Impact of Servitization on the Brand Personality and the Subsequent Effect on Brand Trust

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Abstract: Servitization is an important activity related to the services extended by the sellers towards the buyers and the selling of products. Although Servitization is an operational concept, but its implication has also been observed in the marketing field. This paper strives to analyze the impact of Servitization on brand or organizational personality and also the subsequent impact on brand trust using structural equation modelling. The managerial implications of this study would help the decision makers especially working in the operational role to impact the marketing of the brand or the organization. Based on our analysis of the survey conducted of the participants having a background from a Servitization based job role, we identify that the servitization implementation does not influence brand personality. Further, we do not identify the specific dimension of brand personalities that theoretically underscores the empirical data that has been obtained through the survey. As a result, the concept of brand personality is completely discarded in the purview of this study in the final result. Further, we find that Servitization has a small but positive impact on the brand or organizational trust, however, the R^2 or the variance of the brand trust explained by the servitization dimension is only 32% which indicates several other factors contribute to the construct of brand trust.

Keywords: brand personality, brand loyalty, industry service, servitization, brand trust.

INTRODUCTION

The manufacturing industry operates in a world of constant change and improvement. The managers have to understand the customer requirement and make objective decisions accordingly constantly. However, even the decisions taken objectively may differ from person to person based on their prior work experience and personality. This paper aims to highlight one such aspect known as services along with products offered by any organization. Today, the economic stability and the

future growth depend as much on the services as on the product itself. This concept is termed as Servitization, which encompasses several research fields, including service as marketing & service as management (Lightfoot, Baines, & Smart, 2013). Although it is understood that the aspect of service is as important as the product, it is also important to understand the specific types of services that are more preferred by the customer based on if it is the B2B customer or a B2C customer. Also, the type of service required or preferred may differ across the industrial categories. In the paper, industrial services also synonymously referred to as Servitization will be tested for their impact on brand personality. Brand personality (here, Organizational personality) is defined as behavioral characteristics related to a brand (Aaker J. , Dimensions of Brand Personality, 1997). Several studies and a growing mass of literature attribute a personality to a brand that a person perceives. In this particular research a brand of an organization is compared instead of the brand of a particular product which is mostly found in the previous studies. From a major researcher in brand personality, we understand that Brand personality assists in building a relationship between brand and consumers and plays a role in self-expression to attract consumers (Aaker David 2011). Further, research has shown that brand personality boosts the emotional connection between the brand and the consumer. It positively uplifts brand trust and brand loyalty (Louis & Lombart, Impact of brand personality on three major relational consequences (trust, attachment, and commitment to the brand), 2010). Brand personalities have also been observed to be different based on culture, regions, etc. Accordingly, a brand personality scale that fits the context of Indian culture and background is identified for the research in this paper (Ahmad & K, 2017). As of yet, no study has tried to assess the effect of firms' industrial services (or Servitization) on brand personality. Organizations are slowly shifting the focus of their business from tangible products to a cumulative combined intangible service (Jukka Partanen, 2017). Brand personality and brand

trust are different constructs that have been identified in the marketing literature. Brand trust (BT) was conceptualized as the willingness of a customer to depend on the brand's perceived functionality to achieve a stated goal (Chaudhuri & Holbrook, 2001). They further stated that BT improves customer attitude towards the brand thereby improving subsequent buying loyalty. Brand trust is a very important factor that helps sustain a good relationship between brands and clients and gives a competitive lead to the brands (Ballester & Munuera-Alemán, 2005). It could be inferred from the above statements the importance of brand trust to maintain a healthy relationship between the organization and the buyer, which will impact the loyalty of the customer towards the organization and the subsequent impact on the repeat purchase by the buyer. Thus, we understand that it is important for the mangers to take service-based decisions objectively and based on proven research that can help them strengthen the perception of organizational personality in the market and maintain the loyalty of the customers. Accordingly, this study will try to find the relationship between an organization's servitization construct, the brand personality dimension within the Indian context, & the subsequent impact on brand trust.

LITERATURE REVIEW

Servitization

The term Servitization can allude to the concept of service. However, service is only a part of Servitization. The concept of service is majorly used to express the things or activities that a firm does for its clients and is considered as an intangible entity (Johns, 1999). According to Lightfoot (2013), Servitization is a broader concept that encompasses several research fields such as service as marketing, service as management, service as operations, service combined with product offerings, and service as a science. The service and product bundle are widely being

addressed under the paradigm of service as marketing, service management and service under efficient operations (Lightfoot, Baines, & Smart, 2013). The manufacturing firms specifically are cajoled to implement service offering along with the conventional product offering in the competitive market space. But the available literature does not provide the specific factors that could benefit the managers by providing an empirical data of any research or even what constitutes explicitly as service (Gebauer, 2008). Just as some necessary features and features delight a product, certain services such as installation, repair, etc. are necessary. Still, in order to delight the clients, a firm needs to broaden its view of services, and such increased set of services have also been observed to increase the sales of a firm (Kohtamäki, Partanen, Parida, & Wincent, 2013).

