

## **Product Quality and Customer Loyalty: A Review of literature**

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### **Abstract**

Product quality and customer loyalty has attracted immense scholarly attention because it directly translates into increased profits. Firms compete on quality, customers search for quality, and markets are transformed by quality. It is a key force to delight customers, firm profitability and the economic growth of nations (Deming, 1982). For survival and success of business operations, quality is considered as most integral part of any competitive marketing strategy. Better product quality will maintain a high level of customer satisfaction, which encourages customers to make their next purchases, thus, customer loyalty is gradually formed. Loyal customers are willing to pay more, express higher buying intentions, resist switching and also leads to endorsing the goods and services to their friends and associates. In view of the growing importance of product quality and its impact on customer loyalty, present study attempts to review the two constructs, their dimensions and relationships and to offer suggestions, on the basis of review of literature, for improved business decisions.

**Keywords:** Product Quality, Dimensions of Product Quality, Customer Loyalty, Dimensions of Customer Loyalty, Customer Satisfaction

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## Introduction

The importance of quality in today's business environment is paramount at several levels. Organizations strive to manage quality (Rust, et. al., 2002) to adopt an appropriate marketing strategy (Buzzell, 2004; Prajogo, 2007) and to develop new products calibrated to customers' quality requirements (Morgan and Vorhies, 2001). Firms compete on quality, customers search for quality, and markets are transformed by quality. It is a key force leading to delighted customers, firm profitability and the economic growth of nations (Deming, 1982). Product quality is one of the key parameters for building a competitive advantage in the marketplace (Aaker, 1991; Jacobson and Aaker, 1987). For survival and success of business operations, quality is considered as most integral part of any competitive marketing strategy from last two decades (Ishaq 2011a, Ismail, et. al., 2006). Even in the Pandemic, Covid-19, the application of quality standards in producing the sanitizers, masks, protective gear and clothing and respiratory devices has helped very much in the fight against COVID-19 (UNIDO, 2020). (Kotler, et.al., 2016) believed that better product quality will maintain a high level of customer satisfaction which encourages customers to make their next purchases and become loyal. Customer loyalty helps companies to achieve a competitive advantage in the market besides lower costs, higher prices and increased profits (Mokhtar, 2011). Loyal customers spread positive word of mouth, make repeat purchases, and recommend the product to others (Jahanshahi, et. al., 2011). Customer loyalty expresses an intended behaviour to support a product, which is by communicating their experience to others through positive word of mouth communication (Selnes, 1993).

In light of above research findings, product quality and customer loyalty has attracted immense scholarly attention from last decade. Researches by Pilkington and Chai (2008) show that quality of services to a customer is one of the most important factors in identifying new customer needs and the key to customer loyalty in providing the customers with their undiscovered needs. Oghojafor, et. al., (2014) are of the opinion that quality of products tends to increase customer loyalty. If the product meets customer expectations, customers will be happy and may remain loyal to the product/company. Similarly, Kotler (2002) support this view-point by expressing claims that people prefer products that offer quality, performance, and excellent features. Good product quality attracts, retains, and converts customers into loyal customers.

## **Objective of the Study**

In light of above research findings and also keeping in view the growing importance of product quality and customer satisfaction as an integral part of any competitive strategy, present paper is a humble attempt to make a review on product quality and customer satisfaction to put in proper perspective the contributions of these constructs in marketing literature.

## **Methodology**

This paper is purely descriptive and narrative. Initially, 120 papers were obtained from databases like, Emerald insight, Research Gate, ProQuest, EBSCO, Science Direct, SAGE publications, JSTOR, and Google Scholar etc using the keywords Product quality, customer satisfaction, and customer loyalty. After further processing, the number of downloaded research papers was reduced to 66 which served as a reference for more than 24 other studies. In total, 90 publications were reviewed to achieve above stated objective.

