

A study on Perceived Product and Service Quality on Customer Loyalty: A Structural Equation Modelling Approach

A case study on a leading jewelry chain in South Canara District

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Abstract- Jewelry sector is one of the fastest growing sector. The usage of Jewelry has been a constant feature in mankind existence from earliest times. Accordingly Jewelry retailing has been changing every year. This change may be due to the effect of several factors like existence of brands, certification, advertising etc., Inorder to retain the customers, organization have to think of improving customer satisfaction. This can be increased by providing good quality products, reaching customer expectation, providing wide range of designs, good quality of service etc.,

Considering this, an attempt has been made to identify the relationship between Customer Satisfaction, Perceived Product Quality and Perceived Service Quality at well-known jewelry shops in South Canara. This study helps in identifying different factors influencing Customer Satisfaction which the organization can focus. This is done by collecting data through Questionnaire and analyzed using Partial Least Square Structural Equation Modelling Approach to find out the degree of relationship that exists between the variables and its impact on Customer Satisfaction.

Index terms- Customer Satisfaction, Customer Loyalty, Perceived Product Quality, Perceived Service Quality, Structural Equation Modelling.

1. INTRODUCTION

Gems and jewelry plays an important part in Indian custom and tradition, making this sector integral to the economy and one of the fastest growing industries in the country (Dhingra, 2014). The study is on a leading Jewelry showroom in South Canara district, which has been attracting a lot of customers. Due to the competition from other reputed shops various strategies must be adapted to retain existing customers and enjoy good business. To achieve good business, the organization must focus on product quality, available varieties, value delivered and service quality. Customer Satisfaction plays a very important role in jewelry sector to gain high profits (Heskett, 2010). Hence, it is necessary to identify the influence of Perceived Product Quality and Perceived Service Quality on Customer Satisfaction and Customer Loyalty. Jewelry is one of the decorative items which includes Necklace, Rings, Earrings and bangles, Chains etc., which is worn by Men, Women,

and Children on different Occasions as well as daily usage (Raju et al., 2013). Gold was the first metal used for jewelry in the ancient world, prized for its rarity, beauty and flexibility (Rao et al., 2014).

It is important to focus on customers in an organization. Without customers, a business wouldn't exist. Satisfying customers' needs translates directly into greater profitability of an organization (Heskett, 2010). A successful organization must concentrate on satisfying a targeted group of customers who place the highest value on the goods or services it offers (Hayes, 2010). Once organization targets its customers and begins to meet and exceed their expectations, customer satisfaction rises. When satisfaction rises customer will repurchase, which leads to customer retention which will benefits the organization (Malik, 2012).

Most of the studies show that the longer customer are loyal, the more profitable to the organization (Oliver, 1999). The three R's (Retention, Related sales, Referrals) explains why loyal customers are most

profitable. Through Retention, loyal customers continue to buy products. Through Related sales, they buy new variety products and services. Through Referrals, customers praise your organization to other people (Heskett, 2010). It has been noticed that most of the jewelry shops concentrate more on attracting customers through promotional activities like advertising, gold schemes etc., considering this, a study has been conducted to identify several factors which leads to Customer Satisfaction and Customer Loyalty.

2. LITERATURE REVIEW

The wearing of jewelry has been a constant feature in mankind's existence from earliest time. About 100000yrs. ago people from different regions were wearing pendants made from the bones and teeth of

animals (Phillips, 1996). In India, gems and jewelry were used for both fashion/beauty as well as investment purposes (Raju et al., 2013). India is the first country to introduce Diamond to the world and first to mine, cut and polish, and trade diamonds (National Skill Development Corporation, 2007). In India, Jewelry has been used not only for adornment but also for gifting during auspicious occasions, as a security for women, as a wealth, power, status etc., (Rao et al., 2014). The significance of jewelry plays a very important role in the life of women which is called as *Stridhan*, meaning 'wealth of women', the ornaments gifted at the time of marriage. Kain (2013), Deepa et al., (2013), and Joseph (2014) conducted a study on consumer perception, customer satisfaction and consumer buying behavior in jewelry. Table 1 shows the definition of key constructs.

Table 1: Definitions of Key Constructs

| Sl.no. | Dimension | Meaning | Author (year) |
|--------|------------------------------------|--|---|
| 1. | Assurance (ASU) | Ability to achieve trust and confidence of customers; Building Trust and confidence about the product; Assurance is guarantee of the product; Employees ability of achieving trust and confidence of the customer. | Parasuraman et al., (2000); Sylvia, (2009); Enayati et al., (2012); Khuong et al., (2013) |
| 2. | Tangibles (TAN) | Physical appearance of the facilities; Appearance of personnel, equipment, devices etc. which can measured; Tangibles include tools, equipment's, personnel appearance etc., which can be measurable; | Parasuraman, et al. ,(1985); Munusamy et al, (2010); Khuong et al.,(2013); |
| 3. | Monetary Investment (MAI) | Monetary value is Total customer value including all benefits excluding Market price of a Product; Monetary value is the Price fixed by a seller for a particular product and services; | Zeithaml, (1988); Gilbert, (2013); |
| 4. | Empathy (ETY) | Individual concern and Kindness towards customers; Empathy is dimension of SEVQUAL model contributing to customer satisfaction; Employees Individual attention towards customers; | Parasuraman et al., (2000); Ismail et al, (2009); Ravichandran et al., (2010) |
| 5. | Perceived Product Quality (PPQ) | Perceived Product Quality is different from actual quality; PPQ is Predictor of customer satisfaction; Products capability to meet customer expectation; | Zeithaml, (1988); Tsiotsou, (2006); Goccek et al., (2007); |
| 6. | Perceived Service Quality (PSQ) | Quality of service that exceeds customer expectation; PSQ is the difference between service perception and service expectation; | Abdullah et al., (2009); Malik,(2012); Almsalam (2014); |

| | | | |
|----|-----------------------------|--|---|
| | | PSQ determines customer satisfaction and attitudinal loyal customers. | |
| 7. | Customer Satisfaction (CSN) | Customer Satisfaction is key driver of profit, growth and performance; CS is predecessor of customer loyalty; Meeting requirement and needs; Overall fulfillment of needs and expectation. | Denga et al., (2010); Hayes (2010); Heskett (2010); Malik,(2012) |
| 8. | Customer loyalty (CLY) | Intension of re-purchase of product in the same firm; key driver of business success; effective purchase behavior of customers; continuous buying behavior | Oliver,(1999); Heskett (2010); Robert East et al., (2005); Chou (2014); |

monetary investments and PPQ.