> "The servitization or open service innovation can be seen as developing an organization's innovation capabilities by effecting a shift from products to product-service systems, thereby better satisfying customer needs", (Kastalli & Looy, Servitization: Disentangling the impact of service business model innovation on manufacturing firm performance, 2013).

Kastalli & Looy's (2013) study further indicated that Servitization of the manufacturing industry helped proliferate customer relations, enhanced the knowledge of the firm in the service sector, and supported long-term profitability. A study of Servitization observed that not only it helped suppliers to improve their offerings and balance sheets, but from a customer's perspective, it helped them to expect a stable output from a product in the way of the availability of supplier provided services, thereby perceiving a reduced risk in a given purchase (Neely, 2008). As cited in research, the manufacturers have adopted these concepts, increased their service set, and capitalized their image as an overall solution provider, who will support their customers before and after purchase (Finne, 2009). The research of service under the marketing paradigm merged the concepts of

marketing and consumption concepts wherein (Grönroos, 2006) suggest that it would be profitable for a marketer to observe the delivery of goods as a small part of overall service. He argues that the product offering is a part of the process and is a service bought by customers.

> "A customer does not consume a drill as a service, but the process of using the drill together with, for example, information about the drill and knowledge about drilling, in order to make a hole in the wall. This process is the service. The drill is not a transmitter of service, rather it is one resource needed to make a service process and service consumption possible", (Grönroos, 2006).

However, providing integrated product-service offering without proper knowledge could lead to a dent in the profitability of the organization (Paivarinne & Lindahl, 2016). Thus, it becomes important for an organization to understand the services that impact the customers most.

The foremost task of the management is to generate awareness within the organization of service as an important aspect of marketing and to demonstrate the potential of Servitization as a business instead of just being a side function (Kastalli, Looy, & Neely, Steering Manufacturing Firms Towards Service Business Model Innovation, 2013). But this introspection should be considered with the inherent business risks in the market and the management should be ready to invest additional price and resources in sustaining and improving the service performance (Datta & Roy, 2011). However, the above literature does not convey the actual width and depth of the service that a firm should focus on (Parasuraman, 1998). Based on this gap, Jukka et. al. (2017) created a multidimensional scale to analyze the impact of Industrial service offerings on the organization's brand personality. The scale thus created "captures the breadth (i.e., the

extensiveness of the offered services) and depth (i.e., internal emphasis and revenue generation of each service) of industrial service offering", (Partanen, Marko, Parida, & Wincent, 2017).

Brand Personality

Brand personalities are behavioral characteristics associated with the organization or brand (Aaker J. , Dimensions of Brand Personality, 1997). According to her, the people have been observed to view brands as possessing personalities. The research suggests that such brand personality traits be the latter to satisfy the former (Aaker D. , 1996) (Aaker J. , The malleable self: The role of self-expression in persuasion, 1999). Although the concept of 'Big Five' existed for a long time, the study of brand personality only initiated in the 1980s and proliferated since (Aaker J. , Dimensions of Brand Personality, 1997) (Sirgy, 1982). Early research on brand personality studied the effect of such traits on consumers who try to express themselves using such brands (Belk, 1988) (Malhotra, 1988). Brand personality has been linked with various fields such as media choice, innovation, choice of product, segmentation, etc. (Kassarjian, 1971). The research has progressed to a point where the brand personality is used to substitute certain specific brands (Bairrada & Coelho, 2018) (Louis & Lombart, 2012).

In an ever growing and competitive market space consisting of several stakeholders in an intricated supply chain, the firms' activities provide an abstract corporate image, which is used as an input by the customer for supplier selection (Sheth & Sinha, 2015). For example, M. Mutsikiwa and T. Maree researched the brand personality of websites viz. LinkedIn, YouTube and Facebook. Their research identified that the websites are perceived with relatively less dimensions of personalities. This is in contradiction to the huge scale of personality defined by Aaker which indicates that brand or organizational personalities can differ based on the type of industry. However, a gap exists in the literature to understand the impact of critical industrial services on

brand personality that this research address under the paradigm of Indian context. The literature on brand personality further provides data on variation in the types of personality that vary according to the region (Wang, Wang, Fang, & Jiang, 2018). This theory was underpinned in the research where the US & Japan had several similar along with a few different sets of brand personalities (Aaker, Bennet, & Garolera, Consumption Symbols as Carriers of Culture: A Study of Japanese and Spanish Brand Personality Constructs, 2001). Similarly, the brand personalities accepted in Korea and the US had six commons while two culturally specific brand dimensions (Sung & Tinkham, 2005). Thus, a marketer needs to consider the cultural aspect of identifying the brand personalities that affect the target consumer, i.e., the Indian consumer. Researcher Ahmad et. al. have idientified a brand scale specific to the Indian context, which was also compared with the Aaker's brand scale. Subsequently, Indian scale provided better results. A brand manager must understand the perception of one's own brand and attempt to identify the target consumers with the similar brands. In such context, the research uses the multidimensional brand personality scale specific to Indian context (Ahmad & K, 2017).