## **Literature Review**

### **Product Quality**

Quality management has a long history dating back to the dawn of manufacturing and has attracted the attention of researchers and practitioners for decades as a major competitive priority of businesses all over the world. A search for the definition of quality produced a mixed bag of results. Quality has been defined as value (Feigenbaum, 1951), conformance to specifications (Gilmore, 1974; Levitt, 1972), conformance to requirements (Crosby, 1979), fitness for use (Juran, 1974, 1988), loss avoidance (Ross, 1989), and meeting and/or exceeding customers' expectations (Gronroos, 1983; Parasuraman, et. al., 1985). Quality is an important working strategy that is well understood in the expectations of customers both inside and outside the company, whether these expectations are explicit or implicit (Feigenbaum, 1991).

Global definition of quality does not exist, rather, there are different definitions resulting from five major approaches to defining quality, namely, transcendent, product-based, user-based, manufacturing-based, and value-based. These approaches have their roots in philosophy, economics, marketing and operations management (Rose and Tamimi, 2002). Garvin (1984) and Carol and Bednar (1994) have noted that these numerous definitions are required not exclusively to catch the complexity of the quality construct, but with the end goal for firms to address quality issues that change as product travels through

different stages from design to production stages till final/finished product in the market-place. A brief review of five major approaches to quality is presented below: -

**The Transcendent approach** of quality is derived from philosophy and from Plato's discussion of beauty (Garvin, 1984). From this perspective quality is synonymous with "innate excellence". The assumption is that quality is both absolute and universally recognizable. Proponent of this view claim that quality cannot be defined precisely; rather it is a simple, analysable property that we figure out through experience (Brown et al., 2001). This is the basis for technological leadership and quality leadership as well. This approach to define quality is highly subjective.

**The product-based approach** has its roots in economics. According to this view, differences in the quantity of some ingredient or attribute possessed by the product are considered to reflect differences in quality (Garvin, 1984). It has two approaches - first, higher quality can be obtained at higher expense/costs and second, quality is viewed as measurable characteristic of a good/product rather than preferences. The emphasis is more on objective evaluation of quality (Tamimi and Rose, 2002).

In the **user-based approach**, quality is the extent to which a product or service meets and/or exceeds customers' expectations (Garvin 1984). This approach is market based, and arose basically out of the services marketing literature. As the service sector grew, the client's/customers point of view turned out to be progressively more significant in deciding quality (Carol and Bednar, 1994). Nonetheless, the effect of the "customers perspective" can be found in a few of the early definitions on quality. For instance, in the first release of his Quality Control Handbook, Juran (1951) conceptualized that quality was made out of two sections, namely, the quality of design and the quality of conformance. The quality of design, fundamentally, alluded to giving fulfilment to clients by making products that addresses/met their issues. Quality of conformance is subjective and to some degree complex. Today the user-based definition is broadly acknowledged and thought about one of the vital ideas of TQM.

**The manufacturing-based approach** has its roots in operations and production management. In this approach quality is defined as conformance to specifications (Crossby, 1979). Quality of conformance relates to the degree to which a product meets certain design standards. Its primary focus is internal and quality is viewed as a result of engineering and manufacturing practices. It is the basis of statistical quality control. According to this approach upgrades in quality (which are identical to decreases in the

number of deviations) leads to bring down expenses, for preventing defects is seen as more affordable than fixing or revising them (Garvin, 1984). This approach takes into account the exact and target estimation of value, in spite of the fact that it has restricted appropriateness for services (Carol and Bednar 1994).

***The value-based approach*** compares quality in terms of costs and price. According to this view, quality product is one that provides performance at an acceptable price or conformance at an acceptable cost (Garvin, 1984). This approach is derived from traditional economic model and depends on a thought that customers regularly think about quality according to the price of the product (Tamimi and Rose, 2002). Feigenbaum (1951) has given this idea when he defined quality as “best for certain customer conditions”. These conditions are (a) the actual use and (b) the selling price of the product.