3. HYPOTHESES DEVELOPMENT

Assurance is defined as ability of the employees to develop trust and confidence regarding the quality of the product among the customers (Khuong et al., 2013). Purchasing jewelry means investing high amount of money, hence to purchase jewelry from a shop assurance is the very important factor which depends on perceived product quality and indirectly effects Customer Satisfaction. Hence, a hypothesis can be stated as:

H₁: There is a significant relationship between assurance and PPQ.

Tangibles is defined as physical appearance of the personnel, tools, equipment's etc., (Khuong et al, 2013). In most of the reputed jewelry shops appearance of the employees, equipment used to measure weight of the jewelry and also which measures purity of the gold are most important factors which influences perceived product quality. Hence, a hypothesis can be stated as:

H₂: There is a significant relationship between tangibles and PPQ.

An investment is a monetary asset which is purchased thinking that provides benefits in the future when the item is sold (investopedia). While purchasing jewelry, if the quality of the gold is not good it doesn't provides more benefits to the customer because in future if the gold has to be sold it will lead to loss rather than profit. Therefore, monetary investment plays a very important role in purchase of products. Hence, a hypothesis can be stated as:

H₃: There is a significant relationship between

Monetary value is the price fixed by a seller for a particular product and services (Gilbert, 2013). With respect to the jewelry shop, it is a price fixed by the seller including making charges, tax and services along with the market price of gold. Hence, a hypothesis can be stated as:

H₄: There is a significant relationship between monetary investments and PSQ.

Empathy is one of the dimension of SERVQUAL model which contributes indirectly in improving customer satisfaction (Ravichandran et al, 2010). It is understanding the needs and paying individual attention towards customers by employees of the firm (Ismail et al, 2009). While purchasing jewelry in a reputed shop quality of the service is also an important factor which will satisfy the customer and intend to repurchase. Hence, a hypothesis can be stated as:

H₅: There is a significant relationship between empathy and PSQ.

Perceived Product Quality (PPQ) is different from actual quality. PPQ is the customer's perception about the products excellence (Zeithaml, 1988). Products capability to satisfy customers' needs (Gocek, 2007). While purchasing jewelry, purity of the jewelry, variety of designs etc., are integral part of the product quality which directly effects customer satisfaction. Hence, a hypothesis can be stated as:

H₆: There is a significant relationship between PPQ and Customer Satisfaction.

H₈: There is a significant relationship between Customer Satisfaction and Customer Loyalty.

Perceived Service Quality (PSQ) is the gap between expectations of the customers regarding service performance and quality of service received (Brady et al, 2001). Perceived Service Quality refers to the quality of services provided by the firm which directly influences overall satisfaction of the customer (Almsalam, 2014). While purchasing jewelry, employees must understand the customers' needs, handle complaints politely, quick delivery etc., leads to customer satisfaction. Hence, a hypothesis can be stated as:

H₇: There is a significant relationship between PSQ and customer satisfaction.

Increase in level of satisfaction of the customers leads to re-purchase intentions among customers and also 'Must be' attributes leads to overall satisfaction (Conklin et al, 2004). Customer Satisfaction is defined as fulfilling the need and expectation of the customers' in order to achieve customer loyalty (Khuong, 2014). While purchasing jewelry, product design, purity, variety of choices, good hospitality, store ambience etc., leads to overall satisfaction which encourages customers to repurchase. Overall satisfaction with respect to product and service, intension of re-purchase directly influenced customer loyalty (Auka, 2012). Hence, a hypothesis can be stated as:

4. THE HYPOTHETICAL RESEARCH MODEL

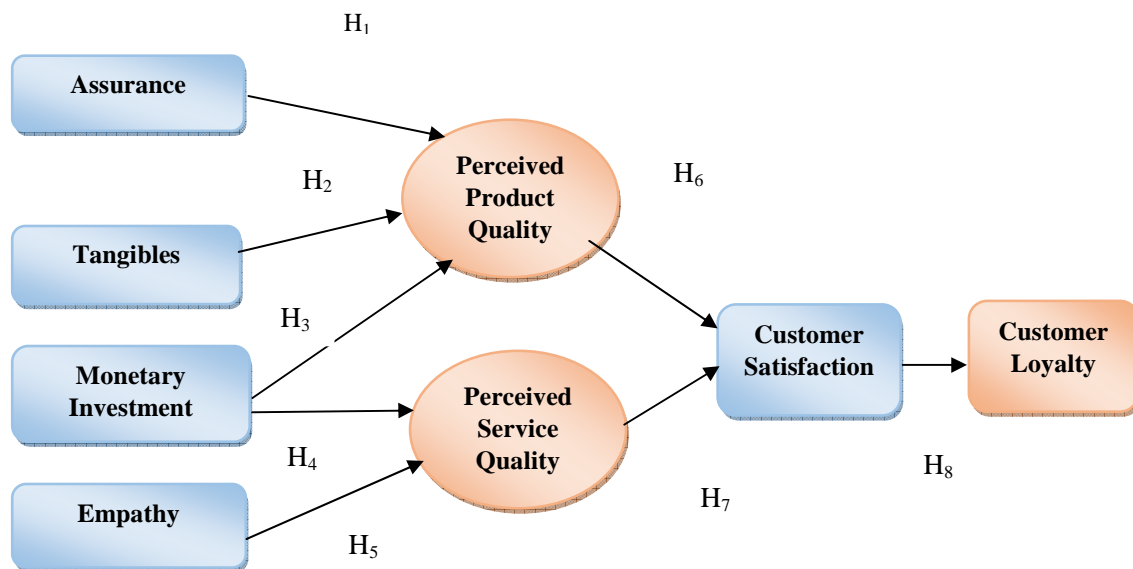


Figure 1: Conceptual Frame work

Source: Author (2015)

