

Servitisation Levels for Service Providers in Industrial Services

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Abstract

Servitisation is the process of product companies getting into services activities and offering products and services as bundles to users. Creation of a bundle of services with products has been always a challenge for companies. So was the pricing of these bundles. This research paper studies the factors customers' consider while paying a premium for such bundles. Further it also explores the preferred levels of servitization for these companies. A qualitative research was carried out among three industries, namely, power & related industries, heavy engineering and defence manufacturing, through depth interviews. Brand equity was found to be a prominent factor in willingness to pay premiums. It also lists out the services consumed by three industries. Such services are categorised by customers as critical services and non-critical services. Customers are ready to pay premium for approximately 30% services among the critical services and 10% among non-critical services. This willingness to pay premium is enhanced by the brand equity of the service provider. This research enables the service providers to bundle the products and services by picking the right services which fetch premiums for them.

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I. Introduction

Companies are getting into services as a differentiator when the products alone are shrinking in terms of profitability, especially when together it creates a better value proposition (Kamp & Parry 2017). Servitisation is defined as the process of product companies getting into services activities and offering products and services as bundles to users (Brax & Visintin, 2017). The strategy of clubbing services with products worked wonders for IBM in their computer business. This prompted many companies to follow suit.

Servitisation of manufacturing companies result in immediate profits. Manufacturing companies start servitisation on a low scale and it fetches immediate high returns. However, in an attempt to scale up, these companies start investing in employees, infrastructure and skill development and the profits vanish. As companies achieve scale in services, servitization once again turns profitable (Kastalli & Van Looy, 2013). Globally one third of companies in the manufacturing space have turned to servitisation, the figure going up to 60% in western companies (Lee, Yoo & Kim, 2016).

A firm's profit can be improved by an increase in complementary effect or network effects, if either of them are sufficiently strong (Barnett, Parry, Saad, Newnes & Goh, 2013). Seeing the success of some initial few, many product manufacturers ventured into servitisation in the starting of twentieth century. Nevertheless, not all organisations were in favour of servitisation. A manufacturing company getting into service shifts its focus away from its core strength thus diluting its market competitiveness with regards to the product (Barnett et al., 2013). Soon the initial euphoria died down as reports of failure also started pouring in. The large number of failures brought terms like service paradox and deservitisation into the world of researchers. Due to these positive and negative factors, servitisation was called a service paradox. Farrell and Saloner (1985), were one of the early predictors who said that the bandwagon strategy is prone to excess inertia or excess momentum in switching.

In case of branded industrial services companies, a major challenge is in pricing a service, especially when it gets into new markets. Empirical studies in B2B marketing (Bendixen, Bukasa & Abratt, 2004), points that vendors of reputed quality deserve price premiums (Biong, 2013). In industrial goods market, brands testify quality, authenticity and high performance which influences the customers' buying decision (Kotler and Pfoertsch, 2007). Those customers who value quality, are ready to pay premium when it comes to a quality product or services (Klein and Leffler, 1981).

In the domain of industrial goods, research is wanting in case of brands adding value to price, (Barth, Clement, Foster & Kasznik, 1998), and not much is known about brand equity and its effect on price (Davicik & Sharma, 2015). More the sellers invest in quality, the more premiums they get for their reputation for quality (Biong, 2013). Brand equity studies in the business to business space implies that suppliers with brand equity command better prices (Bendixen et al., 2004). When branded

companies price their services at par with its lowly branded competition, it wins market share, but at the cost of due profits. At the other extreme, if they price it higher than what the market expects, it stands to lose out on market share. For these reasons, pricing of services has remained a challenge for branded industrial services companies especially for the ones entering a new market.

The critical questions this research answers are:

- a) What are the factors that customers consider while deciding on the price for industrial services?
- b) Is brand equity of the service provider, a factor among them?
- c) Are customers ready to pay a premium for servitised products?
- d) Another question this research answers is the level of servitisation the service providers should aim to maximise their price.

II. Literature Review

This section is further divided into 5 sub-sections, namely theoretical background, servitisation concepts, positive aspects of servitization, negative aspects of servitization and brand equity.

2.1 Theoretical Background

Lusch, Vargo and O'brien (2007) stated that unless an organization views itself and customers through a service-dominant (S-D) logic, it cannot succeed in the service market. S-D logic views the customer as a collaborative partner who helps the organization in achieving the service goals by interacting with other stake holders.