From the standpoint of the marketplace, quality has been described as a product's perceived superiority or excellence when compared to competing alternatives (Garvin 1988; Zeithaml 1988). Quality, according to Deming (1982), is characterised as "the output of using the most cost-effective means to produce the most valuable goods in the market," stressing that "quality is to be produced, not tested." Quality refers to a product's ability to satisfy a particular customer's need, and is deemed to be of higher quality (Garvin, 1987). Product quality as described by Kotler and Keller (2006) is the amount of a product's or service's features and characteristics that are based on its ability to meet needs that are either articulated or implied. Tjiptono, et. al., (2015) holds the view that product quality is a complex condition related to goods and services, individuals, processes, and environments that meet or exceed standards. Kotler, et. al., (2008), however, are of the opinion that product quality is a product's ability to perform its function, which includes overall durability, reliability, accuracy, ease of operation, and product repair, as well as other product attributes. McDaniel (2011) states that product quality is defined by six characteristics, namely, dependability, longevity, ease of maintenance, ease of use, a trusted brand name, and a low price while (Lefkoff and Mason, 1993) identified three characteristics of product quality, such as, features, advantages, and image. There is no consensus among researchers regarding the number of dimensions/attributes/features of product quality even today. For example, Alhire, et. al., (1996) identified four dimensions of product quality (performance, reliability, conformance, and durability), Mandu (1985) two (features and reliability), Tamimi (1996) three (reliability, aesthetics and performance and Brucks, et. al., (2000) has identified seven (ease of use, features, durability,

serviceability, performance, perceived quality and aesthetics) dimensions of product quality. Garvin's (1984) eight-dimensional structure (performance, features, reliability, conformance, durability, serviceability, aesthetics, and perceived quality) has been widely used in many research studies (Hoe, and Mansori, 2019; Jakpar, et. al., 2012 and Syahril, et al., 2018). Customer perceptions of product quality, however, ranks high on one dimension and low on another (Garvin, 1987). Since these dimensions are often interrelated, changes in one might be at the cost of another (Kenyon and Sen 2016). These eight dimensions (Garvin's, 1984) are explained given below:-

### ***Performance***

Performance implies the primary operating characteristic of a product. For an automobile, these would-be traits like acceleration, handling, cruising speed, and comfort; for a television set, they would include sound and picture quality, colour, and ability to receive distant stations. In service businesses, performance often means prompt service (Garvin, 1984; 1987). Since this quality dimension incorporates assessable qualities, brands are typically evaluated objectively on specific features of performance. Nonetheless, the general performance levels are harder to increase, particularly when they don't uphold all the customers' necessities (Garvin, 1987). Murthy (2000) states that total product quality is a coordination of three concepts of quality, such as, conformance, performance and quality of service. These three are connected to one another and should be studied together in an incorporated system that includes both the retailer's and manufacturer's decision-making process and their cooperation. Babbar, et. al. (2002) suggests that improving performance should be the main target of the producers when they are creating products to meet clients' expectations.

### ***Features***

Features are “bells and whistles” of products and services, secondary characteristics that supplement the product's basic functioning. Examples include free drink on a plane and automatic tuner on a TV set (Garvin, 1984). The separating line between primary performance features and secondary features is regularly hard to draw. What is critical are features involving objectives and measurable attributes, individual needs, not prejudices that affect their interpretation into quality differences (Kianpour, et al., 2014).

### ***Reliability***

The mean time to first failure (MTFF), the mean time between failures (MTBF), and the failure rate per unit time are some of the most common product reliability indicators. Since it is important to measure a product that is in operation for a fixed period of time. It is usually associated with durable items rather than goods or services that are used directly (Garvin, 1987). The goods or services would have respectable quality if the scheduled tasks were performed without inconsistency. There would be no loss due to side-effects, in addition to the cost of using them (Eiklenborg, et al., 2011). Romero, (1997) gave a measure of perceived product quality to gauge four general dimensions of products. One of the referenced measurements was flawlessness which was identical to reliability. Ahmed, (1996) considers reliability as the most significant dimension of product quality and concluded that broadening the reliability of a product straightforwardly impacts on the product's performance and quality.