Brand Trust

Brand trust (BT) was conceptualized as the willingness of a customer to depend on the brand's perceived functionality to achieve a stated goal (Chaudhuri & Holbrook, 2001). They further stated that BT improves customer attitude towards the brand thereby improving subsequent buying loyalty. Brand trust is a very important factor that helps sustain a good relationship between brands and clients andives a competitive lead to the brands (Ballester & Munuera-Alemán, 2005). Similar results on the positive relation between brand trust and brand loyalty have been obtained in several other studies (Sung & Kim, Effects of brand personality on brand trust and brand affect, 2010) (Matzler, Grabner-Kräuter, & Bidmon, 2008). A research on BT has also showed its

important role for a firm during economic crisis (Hegner, Beldad, & Heghuis, How company responses and trusting relationships protect brand equity in times of crises, 2014). The value of a brand esp. multinational brands, is affected by consumer's trust in the given brand, which was shown in a study that observed the close relation between BT and repurchasing intent that was conducted across three countries viz. Germany, India & South Africa (Hegner & Jevons, 2016).

Brand personality helps differentiate a product category andnfluences customer preferences (Su & Tong, 2016). It further stimulates a person's feelings and compels the brand trust and brand affect to rise up positively (Su & Tong, 2016) (Sung & Kim, Effects of brand personality on brand trust and brand affect, 2010). Similar research has shown that brand personality boosts emotional connection between brand and the consumer. It positively uplifts brand trust and brand loyalty (Louis & Lombart, Impact of brand personality on three major relational consequences (trust, attachment, and commitment to the brand), 2010). This is esp. observed in case of luxury brands where the author suggests that:

"In order to enjoy the substantial competitive and economic advantages provided by a loyal customer base, luxury fashion brands should manage not only the customer satisfaction with the tangible/functional attributes of the brand but also intangible/symbolic attributes such as brand personality", (Tong, Su, & Xu, 2017)

This research adopts a multidimensional Brand Trust scale. The brand trust scale dimension includes reliability, which assesses the performance and provides details about a brand's functional abilities and physical features. In contrast, the second dimension of Intention explores the understanding of the perception of the brand that exists above its physical abilities.

Based on the above discussion, this research expects that Industrial service offerings will impact the brand personality and only specific traits of those personalities will impact the brand trust as per the model shown below:
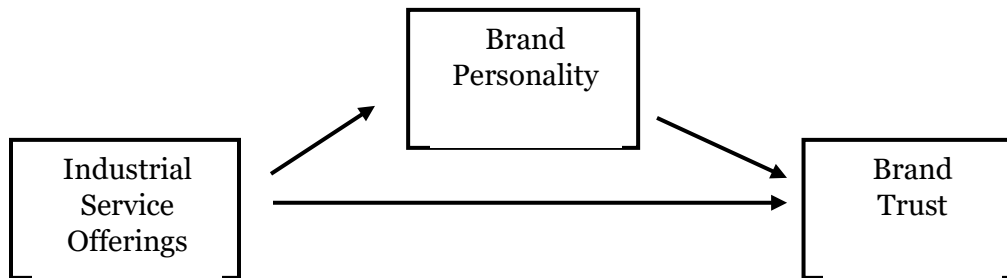

Figure 1Conceptual Model

The above model shows the relationship between the constructs that are being evaluated. Accordingly, the following hypothesis are generated:

H1:   Industrial service offering has a positive impact on Brand Personality.

H2:   Brand personality has a positive impact on Brand trust.

H3:   Industrial service offering has a positive impact on Brand Trust.

METHODOLOGY

The nature of our research is of the exploratory type conducted with the support of theoretical knowledge and using a deductive approach under quantitative research design. The study tries to identify the relationship between the above-given constructs made from the secondary database and the final outcome derived from primary surveys.

The questionnaire for the survey was designed from the existing literature—the questions to analyze the individual and different dimensions of the construct viz. Servitization (or industrial services), brand personality, and brand trust were directly sourced from renowned journals' most

recent and well-cited research papers. The answers to the questions were analyzed on the basis of a Likert scale from 1 to 5. Apart from construct-related questions, a few additional demographic-based questions were asked to analyze the final results. The specific questions asked have been highlighted in the Table 2 given below.

