

Designing Customer Satisfaction Measurement System for a SME Laundry Services Company

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Abstract

A Fundamental issue faced by Small Medium Enterprise (SME) in Indonesia is the increasingly competitive business competition. It is also occurred in the laundry service industry. In order to maintain the business or success in the business competition, SME laundry service company should focus on business key success factors. One of the key success factors is customer satisfaction. Therefore, it is important for the SME laundry service company to have a tool for monitoring customer's satisfaction. This research aims to propose a customer satisfaction measurement system for SME laundry service company in Indonesia. The customer satisfaction measurement system can be used by the SME laundry service company to monitor its customer satisfaction. The research was conducted by three phases, i.e. (1) developing a customer satisfaction measurement system, (2) trial of the customer satisfaction measurement system, and (3) evaluating the customer satisfaction measurement system. We performed several data collection methods, i.e. literature review, observation, interview, company document study, and survey. The research results show that the customer satisfaction measurement system for SME laundry service company in Indonesia consists of two measurements type, namely (1) simple-measurement, and (2) complex-measurement. This paper will describe the system and the research implications.

Keywords

Customer satisfaction, measurement, SME laundry service, Indonesia

1. Introduction

1.1. Research Background

In globalization era, a fundamental issue faced by Small Medium Enterprises (SMEs) in Indonesia is the increasingly competitive business competition. The competition happens not only among the products of domestic SMEs but also between the products of domestic SMEs with foreign products in domestic market (Bakti, 2016). Moreover, the requirement/standard of Indonesian consumers on a product is increasing (Razdan et al., 2013). Given this, they are also getting easier to switch from one product brand to another product brand.

One of developing service industries in Indonesia is laundry service. The service is one of the service industries that are increasingly needed by the urban society. Even we could find easily the laundry service almost in every city in Indonesia. Based on the statistic, the number of laundry service increased annually (Melany et al., 2010). In Indonesia, there are two associations of the laundry service company, namely Asosiasi Laundry Indonesia (ASLI) and Asosiasi Pengusaha Laundry Indonesia (APLI).

In order to maintain the business or success in business competition, SME laundry service company should focus on business key success factors. One of the well-known and accepted key success factors of a business in literature is customer satisfaction. Many studies suggested that customer satisfaction provides positive effects, i.e. repurchase intention (Shin et al., 2017; Athanassopoulos et al., 2001; Lin and Lekhawipat, 2014), word of mouth (Shin et al., 2017; Carpeneter and Fairhurst, 2005; Athanassopoulos et al., 2001), customer loyalty (Kim, 2007; Kandampully and Suhartanto, 2000; Bakti and Sumaedi, 2013), profitability (Niraj et al., 2008; Keiningham et al. 2005), firm value (O'Sullivan and McCallig, 2012), etc. Many business academics and practitioners acknowledged that it is important for the business to measure customer satisfaction. In fact, the good management practices, such as Balance Score Card (Kaplan and Norton, 1996) and ISO 9001: 2015 – International Standard for Quality Management System (ISO, 2015), require organization to measure the performance of organization from customer perspective or perception. Based on the explanation, therefore, it is important for SME laundry service company to have a system for measuring its customers' satisfaction.

1.2. Research Gap and Objective

In existing literature, customer satisfaction measurement systems have been developed by several scholars. Fornell (1992) established a national customer satisfaction measurement model in Sweden context. Fornell et al. (1996) developed a national customer satisfaction measurement model in United States context. In addition, European customer satisfaction measurement model has been developed by Cassel and Eklof (2001). The other scholars also proposed several customer satisfaction measurement systems, such as Aydin and Ozer (2005), Song et al. (2012), El-Bassiouni et al. (2012), Turkyilmaz et al. (2013), Jhonson et al. (2001), Chiu et al. 2011), and Lobato-calleros et al., (2013), etc.

Developing a customer satisfaction measurement system for SME laundry service company in Indonesia becomes necessary because the expectations of Indonesian customers are different from the customers from other countries. Consequently, the customers' satisfaction measurement systems designed in the others countries may not suitable for the context of a company in Indonesia. Therefore, it is important for the SME laundry service company to have a customer satisfaction measurement system that fit to the context of a company in Indonesia. Unfortunately, as far as the researchers know, there is no study that developed a customer satisfaction measurement system for SME laundry service company in Indonesian contexts.

