

## **Quality and Purchase Intention Perceived towards Low Cost Energy-Saving Cars**

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### **ABSTRACT**

Low cost car does not mean having low quality. This is the assumption that the producers or sellers of especially energy-saving car want to emphasize. This research on the desire and expectation of every car producer and dealer in Indonesia who tries to be perceived as having the best quality on their consumers mind and on the increase of consumer purchase intention is carried out using a qualitative method as well as the concept of perceived service quality—which shows the difference between bibliographic study and the actual condition.

Keywords: Low cost car, perception on quality, purchase intention

## Introduction

More than one million cars were sold in Indonesia in 2013. This number of sale is predicted to sustainably increase. Automotive business has grown fast. It is caused by, among others, the improved prosperity of people that increases the number of people in middle-up class category as well as their purchasing power. No one can deny that the sales of car in Indonesia is dominated by Japanese companies (Toyota, Daihatsu, Suzuki, Mitsubishi, Honda, Nissan, Hino, and Isuzu), and followed by Korean companies.

Referring to the global trend, potential market, and government attention on the low cost car, Indonesia has a chance to become the base of production as having been done by China, India, and Thailand. Indonesia has a potential market similar with China and India, i.e. growing market as illustrated in Figure 1.

Director General of High Technology-Based Superior Industry of the Ministry of Industry, Budi Darmadi says that low cost

green car (LCGC) can suppress the import of automotives from other countries, as quoted by Antara, in Jakarta, Wednesday (14/8/2013).

The market for four-wheel vehicles in Indonesia has been growing in line with the economic growth but its growth is still not optimum. In fact, the four-wheel vehicle industry in Indonesia has an opportunity to keep growing by developing new market segments in accordance with the prosperity and purchasing power of Indonesian people. The market segments have a big potential, about 300-600 thousand units per year for the households with income around IDR 4 to 8 million per month. It can be stated explicitly that first-time car buyers are those in the age of 20 to 39 and are the second biggest population in Indonesia (Figure 2).

The prices offered by dealers are much varied ranging from IDR 77.8 million to IDR 120.8 million, depending on the brand and specification. For more detail, see Figure 3. Based on the data on sales (market share), it is seen that Toyota

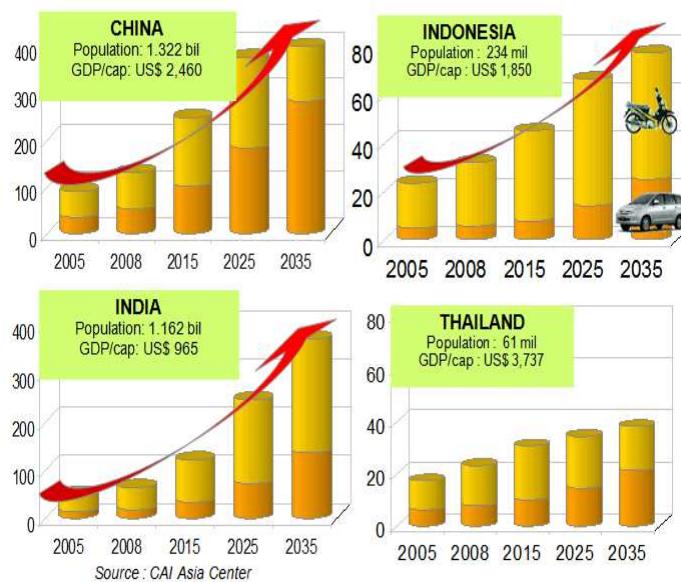


Figure 1. Estimated use of cars and motorcycles (in million)

