related and intertwine subjects. It is the inability to understand and acknowledge the difference that result to service offering failure. According to study conducted by Moritz (2005), many manufacturing companies understand service design to be design. And such organizations employ the service of designers to specialized and focus on design in the organization. Consequently, design is seen as the stage last stage in production.

However, Moritz (2005); Hartson & Pyla (2012), tried to give a better understanding and knowledge of service design and design. Design is described as the design of total customer experience from service design initiation to delivery. Service design is a multi-disciplinary and versatile system that integrates and connects all other fields, expertise, tools and knowledge within and outside an organization. Explained further, that service design act as a hub (see figure 4) that connects all experts, resources and experiences from various fields to develop, generate or redesign service experiences. Design on the other hand is a sector in the circle of service design process (i.e. design is one of the sectors that cannot be isolated

from other sectors in an organization during service/product design process). Moritz (2005), emphasized that though the contribution of each sector in service design process differs, however, such contribution can never be underestimated to service design success. Service design process involves both technology and human creative activities through which new ideas are generated, synthesized and translated to creating values. (Moritz 2005; Hartson & Pyla 2012: 252.)

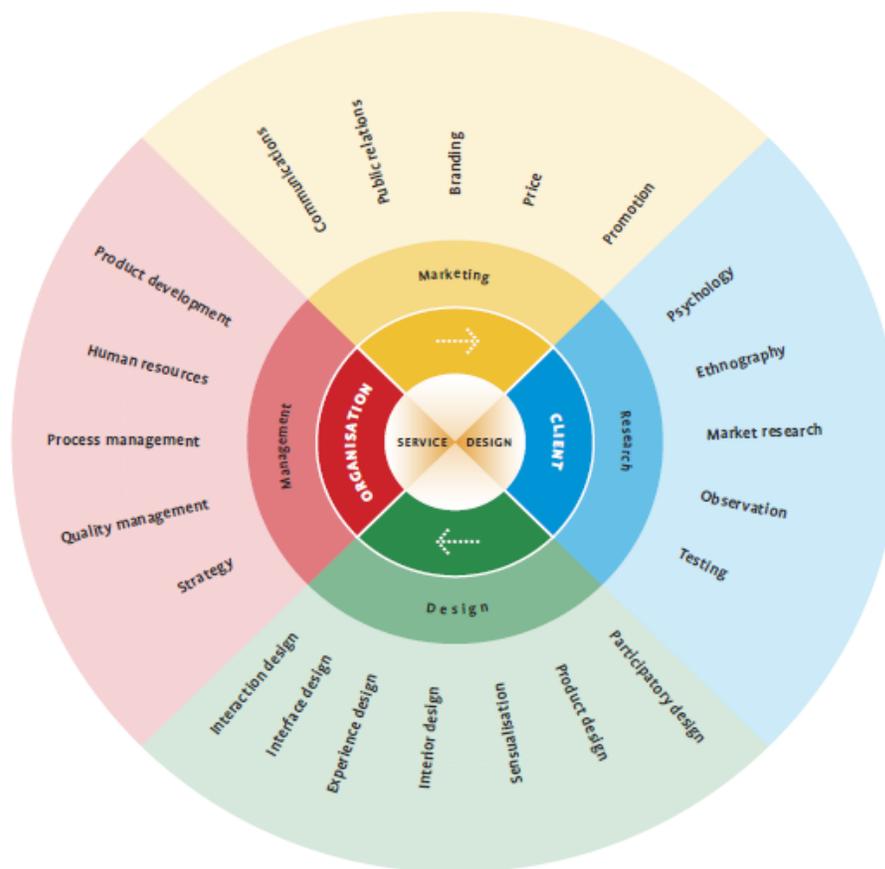


Figure 6: Service design as a hub.

According to Moritz (2005), the figure above depicts that service design connect organization with customers through marketing and design. That is, after research, the

organization translates customers' requirements in the design field with the uses of organization resources supervised by the management into a definite products/service to fulfill customers' requirement. Design is seen as an integral part of service design process like every other related field. Moritz (2005); Hartson & Pyla (2012) stated that service design is a continuous lifecycle wheel that evolves over time and the wheel consist process and activities.

Also, the figure revealed that service design spreads its tentacles across every sector in an organization; thus, it eliminates the mindset of limiting service design to a particular sector (design) in an organization (Moritz 2005). However, some manufacturers still think and plan design at the end of production process as additional activities for consumers. That is, design was perceived as the final activity that adds beauty or makes product and service attractive to consumers. For instance, designers were viewed as the last expert in production line that worked on shape, logos, package and the overall outlook of final products/service. Design perceptions and practice have changed in the present environment as a result of technology development. The gap and barriers between the designers and consumers have been shrinking and eliminating. In such that design is no longer exclusively reserved for professional where only certain people were allowed and capable of designing. Neither is it limited to the last stage of production process where surface activities such as shape, package, logos and outlooks of product and service come in the production process. It is now at the beginning, center and last stage of production process. (Moritz 2005.)

2.2.1. Service design phases

According to Moritz (2005) study, there are four different phases through which an organization engages in service design namely: a) Design of features. b) Design of experience. c) Design of processes and systems. d) Design of strategy and philosophy.