In conducting the survey, the study required the respondent to be aware and be knowledgeable about the services carried out in manufacturing firms' industries. We assume that these firms act as a buyer in the B2B transactional setup. This study applied a combination of simple convenience sampling and snowball sampling and focused on respondents who had a minimum two months of experience in the above-given setup. The survey was conducted by floating the online questionnaire on different social media platforms. A total of 316 respondents answered the form of which only 255 respondents met the minimum eligibility criteria. The three essential multidimensional variables viz. industrial services, brand personality and brand trust were measured on a five-point Likert scale. The latent variables were measured using the predefined scales based on the above discussion.

The basic demographic measurements required from the participants is the type of job that they had or are associated with. We are looking for the effect of Servitization on the personality of the brand or organization. Accordingly, we need to understand their industry, the activities involved in their job role, and the type of customers they catered to. These inputs would help generalize the influence of Servitization in specific industries and the type of customers where the concept of Servitization has penetrated. The below table highlights the industries recognized by the Indian government (GOI, 2008) as described in the National Industrial Classification Corrigendum of 2008:

Table 1: Government recognized Sectors

Indian Government recognized types of sectors
Information and communication
Financial and insurance activities
Manufacturing
Construction
Professional, scientific and technical activities
Other service activities
Accommodation and Food service activities
Transportation and storage
Wholesale and retail trade; repair of motor vehicles and motorcycles
Real estate activities
Agriculture, Forestry & Fishing
Arts, entertainment and recreation
Electricity, gas, steam and air conditioning supply
Water supply; sewerage, waste management and remediation activities

The above table mentions an additional industry that it not mentioned in the National industrial classification corrigendum of 2008 and that is Other service activity industry. During the preliminary survey it was identified that several participants that had an experience in IT industry did not relate to any of the industry classified by the Government of India. As a result, to accommodate the participants from a huge IT industry that prevails in India, the option of Other service activity was added.

The three essential multidimensional variables viz. industrial services, brand personality and brand trust were measured on a five-point Likert scale. The latent variables were measured

using the predefined scales based on the above discussion. The preliminary task was to analyze the reliability and validity of the scale for the given research.

Based on the preliminary responses the Cronbach's Alpha, Item-to-total correlation, Factor loading and the Average variance extracted was determined using SPSS. The measures Cronbach's alpha and Item-to-Total correlation are the factors to analyze the reliability of the scale. The reliability indicators address that the calculation is free from random errors. A greater value of Cronbach's alpha suggests that majority respondents have the same response for a given question. The threshold value for Cronbach's α should be greater equal 0.7 (Nunnally & Brenstein, 1994), and constructs with such high value of Cronbach's alpha would be highly appreciable. However, based on the sample size, the value of Cronbach's α should be greater equal 0.5 will also be acceptable. Similarly, the Item-to-Total measurement analyzes the variable that have minor significance that can be eliminated. An indicator with a value of less than 0.3 for item-to-total correlation should be eliminated (Bearden, Netemeyer, & Teel, 1989).

Validity measurement analyzed the conceptual correctness of the given constructs and its indicators. In the given preliminary analysis, the research analyzes the convergent validity which identifies that more than two attempts to analyze a given indicator are in agreement (Bagozzi & Phillips, 1982) i.e., it shows the extent to which different indicators positively interrelate with each other. Thus, we analyze the convergent validity by calculating the factor loadings which should be ideally greater than 0.5 (Bagozzi & Yi, On the Evaluation of Structure Equation Models, 1988) and the average variance extracted which needs to be greater than 0.5 (Fornell & Larcker, 1981). Further, a factor loading value also depends on the sample size. A total of 250 acceptable participants shared their feedback, the required factor loading should be 0.4 or above (Hair, Black, Babin, & Anderson, 2009). While determining the factor loadings, we will also need to take into

account of the indicators that load onto more than one component. Although, the main objective

of determining factor loadings is to reduce the number of variables, but the objective of this study

was to analyze the effect of pre-existing scales under a given context. Therefore, any empirical

deviation from the theory that may lead to a formation of newer constructs in most objective

approach will be eliminated. The following table provides the details and an overview of

operationalization of the constructs:

Table 2: Questionnaire Details

CONSTRUCT	DIMENSION	ITEM		SCALE	SOURCE
QUESTION: How important are the following industrial services for your organization as a buyer?				5-point Likert scale (1=Very Insignificant at all, 5=Very significant)	(Jukka Partanen, 2017)
Industrial Service/ Servitization	Pre-sales services	1	Product demonstrations		
		2	Customer seminars		
	Product support service	1	Warranty		
		2	Technical user training		
		3	Customer consulting & support by phone		
	Product life-cylce service	1	Installation service		
		2	Repair service		
		3	Spare parts		
		4	Maintenance		
	R&D service	1	Research services		