- H₁: There is a significant relationship between Assurance and PPQ.
H₂: There is a significant relationship between Tangibles and PPQ.
H₃: There is a significant relationship between Monetary Investments and PPQ.
H₄: There is a significant relationship between Monetary Investments and PSQ.
H₅: There is a significant relationship between Empathy and PSQ.
H₆: There is a significant relationship between PPQ and Customer Satisfaction.
H₇: There is a significant relationship between PSQ and Customer Satisfaction.
H₈: There is a significant relationship between Customer Satisfaction and Customer Loyalty.

5. METHODOLOGY

The study has been conducted in three stages:

- Literature review: Based on the previous literatures, gathering information regarding the research done before. Understanding the several aspects considered in previous research work and framing conceptual frame work.
- Field research: A questionnaire method was adopted for field research by designing the questionnaire which would help in finding customer expectations and necessities.
- Data analysis: Data analysis was carried out using Partial Least Squares- Structural Equation Modelling Approach. This approach was used as, PLS has the ability to handle small sample sizes and deal with the latent variables (Kwong et al, 2013). Based on the analysis a detailed information is gathered and results are obtained.

In this research, there were 8 variables in which 4 were independent variables and 4 was dependent variables. A standard questionnaire was prepared based on different variables and pilot study was conducted for 30 samples. Maximum questions are in the form of statements using five-point Likert scale, ranging from 1 is 'strongly disagree' to 5 is 'strongly agree'. Pilot study was conducted to check all the statements with respect to dependent and independent variables. The Questionnaire were given to the respondents and was tested for its Reliability. Table 2 below shows the outer loading numbers. For checking indicator reliability, outer loading numbers must be greater than or equal to 0.7 (Kwong et al, 2013). Table 3 below shows the outer loading numbers after reduction. Based on Table 3, a new questionnaire was prepared and distributed among 250 customers for final study.

Table 2: Outer loadings before Reduction

| | ASU | CLY | CSN | ETY | MAI | PPQ | PSQ | TAN |
|-------|--------|--------|-----|-----|-----|-----|-----|-----|
| ASU47 | 0.9730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ASU48 | 0.9288 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ASU49 | 0.6090 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ASU50 | 0.8730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CLY31 | 0 | 0.6923 | 0 | 0 | 0 | 0 | 0 | 0 |
| CLY32 | 0 | 0.9267 | 0 | 0 | 0 | 0 | 0 | 0 |
| CLY33 | 0 | 0.9451 | 0 | 0 | 0 | 0 | 0 | 0 |
| CLY34 | 0 | 0.5940 | 0 | 0 | 0 | 0 | 0 | 0 |
| CLY35 | 0 | 0.8999 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | |
|-------|---|---|--------|--------|--------|--------|--------|--------|
| CSN27 | 0 | 0 | 0.8798 | 0 | 0 | 0 | 0 | 0 |
| CSN28 | 0 | 0 | 0.8674 | 0 | 0 | 0 | 0 | 0 |
| CSN29 | 0 | 0 | 0.9193 | 0 | 0 | 0 | 0 | 0 |
| CSN30 | 0 | 0 | 0.6980 | 0 | 0 | 0 | 0 | 0 |
| ETY36 | 0 | 0 | 0 | 0.8788 | 0 | 0 | 0 | 0 |
| ETY37 | 0 | 0 | 0 | 0.8363 | 0 | 0 | 0 | 0 |
| ETY38 | 0 | 0 | 0 | 0.7139 | 0 | 0 | 0 | 0 |
| ETY39 | 0 | 0 | 0 | 0.6856 | 0 | 0 | 0 | 0 |
| MAI40 | 0 | 0 | 0 | 0 | 0.7464 | 0 | 0 | 0 |
| MAI41 | 0 | 0 | 0 | 0 | 0.8271 | 0 | 0 | 0 |
| MAI42 | 0 | 0 | 0 | 0 | 0.6619 | 0 | 0 | 0 |
| PPQ14 | 0 | 0 | 0 | 0 | 0 | 0.6516 | 0 | 0 |
| PPQ15 | 0 | 0 | 0 | 0 | 0 | 0.8113 | 0 | 0 |
| PPQ16 | 0 | 0 | 0 | 0 | 0 | 0.6679 | 0 | 0 |
| PPQ17 | 0 | 0 | 0 | 0 | 0 | 0.8119 | 0 | 0 |
| PPQ18 | 0 | 0 | 0 | 0 | 0 | 0.7688 | 0 | 0 |
| PPQ19 | 0 | 0 | 0 | 0 | 0 | 0.6453 | 0 | 0 |
| PSQ20 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6288 | 0 |
| PSQ21 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6401 | 0 |
| PSQ22 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8831 | 0 |
| PSQ23 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8947 | 0 |
| PSQ24 | 0 | 0 | 0 | 0 | 0 | 0 | 0.9210 | 0 |
| PSQ25 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6530 | 0 |
| PSQ26 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5938 | 0 |
| TAN43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7829 |
| TAN44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.9180 |
| TAN45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6167 |
| TAN46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8676 |