Based on the research gap, we argued that it is necessary to develop a customer satisfaction measurement system for SME laundry service company in Indonesian contexts. Therefore, the objective of this research is to design customer satisfaction measurement system for SME laundry service. The system can be used by SME laundry service company practitioners to measure their customers' satisfaction. Furthermore, the system also may be used by academics in researching and understanding SME laundry service company customers' satisfaction.

2. Literature Review

Customer satisfaction is not a new concept in management literature. Customer satisfaction has been studied more than 50 years ago. The concept has received a great attention from both academicians and practitioners. Even though customer satisfaction has been long studied, there is a widely debated on the concept of customer satisfaction (Akbar and Parvez, 2009). In the literature, there are various definitions on customer satisfaction (Giese and Cote, 2000). Some experts (e.g., Cadotte, Woodruff, and Jenkins 1987; Westbrook and Reilly 1983) defined customer satisfaction as an emotional response. For example, Oliver (1997) stated “customer satisfaction [is] a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over fulfillment” (Giese and Cote, 2000). Other experts (e.g., Bolton and Drew 1991; Howard and Sheth 1969; Tse and Wilton 1988) believed that customer satisfaction is cognitive response. For example, Howard and Sheth (1969) defined customer satisfaction as “the buyer’s cognitive state of being adequately or inadequately rewarded for the sacrifices he has undergone” (Giese and Cote, 2000). Furthermore, some experts viewed customer satisfaction as the response that may be comprised of both cognitive and affective dimensions (e.g., Churchill and Surprenant 1982; Swan, Trawick, and Carroll 1980; Westbrook 1980). For example, Westbrook (1980, cited in Giese and Cote, 2000) stated that customer satisfaction as “the favorability of the individual’s subjective evaluation of the various outcomes and experiences associated with using or consuming it (product)”.

Some previous researches related to customer satisfaction in laundry service have been conducted. For example, Bhate and Shivdas (2017) identified critical success factors of customer satisfaction in laundry service. They conducted a quantitative research with survey method. 126 questionnaires were distributed to customers of laundry services that spread across different states within India. The result stated that customers’ service perceptions were lower than their expectations in all five dimensions of service quality. Based on the result, then they identified critical success factors of customer satisfaction in the five dimensions. Ansari et al. (2015) carried out a descriptive research with exploratory approach to identify customers’ perception toward laundry and bar services at the leading star hotels in Salem city, Tamilnadu, South India. They used purposive sampling technique to collect data. 300 customers visited the star hotels in Salem city were interviewed. In the research, level of customer satisfaction was described and recommendations to attract new customers and to retain existing customers were delivered. Furthermore, Goudar et al. (2016) studied customer and staff satisfaction toward linen and laundry service at a tertiary care hospital. The study aimed to identify the crucial factors of their satisfaction. They performed observation, interview, and survey using questionnaire in the study. They found the crucial factors to increase patient and staff satisfaction. Chou et al. (2001) and Najib et al. (2001) respectively measured resident satisfaction in residential aged care and student satisfaction toward student housing facilities which one of the measured facilities is laundry service. They agreed that quality of laundry service is important to increase resident satisfaction.

3. Research Methodology

The design of this study can be seen at Figure 1. This research was conducted by three phases. The first phase is formulating a customer satisfaction measurement system for SME laundry service company. The objective of the first phase is to develop a generic customer satisfaction measurement system that can be used by SME laundry service company in Indonesia. In the first phase, we employed several collection methods. First, we performed interview, observation, and document study of a SME laundry service company in order to understand the nature of a SME laundry service, its business process, and its practices regarding customer management. The company is a SME laundry service company in Kota Bogor, West Java, Indonesia. Currently, the company has three outlets. If a customer wants to get the laundry service, they could come to the outlet and bring their “dirty” clothes. On other hand, the company also provides pick up services. The customer of the laundry service calls the outlet and the outlet personal will pick up the “dirty” clothes. The second step of this phase is we performed a literature review on customer satisfaction measurement system and formulated the customer satisfaction measurement system. The last step in this phase, we sent the system we have developed to the Director of The SME laundry service company previously engaged in this research in order to check the applicability and suitability of the system with the laundry service conceptually. In other words, the last step of this phase is content validity testing. We selected the Director of the company as the respondent of the content validity testing since in the company she directly managed and executed the marketing programs, including customer satisfaction survey.