CONSTRUCT	DIMENSION	ITEM		SCALE	SOURCE
		2	Prototype design & development		
		3	Feasibility studies		
	Operational service	1	Project management		
		2	Service for operating the product sold for the customer		
		3	Service for operating customer's process		
QUESTION: To what extent do the following personality traits describe the service providing organization in the best way?				5-point Likert scale (1=Very undescriptive, 5=Very descriptive)	(Ahmad & K, 2017)
Brand Personality	Sophistication	1	Sophisticated		
		2	Stylish		
		3	Extravagant		
	Excitement	1	Enthusiastic		
		2	Adventurous		
		3	Vibrant		
	Popularity	1	Popular		
		2	Admirable		
		3	Attractive		
	Competence	1	Competitive		

CONSTRUCT	DIMENSION	ITEM		SCALE	SOURCE
		2	Efficient		
		3	Dynamic		
	Trendiness	1	Trendy		
		2	Young		
		3	Imaginative		
	Integrity	1	Honest		
		2	Sincere		
		3	Moral		
QUESTION: To what extent do the following statements correspond with an organization that provides the above-mentioned services to your organization.				5-point Likert scale (1=Strongly Disagree, 5=Strongly Agree)	(Delgado-Ballester, 2004)
Brand Trust	Reliability	1	This organization meets my expectations		
		2	I feel confident in this organization.		
		3	This organization never disappoints me.		
		4	This organization guarantees satisfaction.		

CONSTRUCT	DIMENSION	ITEM		SCALE	SOURCE
	Intention	5	This organization would be honest and sincere in addressing my concerns.		
		6	I could rely on this organization to solve the problem.		
		7	This organization would make any effort to satisfy me.		
		8	This organization would compensate me in some way for the problem with the product.		
QUESTION: Which of the following industries have you worked in?				Relevant & Recognized Goods & Service providing industries	National Industrial Classificatio n - 2008

CONSTRUCT	DIMENSION	ITEM	SCALE	SOURCE
		QUESTION: Which of the following was offered by your department?	Goods, Services, Both	
		QUESTION: Who were your buyers?	End users, Businesses, Both	
		QUESTION: Do you have more than 2 months of experience?	Yes, No	

Finally, after verifying the reliability and the validity of the hypothesized constructs, the study will aim to identify the impact of Servitization on Brand Personality and its subsequent impact on Brand Trust using Structural equation modeling analysis using AMOS software. The aim of the SEM analysis is to determine the path coefficients (standardized) that indicate the significance of exogenous variable (here, Servitization and Brand Personality) on the endogenous variable (here, Brand Trust). The significance of standardized path coefficients is noted when the value is above 0.2 or below -0.2 (Chin, 1998). The model thus obtained will help us understand the significance and the power of prediction of the model. Further, the value of R^2 (coefficient of determination), will enable us to identify the variance over which the identified exogenous variables impact the endogenous factor. The variables that significantly impact the exogenous variable will be identified based on the significance obtained using P-value. A higher P value

indicates that there is a higher probability that the assumed sample for the given variables was obtained from outside of the relevant standard deviation. Thus, after understanding the calculation that will be conducted to reach the final output, we discuss the implication of the calculation and the results thus obtained.

FINDING & DISCUSSION

It is essential for the objective of the paper to know the contribution of each industry and the contribution of service lead offerings provided by each industry. The below tables provide the demographic representation of the required data:

Table 3: Survey Demographic Results

Industry Differentiation	Industry Contribution	Servitization Contribution
Other service activities	21%	15%
Information and communication	16%	22%
Financial and insurance activities	15%	11%
Manufacturing	15%	65%
Construction	7%	65%
Professional, scientific and technical activities	5%	31%
Accommodation and Food service activities	5%	17%
Transportation and storage	4%	40%
Wholesale and retail trade; repair of motor vehicles and motorcycles	3%	75%

Real estate activities	3%	43%
Agriculture, Forestry & Fishing	3%	43%
Arts, entertainment and recreation	2%	50%
Electricity, gas, steam and air conditioning supply	2%	80%
Water supply; sewerage, waste management and remediation activities	1%	0%

Table 4: Survey Sector wise Contribution

Offerings Provided	Percentage Contribution
Services	55%
Both Goods and services	33%
Goods	12%

We observe that the total industry segregation and the contribution of different industries and the contribution of Servitization in different industries. We observe that the industries with the highest contribution in economy have very low Servitization based activities. As discussed earlier the Other service activities industry was an added industry to accommodate the employees form Information technology background. This leads to the inference that the top industries including the IT industry are not significantly involved in servitization activities and are majorly based in service-based activities only. However, the other two major industries in the top 5 categories have a major contribution of Servitization based activities. These include construction and manufacturing. The construction filed refers to the industry mainly involved in infrastructure-based construction and manufacturing industry mainly identifies itself with sectors associated with

manufacturing of FMCG or FMCD products. Further, we observe that two industries apart from the top five industries viz. Wholesale and retail trade; repair of motor vehicles and motorcycles and Electricity, gas, steam and air conditioning supply industry. Although these industries do not share a major contribution in the given study but the servitization contribution in these industries is 75% and 80% respectively. This show that a major although smaller in contribution but the result of this study will be particularly beneficial for these two industries. Further, we also observe that a major percentage of the employed people are involved in service-related activities. If we consider the contribution of people involved in both goods and service-related activities, then the contribution of Servitization related activities is almost 1/3rd of the total participants. This indicates that Servitization has gripped firm roots in the Indian economy.