Vargo, Maglio and Akaka (2008) brought out the difference between goods dominant (G-D) logic and service dominant (S-D) logic. Goods dominant logic focusses on the efficiency and features of the goods and believes in delivering the product in its best form to consumer. But service dominant logic focusses on the end use and the satisfaction the consumer derives from the use of goods. In case of

an automobile G-D model believes in converting the raw materials of metal sheets and other component into an automobile so that the consumers buy it. Whereas in S-D logic, the automobile manufacturer gets into the detailing of whether the consumer knows driving, for what purpose they buy the automobile, and whether the features support customer needs. In S-D logic the manufacturer interacts with consumers regularly and hence is in a better position to satisfy their needs and ensure future market for its products. Another aspect in theorizing services is the use value and exchange value of a product. Use value denotes the value a consumer sees in buying that product considering all its factors like colour, size, status etc. Whereas exchange value is the value that consumer sees in it as to exchange it against some other product which is difficult to measure and is dynamic in nature. Hollebeek & Andreassen (2018), uses a Hamburger model to highlight service innovation after considering all the factors that pave way for service.

Reputation building activities which creates a differentiation enables companies to charge price premiums and therefore increase the margins (Aaker and Equity, 1991). A consumer is always mentally pre-decided to pay a premium much before he actually makes that purchase (Casidy, Prentice & Wymer, 2019). One should not get confused between price premiums and premium prices, the former is what customer willingly pays extra for the perceived value, and the latter is what companies charge for either the higher costs of quality or for positioning reasons. The former creates profit, but the latter do not necessarily create profits. (Rao and Bergen, 1992). The decision whether to grant a price premium to a brand depends on the perception of the customer towards that brand. A qualitative research was carried out by interviewing the customers to understanding their perceptions on factors they consider while deciding the price. The questionnaire was predominantly open-ended to capture the perceptions holistically.

Brand Equity is always a relative aspect, how a brand fares with other brands or unbranded ones. All Brand Equity definitions point towards such a comparative construct (Keller and Lehmann, 2003). Brand equity is an important marketing resource (Keller and Lehmann 2006) and after some of the seminal works it has taken prominence in marketing literature given its contribution in tactics and strategy (Aaker and Equity, 1991).

Casidy et al (2019), further state that a different brand image becomes a key success factor in the highly sensitive service sector. Previous studies have pointed out that customers who think of a brand as having a unique identity are more likely to identify with that brand (Alnawas & Altarifi, 2016), and they prefer that brand to other options in the same product category (de Chernatony, 2009), and they are more willing to pay premium price for the brand (Anselmsson, Bondesson, & Johansson, 2014), resulting in an increased market share (Nam, Ekinci, & Whyatt, 2011). Sellers can leverage a well-positioned brand by extracting a premium for their value proposition (Ohnemus, 2009; Persson, 2010). Investing in branding activities by zeroing in on the right elements and positioning strategies would increase the income through premium pricing (Panda, Paswan & Mishra, 2019).

The ultimate target of creating a brand is to maintain a unique presence in the market that attracts customers (Knox & Walker, 2001). The greater a brand identity, the more it correlates the brand with customers; and in turn, they pay a price premium in resonance with the distinctiveness they perceive (Casidy et al., 2019).

In case of a buyer offering more than market price to a supplier, supplier would be obliged to offer him better quality. A cumulative sense of obligation from many such customers makes the supplier develop good quality on a consistent basis. The buyer always gravitates towards suppliers who are ready to raise the quality commiserate with the price than the ones who do not. Customers at the

end decides what would be an optimum premium that fetches them the best quality (Sarkar, 2019).

The preliminary list of research papers was short-listed based on two topics of 1) servitisation, and 2) brand equity. Subsequently, in servitisation, only papers delving into execution of servitisation, their effects on the companies, and the possible reasons of failure was finalised for study. In brand equity, only the papers which dealt into basic definitions, brand premiums and service brands were referred to.