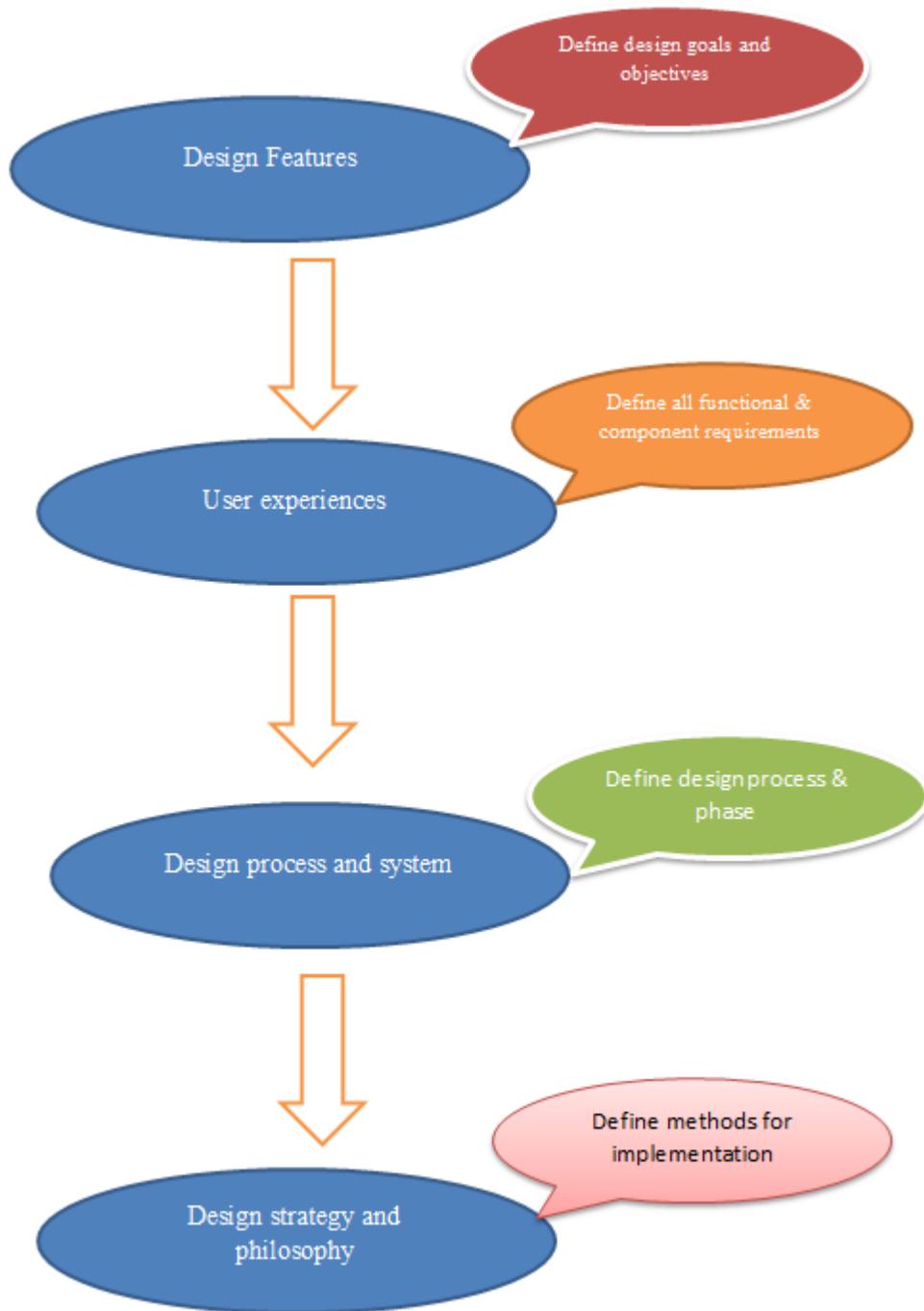


Figure 7: Design Phases

Design of features is the phase where all qualities, function and characteristics consumers requested in product/service are well defined and stated. The functional requirement at this level is crucial to the success of the entire design. Jackson (2010, 35–40) supports this view that functional requirement must be what the products/service is expected to perform and it is a high-level design decision. Thus, all functional requirements must be align to consumers' request. For example, a car manufacturing company needs to define and outline every functional requirement and features needed to produce a car. The features of the car must be in line with what consumers requested. Jackson (2010, 37–38) further states that care must be taken when writing functional requirement because the limitation during process might eliminate crucial feature that might be pleasing to customers.

Design of client experience is the following phase after the feature design and it is the design level where total customers experience is designed. It is the point where what consumes' experience is put into perspective. In the example of a car manufacturing company above, the company needs to examine the degree of comfort the customer is expected to derive. Also, organization engages in design by mapping and outlining methods, processes and systems to bring the design into reality. It is management responsibility to identify all resources needed either within or outside the organization for design. As illustrated above, a car manufacturing company must identify every process, systems, methods and resources involved to produce a car. Finally, organization also engages in design at strategy development level. That is, every organization designs its operation and delivery strategies for its products/services offerings. (Moritz 2005.)

Further, Jackson (2010: 6–7) support Moritz (2005) view that design must be continuous activities for both existing and new products/services offerings. Jackson identifies the following activities for service design wheel: defines, measure, explore, optimize, develop, validate, execute, and iterate. Define is the first and crucial activities of the design process.

This is the stage where the problem is being clearly defined or new idea for new service is generated, and functional requirement is identified. And this can only be obtained through the voice of the customers. That is, it is the stage where customers' voices are captured. Measure is the following stage where all the needs and functional requirement are synchronized to set a measurable performance target for the new design.

Explore is the stage where the designer tries all possible and available design concept such as brainstorming, visualization and other techniques to fulfill the required requirements. After exploring all design concepts available for the new project, then the designer needs to set the design parameters to identify workable design concepts. The next activity of design process is to develop/sketch the architecture. During this stage, the designer will be able to identify all required components and subcomponents, identify the constraints of the components according to the functional requirement. The performance of components needs to be validated to ensure conformance with requirements and thereafter, the design develop a plan to execute the design successfully. Iteration is the final stage of design process where the preceding steps are taken in further design process for a new product and service design. (Jackson 2010.)

The definition stage (Jackson 2010) and ideation stage (Hartson and Pyla 2012) is market driven and the purpose of designers is to create user experience that includes positive emotional impact, aesthetics and values into products and services. Hence, it utmost important to involve users in design process but in the absence/lack of access to direct users, designers often select user personas for design process. Persona is specific person that represents the real customer/user with the same or similar characteristic as the real customer/user. The benefit or purpose of customer involvement/persona in design process is to co-define and co-create value in form of ideas. This process in design is called ideation. Ideation is the first approach in conceptual design where active, creative, exploratory, iterative and collaborative group generates ideas for design. During this

process all the participants brainstorm on finding solution of existing and new design problem. That is, iterate to explore for new possibilities. (Hartson and Pyla 2012: 252–274.)

However, ideation process involves two modes of thought: idea creation and critiquing. Idea creation is the flow of new ideas from creative discussion and inspiration from brainstorming with collaborative group while critiquing is the negative review and judgment of idea. These two modes are inseparable and inevitable in ideation stage. However, caution must be taken to identify which mode in usage and to also benefit of the contribution of other mode that enriches ideation. According to Hartson and Pyla (2012: 275) scholars describe idea creation and critiquing as “go-mode and stop-mode; yin and yang”. And Jackson (2010: 14) describes both creation and critiquing as a starting point for design. He mentioned that ideas could come in any form and it is the responsibility of designer to be sensitive and remain flexible to any source of inspiration. Ideas could come in form of irritation, complain, customer feedback, product error, competition and others.

2.2.1. Service design and Social media

The main objective of every organization is to satisfy and optimize its customers' experiences. And studies have shown the need for organizations to go downstream (customers) to define and co-create these needs (Hoyer, Chandy, Dorotic, Krafft and Singh 2010). So, it becomes imperative for organizations to be able to determine who the customers are, in which environment the customers exist, what is their current and future expectations. In other words, organizations should have an in-depth knowledge and understanding of the customers and this can only be achieved through customer involvement (karkainen, Piippo and Tuominen 2001.). Studies also revealed that cyberspace/internet technologies and processes such as social media have provided opportunities for organizations to eliminate information alteration or distortion by

middlemen and actively engage/involve customers directly in values co-creation and new service development (Kohler, Matzler and Füller 2009).

However, some researchers have indicated associated risks such as conflict and divergent of interests when customers are integrated into new service development processes and challenges of using new technologies for such development or design. (Christensen 1997; Enkel, Kausch & Gassmann 2005). But the studies failed to understand that since values definition lies with the customer and values is whatever what the customers say it is; thus, customer participation in value co-creation is inevitable. And, sure the conflict and divergent of interests is what enhance innovative capabilities of organizations and the ability to manage new technologies proficiently give sustainable competitive advantage (Sigala 2012).

Hence, there is a need for service/product designer to strategically and systematically analyze user generated content (UGC) appropriately through netnography methodology for successful service/product design. Netnography is a form of ethnography methodology that is conducted on the communities emerging from computer-mediated communication and Internet. The term was defined as “a written account of online cyber-culture, informed by the methods of cultural anthropology” (Kozinets 1997: 3). And it has been identified as appropriate methodology for content analysis, historical analysis, semiotic analysis and other analysis intend to observe and study cultural behavior and participative methods (Kozinets 2009). Netnography provides the mean through which computer-mediated textual data can be gathered, accessed, analyzed and interpreted. It has been used to analyze blogs to determine lead users (Belz and Baumbach 2010) and to analyze organizations’ discussion forum for idea generation (Andreassen and Streukens 2009)

2.2.2. Service design and customer involvement

Service design has been defined as the process of generating/innovating new customer/user-friendly services in the market. And these processes involve planning, gathering resources, interacting and communicating with the customers (Hoyer et al., 2010.). The study proved that service could only be designed through customer involvement because it is the customer that can define what the needs or expectations required in new service. And, customers' involvement can be achieved when organization is relationship focus rather than transactional focus when interacting with customers. (Quartel, Steen, Pokraev and Sinderen 2006; Pitta & Fowler 2005; Baines and Lightfoot 2013.). It is also proposed that channels to actively engage customer in interaction should be opened to customer because knowledge flow/exchange during interaction in order to co-create values collaboratively (Howe 2008; Kozinets, Hemetsberger and Schau 2008).