Source: Toyota Astra Motor

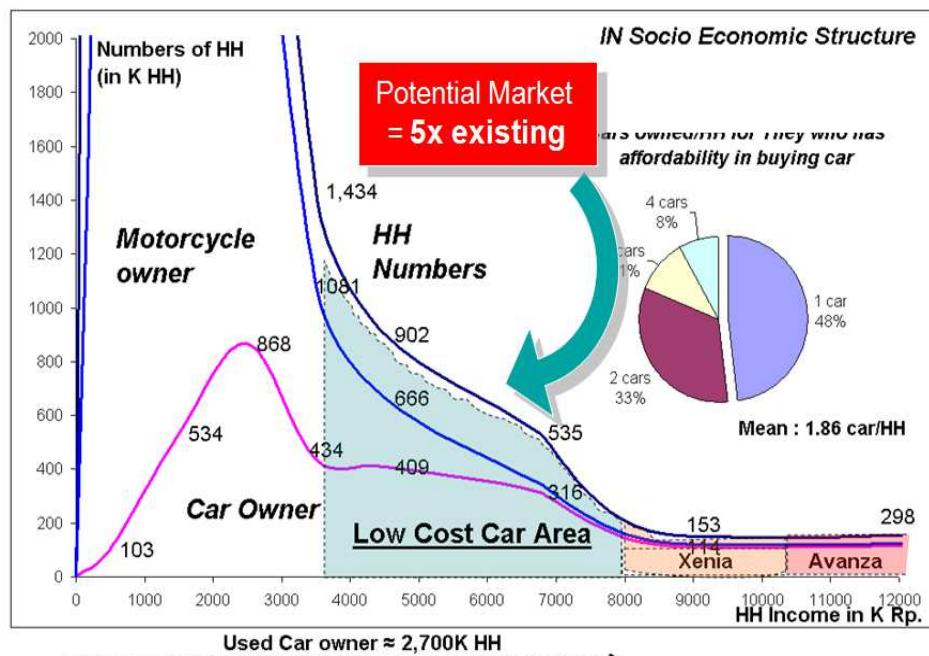


Figure 2. Emerging Market Size

Source: Toyota Astra Motor

Agya occupies the top position with market share 40.7%, followed by Daihatsu Ayla (26.3%). In the bottom position there are Nissan, Datsun Go+ (7.1%), and Suzuki Wagon R (11.2%).

This condition is different from the result of survey on QUALITY carried out by JD Power Asia Pacific, an independent survey institution based in Singapore, which shows that Suzuki Wagon R occupies the top position, followed by Toyota Agya and Daihatsu Ayla (see Figure 4). This condition makes the author interested in studying how the perception on quality affects the buying intention for low cost green cars.

In the business environment, customers demand quality and companies try to meet it, creating competition in quality. Powell (1955) explicitly states that the quality programs such as Total Quality Management, Baldrige Awards, and Six Sigma have helped companies in improving their quality, especially in manufacture. Not only that, academic researches also give contribution to us in understanding quality.

For example, the marketing explanation about service quality has improved our understanding in the perception on quality, customer expectation, and satisfaction (Boulding et al. 1993; Cronin and Taylor 1994; Oliver 1980; Parasuraman, Zeithaml, and Berry 1985, 1988; Zeithaml 1988).

According to Aaker (1991), Perceived quality can be defined as the customer's perception on the total quality or excellence of a product or service relative to the alternatives.

Some writers propose an alternative Quality Framework of product or service but not in the integrated sight of both (Parasuraman, Zeithaml, and Berry 1988; Brucks, Zeithaml, and Naylor 2000; Brady and Cronin 2001). Some researchers integrate the perceived service quality and perceived product quality (Lien Ti Bei, Yu Chin Chiao, 2001; Peter N. Golder, Debanjan Mitra, & Christine Moorman, 2012,).

It can be said that most industries, including automotive industry, provide tangible goods and intangible services, and