2.2 Servitisation – Concepts

Matthyssens & Vandembemt (1998), one of the pioneers in the area of service marketing research, studies competitive advantage for industrial services organisations and how they are achieved. Later on, Kunz & Hogreve (2011) take us through the evolution, the present and future of services marketing. Followed by them, Brax & Visintin (2017) did a systematic review of servitisation, and subsequently a meta-analysis of existing models of servitisation. Product-Service Systems (PSS) have been studied in depth from a value-based perspective by Kuijken, Gemser & Wijnberg (2017). In another study, Story, Raddats, Burton, Zolkiewski & Baines (2017), opined that, intermediaries play an important role, since the costs involved for building service infrastructure becomes prohibitively costly for manufacturers. Does servitisation result in financial gains for companies, this is explored by Kowalkowski, Gebauer & Oliva (2017). They were in support of servitisation as it was resulting in financial gains.

2.3 Positive aspects of Servitisation

Mathieu (2001), was one of the pioneers of servitisation research. He proved that servitisation results in tangible and intangible benefits to manufacturing firms, like profits, customer satisfaction and financial stability. Before that, Anderson & Narus (1995), stated that bundling of services and goods, which is called servitisation

gives a distinct advantage for capital goods manufacturers over the competition. They were closely followed by, Wise & Baumgartner (1999), who had based their study on capital goods industry and gave a conclusion that servitisation gave a competitive advantage to companies in capital goods industry. Later on, Oliva & Kallenberg (2003), researched the transition of companies from products to services. They stated that installed base (IB) of services itself is big enough and lucrative for the product companies to enter services. Kamp & Parry (2017) brought in the concept of Product Service Systems (PSS) and advanced services, which later on was studied in depth by Kuijken et al., (2017). Kamp and Parry (2017), explained how servitisation can be taken a step forward by getting into digitalization.

2.4 Negative Aspects of Servitization

Coreynen, Matthyssens & Van Bockhaven (2017), brought in the term Servitisation paradox. They also supported digitisation as a tool for effective servitisation. They brought in four different case studies to show how digitization would affect servitisation. The paper by Valtakoski (2017) delves more into the "servitisation paradox", which is, Servitisation though was expected to be profitable, but in reality turns up to be not so profitable and loss-making in many cases. Spring & Araujo (2017) came out with a further study on Servitisation Paradox, and introduced the circular economy concept. In continuation of articles sceptical about servitisation, Benedettini, Swink & Neely (2017), studied the likelihood of bankruptcy for servitised companies. Brax (2005), was one of the pioneers who pointed out towards a servitisation failure. Later on many started establishing servitisation as a failure and highlighted the process of deservitisation and service dilution.

2.5 Brand Equity

Kotler, Saliba & Wrenn (1991) defines a brand as "a name, term, sign, symbol, or design, or combination of them which is intended to identify

the goods and services of one seller or group of sellers and to differentiate them from those of competitors". Leone, Rao, Keller, Luo, McAlister & Srivastava (2006) defines and bifurcates brand equity into brand awareness and brand image. They also study in depth about customer-based brand equity (CBBE). Customer Equity is defined by them as the life time value of a particular customer. It was Keller (1993) who came out with that brand equity model which was a pioneering model in the area of brand equity. Though he states that the customer-based brand equity (CBBE) model is a best fit for B2B scenario, empirical evidence was long awaited for the same. Kuhn, Alpert & Pope (2008), improvises on Keller's model of Brand Equity. Keller had focussed more on consumer markets though he also made significant contributions to B2B markets. Davcik & Sharma (2015), find out that little has been explored about brand and its effect on price, and further seldom is known how price co-relates with brands. Juntunen, Juntunen and Juga (2011) states that in B2B markets brand equity denotes the customer's readiness to pay a premium. They further state that in the case of services, brand equity relates to the service providing firm rather than any product. This was echoed by Krishnan & Hartline (2001), much before them. They also went on to say that branding of services by the service providers differentiates it from other players thereby helping the customer identify the value associated with that brand. Though this is more applicable for services identified by experience and credence attributes, than search attributes, authors come to the conclusion that services with search attributes have been observed to have higher brand equity, apparently to stand tall among the crowd.

III. Methodology

A qualitative research was used as the questions were exploratory in nature. Depth interviews were carried out as part of the qualitative study with a semi-structured questionnaire having twenty open-ended questions and five closed end questions.

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Three Industries, namely, Power Generation & related industries, Heavy Engineering and Defence manufacturing were interviewed till redundancy and saturation were observed and thus closing the study at twenty five customers.

Industrial services are spread out across various verticals. The in-depth interviews were carried out in three industries till redundancy. The interviewees were purchase managers, purchase heads who were at different levels of organisations and were of different age groups.