Conversely, some studies (von Hippel 2001; Alam 2006 & Enkel et al, 2006) have also tried to study the negative impact of customer involvement in new service design and development. Below are the results of these studies about the benefits and risk of customer involvement in new service design.

2.2.3. Benefits & risks of customer involvement

First and foremost, customer involvement in either product/service design process shortened R&D period, cycle time, save cost and increase success rate of such new service/product of organizations. Take for instance, when organization involve it R&D to design/develop new service, R&D department require a specified period of time to define and specify the needs and also the final service/product is based on prediction which increase failure of the service. (Alam 2002.)

Next is clear definition of problem and precise specification of design requirement. These are crucial touch-points in service design process where the voice of customer is capture

and define in order to identify other functional requirement to fulfill needs (Gruner and Hombury 2000). And it is through customer involvement that problem can be clearly defined and precise specification can be outlined to further design/develop new valuable services. (Hautz et al. 2010). This is first stage of service design process; though it is information intensive for service designers/providers to gather all necessary information and analyze the information to determine what the problems or customers' expectation or determine the specific requirement/needs customers are looking for in new service. Some researcher referred to this stage as idea generation, idea screening and concept development stage. (Alam 2006.).

In addition, organization that cultivates good relationship through communication and interaction with customers, employees and partners, will have implicit and explicit knowledge flowing across the organization. This knowledge flow will enhance the innovative and competitive capability of such organization. (Lundkvist and Yakhlef 2004.). Further, customer involvement in service design process will increase customer loyalty to an organization. Customer feels the sense of responsibility and ownership when value is co-created. And, there are other positive leverages in customer involvement such as free advertisement (word-of-mouth & social media), low-rate negative feedback and premium price.

However, some studies pointed out that involving customer in service design process will only place limitation because customers are lacking the technical knowledge and prowess in defining the perceived needs in design process. Also, the inability to conceptualize, visualize or imagine the perfect scenario prevents customer participation in design or development process. (Von Hippel 2001 & Alam 2006.). In the same vein, Enkel et al. (2005) described the risks associated with customer integration as loss of control the organization does not have control over the shared information, and consequently internal competitor is nurture and such customers will become prospective competitor in the nearest

future. Overdependence on customer for information and misrepresentation of main customer of organization are the risk affecting customer involvement.

2.2.4. Social media and customer involvement

Social media (SM) has revolutionized the process of service design and development by involving customer extensively through interaction to co-create value. The elimination of middlemen who distort and filter information during information flow from customer to organization has brought a shift in service design paradigm of 'design for customer to design with and design by customer'. (Hoyer et al. 2010.). User generated contents (UGC) have been of immense benefits that is enabling organization to collaboratively identify, collect, and analyze new business idea for service improvement and also promote such service (Kritensson, Matthing & Johansson 2008). As illustrated that organization that can optimize the benefit and minimize/manage the risk involve in SM will have better competitive advantage (Kaplan and Haenlein 2010.).

And according to Stott of Content Marketing Institute (2013), organization have gone a step further to engage customer in content generation competition by providing incentives/bonus to customers who share and promote brand with their peers. This strategy generates more content with high-level involvement and greater participation. For example, Ford motors introduced user generated content competition named 'Ford Fiesta' in 2009. Where 100 influential bloggers were selected to blog about their experiences based on challenges/ tasks given. This strategy was used to introduce Ford Fiesta to American market. Australia Tourist Board also engaged this strategy to generate AUD \$368 million in a competition tagged "The best job in the world". The task required applicant who wish to assume the position of caretaker of island in Australian paradise for six-months with AUD\$ 150,000 salary, to upload one-minute video explaining how they suite the position. Result

revealed that 34,000 videos were uploaded to the official websites viewed by over 8.6 million viewers and consequently it increased the number of tourist to Australia.

Thus, the amounts of contributions enrich the amount/level of knowledge flowing from customer to organization. There are enormous opportunities for service designers/developers/providers in SM to actively interact, correspond, and test ideas in order to co-produce with customer throughout design phases. (Hoyer et al. 2012.). According to von Hippel (2005), SM cultivates and instills innovative culture and mindset collaboration and interaction between the firm and customer in functional-operational role (generating/screening ideas) and social role (relationship building). In addition researchers have tried to study the impact of SM and the quantity of interaction in new service development (Hrastinshi et al., 2010 & Hautz et al., 2010).

3. METHODOLOGY

Scientists argue that before any research can be suitable and contribute to any discipline; such research must take existing or new methodological approaches applicable to the discipline in which the research is conducted. The empirical investigation is the channel through which research reliability and validity can be varied because every theories and hypotheses must be tested against reality (Uwe 2006:14.).

Thus, under this section the nature of the research method, data collection, analysis and discussion shall be explained. At the end of this session the researcher and reader should be able to establish the validity and reliability of the hypotheses and as well answer the research questions that started the quest for knowledge in this study.

3.1. Qualitative research

This study has taken a methodological qualitative research approach to measure the extent and impact of customers' co-designing and co-creation of services/ products to servitization concept and also to operationalize theoretical relations in the case study companies. Qualitative research approach is suitable and applied to this study because of data collection and analysis processes.

Uwe (2006: 11) is of the opinion that qualitative research method seems best in social study where the subject matters are interconnected and intertwine. Uwe (2006) further explains that qualitative research will help to reveal new event or occurrence in the intertwine events. Thus, it must be understood that the subject matters of the study are intertwine and interconnected in such that service design is connected to servitization and customer involvement plays a role in servitization while social media is connected to customer involvement.

3.2. Case Study

A case study is a sampling method by which certain group is taken from the sampling population for examination. In order to consider the group true representation of the whole population such group must possess the same trait, and be part of the exact institutional context of the specific study. Although, certain group of the population might exhibit the same trait as studied, generalization might be limited within the studied group (Flick 2006: 132–133).

However, case study reveals vital information about the characteristics of the sampling population that can be further studied. That is, case study does not only help to limit the scope of study, it also helps to give insight to common features or characteristic of the whole sampling population of the specific study.

3.2.1. Fixura Ab Oy

Fixura is an organization that finds its niche in finance service industry known as peer-to-peer lending (P2P). P2P is a form of debt financing through which individual can lend and borrow fund without the intervention of bank as intermediary. Fixura is the first and biggest organization to introduce P2P to Finnish society and it is a leading player in the Nordic Countries. Fixura like every other organization in P2P stands to change the world of Finance by returning lending back to basics and contributing to the creation of sharing economy through the provision of direct credits between people.

Fixura Ab Oy was founded in January 2009 but the company officially set-up its operation in 2010 with the launched of its website in August same year. The website increased the

numbers of registered users and loan originated. As at the end of 2013 the company had transferred loan worth 22 million euros three times greater than the first year. Also, as the P2P continues to gain awareness and Fixura playing the lead role by the end of same year the company have recorded a geometrical increased in membership to 30,000. Thus, the company has experienced significant growth in its operations as illustrated below.