### ***Conformance***

Conformance is a degree to which a product's physical and performance characteristics meet design specifications. The measures for the disappointments of conformance are the incidence of service calls and defecting rate in the industrial unit or once the product is in the customer's hands. These measures disregard other deviations from the norm, for example, "incorrectly spelled labels/tags or terrible structure that try not to prompt help or fix" (Garvin, 1987). Also, some examination has been done about conformance as one of the product quality dimensions. For instance, for estimating and classification of product quality for a particular product, conformance is classified as the second element of product quality from the customer's point of view (Karnes, 1995).

### ***Durability***

Durability has both economic and technical dimensions. Technically, durability can be defined as the amount of use that one gets from a product before it deteriorates. It can be defined as the amount of usage that one gets from goods before it breaks down, and replacement is desirable to constant repair (Garvin, 1987). Karnes, (1995) sorted durability or expected life as the third most significant component of product quality from the shopper's perspective.

### ***Serviceability***

Serviceability means the ease, speed, courtesy, and competence of repair.



Customers are concerned not only about the product breaking down, but also are stressed over the time before service is restored, the timeliness with which service appointments are kept, being confronted with the nature of the service staff and the frequency of service calls or repairs fail to resolve problems related with the product or service. In those situations where the issues of the customers are not fixed carefully and grievances are recorded, customers evaluation of goods and service quality are affected by these complaints and handling processes (Garvin, 1987). Brucks, et al., (2000) show that the price and brand names would not be especially significant from the purchaser's perspective about the serviceability, since data about the serviceability of the goods isn't open to the customer before purchase.

### ***Aesthetics***

Aesthetics has been characterized as a subjective element of quality. How a product looks, appears, sounds, tastes, or smells involves person/individual decisions and are reflection of individual preferences. It may be difficult to satisfy everybody with respect to this dimension of quality (Garvin, 1987).

### ***Perceived Quality***

Quality based on image, brand name, or advertising rather than product attributes are subjectively assessed. Customers may not generally have enough information about the features of the product or service. Secondary measures like comparing the brands can be their solely source of comparison. Customers must rely on indirect measures while comparing brands. In such conditions, product is evaluated less on their objective characteristics than on their images, advertising, and brand names (inferences about quality more than the realism itself) can be critical (Garvin, 1987).

### ***Customer Loyalty***

There is no universally accepted definition of customer loyalty (Zhang, et. al., 2010). In fact, one philosopher, Sorley (1908), has said that great thinkers of morality have tended to avoid the subject of loyalty. Oliver (1999), however, has defined loyalty as a deeply held commitment to re-buy or re-patronized a preferred product or service consistently in the future. In other words, it refers to the willingness of a customer to consistently re-patronise the same service provider. Jacoby (1973) expressed the view that loyalty is a biased behavioural purchase process that results from a psychological process.



Lovelock (1983) conceptualized loyalty as the willingness of a customer to maintain a relationship with the firm, continue to purchase and use its products or services and likely to recommend the firm to others. Gremler and Brown (1996) defined customer loyalty as those who repeat purchase from the same service provider. According to Jones (1996), customer loyalty is a prime determinant of long-term performance of organizations. Increasing customer satisfaction and customer retention leads to improved profits, positive word-of-mouth and lower marketing expenditures (Heskett and Sasser, 2010). According to Tjiptono, et. al., (2015), customer loyalty is consumer commitment to a brand, store or supplier based on a very positive nature in long-term purchases. From this view-point, it can be concluded that customer loyalty is created because of a combination of satisfaction and complaints. Creating and maintaining customer loyalty helps companies develop long-term, mutually beneficial relationships with customers (Pan, et. al., 2012). Furthermore, loyal customers are willing to pay more, express higher buying intentions and resist switching (Evanschitzky, et. al., 2012). While, achieving customer loyalty is a primary marketing goal of any company, building loyalty and reaping its rewards have become huge challenge (Watson, et. al., 2015), and creating and maintaining customer loyalty has become a strategic mandate (Ganesh, et, al.,2000). Once customers become loyal, they tend to purchase more, willingly spend more, and are eager to be advocates for a particular firm (Harris and Goode, 2004; Reichheld and Sasser, 1990). In other words, it refers to the willingness of a customer to consistently re-patronise with the same service provider. Scholars within this field have defined loyalty from behavioural and attitudinal perspective (Dick and Basu, 1994; Zeithaml and Bitner, 2009).