The questions which were asked included twenty open ended questions to bring out the customer opinions as widely as possible. Closed end questions were to find out basic features like gender, age, experience, education qualification. A probing without prompting was carried out in all cases. Customers were asked on the price premiums they would pay for each of the brand categories for similar services.

The answers were coded, and themes were identified for easy segmentation. The premiums in percentages as prescribed by customers were ascribed to these brand categories.

IV. Summary of Findings

Servitisation has emerged as a trend in the industrial sector the world over. It has brought solace to many product companies reeling under severe competition for the products. It was also reported by many companies that servitisation has been counter-productive and has shrunk their profits. Though Benedettini et al., (2017) confirms that no company has reportedly gone bankrupt because of servitisation, many research papers referred here have proved that servitisation has not delivered the desired results in many cases. On further probing through literature review, it was found that pricing has remained a challenge for branded industrial services companies especially for the ones entering a new market.

The pricing if was based on premiums that the brands could get, it would make servitisation help the companies to get the desired results from it. This should help them to mitigate the “servitisation paradox”.

The qualitative research carried out has helped to ascertain that brand equity influences the willingness to pay of the customer. It was inferred from the customers that they were considering brand equity as one of the factors while deciding the price. It was deciphered that among the services listed out by them, both critical services and non-critical services, there are certain services for which they were ready to pay premium.

4.1 Critical and non-critical services: -

Customers listed out many critical services like 1) Welding 2) Non-Destructive Testing 3) Hydraulic testing 4) Forming 5) Machining 6) Inspection 7) break-down maintenance 8) Fire and safety. Non-critical services like 1) dimensional inspection 2) logistics 3) civil works 4) routine maintenance 5) pollution monitoring 6) HVAC / air conditioning 7) Water-management 8) Waste management. Out of these services, for some critical services customers said they were ready to pay a premium. They were ready to pay premium for a few non-critical services also.

4.2 Servitisation level: -

From the number of services that were listed by customers, they cited a few services for which they were ready to pay premium. If we take a ratio between services that they were ready to pay premium and the total services they have listed, it was inferred that approximately 20% of services, customers were ready to pay premium. This ratio was higher than 20% and was approximately 30% in case of critical services. The ratio came down to 10% in case of non-critical services.

This data is useful to bundle the services and products. Companies can pick and choose the services that provide them premium, from both

critical and non-critical services. From the ratios mentioned in the previous paragraph, it is inferred that a 20% servitisation, which includes the product being bundled with those services which customers are ready to pay premium for, makes a better business proposition. This percentage can go high as far as 30% in case of the company choosing to club only critical services. Likewise, the ratio can come down to 10%, in case of the company choosing only non-critical services.

One customer from power sector commented *“longevity of service support is what matters; I would pay a 100% premium for a company that can assure me life-long service. But this is the essential or critical services that I expect, not all the spectrum of services.”*

Another customer from rotating equipment manufacturing unit catering to power sector, echoed that *“a service provider offering more than what we are expecting them to deliver, is always taken with a pinch of salt. We do not want to pay a premium for what is not required. We want the service providers to stick to their essential and expected service offerings”*.

Customers feel a higher level of servitisation is not something that the customers desire and therefore not ready to pay anything extra for it. The perspective is that they should have a choice of looking around for more options than just the Original Equipment Manufacturer (OEM). 80-100 % servitisation model, wherein products are bundled with almost all related services, is not well-received by customers as they think this will unnecessarily lock up the customer with the OEM, preventing him from going to better choices that may be available cheaply.

Hence looking from the profitability point of view, a 20% servitisation is the preferred servitisation level. Higher servitisation levels may fetch more premiums, but the cost of servitisation is also huge thus not justifying the extra-revenue it generates. Understanding that capability needed for

servitisation comes very costly and needs lot of efforts, it comes out clearly through this qualitative research that anything more than 10% to 30% servitisation will not be a good business proposition.

4.3 Factors that determine the price premium: -

Some factors that customers considered before deciding the price were inferred from the answers they gave to open-ended questions. The factors varied amongst 1. Quality 2. Timely delivery 3. Technical credibility 4. Track record 5. Safety 6. Trust Worthiness 7. Acceptability of end customer 8. Adaptability 9. Technology advancement 10. Stability 11. Matrix (Bundling of Services) 12. Brand Equity.