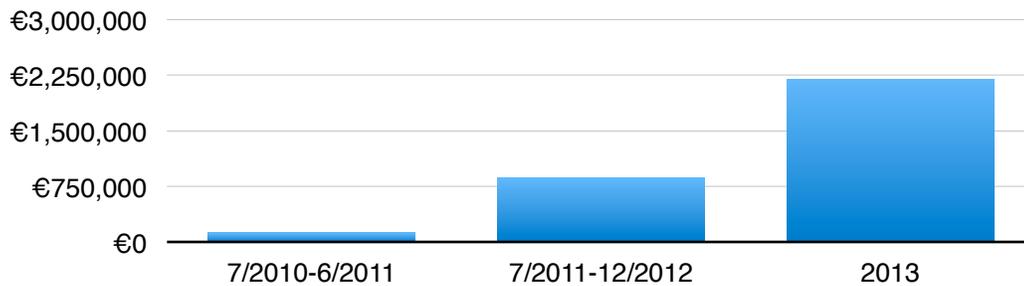


Figure 8: Fixura loans originated.

For the purpose of sustainability the company decided to expand its capability by seeking extra fund from its existing and new shareholders total is 17. The growth was accounted for as a result of investment made to insource IT department that was outsourced to external partner in order to facilitate faster and smoother co-ordination.

Also, peer-to-peer service industry is set to capture significant portion of the financial service industry with higher return on investment (ROI). As at 2013 Fixura had captured 0.5% of the sharing economy in Finland and target to increase this percentage by intensifying awareness. The following figure represents the claim that P2P gives better annual return than the primary financial intermediaries.

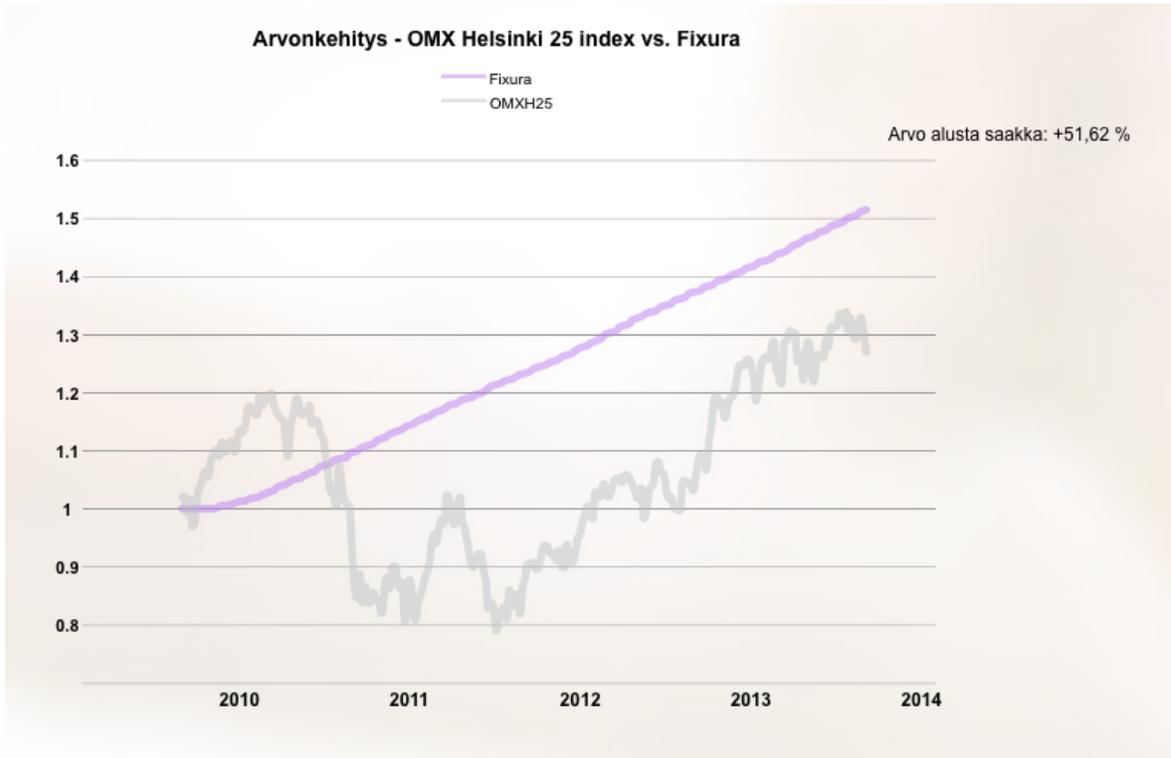


Figure 9: Fixura Average Annual Return

Fixura indicates that P2P is the engine in creation of sharing economy with constant cash-flow for investor. And as P2P continues to gain its acceptance into the Finnish society that simultaneously increases the numbers of loans initiated, the value of the company is increases. As at 2013 annual report the estimated value was 51, 62%.

Also, the company has created more wealth for its investors with annual average return of 10.80% on their investment including paid subscription and transaction fees over the period. And when compare return on investment P2P gives better return than other contemporary financial intermediaries because the graph above reveals that the constant cash flow is not subjected to the performance of the economy as the case of stock market where there are many factors affecting the market. Rather P2P is subjected primarily to the

agreement between the parties involved and their financial situation. More information about the company can be obtained at www.Fixura.fi.

3.2.2. Samsany International Nigeria Limited (SINL)

SINL is a local manufacturing company in Nigeria though the company information and background check up is not available on the internet. However, effort was made to contact the owner who presently resides in Finland and also other staffs that are residing in Nigeria. The company SINL was once known as Samsany organization with the production of polythene bags in 2001. But, in 2008 the company was registered and added International Nigeria Limited to its name to become SINL.

As at 2008, the company had changed its line of business to production of livestock like chicken breeding, fishery and goat farming. And in 2009, the company further includes production of drinking sachet and table water. According to the information received via email from the owner, the company currently has about 12 staff (2 drivers, 2 sales representatives, 1 manager, 1 director, 1 accountant, 1 supervisor, 2 machine operators, and 2 product parkers) and the average annual turnover of the company amount to 32, 743€ (6,548, 640 naira consider that 1€= 200naira)

3.2.3. Creamarketing Ab Oy

Creamarketing is a service based company that started over 16 years with two friends named Karl-Johan- Smeds (CEO) and Kims Karl. Kims Karl is responsible for the technical operation such as servers while Karl-Smeds is responsible for sales, project management and all the managerial events in the company. The company provides web based solutions with the use of latest web technology make technical solution become simple and easy such

as online marketing, e-commerce, and online booking system and tailored made solution. Creamarketing is B2B organization that provides its service for other businesses. The company has over four hundred (400) customers.

The company has twelve (12) employees and nine to ten of the employees specialized in technical department to provide system development, programming and all technical solutions. The company has been a major player in web technology and solution within and outside the region of Vaasa and it is known for quality service. The company has its customers spread all over Finland but the company main office is located at Ratakatu 1B, 65100 Vaasa. The company's web site is www.creamarketing.fi.

3.3. Data Collection

The combination of semi-structured and structured questionnaire is employed to retrieve data for this study. The purpose for combining semi-structure and standard structured questionnaire is to provide easy understanding and well define scope as well as to give respondents ability to express opinions within the scope of study. (Uwe 2006.)

The questionnaire comprises of questions extracted from covered subject matters of this study that will enable to answer the main research questions. Also, as a result of distance and financial constraint to travel to the location SINL, the questionnaire needs to be simplified and structured and administered via email.