The second phase of this research is trial of the customer satisfaction measurement system. The second phase aims to implement the system in a laundry service company operationally. In this phase, we implemented the system in the SME laundry service company previously engaged in the first phase of this research. The trial was performed by performing survey with questionnaire to the customers of the company.

The last phase of this research is evaluating the customer satisfaction measurement system. The purpose of third phase is to evaluate the system we previously developed and re-develop a customer satisfaction measurement system that fit to SME laundry service company. In the third phase, we interview the Director of the company. We selected the Director of the company as the respondent of the evaluation phase since in the company she directly managed and executed the marketing programs, including customer satisfaction survey. In the interview, we collected information regarding the company experience in the trial phase, the benefits of the system, and the obstacles or difficulties the company faced in implementing the system.

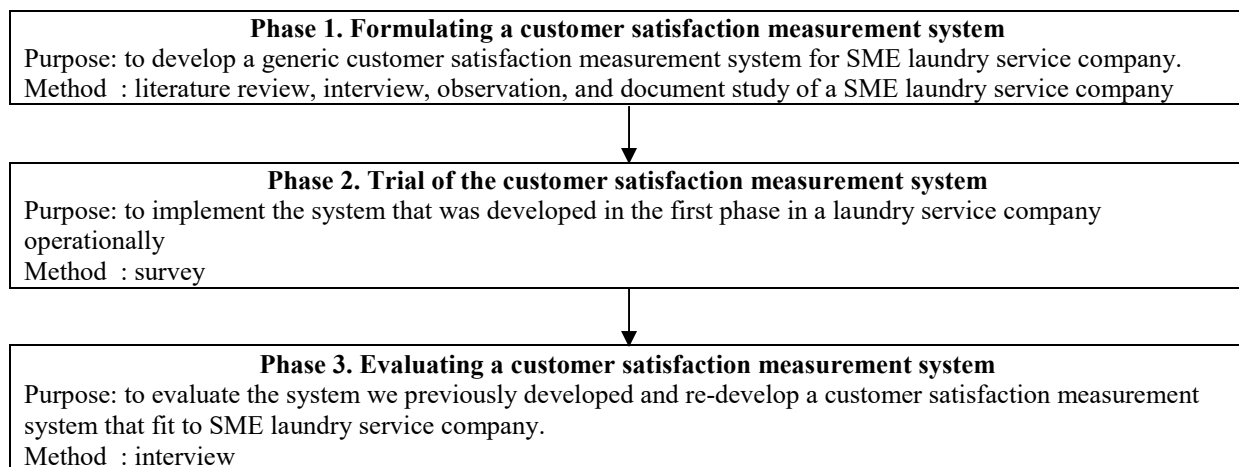


Figure 1. Research Design

4. Result and Discussion

4.1. Customer Satisfaction Model for SME Laundry Service

Based on the literature studies, we suggested that the customer satisfaction measurement system for SME laundry service company should adopt the balance principle of consumer behavior measurement (Jhonson et al., 2001). We selected the principle because scholars acknowledged the excellence of the balance principle of consumer behavior measurement (e.g. Lobatto-Calleros et al., 2013; Turkyilmaz et al., 2013; Hsu, 2008). The popular of customer satisfaction measurements also applied the balance principle of consumer behavior measurement, for examples American Customer Satisfaction Index (ACSI) (Fornell et, al, 1996), Swedish Customer Satisfaction Barometer (SCSB) (Fornell, 1992), European Customer Satisfaction Index (ECSI) (Cassel & Eklof, 2001), and Taiwan Customer Satisfaction Index (TCSI) (Chiu et al., 2011).

Based on the balance principle of consumer behavior measurement, the design of customer satisfaction measurement model should include causal (leading) variable related information and effect (lagging) variable related information (Jhonson et al., 2001). The lagging variable is customer satisfaction and the leading variable is the variable that influences customer satisfaction. Furthermore, both the causal (leading) variable and effect (lagging) variable should be measured by multiple observed indicators since the variables can be categorized as latent variables (Sekaran and Bougie, 2010).