A defence equipment customer was very specific that *“I would never entertain a fly-by-night operator, however price competitive they may be. Mine is a critical service, and I would want my end-customer to ratify the service provider, which is my prime concern. And being in the defence sector, that too a reputed manufacturer, I cannot propose a sub-standard vendor to my customer for ratification. Hence I am ready to pay even a hefty premium to a service provider with high brand equity and credentials.”*

Another customer who caters to the power sector says that *“Mine in a contract wherein time is the essence. A single day’s delay amounts to crores of revenue loss to the customer and also puts a huge dent on my cash flow. Hence, I make sure that my service providers are reputed brands who would deliver on their promised time. And for that I would be happy to pay a premium if needed.”*

Customers who were senior as per designations and experiences preferred to pay premiums for highly branded services, if those services are in those selected services which they are ready to pay premium for. This gives a clear indication that customers prefer to buy only essential services from a product manufacturer. An overdose of services is

counter-productive as customers see it a monopolistic tendency.

4.4 Premium based on brand equity: -

From the inferences that were made from the customers, they had a clear understanding of brand distinctions. Brands were broadly distinguished as 1. Outstanding 2. Strong 3. Moderate and 4. Low.

Among service providers who offered their desired services, the highly branded ones got a preference in terms of price premiums. But whether to pay a premium or not depended on factors as explained below.

The premium percentages varied based on critical or non-critical service, and customer’s competitiveness. For example, quality and technology intensive industries like Steam and Gas Turbines who catered to power sector, pay a higher premium for Branded service providers in critical services. Customers who have a competent staff preferred not paying premium and take a risk with a lesser-branded service-providers even in critical services. For non-critical services customers were ready to pay a premium if it came from a branded service provider, but only in case of services the customers thought were worth a premium.

V. Key Contributions

Brand equity is a factor considered by customers while deciding their price to purchase industrial services. Among the services that customers source from various service providers, there are critical services and non-critical services.

Among critical services, for more than 30% of them, customers are ready to pay a premium. Among such services, if the service provider is a branded company the willingness to pay premium increases. The same is true with non-critical services only to the extent of 10% of the total non-critical services.

Going by the ratio that 30% of all critical services and 10% of all non-critical services, customers are ready to pay a premium, we infer that the preferred servitisation level for service providers would be 10% to 30%. The bundles that the service providers create, which includes the product and the services, they can pick and choose the services as per the customer's willingness to pay premium. They may include non-premium services also, for the bundle to look full-fledged.

The factors that were identified as factors which customers consider before deciding on the price for industrial services are 1. Quality 2. Timely delivery 3. Technical credibility 4. Track record 5. Safety 6. Trust Worthiness 7. Acceptability of end customer 8. Adaptability 9. Technology advancement 10. Stability 11. Matrix (Bundling of Services) 12. Brand Equity.

It was inferred from the customers that they were considering brand equity as one of the factors while deciding the price.

Since it is inferred that customers willingness to pay is enhanced by brand equity, service providers with a high brand equity can price the services accordingly so to fetch the deserved premium. Customers clearly distinguish brands as outstanding, strong, mediocre and low brands and have willingness to pay a premium accordingly.

Customers were not in favour of a product being bundled with all the related services (higher level of servitisation), since it takes away their liberty to take these services directly from other service providers, which they feel are more economical. They also do not want monopolistic tendencies among companies which will cut short their choices.

VI. Managerial implications

Decision to servitise or not is a strategic dilemma most of the managers face. Further, if at all servitise, then to what extent. As per the recommendation from this paper, managers can

servitise to the extent of 10% to 30% for which customers are ready to pay premium. Customers are wary of over-servitisation (above 40%), since they do not see value in taking all the services from the Original Equipment Manufacturer. They see this as a monopolistic tendency which curbs the choice of customer.

Managers could thus servitise to maximize their revenue and profits, provided servitisation is within 10% to 30% range. They can bundle the services and products, picking and choosing those services that customers prefer to pay premium.

VII. Limitations and future scope for research

The paper covers only industries from the organised sector. Unorganised sector may have their own choices and preferences. A pan India study can further justify the findings of this research.

The perspective on industrial services is heavily dependent on the technical competence of the customer. Higher the technical competence, lesser the premium customers would give to branded companies. Higher the technical competence, lesser servitisation is expected by the customer. Hence a study on technical competence on the customer and its effect on price premium as well as servitisation can be done by future researchers.

Future research can be carried out to create a pricing model which factors in brand equity of service provider to determine the right price for the services.

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