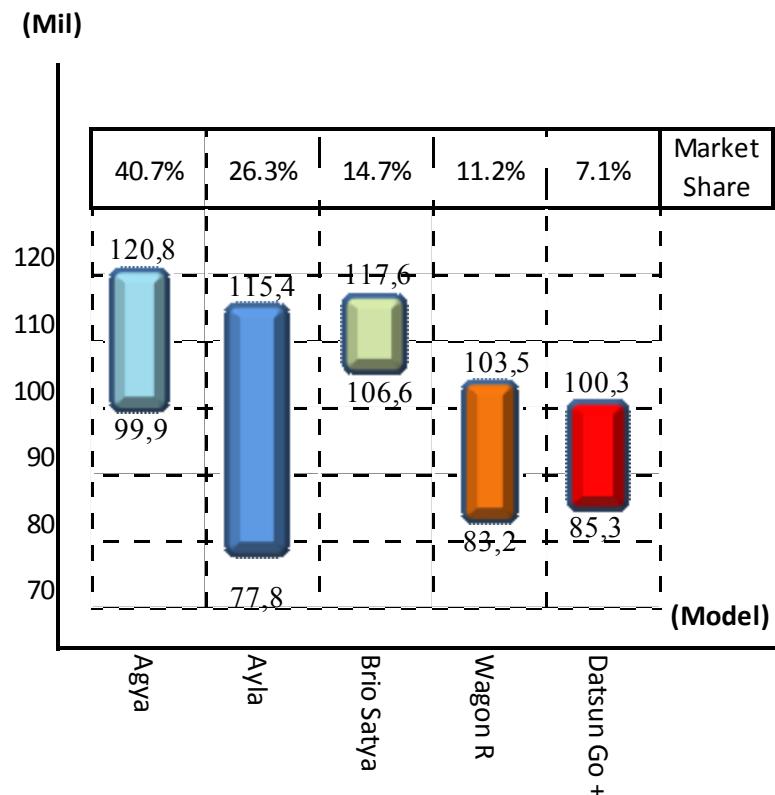


Figure 3. Prices vs Market Share (August 2014)  
 Source: Self-processed from Gaikindo and the dealers' official web

### ***Top Three Vehicles per Segment in Initial Quality***

*Lower score reflects higher quality performance*

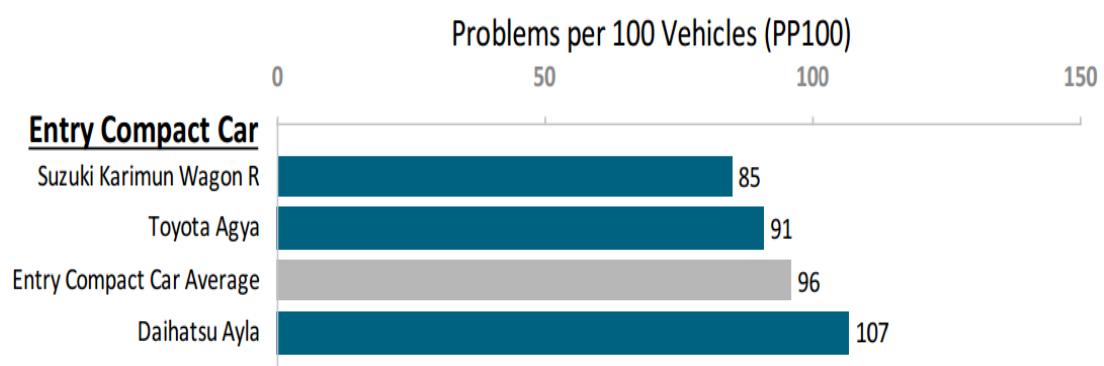


Figure 4. The best three cars in the segment of *Entry Compact Car*  
 Source: JD Power Asia Pacific 2014

both of them have important roles in the purchase intention. Therefore, perceived quality which will be studied in this article is divided into two: perceived product quality and perceived service quality.

How a product looks, feels, sounds, tastes, and smells is of personal judgment. It shows how important a better understanding in the perceived product quality is (Garvin, 1984). In another word, it is important to identify the differences between the ways the producers and consumers perceive quality (Morgan, 1985).

This study uses the concept of perceived product quality from Brucks et al (2000) since this concept has conformity with the character of the object to be studied; i.e. the quality dimension of durable goods. Since this research is carried out in the automotive industry which is categorized

durable product, thus the dimensions of perceived product quality to be used are (1) Ease to use, (2) Versatility, (3) Durability, (4) Serviceability, (5) Performance, (6) Prestige. See Table 1.

According to Gronroos (1984) related to perceived service quality it is said that: [...] The result of evaluation process, [in which] consumers compare their expectation with the service they have seen and received, i.e. they position the service they received against the service they expect. The result of this process will become the perceived service quality. This Gronroos' opinion (1984) is followed by Rust and Oliver (1994). It can be seen on Figure 5.