Table 3: Outer loadings after reduction

| | ASU | CLY | CSN | ETY | MAI | PPQ | PSQ | TAN |
|-------|--------|--------|--------|--------|-----|-----|-----|-----|
| ASU47 | 0.9730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ASU48 | 0.9288 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ASU50 | 0.8730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CLY33 | 0 | 0.9451 | 0 | 0 | 0 | 0 | 0 | 0 |
| CLY32 | 0 | 0.9267 | 0 | 0 | 0 | 0 | 0 | 0 |
| CLY35 | 0 | 0.8999 | 0 | 0 | 0 | 0 | 0 | 0 |
| CSN29 | 0 | 0 | 0.9193 | 0 | 0 | 0 | 0 | 0 |
| CSN27 | 0 | 0 | 0.8798 | 0 | 0 | 0 | 0 | 0 |
| CSN28 | 0 | 0 | 0.8674 | 0 | 0 | 0 | 0 | 0 |
| ETY36 | 0 | 0 | 0 | 0.8788 | 0 | 0 | 0 | 0 |
| ETY37 | 0 | 0 | 0 | 0.8363 | 0 | 0 | 0 | 0 |

| | | | | | | | | |
|-------|---|---|---|--------|--------|--------|--------|--------|
| ETY38 | 0 | 0 | 0 | 0.7139 | 0 | 0 | 0 | 0 |
| MAI41 | 0 | 0 | 0 | 0 | 0.8271 | 0 | 0 | 0 |
| MAI40 | 0 | 0 | 0 | 0 | 0.7464 | 0 | 0 | 0 |
| MAI42 | 0 | 0 | 0 | 0 | 0.6619 | 0 | 0 | 0 |
| PPQ17 | 0 | 0 | 0 | 0 | 0 | 0.8119 | 0 | 0 |
| PPQ15 | 0 | 0 | 0 | 0 | 0 | 0.8113 | 0 | 0 |
| PPQ18 | 0 | 0 | 0 | 0 | 0 | 0.7688 | 0 | 0 |
| PSQ24 | 0 | 0 | 0 | 0 | 0 | 0 | 0.9210 | 0 |
| PSQ23 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8947 | 0 |
| PSQ22 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8831 | 0 |
| TAN44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.9180 |
| TAN46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8676 |
| TAN43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7829 |

6. RESULTS

6.1 The Measurement Model

Internal consistency reliability was checked by calculating composite reliability which should be greater than or equal to 0.7 (Kwong et al, 2013). Composite Reliability also called as construct reliability, analyses the strength of all the indicators correlation with their construct (Ebert, 2010). From Table 4, it is clearly observed that all values in composite reliability column is greater

than 0.7, all indicators are said to be highly relevant.

Convergent validity denotes a set of indicators load together as a single construct (Osman et al., 2013). This test can be done by calculating AVE (Average Variance Extracted). To check validity measure, AVE values must be greater than or equal to 0.5. Table 4, below shows the Reliability and Validity measures.

Table 4: Reliability and Validity measures

| | AVE | Composite Reliability | R Square | Cronbachs Alpha | Communality | Redundancy |
|-----|------------|------------------------------|-----------------|------------------------|--------------------|-------------------|
| ASU | 0.8737 | 0.954 | 0 | 0.9277 | 0.8737 | 0 |
| CLY | 0.9077 | 0.9672 | 0.8268 | 0.9491 | 0.9077 | 0.7494 |
| CSN | 0.893 | 0.9616 | 0.596 | 0.94 | 0.893 | 0.4293 |
| ETY | 0.7766 | 0.9125 | 0 | 0.8558 | 0.7766 | 0 |
| MAI | 0.7235 | 0.8868 | 0 | 0.809 | 0.7235 | 0 |
| PPQ | 0.8113 | 0.9279 | 0.5134 | 0.8835 | 0.8113 | 0.2556 |
| PSQ | 0.8102 | 0.9276 | 0.5123 | 0.883 | 0.8102 | 0.3363 |
| TAN | 0.8014 | 0.9236 | 0 | 0.8772 | 0.8014 | 0 |

Table 5, below shows Latent Variable Correlation and discriminant validity. Discriminant validity denotes how efficiently individual construct connect each other (Osman et al., 2013). To check

discriminant validity, the AVE square root value must be greater than other correlated values which is shown in bold along the diagonal (Kwong et al., 2013).

Table 5: Latent Variable Correlations and discriminant validity

| | ASU | CLY | CSN | ETY | MAI | PPQ | PSQ | TAN |
|-----|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| ASU | 0.9347 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CLY | 0.7982 | 0.9527 | 0 | 0 | 0 | 0 | 0 | 0 |
| CSN | 0.7757 | 0.9093 | 0.9450 | 0 | 0 | 0 | 0 | 0 |
| ETY | 0.7511 | 0.6844 | 0.6405 | 0.8812 | 0 | 0 | 0 | 0 |
| MAI | 0.7416 | 0.7072 | 0.7122 | 0.7102 | 0.8506 | 0 | 0 | 0 |
| PPQ | 0.6578 | 0.6769 | 0.7334 | 0.6083 | 0.6767 | 0.9007 | 0 | 0 |
| PSQ | 0.6520 | 0.6147 | 0.6876 | 0.6823 | 0.6368 | 0.7043 | 0.9001 | 0 |
| TAN | 0.7732 | 0.6662 | 0.6419 | 0.6588 | 0.7755 | 0.6147 | 0.5787 | 0.8793 |