From the above theory, we understood that Servitization-based activities may have an indirect impact on brand personality, which could impact the buyer's trust into the organization. Accordingly, we try to verify the theory through empirically measurements and assess the reliability and validity of the hypothesized model. Subsequently we perform an exploratory analysis of the constructs and perform confirmatory factor analysis first to calculate the factor loadings of the hypothesized constructs. The correct output of factor loading will involve well defined components or dimension represented by the indicators as defined in the theory and there will be no cross loadings within the indicator themselves. Accordingly, we calculate the reliability and validity of only those successfully verified constructs using confirmatory factor analysis. The below table summarizes the factors that were eliminated (value=NA) in the subsequent analysis:

Table 5: Reliability & Validity Test Results

Construct/ Indicator	Factor Loadings	Cronbach's Alpha	Item-to-Total Correlation	AVE
Industrial Service				
Pre-sales services		NA		NA
- Product demonstrations	NA		NA	
- Customer seminars	NA		NA	
Product support service		NA		NA
- Warranty	NA		NA	
- Technical user training	NA		NA	
- Customer consulting & support by phone	NA		NA	
Product life-cylce service		0.713		0.506
- Installation service	0.666		0.480	
- Repair service	0.810		0.557	
- Spare parts	0.753		0.476	
- Maintenance	0.598		0.488	
R&D service		NA		NA
- Research services	0.608		NA	
- Prototype design & development	0.884		NA	
- Feasibility studies	NA		NA	
Operational service		0.617		0.517
- Project management	0.690		0.373	

Construct/ Indicator	Factor Loadings	Cronbach's Alpha	Item-to-Total Correlation	AVE
- Service for operating the product sold for the customer	0.755		0.505	
- Service for operating customer's process	0.710		0.404	
Brand Personality				
Sophistication		NA		NA
- Sophisticated	NA		NA	
- Stylish	NA		NA	
- Extravagant	NA		NA	
Excitement		NA		NA
- Enthusiastic	NA		NA	
- Adventurous	NA		NA	
- Vibrant	NA		NA	
Popularity		NA		NA
- Popular	NA		NA	
- Admirable	NA		NA	
- Attractive	NA		NA	
Competence		NA		NA
- Competitive	NA		NA	
- Efficient	NA		NA	

Construct/ Indicator	Factor Loadings	Cronbach's Alpha	Item-to-Total Correlation	AVE
- Dynamic	NA		NA	
Trendiness		NA		NA
- Trendy	NA		NA	
- Young	NA		NA	
- Imaginative	NA		NA	
Integrity		NA		NA
- Honest	NA		NA	
- Sincere	NA		NA	
- Moral	NA		NA	
Brand Trust				
Reliability		0.697		0.322
- This organization meets my expectations	0.626		0.377	
- I feel confident in this organization.	0.623		0.363	
- This organization never disappoints me.	0.602		0.315	
- This organization guarantees satisfaction.	0.581		0.418	
Intention		0.697		0.322

Construct/ Indicator	Factor Loadings	Cronbach's Alpha	Item-to-Total Correlation	AVE
- This organization would be honest and sincere in addressing my concerns.	0.557		0.401	
- I could rely on this organization to solve the problem.	0.540		0.437	
- This organization would make any effort to satisfy me.	0.524		0.348	
- This organization would compensate me in some way for the problem with the product.	0..472		0.439	

The factor loadings were calculated using both Varimax rotation & Quartimax rotation, assuming no correlation between individual indicators, and using Direct Oblimin rotation assuming a correlation in SPSS. As observed from the table, several components of service factors were eliminated as the factor loadings obtained for the same was below the required 0.4 threshold or there was a problem of cross loadings. Further, the entire personality construct was eliminated as the factor loadings obtained for the same were either below the required 0.4 threshold, had cross loading issue, or the obtained components were not in line with the proposed theory. However, the components of the personality that were obtained were intermixed. No previous literature (including Aaker's) could identify the correlation or a common theme between the obtained components. Finally, for brand trust, only a single component was verified instead of the

multicomponent output obtained in the literature. Thus, we conclude from the factor loading determination that servitization activities do no impact the brand personality of the entire organization. This would indicate that either the additional services are completely unrelated to the organization's personality or the brand personality associated with the services are different compared to the personalities associated with a product-based-brand in the literature. Thus, our model completely eliminates any impact of Brand personality on Brand Trust and we only analyze the impact of service-based indicators on Brand Trust.