The second theme, the definition of perceived service quality from Parasuraman et al. (1991, 445) says that: servqual is a

Table 1 The Dimensions of perceived product quality according to Brucks

(1) Ease of use	Consumer's ability to start and operate the product and the clarity of instrumentations and instructions;
(2) Versatility	Involving the number and complexity of characteristics that differentiate the model or brand with the lower model;
(3) Durability	Involving product life cycle, effective product life cycle (i.e. whether it frequently need services); and how well the product scrape along the weather, heavy use, or misuse;
(4) Serviceability	Including the ease for consumers to find maintenance service (i.e. access to service center and/or the ease for self-service), the response of service officers (i.e. the ease to make a date, the maintenance personnel's willingness to listen to the customer), and the service reliability (i.e. whether the service is delivered right in the first time); Referring to how well a product performs what it must perform. For example, the performance of a car involves its strength, security, and comfort;
(5) Performance	Involving how well a product communicates its excellence to the buyers and relevant buyer communities;
(6) Prestige	

Source: Brucks (2000:361)

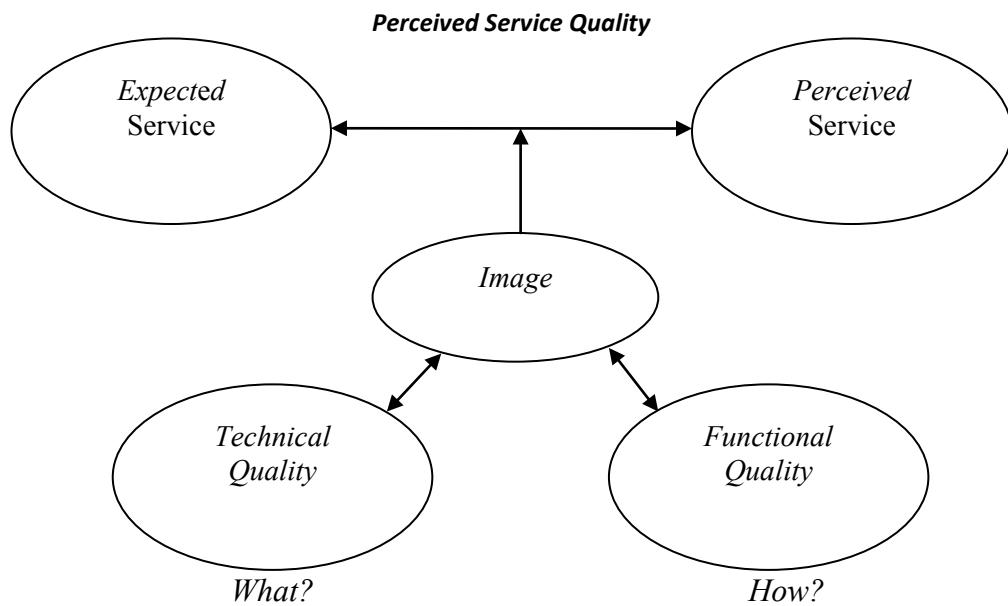


Figure 5. Gronroos' Model of Perceived Service Quality

Source: Gronroos (1984)

generic instrument having good reliability, validity and broad implementation [...] The aim of servqual is for diagnostic methodology in revealing the weak and strong area of a company's service quality. The dimension and point of servqual represent the criterion of core evaluation which cope with certain companies and industries.

Related to this opinion, according to Riadh Ladhari (2009), many researchers use servqual to measure service quality in various service industries such as Banking (Chi Cui et al 2003; Arasli et al. 2005), Health Instrumentations (Kilbourne et al. 2004, Baldwin et al. 2003); Information Technology (Jiang et al, 2000; Badri et al. 2005); Telecommunication (Van der Wal et al, 2002); Library (Cook and Thompson, 2000). According to Dabholkar et al (1996,1) Servqual has been empirically tested in a number of studies involving "pure" service settings.

Then, the third theme, the concept of perceived service quality from Dabholkar et al (1996, 13) says; the analysis on the service quality can be done in the aggregate

level (full scale), in the factor level (using points in the given dimension), and in the subdimension level (using points in the given subdimension). This concept is related to the construction structure of service quality that uses the hierarchical concept of retail service quality. This concept is supported by Brady and Cronin (2001) who examine four service industries (fast food, photograph, garden hall, and dry cleaning), and Wilkins et al (2007) for hotel industry.