### ***Behavioural Loyalty***

Rauyruen and Miller (2007) identified behavioural loyalty as the willingness of average customers to repurchase the service or the product and to maintain a relationship with the service provider or supplier. The behavioural perspective or the purchase loyalty looks at repeat purchase behaviour and is based on the customer's purchase history. The emphasis is on past rather than on future actions (Dimitriades, 2006). Mellens, et. al., (1996) reported that behavioural measures define brand loyalty in terms of the actual purchases over a specified time frame and they are non-incidental.

### ***Attitudinal Loyalty***

Reuyruen and Miller (2007) defined attitudinal loyalty as the level of customer's psychological attachments and attitudinal advocacy towards the service provider or

supplier. Attitudinal loyalty emphasizes the customer's strong positive attitude toward a seller or brand (Dick and Basu, 1994). This attitudinal strength drives a customer's deep emotional commitment to the brand (Chaudhari and Holbrook, 2001) which further motivates customers to advocate the brand in public with a strong opinion (Dick and Basu, 1994). Variables of attitudinal loyalty include recommendation to others, positive word of mouth, and commitment to a preferred firm (Andreassen and Lindestad, 1998; Dimitriadis, 2006; Rauyruen and Miller, 2007).

As stated by Superville and Gupta (2001), that success belongs to those companies that are willing to improve the quality and service in accordance with the demands of the customers. Kotler and Keller (2006), believed that better product quality will maintain a high level of customer satisfaction which encourages customers to make their next purchases. Numerous studies (Gronholdt, et. al., 2000; Kristensen, et. al., 2000) showed that improved product quality benefits companies by building a long-term customer base, and creating a valuable asset for company. In order to stand out in today's competitive market, firms should pay more attention to product quality, as it is believed to be the starting point for generating customer loyalty (Bruhn and Grund, 2000; Gerpott, et. al., 2001). Oghojafor, et. al., (2014) are of the opinion that quality of products tends to increase customer loyalty. If the product meets customer expectations, customers will be happy and may remain loyal to the product/company. Similarly, Yuen and Chan (2010) substantiate this view point by stating that product quality will maintain high level of customer satisfaction which encourages customers to make future purchases, thus, customer loyalty is gradually formed. Good product quality creates profitability, maintains satisfaction, and makes loyal consumers. There are many empirical research studies confirming positive and significant relationship between product quality and customers loyalty as shown in the following table: -