Two sessions of interviews were conducted for FIXURA. The first interview took place on 16th December 2014 at about 15.30pm local time in the company's main office at Kauppapuistikko 15 65100 Vaasa. The first respondent is chief commercial officer (CCO) in the person of Heikki Koivv while the second respondent named Chris is the Chief Technical Officer (CTO) and interview was conducted on 29th January 2015. Both

respondents explicitly explained the business operation of Fixura as presented in the followings. The interviews were recorded with the approval of the interviewees.

On the other hand, two questionnaires were sent to Samsany International Nigeria Limited via email. One questionnaire is for the company while the second is for the company's direct customers. SINL is a business-to-business manufacturing company that supplies its products to wholesalers and retailers called the middlemen in channels of distribution. The first questionnaire for the company is to understand the capability, perception and understanding of the company on servitization through service design. While the second questionnaire is enhance the involvement of customer in service design and also for the purpose of design new service that will servitize.

The respondent in SINL is the Manager in the person of Mr. Adeniji Adeolu. Mr. Adeolu has been in the company ever since the company started up till date. After the questionnaires were sent via email, the respondent was contacted through telephone to ensure better understanding of the questionnaires and also to ensure conformity of answers to the scope of the research. However, the retrieval of the data suffered a little delay due location disparity of the company's customers and lack of enough personnel to administer questionnaire.

3.4. Data Analysis Method

The gathered data through interviews for this study are presented in chapter 4. The interview is thoughtfully transcribed and presented to reflection the true idea and pictures as recorded. The transcription and presentation is carried out in a way that will enable readers and researcher to grasp better understanding of the study without accessing the recorded interviews or after the period of the study laps. (Irving Seidman 2006: 115). Then a method named by David Silverman (2006: 210-211) as "Conversational Analysis" (CA)

is employed. CA is an explicit diagnosis of conversations for the purpose of extracting opinion(s)' similarities, difference and as well as measuring level of knowledge. And it is suitable for the study for this study in order to grasp different opinions, connect interrelated issues and understanding of subject matters of the participants.

Also, the concept of relativism is applied to evaluate and analysis data. According to Denzin N. and Lincoln Y. (2005: 910 – 911) constructivist epistemology believes that every research or inquiry for knowledge is based on the previous knowledge. Therefore, all study must have theory base to build or construct further theories refers to as knowledge. Foundational epistemology further stated four standard criteria of research: internal validity, external validity, reliability and objectivity.

Internal validity is the process of ensuring conformity of principles within the field of study. That is, eliminating variability in principles guiding the field of study. External validity is aligning the theoretical principle to the empirical to ensure that the projected claim is valid. Reliability is to ensure the correctness and accuracy of the facts and objectivity is ensuring that the study has not been influence by researcher rather it is studied and reported in actual nature.

4. RESULT & DISCUSSION

Under this session all the retrieved data from the interviews and survey questionnaire are presented. As already mentioned, there are three companies involved as case studies for this study – Fixura Ab Oy, Samsany International Nigeria Limited (SINL) and Creamarketing Ab Oy. Fixura and Creamarketing are mainly service providers in Finland while Samsany (SINL) is manufacturing company in Nigeria.

The questionnaires for interview and survey are extracted from different subject matters in this study. So, the results are also presented in accordance to the respondents' view in the field. There are two respondents from Fixura .The first respondent Heikki Koivv (CMO) and the second is Christian Långfors (CTO). And respondent from Creamarketing is Karl-Smed while the respondent from Samsany is Adeolu (Manager). Questions 1 – 8 give basic information about each company that has been presented in each company introduction.

4.1. Servitization Knowledge.

Heikki: what does the word servitization mean? I have not come across such word.

Reseacher: Servitization is the process of creating additional value to market offerings (products/services)

Heiiki (Fixura): Ok! It is like optimizing customer experience. I think not the whole understand the term servitization but we have some people that understand the term but definitely not the whole organization. So, we still have something to be done in that area

Christian (Fixura): No. I think Heikki (CMO) should be here to answer some of the questions

Karl-Smed (Creamarketing): No

Adeolu (Samsany): Yes

4.2. Design processes

Heikki: I would say the technical and myself (CMO) are responsible for design but to some extent some other department are getting involved because everyone understand what need to be designed and they start contributing. Also, the company is moving towards a point where every segment such as R& D, technical, customer service, marketing & management will be involved in the whole process.

Christian: The management group is responsible for service design because the group which comprises of Chief Executive Officer, Chief Marketing Officer, Chief Technical Officer & Chief Financial Officer decide on what to be designed while technical department decide on how to design. And I will say every sector participate in the design process because design idea must be presented for proper planning and budgeting. Sometime, the participation of every sector depends on the nature of the design idea(s).

Karl-Smed: The technical department is responsible for service design. I would say all sectors are involved because information flows through all the sectors- sales, marketing, technical & management.

Adeolu: Engineering department is responsible for design and other sectors are involved in design process.

4.3. Value Creation

Heikki: The value we provide is that we access/platforms for people to be smart with their finances. From the side of borrowers, we give them access to better loan terms. For instance there many borrowers with high interest loan terms from the bank but when they come to Fixura with better loans terms, they pay off the higher loans with the bank. So, the value for them (Borrowers) is to provide them more affordable means of financing their lives. The same idea applies to the investors (Lenders). The value we provide for them is to provide good ways of investing with better return through lending to other people with agreed interest rate.

We as well provide anonymity to the parties involved in lending and borrowing. That is the lender does not get to know who the borrower is and likewise the borrower does not get to know who the lender is. And in order to minimize the risk we spread investors' funds over all loans. That is when a loan is initiated that loan comes from different investors but not from one particular investor. With that, the level of individual investors is minimized and we also provide credit scoring of all borrowers. This process make it more professional where investors will be able to see the credit rating of all borrowers either on high level or risky level and the decide their risk tolerance level.

Christian: That is a very good question because the value we are providing is that people can now access a loan without going through the bank. And the power of decision is returned to the people where they decide rate of interest they either willing to borrow or to lend. This is something the banks do not have now. And base on the segment of values, I think Heikki (CMO) will be in the best position to answer that I am just the technical guy.

Karle-Smed: As web solutions company our values can be defined as creating and giving simple, easy and user-friendly web solutions. I cannot say specifically that our services are limited to specific segment because our services are adaptable to all segments for example start-up businesses, individual, big company and society.

Adeolu: We are satisfying needs or want of thirsty. And services segment are production, delivery and packaging.

4.4. Customer Involvement and Social Media

Heikki: In the area of customer involvement, I would not really much is done to involve customer today. Though little is done but not as it should be because we are getting adhoc feedback from customers who want different things to be done at the same time, so we do get the feedbacks but we do not collect them for design purpose. However, the company is working to improve in this area.

The company has always involved customers at the final stage of design because the company had design the model for operation 5 years ago nonetheless we are developing new version now but we are not involving customer for early feedback.

The company uses social media such as Facebook, twitter and LinkedIn. The purpose of using these social media is basically for marketing. We use it to inform the public about what Fixura is about, our services, promotion and also we get some feedbacks. We sometime interact with customers but rarely. I will say that we have done something about the feedbacks but the feedbacks have not been developed into new services/product. However, feedbacks have generated new ideas for new services that are yet to be developed. The company does not have forum in the social media to generate design ideas today though it will be good to get there.