Meanwhile, the dimension of perceived service quality according to Gronoos (1984) says; the dimension of perceived service quality as functional quality (the core service or what is delivered) and technical quality (how the service is delivered). Then Gronroos (2007) classifies service into three categories , namely core service, facilitating service, and supporting service. Facilitating service and supporting service are the details of functional quality, while core service is the analog of technical quality. In line with this research, Rust and Oliver (1994) propose a three-component model, namely (1) service

delivery (functional quality), (2) service product (technical quality), and (3) service environment.

Furthermore, the dimension of perceived service quality according to the research done by Dabholkar et al (1996) uses the hierarchical concept of service quality as follows: (1) Physical aspects, (2) Reliability, (3) Personal interaction, (4) Problem solving, and (5) Policy (see Figure 7).

Some other researchers using hierarchical approach are Brady and Cronin (2001) with their dimension of interaction quality, physical environment quality, and outcome quality. Wilkins et al (2007) even uses hierarchical approach for hotel industry and the dimensions used are physical product, service experience, and

quality food and beverage.

From several concepts of perceived service quality that have similarities, the research in this writing follows Brady and Cronin (2001) with the dimensions of perceived service quality that will be used are (1) interaction quality, (2) physical environment quality, and (3) outcome quality (see Figure 8).

Related to purchase intention, Samin et al (2012) states: "intention is the person's motivation in the sense of his or her intention to perform behavior". This is in line with the previous research done by Ajzen (1991) who states: intentions are assumed to grab the motivation factors influencing a behavior; they indicate how difficult people are willing to try from how many efforts they plan to do