## Relationship between Product Quality and Customer Loyalty

Reference Data	Key Findings
Grace, E., Girsang, R. M., Simatupang, S., Candra, V., and Sidabutar, N. (2021). Product Quality and Customer Satisfaction and Their Effect on Consumer Loyalty. <i>International Journal of Social Science</i> , 1(2), 69-78.	The findings of the study shows that product quality has a positive and significant effect on consumer loyalty and consumer satisfaction has a positive and significant effect on consumer loyalty. This shows that when product quality is getting better and satisfaction is achieved, loyalty will persist.
Dharmawan, D. A., and Sitio, A. (2020). Related Impact from Service Quality and Product Quality Toward Customer Satisfaction as Well as Its Implications to Customer Loyalty. <i>International Journal of Management Science</i> , 2(1), 101-111.	The results showed that (1) Service Quality impacts Customer Satisfaction (2) Product Quality has significant influence on Customer Satisfaction (3) Service Quality has marked effect to Customer Loyalty (4) Product Quality has undefinable effect on Customer Loyalty and (5) Customer Satisfaction impacts Customer Loyalty.
Purwati, A. A., Fitrio, T., Ben, F., and Hamzah, M. L. (2020). Product Quality and After-Sales Service in Improving Customer Satisfaction and Loyalty. <i>Journal Economica</i> , 16(2), 223-235.	The results of this research showed that the product quality had no significant effect on customer satisfaction but had significant effect on customer loyalty, after-sales services had significant effect on both customer satisfaction and customer loyalty and satisfaction had no effect on customer loyalty. Study proved that product quality and after-sales service had no indirect effect on customer loyalty through satisfaction.
Mahsyar, S., and Surapati, U. (2020). Effect of Service Quality and Product Quality on Customer Satisfaction and Loyalty. <i>International Journal of Economics, Business and Accounting Research (IJEBAR)</i> , 4(01).	The result of this research is that the quality of service has no significant effect on customer satisfaction, product quality has significant effect on customer satisfaction, and customer satisfaction has significant effect on consumer loyalty.
Jannah, R., Mappatempo, A., and Haanurat, I. (2019). The Influence of Product Quality and Promotion on Customer Satisfaction and Its Impact on Customer Loyalty. <i>Proceeding UII-ICABE</i> , 1(1), 201-206.	Research shows that product quality has a significant effect on customer satisfaction; promotion has a significant positive effect on customer satisfaction; product quality has no significant effect on customer loyalty; promotion has a significant positive effect on customer loyalty; customer satisfaction has a significant positive effect on customer loyalty; Product quality has a significant positive effect on customer loyalty through customer satisfaction; and promotion has a significant positive effect on customer loyalty through customer satisfaction.
Cater, T., and Cater, B. (2010). Product and relationship quality influence on customer commitment and loyalty in B2B manufacturing relationships. <i>Industrial Marketing Management</i> , 39(8), 1321-1333.	The results show that product quality influences positive and negative calculative commitment. In addition, product quality directly positively influences attitudinal and behavioural loyalty. The results imply that customer loyalty depends more on "emotional" (affective commitment) than on "rational" (negative calculative commitment and product quality) motivation to continue the relationship.
Diputra, I. G. A. W., and Yasa, N. N. (2021). The influence of product quality, brand image, brand trust on customer satisfaction and loyalty. <i>American International Journal of Business Management (AIJBM)</i> , 4(1), 25-34.	The study confirmed that product quality has a positive and significant effect on brand image, brand trust and customer satisfaction, brand image and brand trust have a positive and significant effect on satisfaction. Satisfaction has a positive and significant effect on customer loyalty. The implications of the results of this study indicate that product quality is found to be the main factor in increasing customer satisfaction so