In this study, the design of customer measurement model was developed by the causal relationship between service quality and customer satisfaction. Previous studies have confirmed that service quality have a positive impact on customer satisfaction (e.g. Olorunniwo and Hsu, 2006; Silvestri et al. 2017; Paul et al., 2016; Bakti and Sumaedi, 2013; Sumaedi et al. 2013). Indeed, some scholars used service quality concept to measure customer satisfaction (e.g. Wisniewski, 2001; El-Bassiouni et al., 2012; Chatzoglou et al., 2014). More specifically, in this study, laundry

service quality is represented as the leading variable and customer satisfaction is represented as the lagging variable. Customer satisfaction reflects the satisfaction level of the customers and laundry service quality reflects the level of service performance perceived by customers. Figure 2 shows the conceptual model of the SME laundry service company customer satisfaction measurement system.

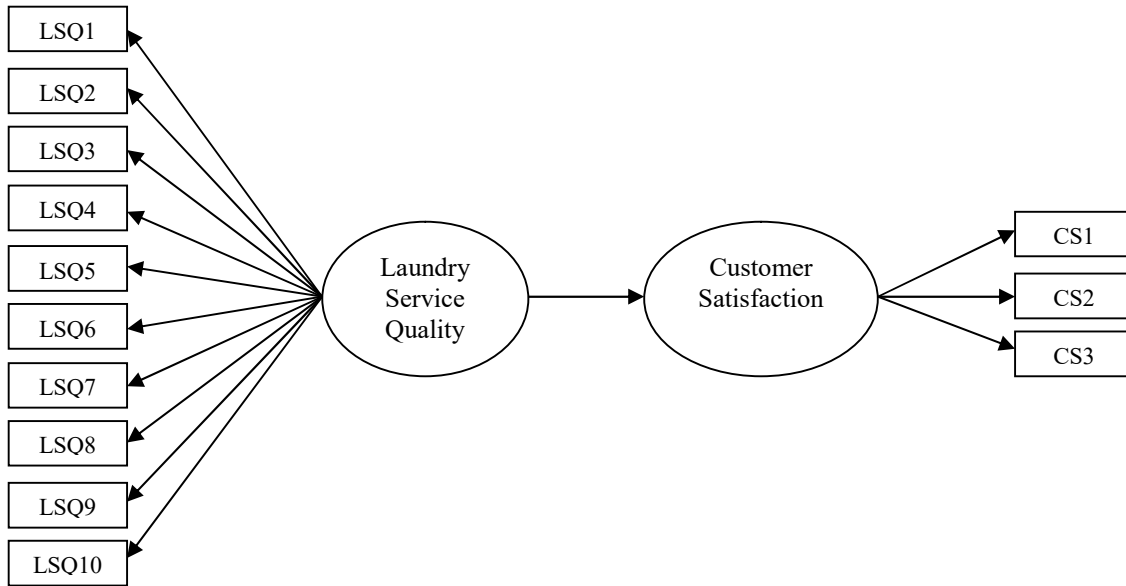


Figure 2. The conceptual model

Based on literature review, interview with the Director and Marketing personnel of the SME laundry service company, and the study of the company document regarding the customer satisfaction measurement practices, we proposed that customer satisfaction is measured using three indicators and laundry service quality is measured using ten indicators. The customer satisfaction measurement concept and the involved variables and indicators were checked by the Director of the SME laundry service company in order to ensure the content validity as well as the applicability and suitability of the system with the laundry service conceptually. The Director has agreed with the concept and the involved variables and indicators. Table 1 shows the variables and its indicators that we used in SME laundry service company customer satisfaction measurement system.

Table 1. The variables and indicators of SME laundry service company customer satisfaction measurement system

Variables	Indicators	References
Satisfaction	<ul style="list-style-type: none"> • Overall customer satisfaction • Performance versus the customer’s ideal service provider • Expectancy disconfirmation 	Fornell et al. (1996), Jhonson et al. (2001), Chiu et al. (2011)
Laundry Service Quality	<ul style="list-style-type: none"> • Convenience of the outlet • Politeness of the employee • Responsiveness of the employee • Professionalism of the employee • Quickness of pick-up and service delivery • Cleanliness of the laundry results • Tidiness of the laundry results • Fragrance of the laundry results • Packaging quality • The finishing service schedule is on time 	Parasuraman et al. (1988; 1994), Ansari et al. (2015), Bhate and Shivdas (2017), Goudar et al. (2016)

4.2 Measuring SME Laundry Service Company Customer Satisfaction (Trial)

As previously explained in research methodology section, after we formulated the customer satisfaction measurement system for SME laundry service company, we tried to implement the system in a customer satisfaction measurement in The SME laundry service company that previously involved in the first phase of this research. The data collection of the system was designed through survey with questionnaire. The measurement indicators were measured using a 5 point Likert scale, ranges from 1= very disagree to 5 = very agree. Therefore, the company should perform customer satisfaction survey.