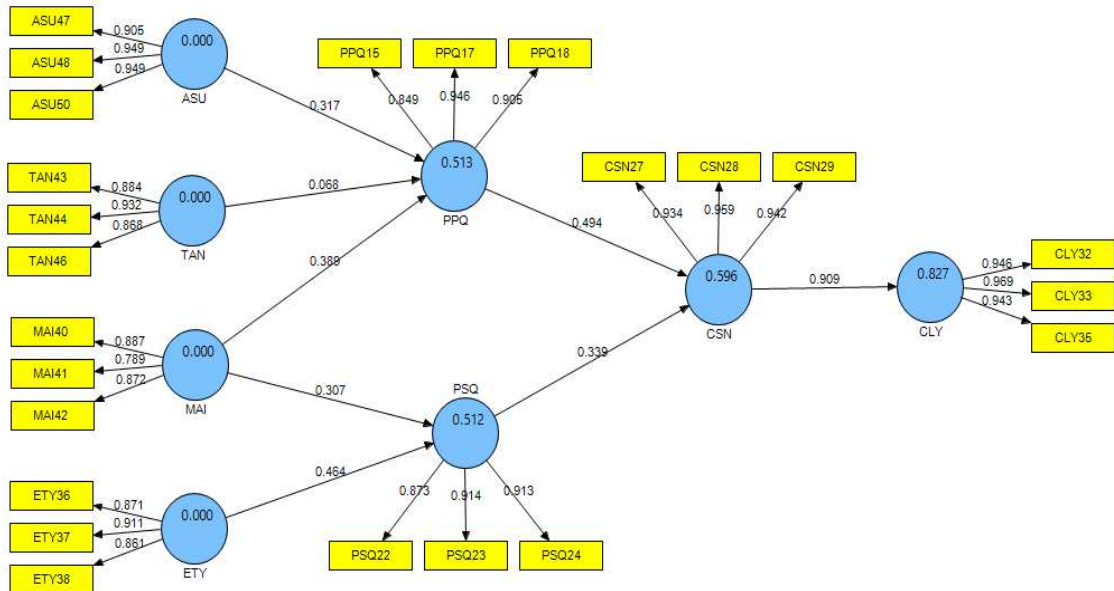


Figure 2: Pictorial Representation of path coefficients

Smart PLS is able to generate T-statistics for testing the significance of both internal and external model, using a process called bootstrapping. (Kwong et al, 2013). In this process, huge amount of sub samples are taken from the actual sample with replacement contributing to bootstrap standard error, which in turn provides T values approximately for checking the significance of the structural path. Hypothesis results

are obtained from Table 6. To check the result, T statistics column must be observed, where T statistics value greater than 1.96 for 5 percent level of significance is accepted and hypothetical statements are said to Supported. (Kwong et al, 2013). From Table 5, it is observed that except TAN→PPQ (0.496) all other factors are significant with respect to the T statistics value.

Table 6: t-values of all dimensions

| | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | Standard Error (STERR) | T Statistics (O/STERR) | Hypothesis Inference |
|------------|---------------------|-----------------|----------------------------|------------------------|--------------------------|----------------------|
| ASU -> PPQ | 0.3165 | 0.3079 | 0.1517 | 0.1517 | 2.0871 | Supported |
| TAN -> PPQ | 0.0683 | 0.0677 | 0.1377 | 0.1377 | 0.496 | Unsupported |
| MAI -> PPQ | 0.389 | 0.3984 | 0.128 | 0.128 | 3.0392 | Supported |
| MAI -> PSQ | 0.3071 | 0.3024 | 0.116 | 0.116 | 2.6487 | Supported |
| ETY -> PSQ | 0.4641 | 0.4636 | 0.1269 | 0.1269 | 3.6567 | Supported |
| PPQ -> CSN | 0.4943 | 0.463 | 0.155 | 0.155 | 3.1883 | Supported |
| PSQ -> CSN | 0.3395 | 0.3612 | 0.147 | 0.147 | 2.3097 | Supported |
| CSN -> CLY | 0.9093 | 0.9032 | 0.0353 | 0.0353 | 25.7292 | Supported |

6.2 The Structural Model

The iterative process of testing for convergent and discriminant validity of the model suggested combining items took place during the unstructured interviews with the customers of the jeweler. The figure displays the coefficient of determination R^2 and the path coefficients between the two variables customers of reputed jewelry shops. Figure 2 shows the eight different constructs used in the hypothesized research model.

The following observations can be made from Figure 2:

i. Endogenous Variable Variance Explanation

- An endogenous latent variable is Customer Loyalty (CLY) having co-efficient of determination R^2 is 0.827. This means Customer Satisfaction (CSN) explains 82.7% of the variance in Customer Loyalty (CLY).
- Perceived Product Quality (PPQ) and Perceived Service Quality (PSQ) both together explains 59.6% of the variance in Customer Satisfaction (CSN).
- Assurance (ASU), Tangibles (TAN) and Monetary Investment (MAI) all together explains 51.3% of the variance in Perceived Product Quality (PPQ).
- Monetary Investment (MAI) and Empathy (ETY) both together explains 51.2% of the variance in Perceived Service Quality (PSQ)

ii. Path Coefficient sizes of inner model and its significance

- The internal model suggests that Monetary Investment has the strongest effect on Perceived Product Quality (0.389), followed by Assurance (0.317) and Tangibles (0.068). Also, Empathy has the strongest effect on Perceived Service Quality (0.464), followed by Monetary Investment (0.307).
- Perceived Product Quality has the strongest effect on Customer Satisfaction (0.494), followed by Perceived Service Quality (0.339).
- The Customer Satisfaction has the strongest effect on Customer Loyalty (0.909).
- Hypothesized path relationship between Tangible and Perceived Product Quality is not statistically significant because its path coefficient is less than 0.1 (Kwong et al., 2013).

6.3 Descriptive analysis

Individual analysis of the variables as follows:

6.3.1 Perceived Product Quality (PPQ):

Table 6 shows the responses related to PPQ. It was observed that 52 percent of respondents have recognized this variable on the overall basis as good followed by very good (33.87 percent) and average (9.73 percent). Very less percentage of respondents have conveyed that the customer satisfaction with regard to the Product Quality are poor (3.73 percent) and bad (0.67 percent). Also, with reference to the specific variables of study, the best perceived variable is: 'Quality of the ornaments are

excellent.’(Mean = 4.30; SD=0.74). Figure 3 shows the overall response for Perceived Product Quality.