Christian: In term of customer involvement, I would say that we have two forms of customers. The first are the customers that are interested in our services, these people call us to give us feedbacks and also our existing customers give us feedbacks. We have our presence in social media such as Facebook, twitter and LinkedIn and the purpose is mainly for marketing. We mainly get feedbacks from customers by sending email and we sometimes get feedback from Facebook We once tried that strategy by creating a forum of Facebook for feedback but it has shown that it is not the best channel for generating feedback. The best feedbacks are from customers calling in or email.

Karl-Smed: Concerning customer involvement, we definitely involve customer very much. Our team work very close with customer as we do not produce something and then go to the market to show it rather customer comes with an idea(s). We make some prototypes and show it to the customer for feedback. Then we adjust and co-create the final product together. So, it is very much in co-operation with customers.

And we involve customer at very early stage because we do not have 100 percent completed solution already. We only have the ideas and components and before we put these two together we need contribution from customers. Yes, we did have some social media at the early start of the company but we did not get any help or idea from there. We get created Facebook account recently and the reason for late entry now into social media is that we do not have the time and have not considered it to be important.

Every time any project is completed, the company sends out questionnaire through email or invites the customer over for feedbacks of the project. We do not want our customers to discuss with us through social media with prefer face-to-face conversation.

Adeolu: According to the respond, the company does not involve customer for service/product design. The company has Facebook account that is only

meant to market and manage its product and connect with customers. Customer feedbacks are retrieved through physically collection and phone calls. Yes, feedbacks generate design ideas.

4.5. Servitization and Service Design challenges

Heikki: We have identified the problem to be lack of resources and time that needs to be used towards systematic collection of feedbacks. And this is the same problem every small organization is facing to designing qualitative service. Nonetheless, we are now developing capability to be able to tackle this problem in 2015.

And idea generation from social media has some risk. The first problem is that there are some innovative ideas that the company does not want to leak out to competitors and how can you prevent that on social media. While the second as already said is the amount of resources involved-time and the number of people available to use this channel.

Our challenges are basically in two areas. Fixura is operating in a grey area or a new industry that is absolutely new to the public that they even question if the law allows us to loan funds to public. But, the fact is that Fixura does not loan money. We only create the platform for lenders and borrowers to meet and agreed on loan terms. And the second area is public awareness because the industry is new; peoples' awareness is still limited. And with other companies in the industry the better for Fixura.

Fixura is extending its service to Sweden and we are aware of some challenges the company might face because the country is different. For instance we do not need license to operate in Finland but we need a license to operate in Sweden. And we need to modify our services to suite the new environment.

Talking about customer involvement, in principle it is good to involve customers and the right customers must be found because there are some customers that are not interested to participate in such process. Such customers are only after the final product/service. And after finding the right customers that are willing to participate in such process then something concrete must be present on the table for better understanding before giving feedbacks.

Christian: I would say the basic challenge is the amount of time involve with the processes. That is, as a technical person I do not use social media for idea generation because I do not have the time to follow it. Instead of following social media for feedbacks, I get weekly report to work with. However, the company is making some improvement in using social media effectively as another company has been contracted to analyze customers' feedbacks from Fixura's home page and social media. And with the feedback Fixura has been able to improve our services and to a degree there are some ideas but these ideas are not ground breaking.

The challenges visible now are more of business and governmental because when going abroad the company needs to know government policy concerning the company's offerings (product/services). As well as the business environment the company is planning to operate. I agreed that using social media is beneficial to design process but the company is not there yet and we have started to take steps towards taking the benefit of social media.

Karls-Smed: The first challenge of designing qualitative service is lack of good understanding of what the customers want. If at the early stage, and customers' wants are not well understood the company will start designing something that does not fit into the environment. So, for us in creamarketing that work with lot of data base and technical components, we seek first to understand what the customers want but if we fail to understand exactly what they want the output will be very bad.

There are steps that we had taken to reduce the amount of resource and time to have to design new service every time by creating a standard solution that can be easily adjusted to suite new customers. And social media as never help us in generating new ideas because we do not get any meaning from someone that just like or put a thumb-up. So, we invite our customers before, during and after any project to get feedback.

I strong believe it is absolutely important to involve customer as early as possible and the problem I see design qualitative service is communication and lack of time. Communicate with the customer to know what they want and spend time to verify that you have understood the need correctly. And since we are Web Solution Company we have our customers all over the world and we communicate with them through skype to retrieve information.

Adeolu: The major challenge facing designing qualitative service is bad road. No smooth direct access to customers. And from my point of view, there is no environmental or societal challenges rather it is technological challenges because all our machines are not locally built but imported and this brought about high cost of machine and spare parts eventually this reflect on the cost of production.

And international companies can take advantage of Nigerian market by investing in power supply and machinery. That is bringing in technology that can help to improve these basic needs in Nigeria. When looking at major challenges facing qualitative design either service or product if all the basic infrastructures are not in place then such design target would be difficult.

4.6. Summary and Analysis.

A quick summary of the result is presented in table 1 below to capture the fundamental focus of this study and further analysis of finding is discussed.

Table 1: Tabular study summary

HYPOTHESIS	THEORIES	FIXURA	CREAMARKETING	SINL
H1. Service producers understand servitization	Raddats and Easingwood (2010) acknowledge that manufacturing companies are aware of servitization but are facing the problem of how to servitize and what is/are the right strategy to servitize	The organization is not aware of the term "Servitization" but define it as "exceeding customer expectation"	The organization have no idea of servitization	The organization has understanding but lack application strategy
H2. Customer involvement leads to servitization	Alam (2002) customer involvement shortened R&D period, cycle time, save cost and increase success rate of new service/product.	<ul style="list-style-type: none"> -Customer Involvement depends on the nature of idea to be generated. -Resources available - Design for the market -Last stage of customer involvement 	<ul style="list-style-type: none"> -Customer Involvement is very crucial because information flow through the organization. -Design with the market. -Early stage of customer involvement 	<ul style="list-style-type: none"> - Customer involvement is somewhat important because the organization producer for the market. -Last stage of customer involvement
H3. Social media influence customer involvement	Kohler, Matzler and Fuller (2009) SM eliminate information alteration or distortion and actively engage/involve customers directly in values co-creation.	<ul style="list-style-type: none"> -SM does not give ground breaking idea(s). -It has not been used for the purpose of design. -SM is limited by the amount of resource required such as time and personnel. 	<ul style="list-style-type: none"> -It has not shown to be the best forum for idea generation. -It is used for marketing and brand management 	<ul style="list-style-type: none"> - Facebook is used only for social presence. -No connection with direct customers. -Not used for design purpose
Servitization & service design challenges		<ul style="list-style-type: none"> -Customer perception about P2P lending. -Government policy 	<ul style="list-style-type: none"> -Clarity of customers' needs. -Resource such as Time involvement 	<ul style="list-style-type: none"> -Electricity (power supply) -Good roads for delivery -Modern machinery for production.

This study has been a great experience not only for researcher but as well as for readers that take time to follow the logical process of this study. This study has increased level of understanding and knowledge of servitization through service design and also gives different perspectives from which the subject matters can be viewed. . The research process has been made simple in order to simplify complex design processes because it is only when the customers' voices are rightly captured can guarantee easy design process. The process is known as idealization where organizations co-create values with customers. In the course of the study, interesting discoveries are made some of which conform to theoretical claims while other refute as discussed below.