After determining the indicators and components that impact the endogenous variable, Brand Trust, we identify the Cronbach's alpha, Item-to-Total correlation and AVE for the remaining factors. In the reliability analysis we observe that the indicators associated with R&D service indicator of the Servitization construct is eliminated because of its subpar empirical output. The Cronbach's alpha for R&D service was below the threshold of 0.5 and the Item to total correlation was also below the threshold of 0.3. As a result, the R&D indicator is eliminated from further discussion.

The validity measurement of the given analysis also indicates that the overall construct of Brand trust is not significant i.e., the indicators fail to explain the construct in the most efficient way. We observe that the average variance extracted for the unidimensional Brand Trust construct represented by 8 indicators only represent approximately 32% of the total construct. However, as seen from the table, only a few indicators are responsible for reducing the AVE below the threshold. These indicators could be eliminated, but they won't be as the individual factor loading for each indicator is above the required threshold of 0.4 indicating their relevance in defining the Brand Trust construct. Also, the reliability tests conducted on the same indicator do not indicate any significant deviation from the normal indicators. As a result, more weightage is given to the

Factor loadings, Cronbach's alpha and Item-to-total correlation in keeping all the indicators of the given construct intact.

Based on the above analysis we are finally left with two dimensions associated with Servitization and a single dimension representing all the indicators of the construct, Brand Trust. We perform Structural equation modelling analysis on these exogenous and endogenous factors to identify the path coefficient and the R^2, to determine the overall significance of the model. The SEM diagram shown below shows the standardized path coefficients and the R^2 value of the endogenous variable.

Figure 2: Structural Model
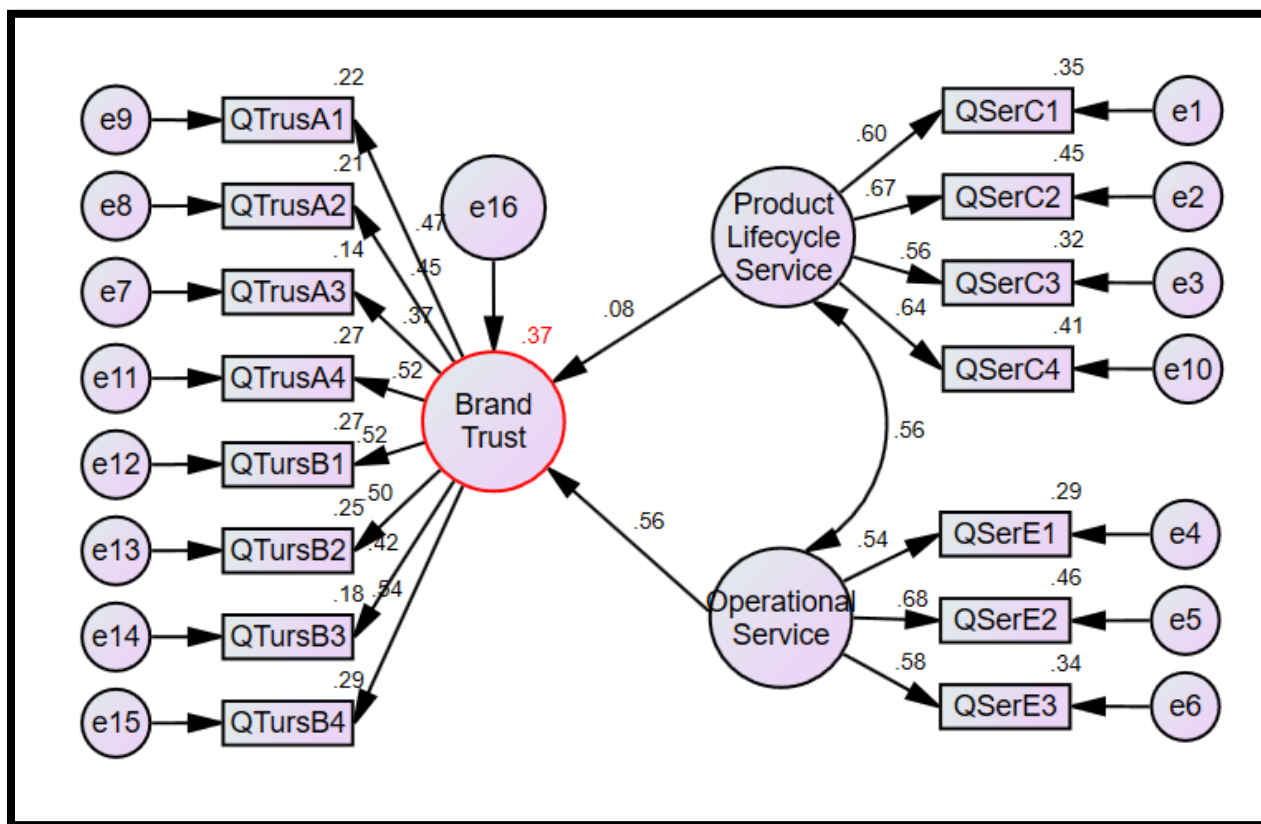
In the above diagram we observe that the exogenous variable is represented by factors that include Product Lifecycle service and Operation service and the endogenous variable is