Table 6: Perceived Product Quality

| | Mean | Std. Dev. | Bad (1) (%) | Poor (2) (%) | Avg. (3) (%) | Good (4) (%) | V. Good (5) (%) |
|--|-------------|-------------|-------------|--------------|--------------|--------------|-----------------|
| 1. Quality of the ornaments are excellent. | 4.30 | 0.74 | 0.4 | 1.6 | 9.6 | 44.4 | 44 |
| 2. The Jeweler offers the latest design | 4.05 | 0.88 | 1.6 | 6 | 8.4 | 53.6 | 30.4 |
| 3. Ornaments are in good condition after using them as daily wear. | 4.09 | 0.72 | 0 | 3.6 | 11.2 | 58 | 27.2 |
| Average | 4.15 | 0.78 | 0.67 | 3.73 | 9.73 | 52.00 | 33.87 |

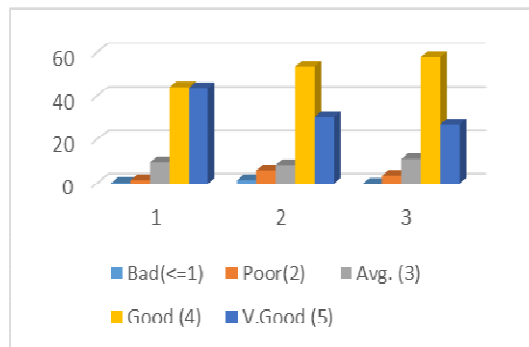


Figure 3. Perceived Product Quality

6.3.2 Perceived Service Quality (PSQ):

Table 7 shows the responses related to PSQ. It was observed that 56.8 percent of respondents have recognized this variable on the overall basis as good followed by very good (32.40 percent) and average (7.87 percent). Very less percentage of respondents have conveyed that the customer satisfaction with

regard to the service quality are poor (2.80 percent) and bad (0.13 percent). Also, with reference to the specific variables of study, the best perceived variable is: ‘Sales Representatives understands my needs’ (Mean = 4.20; SD=0.71). Figure 4 shows the overall response for Perceived Service Quality

Table 7: Perceived Service Quality

| | Mean | Std. Dev. | Bad (1) (%) | Poor (2) (%) | Avg. (3) (%) | Good (4) (%) | V. Good (5) (%) |
|---|-------------|-------------|-------------|--------------|--------------|--------------|-----------------|
| 1. Sales Representatives are polite | 4.17 | 0.68 | 0 | 2.8 | 7.6 | 59.2 | 30.4 |
| 2. Sales Representatives are able to handle complaints. | 4.18 | 0.72 | 0.4 | 2 | 9.6 | 54.8 | 33.2 |
| 3. Sales Representatives understands my needs. | 4.20 | 0.71 | 0 | 3.6 | 6.4 | 56.4 | 33.6 |
| Average | 4.19 | 0.70 | 0.13 | 2.80 | 7.87 | 56.80 | 32.40 |

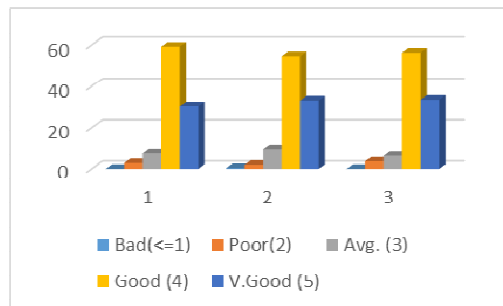


Figure 4. Perceived Service Quality

6.3.3 Customer Satisfaction (CSN):

Table 8 shows the responses related to CS. It was observed that 44.40 percent of respondents have recognized this variable on the overall basis as good followed by very good (40.13 percent) and average (7.20 percent). Very less percentage of respondents have conveyed that the satisfaction with regard to the

product quality and service quality are poor (4.80 percent) and bad (3.47 percent). Also, with reference to the specific variables of study, the best perceived variable is: 'My choice to buy from the Renowned Jewelry Outlet was a wise one' (Mean = 4.14; SD=0.98). Figure 5. shows the overall response for customer satisfaction.

Table 8: Customer Satisfaction

| | Mean | Std. Dev. | Bad (1) (%) | Poor (2) (%) | Avg. (3) (%) | Good (4) (%) | V. Good (5) (%) |
|---|-------------|-------------|-------------|--------------|--------------|--------------|-----------------|
| 1. My choice to buy from the Renowned Jewelry Outlet. was a wise one | 4.14 | 0.98 | 3.2 | 5.2 | 6.8 | 44.4 | 40.4 |
| 2. I feel happy with the products and services provided by the Renowned Jewelry Outlet. | 4.13 | 0.97 | 3.2 | 4.8 | 7.6 | 44.4 | 40 |
| 3. I am overall satisfied with all of my experience with the Renowned Jewelry Outlet. | 4.12 | 1.00 | 4 | 4.4 | 7.2 | 44.4 | 40 |
| Average | 4.13 | 0.98 | 3.47 | 4.80 | 7.20 | 44.40 | 40.13 |

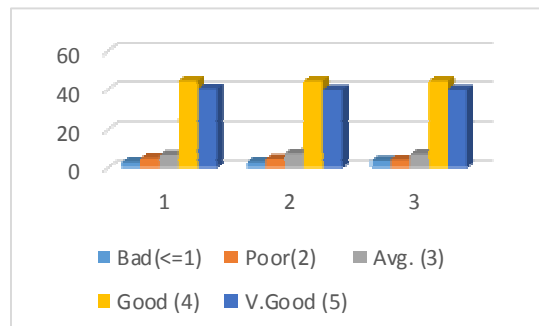


Figure 5. Customer Satisfaction

6.3.4 Customer Loyalty (CLY):

Table 9 shows the responses related to CL. It was observed that 45.20 percent of respondents have recognized this variable on the overall basis as good followed by very good (38.67 percent) and average (7.73 percent). Very less percentage of respondents have conveyed that the customer loyalty with regard to the product quality and service quality are poor

(4.40 percent) and bad (4.0 percent). Also, with reference to the specific variables of study, the best perceived variable is: 'I wish to continue to shop with Renowned Jewelry Outlet more frequently in the future.' (Mean = 4.12; SD=1.0). Figure 6. shows the overall response for customer loyalty.