The company performed the survey. The survey could collect 25 respondents. The respondents are the customers of three outlets of the company.

To measure customer satisfaction, our measurement system adopted the index scoring system. One of the existing customer satisfaction measurement systems in current literature that is adopted the index scoring system is American Customer Satisfaction Index (ACSI) (Fornell, 1996). According Based on the study of Fornell et al. (1996), the formula of the index is as follows.

$$\text{Customer Satisfaction Index (CSI)} = [(\sum_{i=1}^n w_i x_i - \sum_{i=1}^n w_i) / ((\max-1) \sum_{i=1}^n w_i)] \times 100 \dots\dots\dots(i)$$

where xi is the value of the observed variable of customers' satisfaction, n is the number of the observed variables of customers' satisfaction, wi is the weight value of the observed variable of customers' satisfaction, and max is the highest value of the observed variable of customers' satisfaction.

Table 2. Customer Satisfaction Index of the Research Case Study

Indicators	Wi	Xi	Wi*Xi
CS1	0.333	3.920	1.307
CS2	0.333	3.840	1.280
CS3	0.333	3.600	1.200
1 (Σ Wi*Xi - ΣWi)			2.787
2 ((max-1) Σwi)			4
CSI = [(1)/(2)] x 100			69.67 %

Table 3. Service Quality Index of the Research Case Study

Indicators	Wi	Xi	Wi*Xi
LSQ1	0.1	3.960	0.396
LSQ2	0.1	4.200	0.420
LSQ3	0.1	3.880	0.388
LSQ4	0.1	3.880	0.388
LSQ5	0.1	3.550	0.355
LSQ6	0.1	3.792	0.379
LSQ7	0.1	3.920	0.392
LSQ8	0.1	3.880	0.388
LSQ9	0.1	4.240	0.424
LSQ10	0.1	4.040	0.404
1 (Σ Wi*Xi - ΣWi)			2.934
2 ((max-1) Σwi)			4
CSI = [(1)/(2)] x 100			73.35 %

The index of service quality (SQI) is calculated based on the general form as follows.

$$\text{Service Quality Index (SQI)} = [(\sum_{i=1}^n w_i y_i - \sum_{i=1}^n w_i) / ((\max-1) \sum_{i=1}^n w_i)] \times 100 \dots\dots\dots(ii)$$

where y_i is the value of the observed variable of service quality, n is the number of the observed variables of service quality, w_i is the weight value of the observed variable of service quality, and \max is the highest value of the observed variable of service quality.

Based on the formula, customer satisfaction index and service quality index of the SME laundry service company were shown at Table 2 and Table 3. The results found that service quality index is 73.35 % and customer satisfaction index is 69.67 %. Hence, the results stated that the laundry service quality is good and the customer of the company is satisfied.

4.3. Evaluation

After the system was implemented in a SME laundry service company, we evaluated the system by interviewing the Director of the company. Based on the results of the interview, there are two important notes on our proposed customer satisfaction measurement system for SME laundry service company. First, the Director feels that the result of the measurement system is very informative. This is because the result not only provides customer satisfaction level but also produces the information about quality level of laundry service.

Second, however, the Director feels that the data collection (questionnaire distribution) that is required by our proposed system is difficult for SME laundry service company because the company has limited resources to perform it. Furthermore, based on the company experience, many customers rejected to fill the questionnaire because filling the questionnaire needed more time and they had no time to undertake it even though the questionnaire of the system is only one-page questionnaire. Given this, there are only a few customers that want to fill the questionnaire.

Based on the evaluation, we and the Director of the SME laundry service company agreed that the customer satisfaction measurement system for SME laundry service company should consist of two measurement types, namely (1) simple measurement type, and (2) complex measurement type. Figure 3 shows the type of the customer satisfaction measurement system for SME laundry service company after the evaluation phase.

The simple measurement type is the customer satisfaction measurement system that only asks every customer to respond one question, whether they are satisfied or no satisfied after they finished the transaction with the company. The simple measurement aims to obtain the information of customer satisfaction level quickly and up to date. This function of the measurement system is the early warning of customer satisfaction of the company.