In respect to RQ1 (what is servitization) and H1 (Service/product producers understand servitization), it is expected of service or product producers to have understanding of servitization in determining fundamental core value and co-create such values as market offering. Background study revealed that servitization understanding and culture in all sectors but not in particular sector of an organization will increase value adding capabilities. And Raddats and Easingwood (2010) claimed that service/product producers have the understanding of servitization but lack application strategies. However, empirical studies revealed that case studies have no or little understanding of the term 'Servitization'. Some respondents likening servitization to exceeding customers' expectation that focuses on a particular market offering. But theoretical claims refer to servitization as a bundle of market offering without restriction on a particular or single market offering but a bundle (complimentary) market offering that continuously add values. That is servitization does not limit the customers' satisfaction to single product but with a bundle of products/services.

And service design as already explained by Hartson & Pyla (2012) as two intertwine (Design process and design artifact) but different field that needed to be understood. Hartson & Pyla (2012) reveal that service design is the compass that engages all sectors of organization to initiate and co-create customer experience/value. And inability to

differentiate service design and design will result in customer hostility. The case study companies show little understanding of the difference between design and service design by only engaging and designating design process to design segment. And this conform to the claim by Polaine et al. (2013) that service designers fail to design qualitative service because of wrong application of product design paradigm to service design. However, Creamarketing reveal that it becomes inevitable not to involve all sectors of the organization because information flows through all sectors (management, technical, sales and marketing) of the organization. On the other hand, Heikki (first respondent in Fixura) acknowledge that not all sectors are involved for design process but the organization is planning to involve every sector for future service design. Christian (Second respondent in Fixura) explained that sectors involvement depends on the nature of idea to be designed. And this is a crucial point whether every sector should be involved in every design process or sector involvement should depend on the nature of idea and what needed to be designed. Though, theoretical study reveal that service design encompass all sectors of the organization and couple with the opinion from Karls- Smed that information flows through every organization.

RQ2. What forms of values is designed or created?

Studies reveal that most design either product/service failed because designers fail to capture the voice of customer during interaction. Customer involvement is a crucial factor in designing a successful service/product because it is through customer involvement that functional requirement can be clearly defined and design the right service/product for the right market. (Hautz et al., 2010.). Alan (2006) supports the view on customer involvement stating that it is not only an avenue to define functional requirement but a channel to generate, screen and develop design ideas that will give competitive advantage in the market. And to engage the right customer in design process, organization must be relationship focus rather than transaction focus. The screening of customers' feedbacks for

creative and critic is a starting point of customers' involvement for new design. That is organization must not only be looking for good feedback but when there is hostile feedback then it is an indication for need to design new or improve service/product. (Jackson 2010.).

Likewise, case companies consent to the importance of customer involvement in designing qualitative and valuable service by involving customers at different stage of design process. Finding indicates that customer involvement is limited or influenced by some factors such as 1) the nature of idea to be designed. 2) the amount of resources available and 3) technological capability. Customers in the context of this study refer to internal (employees) and external (end users) customers of organization. Both customers are very important in design process and one cannot function without other. Result indicates that some of designers restrict customer involvement based on the nature of design ideas organization seeks. That is, organization cannot involve all customers every time for designing new services/products. The reason is due to bureaucratic process that will delay design process and if such time is being used on the process then at what point will the new service/product be released. Organizations are also trying to come as early as possible into the market before it becomes saturated. Heikki (Fixura respondent) also indicated customers' interest in co-creation as other reason organizations do not frequently involve customer for every design. It is revealed that some customers are only interested in the final product and involving such customers will not yield result. And when organization is seeking to involve customers, care must be taken to know the kind of customers that will be involved and how to present the concrete framework for such customers.

Further, the amount of available resources limits customers' involvement in service design. Organizations have limited amount of resources that must be efficiently and effective utilized to ensure survival. Organizations consider some activities important than the other and in severe competition, organizations are focusing on core competence. So there are rationalization and prioritization of core activities over non-core activities. Technological capability is another crucial factor that influences customer involvement. Organization with

flexible technology will be able to adapt and respond to any change as a result of customer involvement. And in the case of Fixura, it is observe that one reason customer involvement is limited is because the organization has already established a particular operation model and changes to the model will be significant and considered big disruptive. And if organization seeks sustainable competitive advantage, such organization must develop technological flexibility capabilities for disruptive technology (Moritz 2005).

Also, another limiting factor to customer involvement from the study is the fear of information leakage. And this consent with the claim by Enkel et al (2005) that organization that involve customer in design process stand the chance of loss control over information and also the risk of breeding internal competitors with the new idea. That is, by involving customer in design process organization risk leaking vital information to competitors and sometime organization have a representative/informant as competitors' customers. However, studies indicate that customer involvement is very crucial and beneficial to organization (see pg. 32-33 above). And any organization that fails to enhance the culture of customer involvement can never achieve competitive advantage irrespective of technological capabilities and product/service uniqueness. For instance, Nike a sport outfit manufacturing company is being able to reduce inventory, reduce production cost, and cycle time as a result of customer involvement. Now customers are co-designing and custom made product on the company's web site (check www.nike.com).

RQ3. How social media influence customer involvement?

Social media is playing a crucial role in customer involvement as organizations are filtrating information alteration created by middlemen in supply chain. Background study revealed that both international and local organizations are eliminating misinformation from the middlemen by shrinking the gap between organization and direct customers and many big organizations are taking advantages of social media to co-create and design.

Finnair is one of the airlines that have introduced social check-in services and passengers can now tell friends about their journey on social media. Finnair is not only using this medium for daily chat with customers but also using it to design and develop new services because customers are in the habits of sharing information. Also as stated above (pg. 33-34) that Ford automobile company used social media to introduce Ford Fiesta in 2009 to American market and Australia Tourist Board used social media to generate more revenue.

Conversely, case companies consider social media less important because of the claim that such forum has not generated any ground-breaking ideas. According to Hoyer et al. (2010), it is the responsibility of every organization to find its presence in social media because it is the channel customers feel close connection with the organization and organization must take active role in controlling the activities in virtual world. For example in the following figure IBM is using the virtual world to involve employees.



Figure 10: IBM virtual meeting

The virtual meeting saved IBM increase efficiency and effectiveness as employees discuss and act on the new idea before physical design. This method has saved IBM huge cost of physical meeting and reduces design defects. Also, involvement of the right customer is crucial in co-creation of value and social media create a stream of pool from which customer can be involved. Organizations are no more retrained to particular numbers that are not true representation of market. As stated by respondents (Heikki and Kars-Smed) that involving the wrong customer in design process will result to service/product failure and customer hostility.

Hence, social media provides vast pool from which organization can strategically pull the right customers for design process. This eliminates the fear of involving the wrong customer in design process. Also, risk management level of an organization will determine the extent to which social media can be employed. As organization active responsibility, the content of discussion must be initiated and credible customer must be invited to the forum. Though, this is a form of closed customer involvement (Kaplan and Haenlein 2010) where not every customer is involved.

What are the challenges facing servitization and qualitative service/product design?

Theoretical study place more emphasis on internal perspective such as lack of understanding, technical know-how and strategy facing servitization and qualitative service design (Raddats and Easingwood 2010). Baines et al (2013) also includes mental paradigm as factor influencing qualitative service design. Empirical study also confirm to this claim as one respondent explain that lack of understanding of what the customer really want is challenging servitization and designing qualitative service/product. And design failed because designers assume and guess about customers' needs based of wrong survey with wrong customers in a wrong environment.

Though, internal factors greatly influence servitization and service design but external factor also influences as stated by one of the case companies (SINL). SINL claimed that external such as good road, technology and machinery influence servitization and service design. The point from SINL gives another view that external factors contribute to achieving servitization through service design. Because when a company design good service and product but without good delivery strategy such design will fail.