Table 9: Customer Loyalty

| | Mean | Std. Dev. | Bad (1) (%) | Poor (2) (%) | Avg. (3) (%) | Good (4) (%) | V. Good (5) (%) |
|---|-------------|-------------|-------------|--------------|--------------|--------------|-----------------|
| 1. I would recommend Renowned Jewelry Outlet. to my friends and relatives | 4.08 | 0.99 | 4 | 4.4 | 8.4 | 46 | 37.2 |
| 2. I wish to continue to shop with Renowned Jewelry Outlet more frequently in the future. | 4.12 | 1.00 | 4 | 4.4 | 7.6 | 44 | 40 |
| 3. I consider renowned jewelry shop as my first choice to buy jewelry. | 4.11 | 0.99 | 4 | 4.4 | 7.2 | 45.6 | 38.8 |
| Average | 4.10 | 1.00 | 4.00 | 4.40 | 7.73 | 45.20 | 38.67 |

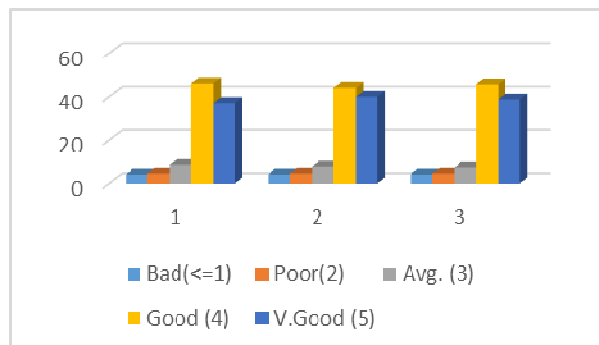


Figure 6: Customer Loyalty

6.3.5 Empathy (ETY):

Table 10 shows the responses related to ETY. It was observed that 53.07 percent of respondents have recognized this variable on the overall basis as good followed by very good (33.87 percent) and average (9.33 percent). Very less percentage of respondents have conveyed that the customer satisfaction with

regard to the product quality and service quality are poor (3.60 percent) and bad (0.13 percent). Also, with reference to the specific variables of study, the best perceived variable is: 'Good hospitality services is provided at Renowned Jewelry Outlet.' (Mean = 4.18; SD=0.78). Figure 7. shows the overall response for empathy.

Table 10: Empathy

| | Mean | Std. Dev. | Bad (1) (%) | Poor (2) (%) | Avg. (3) (%) | Good (4) (%) | V. Good (5) (%) |
|--|-------------|-------------|-------------|--------------|--------------|--------------|-----------------|
| 1. Sales Representatives at Renowned Jewelry Outlet. Identifies the needs of customer. | 4.16 | 0.74 | 0 | 4 | 8.8 | 54.8 | 32.4 |
| 2. Sales Representatives at Renowned Jewelry Outlet do not make the customers to wait. | 4.17 | 0.73 | 0 | 3.2 | 9.6 | 54.4 | 32.8 |
| 3. Good hospitality services is provided at Renowned Jewelry Outlet. | 4.18 | 0.78 | 0.4 | 3.6 | 9.6 | 50 | 36.4 |
| Average | 4.17 | 0.75 | 0.13 | 3.60 | 9.33 | 53.07 | 33.87 |

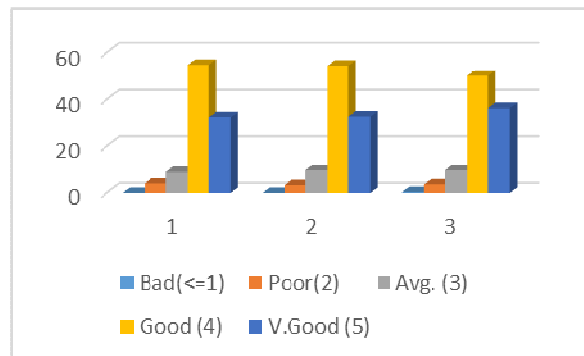


Figure 7: Empathy

6.3.6 Monetary Investments (MAI):

Table 11 shows the responses related to MAI. It was observed that 49.5 percent of respondents have recognized this variable on the overall basis as good followed by very good (34.0 percent) and average (12.9 percent). Very less percentage of respondents

have conveyed that the customer satisfaction with regard to the product quality and service quality are poor (2.4 percent) and bad (1.2 percent). Also, with reference to the specific variables of study, the best perceived variable is: 'Purchasing jewelry is a Good Investment.' (Mean = 4.22; SD=0.80). Figure 8, shows the overall response for MAI.

Table 11: Monetary Investments

| | Mean | Std. Dev. | Bad (1) (%) | Poor (2) (%) | Avg. (3) (%) | Good (4) (%) | V. Good (5) (%) |
|---|-------------|-------------|-------------|--------------|--------------|--------------|-----------------|
| 1. Monthly saving schemes are very helpful. | 4.03 | 0.90 | 2.8 | 2.8 | 14 | 49.2 | 31.2 |
| 2. Purchasing jewelry is a Good Investment. | 4.22 | 0.80 | 0.8 | 2.4 | 11.6 | 44.8 | 40.4 |
| 3. I need not pay for polishing the ornaments purchased at Renowned Jewelry Outlet. | 4.13 | 0.71 | 0 | 2 | 13.2 | 54.4 | 30.4 |
| Average | 4.13 | 0.80 | 1.2 | 2.4 | 12.9 | 49.5 | 34.0 |