represented by Brand Trust itself. As seen from the diagram, that the correlation between Product Lifecycle service and Operation service is 0.56 which indicates that more than 50% of dependence of the two factors over each other. As discussed earlier, that the standardized path coefficient is significant when it has a value above 0.2 or below -0.2. Thus, the standardized path coefficient of Product Lifecycle service on Brand Trust is only 0.08 which indicates that the variable does not significantly impact Brand Trust and the standardized path coefficient of Operational service on Brand Trust is 0.56 which indicates a significant influence of the variable Operational service on Brand Trust. Further we also obtain the squared mean value which is also denoted by R^2 which is 0.37, which means that the given endogenous variable only impacts 37% of the dependent variable, the rest of it is affected by noise or factors other than Servitization.

Table 6: Structural Model Results

Variable Relation	Standard Path Coefficient	Standard Error	Critical Ratio	P Value
Brand Trust ← Product Lifecycle Service	0.08	0.064	0.651	0.515
Brand Trust ← Operational Service	0.56	0.101	3.243	0.001

Further, the P value indicates the significance of the relation between variables. A higher P value indicates that there is a higher chance of the presumed relation to lie beyond the standard deviation. Thus, as observed in the above table, the P value of the relation between Product Lifecycle service and Brand Trust is not significant as P value is greater than 0.5 however, the relation between Operational service and brand trust is significant.

The above discussion would therefore help us analyze the Hypothesis that we had generated based on the literature review. We observe that only 1 of the three hypothesis that were generated hold true. The analysis of each hypothesis is as described below:

H1: Industrial service offering has a positive impact on Brand Personality

We observe that there is no significant impact of the industrial service offerings on the brand personality or personality of the organization. The entire personality construct was eliminated as the indicators associated with personality did not converge on a specific dimension with common theme.

H2: Brand Personality has a positive impact on Brand Trust

As described above, the brand personality was to be defined and understood in the context of Servitization. There is a possibility that Brand personality may have an impact on Brand Trust, but under the given perview where it was important for services to bring out the personalities associated with the brand or organization was not observed. Therefore, the impact of brand personality on brand trust under the given servitization context does not have a conceptual backing and is therefore insignificant.

H3: Industrial service offerings has a positive impact on Brand Trust

As seen above, in the Structural equation model diagram, that there is one dimension (operational service) that has a significant impact on brand trust. The impact is positive as observed from the standardized path coefficient. And, thus it is imperative that industrial service offerings has a significant impact on the endogenous variable Brand trust.

CONCLUSION

Servitization is an important concept as it involves the application of both provision of goods and service to the customer. In the above study we analyzed the constructs of Servitization, Brand personality and brand trust on an overall basis combining all the different industrial sectors together. The total number of industries taken into consideration were 14. The 13 industries were taken based on the reference of the document from Government of India and one additional industry added on the basis of preliminary study to accommodate the employees of IT sector.

We tried to study the positive impact of exogenous constructs Servitization and brand personality on the endogenous construct brand trust in the context of industries that provide servitization capabilities to their customers. However, as seen from the above discussion, Servitization has a significant impact on the construct of Brand Trust. However, in the present study no significant relation was established between Servitization and Brand personality or even between Brand personality or Brand trust. We observed that the brand personality as a construct was entirely eliminated as empirical study was unable to verify the theoretical construct. The exploratory study conducted on the dimensions of brand personality did not bring out a common theme within its indicators.

The managerial implications of this study were to enhance the servitization capabilities of the organization by allowing the managers to implement correct set of industrial service offerings that would have enabled the organization to shape the right kind of personality. However, as observed, there is no significant relation between Servitization and Brand personality. Therefore, the managers should not for one look at improving or shaping the personality of the organization. However, the managers shouldn't forget that Brand trust is still impacted by servitization

implementation. Therefore, to improve and maintain the trust of the customers in the organization, the brand should maintain a healthy level of servitization activities wherever necessary. It was observed that the dimension of Operational services had a significant impact on the Organizational trust. The indicators that impact the Operational services include project management, services for operating the product sold to the customer and service for operating customer's processes. Subsequently the manager should focus on the aforementioned aspects while taking managerial decisions.

Finally, this study tried to analyze the impact of Servitization on a broader scale considering all the industries as a single entity. There is a possibility that further studies could negate the results of this paper using the same model but only for a specific industry. Further, the relevant data was only obtained from only 255 participants. This is a very small number considering the vastness of Servitization based industry. Therefore, an increase in number of participants may lead to more accurate results. Further, considering the segregation of 255 participants into different industries could further indicate that there is a high possibility that the results of survey of participants from a single industry may lead to positive impact exogenous constructs on the endogenous ones that were studied in this paper.

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