	that it leads to a sense of customer loyalty
Putri, A. P., Wongkar, A., Michael, M., and Balliansa, M. R. (2020). The Influence of Product Quality, Price, and Service Quality in Customer Loyalty. Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences, 3(4), 2864-2879.	The results of the study showed that product quality has a positive and significant effect on consumer loyalty. Price has a positive and significant effect on consumer loyalty. Service quality variable has a positive and significant effect on consumer loyalty. The simultaneous test results of product quality, price and service quality have a positive and significant effect on consumer loyalty.
Yusuf, M., Nurhilalia, N., and Putra, A. H. P. K. (2019). The Impact of Product Quality, Price, and Distribution on Satisfaction and Loyalty. The Journal of Distribution Science, 17(10), 17-26.	The results of the study revealed that 1) Product quality has a positive and significant effect on customer satisfaction. 2) Product quality has a positive and significant effect on customer loyalty. 3) Product quality affects customer loyalty by making customer satisfaction an intervening variable. 4) Customer satisfaction has a positive and significant effect on customer loyalty.
Dhasan, D., and Aryupong, M. (2019). Effects of product quality, service quality and price fairness on customer engagement and customer loyalty. ABAC Journal, 39(2).	The study results concluded significant direct effects on customer loyalty, with product quality, service quality, price fairness and customer engagement all having a positive influence. On the other hand, product quality and price fairness did not significantly affect customer engagement. In addition, the study shows that customer engagement has a partial mediation effect on service quality and customer loyalty
Xhema, J., Metin, H., and Groumos, P. (2018). Switching-costs, corporate image and product quality effect on customer loyalty: Kosovo retail market. IFAC-Papers online, 51(30), 287-292.	This study finds strong evidence for the positive effect of Switching-costs on customer loyalty. In addition, product quality positively influences customer loyalty and corporate image has a positive impact on customer loyalty.
Setiawan, H., Firdiansjah, A., and Darsono, J. T. (2019). Effect of house prices, product quality on customer loyalty through customer satisfaction in housing Permata Royal Garden Malang. Management and Economics Journal (MEC-J), 3(2), 142.	The study concluded that product quality has a significant effect on customer loyalty, Customer satisfaction has a significant effect on customer loyalty. The price and quality of products can increase customer satisfaction, Consumer satisfaction can increase customer loyalty. Satisfaction of customers is able to mediate the influence of prices, products to customer loyalty.
Arif, M., and Syahputri, A. (2021). The Influence of Brand Image and Product Quality on Customer Loyalty with Consumer Satisfaction as an Intervening Variable at Home Industry. Journal of International Conference Proceedings (IJCP) (Vol. 4, No. 2, pp. 398-412).	The results showed that brand image has a significant effect on consumer satisfaction and no significant effect on customer loyalty. Product quality has a significant effect on consumer satisfaction and has no significant effect on customer loyalty, Consumer satisfaction has a significant effect on customer loyalty. Brand image has a significant effect on customer loyalty through customer satisfaction as an intervening variable. Product quality has no significant effect on customer loyalty through customer satisfaction as an intervening variable, Consumer satisfaction, however, has a significant effect on customer loyalty.
Rimawan, E., Mustofa, A., and Mulyanto, A. D. (2017). The influence of product quality, service quality and trust on customer satisfaction and its impact on customer loyalty. International Journal of Scientific	The results showed that product quality, quality of service and trust does not affect customer satisfaction and customer loyalty, while customer satisfaction affect customer loyalty.