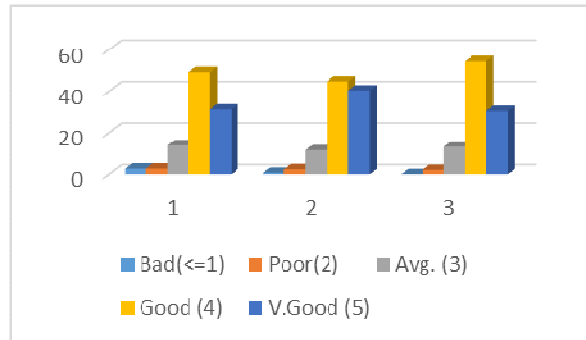


Figure 8. Monetary Investments

6.3.7 Tangibles (TAN):

Table 12 shows the responses related to TAN. It was observed that 50.3 percent of respondents have recognized this variable on the overall basis as good followed by very good (36.4 percent) and average (11.3 percent). Very less percentage of respondents

have conveyed that the customer satisfaction with regard to the Product quality and Service quality are poor (2.0 percent) and bad (0.0 percent). Also, with reference to the specific variables of study, the best perceived variable is: 'Sales Representatives are neatly dressed' (Mean = 4.31; SD=0.69). Figure 9 shows the overall response for tangibles.

Table 12: Tangibles

| | Mean | Std. Dev. | Bad (1) (%) | Poor (2) (%) | Avg. (3) (%) | Good (4) (%) | V. Good (5) (%) |
|--|-------------|-------------|-------------|--------------|--------------|--------------|-----------------|
| 1. I am satisfied with regard to the purity of jewelry purchased at Renowned Jewelry Outlet. | 4.08 | 0.73 | 0 | 2.8 | 14 | 55.2 | 28 |
| 2. I am satisfied with regard to the weights and measures | 4.24 | 0.72 | 0 | 1.6 | 11.6 | 48 | 38.8 |
| 3. Sales Representatives are neatly dressed | 4.31 | 0.69 | 0 | 1.6 | 8.4 | 47.6 | 42.4 |
| Average | 4.21 | 0.71 | 0.0 | 2.0 | 11.3 | 50.3 | 36.4 |

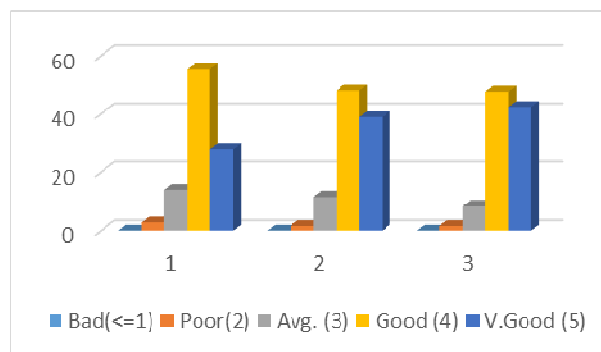


Figure 9. Tangibles

6.3.8 Assurance (ASU):

Table 13 shows the responses related to ASU. It was observed that 48 percent of respondents have recognized this variable on the overall basis as good followed by very good (36.93 percent) and average (9.07 percent). Very less percentage of respondents have conveyed that the customer satisfaction with regard to the Product quality and Service quality are

poor (5.87 percent) and bad (0.13 percent). Also, with reference to the specific variables of study, the best perceived variable is: 'Sales Representatives at Renowned Jewelry Outlet. Creates Trust for customers' (Mean = 4.20; SD=0.85). Figure 10 shows the overall response for assurance.

Table 13: Assurance

| | Mean | Std. Dev. | Bad (1) (%) | Poor (2) (%) | Avg. (3) (%) | Good (4) (%) | V. Good (5) (%) |
|---|-------------|-------------|-------------|--------------|--------------|--------------|-----------------|
| 1. Sales Representatives at Renowned Jewelry Outlet are knowledgeable to answer my questions. | 4.11 | 0.76 | 0 | 4 | 11.6 | 53.6 | 30.8 |
| 2. I am pleased with the spirit of service of Sales Representatives in Renowned Jewelry Outlet. | 4.16 | 0.87 | 0.4 | 6.8 | 8 | 45.6 | 39.2 |
| 3. Sales Representatives at Renowned Jewelry Outlet. creates Trust for customers | 4.20 | 0.85 | 0 | 6.8 | 7.6 | 44.8 | 40.8 |
| Average | 4.16 | 0.83 | 0.13 | 5.87 | 9.07 | 48.00 | 36.93 |

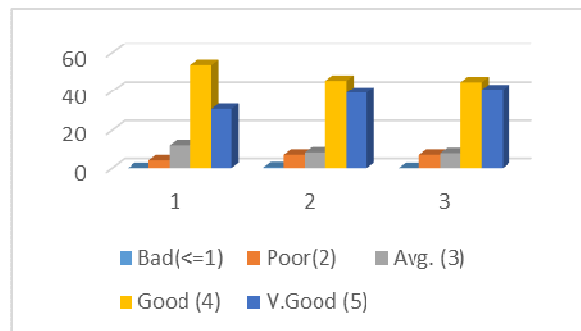


Figure10. Assurance

7. IMPLICATIONS AND CONCLUSIONS:

The main aim of this study was to find the significant influence of different factors on Customer Loyalty. Except Tangibles all other variables which are inter related have a significant influence on its dependent variable. Tangibles was found to have no significant influence on Perceived Product Quality. Most of the

customers were of the opinion that, the purity of the ornaments was checked only when the specific requests were made and that purchases were solely made on the basis of product quality. The showroom Mangers should demonstrate the purity of the ornaments even before the customer requests for it.

8. RESEARCH LIMITATIONS AND FUTURE RESEARCH:

Initially, the study focused on factors like Assurance, Tangibles, Monetary Investment, Empathy, Perceived Product Quality, and Perceived Service Quality that influences Customer Satisfaction which in turn

influenced Customer Loyalty. There were some other factors which are not considered in this research which may influence more on Customer Loyalty such as Trust, Brand Value, and Newness etc. Hence those factors may be considered for future work. This study was limited only for the customers of the renowned jewelry showroom in South Canara District.

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