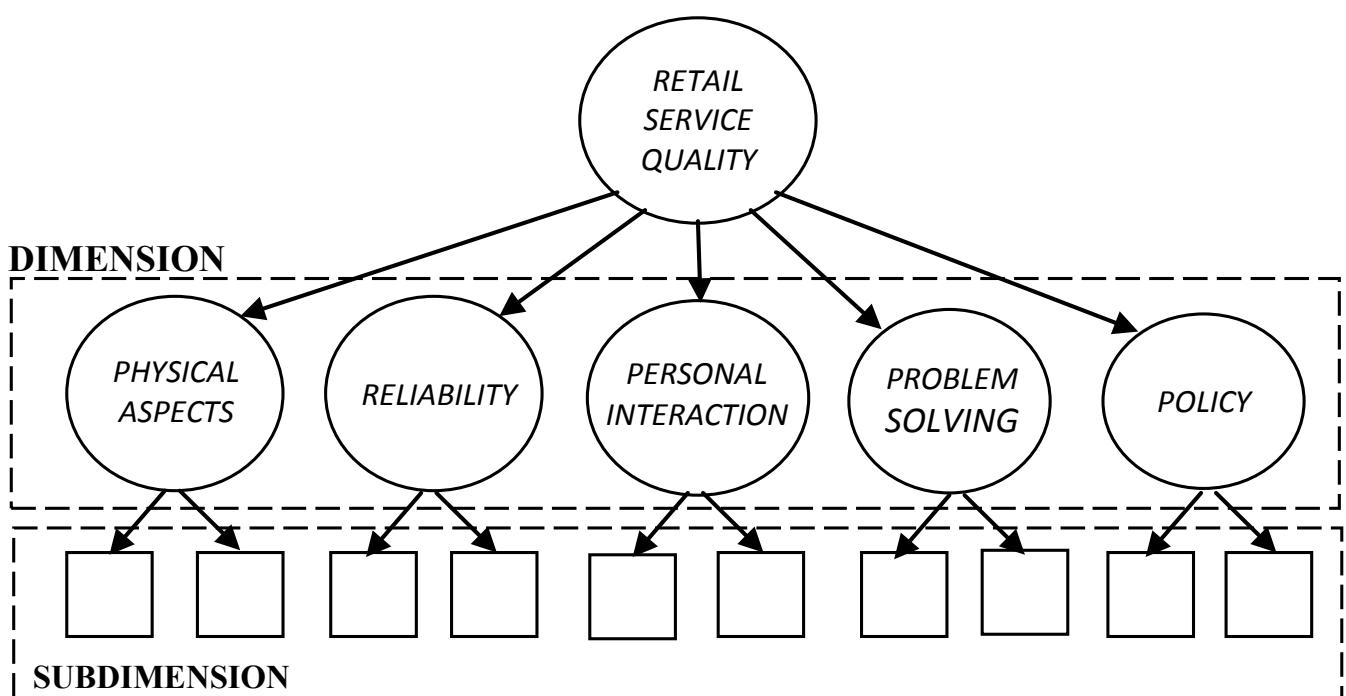
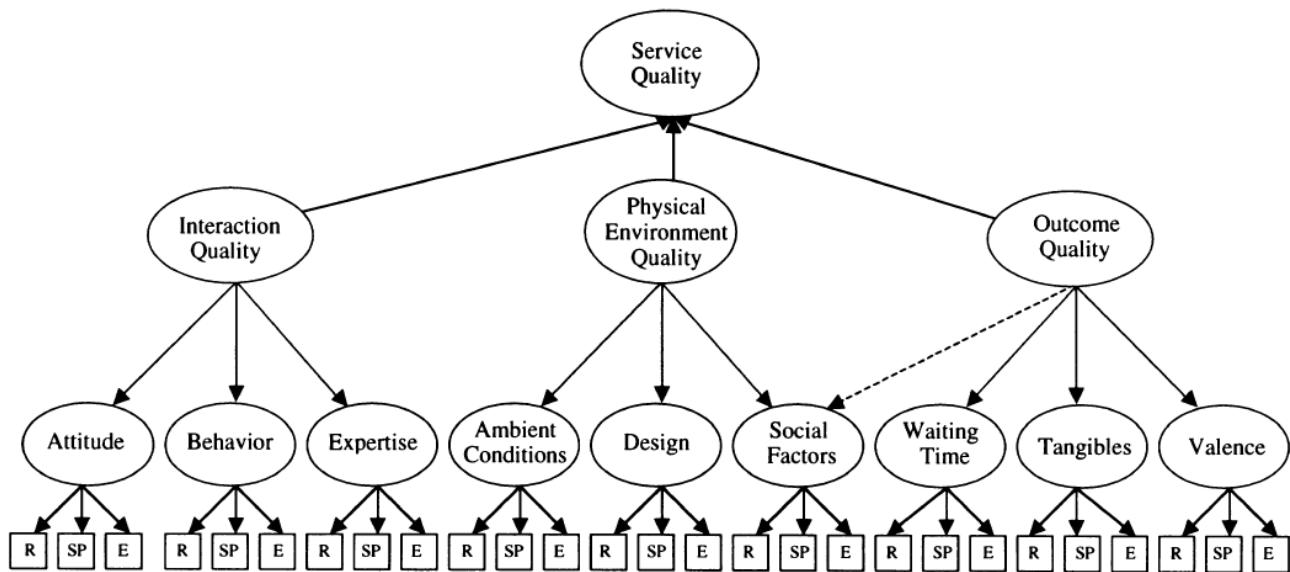


Figure 7. Dabholkar's Model of *perceived service quality*

Source: Dabholkar (1996, 11)

Figure 8. Brady & Cronin's Model of *perceived service quality*

Source: Brady and Cronin (2001, 37)

in order to meet the behavior. When the consumer has a purchase intention and positive commitment to a brand, thus this is an encouragement for the consumer to take a real buying action (Fishbein and Ajzen, 1975; Schiffman and Kanuk, 2007). Subsequently, the increase of purchase intention means the increase of opportunity for purchasing, according to Dodds et al (1991).

According to Kwek (2010) purchase intention can be classified as one of the consumer's cognitive behavior components regarding the individual who intends to purchase a certain brand. This opinion is in line with Teng Lefa and Laroche (2006) that purchase intention is one of the assessments regarding the individual who intends to purchase a certain brand.

The research for studing this uses the concept of purchase intention from Long-Yi Lin and Ching-Yuh Lu (2010). Their opinion is used as a base for explaining the existence of external stimulation factor in terms of price, product, from mouth to mouth (word of mouth) and brand image in the process of car purchasing.