Thus, the survey from SINL a manufacturing company Nigeria indicate that servitization through service design is challenge majorly by the external factor. This view reveal challenge all local African organizations are facing in designing qualitative service and what international organization intending to operate in Africa (Nigeria precisely). Nonetheless, international organizations with flexible agile and resilience capabilities are strategically investing in the huge market opportunity African economies provide.

Since the beginning of every design start with idea and Jackson (2010) in his book ‘Getting Design Right’ also states that success and failure of all designs depend on capturing true customers’ voice and defining functional requirement of market offering. Thus, it extremely important to involve customers during all stage of design processes. Though the tried to sample the opinion of respondents to know at what stage their respective organization involve customers in design process. Some involve customers at early stage for idealization while other involve at last stage for feedback. However, it is suggested to involve throughout design process (Early, Middle & Last) phases. When customer involvement is maintained throughout design process then getting design right and co-creation of value with customers’ loyalty will be achieved.

Another intriguing factor is the fear of social media and the amount of resource (capital and time) commitment. As stated above that the risk of loss of control and vital information leakage is contributing to the level of customer involvement. But, as much as big organization are able to manage the risk involved in social media and harnessing the

benefits in designing with customers, small and medium organizations can also create the capability to manage such risk either by absorption or transferability to other party. For instance Fixura transfer risk by employing third party to analysis its home page and social media activities for the purpose of service development. The following table gives a quick caption of the facts explained above.

5. CONCLUSION AND RECOMMENDATION

In conclusion, this study has been able to increase knowledge and contributes to existing knowledge in the design field that is paramount for successful design. The term “Servitization” is majorly attributed to sales and marketing that only sells final products/service. But in actual sense according to definitions given above it focus more on designing and value co-creation. Thus, designers should also have good understanding of servitization in order to co-create values and design with market rather than for market. However, service design encompasses all sectors of an organization, this is not to indicate that sales and marketing department are not supposed to have the understanding but all departments should increase involvement in design processes for servitization culture. As one respondent (karls-Smed of Creamarketing) indicates that information flows through all sectors of an organization.

Since the purpose of servitization is to co-create with customer, hence, customer involvement is inevitable. There are different ways and stages organizations involve customer for design purpose. According to the study some organizations involve customers passively through feedbacks on the final design process or final service/product. Such involvement creates a vacuum in the mind of customers as customers are expecting to experience better design in future. This approach will leads to customers’ hostility and loss of trust in future market design. Conversely, feedbacks are opportunity that generates better design ideas only when customers are involved actively at the early stage and throughout design process. Early involvement of customers is the crucial stage and as Jackson (2010) indicates that successful design begins with clarity of what needed to be done. And Karls-Smeds (Creamarketing) buttress this view stating that absolute clarity of what the customers want is the foundation of every successful design.

However, organization limits customers' involvement among other reasons is critiquing and adhoc feedbacks that criticize design. Thus, organization tends to strategically select the group of customers to engage/involve for design process. And such organizations establish static system of involving same group customers for different designs. When there is static system or approach of design, then designers will start to minimize customers' involvement to the point of absolute elimination. And according to Hartson and Pyla (2012: 275), critiquing is another source of design ideas only if organization has servitization culture. Since customers are the custodian values designers seek to create then it is through relationship that such values can be transferred. Another significant issue during the study is the wiliness/readiness of the customers to be involved in design process. Actually, customers are only interested in the final product and get values for money. But, creative organizations such as Ford Automobile Company and IBM have been able to influence customer participation through incentives. Organization should add incentives to motivate customers for design process. It has been discovered that majority of companies use this creativity only for promotion, sales and marketing without considering the possibility of value co-creation.

Finally, the influence of social media on customers' involvement and service design cannot be underestimated. Though, empirical studies reveal that the medium has not been helpful. However, further studies indicate that some organizations are using social media for total customer involvement in the case of IBM and for idealization in design process. The first clarification is that social media functions according to the purpose organizations define. That is, the purpose to which organizations apply social determines the benefit such forum delivers. Some basically see SM as channels for brand management, marketing and socialization but never explore the benefit of value co-creation. Designing through SM has not been claimed to replace idealization physical process as shown in the following figure:



Figure 11: Idealization physical process

But, it has given the channel to eliminate distorted information, wrong assumption and reduce cycle time. These are the barriers created by third party between the designers and users. Also, engaging the right customers limit co-creation, SM increases customer pool from which organization can draw the right customers. Also, it creates channel to ensure quick customers' involvement throughout design process compare with the traditional methods that design process will be halted to get further information from customers.

Nonetheless, SM offering great benefits also increases risks of customers' involvement such as vital information leakage and loss of control. However, creative organizations have been able to manage and minimize such risks either by Absorption or Transferability. Absorption is when organizations are able to curtain and manage information with public. In idealization process organizations need not reveal main purpose behind customers' involvement though customers must be presented with concrete framework to avoid vagueness and design error. Organizations can create virtual games, meeting and discussion

forum (User content generators) and give incentives for participation. These methods will help to keep vital information and minimize leakages.

It is no doubt that major question service designers and producers seek is what are the strategies, techniques and tools that can be employed to maximize and minimize benefits and risks respectively social media poses to co-create values with market (customers). Since the scope of this study is limited then it is recommended that further continuous research should be carried out that present service designers and producers knowledge of how and what strategies, techniques and tools to be employed using social media to co-create values.

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APPENDICES

Appendix 1. Research questionnaire

QUESTIONNAIRE

The Purpose of this study is to find out how your organization conducts its business, design service(s), what challenges facing service design, how customers are involved in design process and how social media has influence and help in generating design ideas. The researcher certifies that all information gathered will be treated confidentially and will be limited within the scope of this study except based on mutual agreement with the organization and researcher.

Respondent

Position

1. The organization's operation is in the followings:

- Manufacturing Industry
- Financial Service Industry
- Manufacturing & service

2. The organization has been in operation for;

- 1- 5years
- 6-10years
- 11-15 years

3. Can you please describe in brief how your organization started and the ideology behind its operation?

4. What is the staff strength of the organization presently?

5. What is the volume of customers of the organization presently?

6. Who does the organization consider as competitors?

7. What are the strategies consider for the competition?

8. Does the organization understand servitization?

9. Who is responsible for service design?

10. Is every sector involved in design process?

11. Which segments of the organization are involved in service design?

12. Do you think your organization is creating value and how can you describe the value?

13. In how many segment can you classify the service your organization is offering to the market

The following questions show how customer involvement and social media impact service design

14. Are customers involved and engaged either to improve or develop these services?

15. At what stage of design process is customer involved?

- Early stage
- Middle stage
- Last stage

16. Does the organization make use of social media?

Facebook Twitter LinkedIn Others

17. The purpose of social media for the organization is?

- To involve internal and external customers for design
- To socialize with environment
- To market and promote

18. Does the organization have customers' feedbacks and what was done with these feedbacks?

19. Does the organization create a forum in social media to generate design ideas?

The next questions reveal how the organization solves the challenges involve in using social media in design process.

20. As a value providing and adding company what are the challenges facing designing qualitative service?

21. What measure is the organization taking to solve the stated above problems?

22. What are the challenges involving using social media for idealization of design?

23. What are the environmental, societal, governmental, technological and economical challenges towards service design from your point of view?

24. As a local organization going abroad, how do you think international market can be servitized?

25. Do you think it beneficial to involve customers in design process?