and Engineering Research, 8(7), 2330-2336.	
Susanti, C. E. (2013). The effect of product quality and service quality towards customer satisfaction and customer loyalty in traditional restaurants in East Java. In Proceedings of the International Conference on Managing the Asian Century (pp. 383-393). Springer, Singapore.	This researcher observed that product quality and service quality have significant effect on customer satisfaction. Customer satisfaction has a significant effect on brand loyalty, and customer satisfaction acts as a mediator between exogenous variables to consumer loyalty. These results indicate that exogenous variables (product quality and service quality) significantly influence brand loyalty.
Syafarudin, A. (2021). 'The Effect of Product Quality on Customer Satisfaction Implications on Customer Loyalty in the Era Covid-19', Ilomata International Journal of Tax and Accounting, 2(1), pp. 71-83.	The results showed that product quality affects customer satisfaction and customer satisfaction affects customer loyalty.
Sitanggang, J. M., Sinulingga, S., and Fachrudin, K. A. (2019). Analysis of the Effect of Product Quality on Customer Satisfaction and Customer Loyalty of Indihome ATPT Telkom. American International Journal of Business Management (AIJBM), 2(3), 26-37.	The study concluded that the direct effect of product quality on customer loyalty is smaller than the indirect influence of product quality on customer loyalty through customer satisfaction, and customer satisfaction is an intervening variable between product quality and customer loyalty.
Hoe, L. C., and Mansori, S. (2018). The effects of product quality on customer satisfaction and loyalty: Evidence from Malaysian engineering industry. International Journal of Industrial Marketing, 3(1), 20.	The results provide insights that out of eight dimensions of product quality, durability, serviceability, aesthetics and perceived quality has the highest impact on customer satisfaction which leads to higher customer loyalty in the engineering industry in Malaysia.
Wantara, P., and Tambrin, M. (2019). The effect of price and product quality towards customer satisfaction and customer loyalty on madura batik. International Tourism and Hospitality Journal, 2(1), 1-9.	Study results concluded that price has a significant and positive impact on customer satisfaction, product quality has a significant and positive impact on customer satisfaction. Customer satisfaction has significant and positive impact on customer loyalty, but product quality has nosignificant and positive impact on loyalty.
Ishaq, M. I., Bhutta, M. H., Hamayun, A. A., Danish, R. Q., and Hussain, N. M. (2014). Role of corporate image, product quality and customer value in customer loyalty: Intervening effect of customer satisfaction. Journal of Basic and Applied Scientific Research, 4(4), 89-97.	The study concluded that customer satisfaction proved as a partial mediating variable in corporate image, product quality (independent variables) and customer value, customer loyalty (dependent variables) relationships. Also, product quality is positively associated with customer satisfaction and loyalty.
Jahanshahi, A.A., Gashti, M.A.H., Mirdamadi, A., Nawaser, K., and Khaksar, S.M.S. (2011). Effects of Customer Service and Product Quality on Customer Satisfaction and Loyalty. International Journal of Humanities and Social Science. Vol. 1 No. 7.	Study results showed that customer satisfaction and loyalty are the most important factors that affect automotive industry and customer service can be considered as an innate element of industrial products. Results also showed that there is a high positive correlation between the constructs of customer service and product quality with customer satisfaction and loyalty.
Yuen, FT Euphemia and Sian SL Chan. (2010). The effect of Retail Service Quality and Product Quality on Customer Loyalty. Journal of Data base Marketing and	The findings suggest that retail service quality is positively associated with customer loyalty whereas product quality surprisingly does not exert a positive

Customer Strategy Management. Vol.17(3), 222-240.	influence on customer loyalty. In addition, three dimensions of service quality i.e., Physical aspect, reliability and problem solving were found to have positive impact on customer loyalty.
Xhema, J., and Metin, H., (2018). How product quality and corporate image affect customer loyalty: An empirical study. International journal of Management and Applied Science, ISSN: 2394-7926.	Results of the study showed that product quality has positive impact on corporate image and customer loyalty which eventually make customers to make repeat purchases, positive recommendation to others and would consider buying from the same company in the future.

## Conclusion

The ongoing revolution of quality has reshaped the world in a highly globalised and competitive economy. The concept of quality has shifted from the achievement of quality standards to the satisfaction of consumer needs and the retention of customers. Simply put, product quality refers to a product's or service's ability to meet the needs and expectations of the consumer. It should be noted that product quality is assessed from the standpoint of the customer as well and not from the company alone. Then only company can expect consumer satisfaction to develop a healthy relationship that leads to loyalty. Customer loyalty is a consumer's commitment to conduct business with a specific organisation which results in repeat purchases. It also leads to endorsing their goods and services to their friends and associates. Product quality and customer loyalty have a close relationship as they both bring benefits to the company. Product or service quality consistency can contribute to a company's success depending on consumer satisfaction and consumer loyalty (Sitanggang, et. al., 2019). This demonstrates that a product's quality creates consumers' confidence and satisfaction which leads to customer loyalty because happy customers are more likely to buy again. Pilkington and Chai (2008) in their study discovered that loyal consumers are more likely to have utilised higher-quality products. This means that higher product quality tends to improve customer loyalty. Company should always pay close attention in maintaining the quality of the products as it benefits the company and continue to strive optimally while maintaining the company's advantage.



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