The data collection of the simple measurement system can be performed by providing a customer satisfaction box and customer can fulfill the box with "satisfaction card" if they are satisfied with the services and "dissatisfied card" if they are not satisfied with the services. The data collection will be performed daily during the operation of laundry services. The result of simple measurement is obtained from the percentage of satisfied and dissatisfied customer. The analysis can be performed monthly.

This measurement system is expected more efficient compare to the system we have previously developed in collecting customer satisfaction data because customers only respond one question whether they are satisfied or dissatisfied. There is no another question in the simple-measurement system. Nevertheless, the weakness of the simple measurement is no more information related customer satisfaction. Thus, the more comprehensive measurement system is also needed to be performed and we called it as the complex measurement system type.

Second, the complex measurement type is the measurement that asks customers to fill the questionnaire that questions not only their customer satisfaction but also the antecedent of customer satisfaction. The objective of the complex measurement is to gain comprehensive information related to customer satisfaction. The method of this measurement system is the customer satisfaction measurement system that is developed by the first and second phase of this study. This measurement adopted the causal relationship of service quality and customer satisfaction. Given this, the results of the measurement type provide not only customer satisfaction level but also the laundry service quality level. The results of this measurement type become the consideration for a SME laundry service company to improve which part of its laundry service. This measurement can be performed by SME laundry service company every six months or once a year.

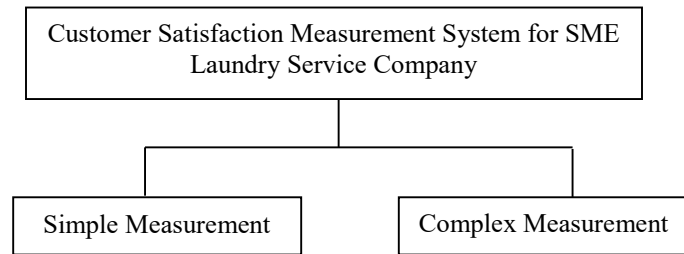


Figure 3. The type of the customer satisfaction measurement system for SME laundry service company after the evaluation phase

4.3. Research Implication

It is well known and well documented in both academic literature and popular book that customer focus is a key success factor for service industries. Therefore, it is important to service industries, such as laundry service company, to employ customer management. One of the well-known customer management processes is a company have to measure customer satisfaction. ISO 9001, a popular quality management system international standard, requires organization to perform customer satisfaction measurement (ISO, 2015). Therefore, it is important for SME laundry service company to have customer satisfaction measurement system. However, to date, there is lack of literature discussing this topic. Given this, the first contribution of this paper is fulfilling the research gap regarding SME laundry service company customer satisfaction.

This paper tried to propose a customer satisfaction measurement system for SME laundry service company that can be used to monitor the customer satisfaction. This system proposed two types of customer satisfaction measurement, i.e. (1) simple measurement, and (2) complex measurement. The simple measurement was performed by asking only one question about the customer satisfaction level. This measurement asks every customer to response satisfied or dissatisfied after they make a transaction with the company. The simple measurement is useful to obtain quick and update information of customer satisfaction. Furthermore, it can be used as “early warning system” for the company regarding the customer satisfaction.

The complex measurement employed the balance principle of consumer behavior measurement that refers to the causal relationship of laundry service quality and customer satisfaction. The complex measurement aims to find comprehensive information about customer satisfaction of SME laundry service company. This measurement able to provide the information on customer satisfaction and quality level of laundry service company. This measurement also could reveal the performance laundry of each service item and it can be an input for improving the quality of laundry service.

Referring to the previous explanation, the second contribution of our research is the system that we have developed can be used by the laundry service practitioners to measure its customer satisfaction. The result of this measurement could be integrated with customer segmentation to create an effective and efficient marketing strategy.

Our system also proposed the indicators that can be used to measure customer satisfaction and service quality of laundry service. Thus, the indicators can be used by academics in researching and understanding SME laundry service company customers’ satisfaction and service quality.

5. Conclusion

The objective of this research is to design customer satisfaction measurement system for SME laundry service company. Related to the objective, we have developed a customer satisfaction measurement system for SME laundry service company. The system has fitted with SME laundry service company in Indonesian context. This is because the development of the system not only based on the literature but also we have implementing the system in a SME laundry service company.

The system has two customer satisfaction measurement types, namely simple measurement and complex measurement. The aim of simple measurement is to obtain update and quick information about customer satisfaction and complex measurement is to produce comprehensive information related to customer satisfaction and service quality level.

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