There is one similarity from the concept and measurement of purchase intention as explained above; namely, they have one dimension: Willingness to Buy (Grewal 1998), the difference is only the way to measure that dimension.

## Analysis and Discussion

### The Correlation between Perceived Product Quality and Purchase Intention

Schiffman and Kanuk (2007) state purchase intention as consumer's decision making process in running his or her need, purchasing, evaluation, and product or service utilization to meet their need.

Based on the concepts of purchase intention from some experts, it can be interpreted that purchase intention is a purchasing decision process made by someone, starting from intention, consideration, expectation, and purchase plan which is influenced by external factors.

This research uses the measurement of purchase intention based on Tsui Yu Shih (2010, 58): we choose three items including

willing purchase, considering purchase and recommendation purchase to be the measure items of a purchase intention. This dimension is an integration of several researches. According to Compeau et al (1998), Grewal et al (1998), purchase intention is measured by willingness to buy for a product; Laroche et al (1996), Teng et al (2007) say purchase intention is one of the assessments regarding how someone intends to buy a certain brand.

Meanwhile, Brucks et al (2000) conclude that in the total quality, the dimension of quality is a better base for understanding the important correlation involved in the consumer assessment and choices. Furthermore, the research done by Wells, Joseph, and Tracy J (2011) related to the correlation between perceived product quality and purchase intention shows a significant correlation. This is in line with the previous research done by Boulding and Kirmani (1993), Dodds et al (1991), and Rao et al (1999).

Some other researchers also explain the correlation between perceived product quality and purchase intention are Tsotsou (2005) for sport shoes and Shaharudin et al (2010) for motorcycle/scooter.

Researches in purchase intention done by Teng Lefa & Laroche (2006) and Teng et al (2007) also use one dimension with four kinds of measurement, namely (1) intend to buy, (2) consider buying, (3) expect to buy, (4) plan to buy which are done for the products of shoes and camera. In line with the above-mentioned researches, Young et al (2008) carry out a research in the product of foods using three kinds of measurement, namely (1) plan to continue purchasing, (2) intend to increase the size, (3) intend to increase the frequency.

Another research related to purchase intention is also done by Wu et al (2010) in drugstore using two kinds of measurement: (1) intend to buy, (2) plan to buy. Meanwhile, Tsui Yu Shih (2010) in his research in retail

store uses three kinds of measurement: (1) willing purchase, (2) considering purchase, (3) recommendation purchase.

### **The Correlation between Perceived Service Quality and Purchase Intention.**

Based on the concept of perceived service quality from some experts, it can be interpreted that perceived service quality is a consumer judgment against the quality of service he or she receives and perceives by comparing the expected service in the dimension level of interaction quality, physical environment quality, and outcome quality.

This research is deliberately uses the concept of perceived service quality from Dabholkar et al (1996, 13). His opinion is used as the research base because it has variable dimensions suitable with the characteristics of the object to be studied. This is in line with the opinion of Brady and Cronin (2001): This multilevel model recognizes the many facets and dimensions of service quality perceptions.

According to Taylor & Baker (1994), the development of better understanding on how the assessment of perceived service quality and customer satisfaction interact and/or influence each other in creating consumer's purchase intention ...”

There is a debatable problem concerning the correlation between perceived quality and purchase intention. Some experts have found the correlation between perceived quality and purchase intention (Carman, 1990; Boulding et al, 1993; Parasuraman et al, 1996), while some others report indirect correlation that is mediated by satisfaction (Cronin and Taylor, 1992).

The research done by Perez et al (2007) in public transportation sector finds the correlation between the five dimensions of service quality and purchase intention, saying “The finding that service quality has

a significant effect on behavioural purchase intentions..."

## Conclusion

Tight competition between producers and consumers, and even sellers of low cost green car, shows the different condition between bibliographical study and the actual condition. Bibliographical study shows the influence of perceived product quality and perceived service quality on the consumer's purchase intention, while the actual condition does not show the influence of perceived quality on purchase intention represented by the sales volume of low cost energy-saving car. Therefore, it is necessary to carry out further researches to examine the impact of perceived quality on purchase intention in the segment of low cost energy-saving car in Indonesia.

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