International Journal of Engineering & Technology, 8 (1.1) (2019) 222-227

International Journal of Engineering & Technology

Website: www.sciencepubco.com/index.php/IJET

Research paper

Cantas^{R} A Green Technology for Oil Palm Harvesting and Customer Satisfaction towards Services Quality of Cantas^{R} Suppliers in Malaysia

Zainon Mat Sharif[1]*, Nurul Jannah Jalil[2]

[1]*Institute of Energy Infrastructure, Universiti Tenaga Nasional,Putrajaya Campus, Jalan IKRAM-UNITEN, 43000 Kajang, Selangor.*
**Corresponding author E-mail: zainon@uniten.edu.my*

Abstract

Determining the relationship between customer satisfaction and services quality of Cantas^{R} suppliers was the major purpose of this study. The study employs empirical and descriptive design, with quantitative approach and purposive sampling using self-administrated questionnaires, were obtained from 30 smallholder respondents who is currently using Cantas^{R} from different supplier at the East Coast Region (Pahang state area), Peninsular Malaysia. The study reveals that there was a convincing relationship between customer satisfaction and services quality of Cantas^{R} suppliers. Therefore, it can be deduced that the service quality factors variable explains 73.20% of the variance that reflects the customer satisfaction on Cantas^{R} suppliers. The overall finding shows that the service quality as tangibility, reliability, responsiveness, assurance and empathy did play a significant role in determining the customer satisfaction on Cantas^{R} suppliers.

Keywords: *Cantas^{R} suppliers; Customer satisfaction; service quality*

1. Introduction

One of the important sections in the agribusiness sector in Malaysia is a palm oil industry and it has been instrumental in addressing rural poverty and employment opportunities. There are more than 550,000 small farmer works in this industry, which are cover near to 40% of the total planted area, thus, it makes this industry become is essential to the livelihood. Comparing with the year 2016, the planted area increases which is from 5.7 million hectares to the 5.8 million hectares for the year 2017 [1]. This was primarily induced by the increase in newly planted areas, particularly in Sarawak, which registered an increase of 4.7%. Sabah is still the largest oil palm planted State, with 1.55 million hectares or 27% of the total oil palm planted area, followed by Sarawak with 1.51 million hectares or 26%. Meanwhile, there was stated that 2.68 million hectares which covered 47% of the total planted area in Peninsular Malaysia (with 11 States). According to the Malaysian Palm Oil Board (MPOB), the number of smallholders has grown almost 47%, which is from 120,437 to 177,046 in 2007; as in January this year, smallholders have exceeded 180,000. Independent Smallholders (mainly growers with little or no assistance from the government or private plantations also play an important role in the industry. It is because they control 14% of the industry in the country. It is estimated that smallholders account for nearly 40 percent of the total oil palms planted in the country, with about 28 percent from supported and 12 percent from independent smallholders respectively, while private estates account for 60.7 percent [2].

2. Background of Study

Overcoming an inadequacy of supply of labor workforce is one of the most substantial challenges facing by the oil palm manufacturing on being a labor-intensive industry because it is brought around by increasing oil palm hectare and the difficulty or complexity in bringing workers from neighboring states. Thus, this current trend has required the plantation industry to get fuller use of mechanization of the harvesting process to improve worker's productivity. Hence, MPOB (Malaysian Palm Oil Board) has invented Cantas^{R} a motorised cutter to simplify the oil palm harvesting activities. This technology utilizes the special designated sickle and chisel, which is installed into the vibrating mechanism which creates greater speed for burning. A telescopic pole is set up with a gas engine to spur the vibrator. MPOB in collaboration with Saplantco Sdn Bhd (wholly owned by Sawit Kinabalu Berhad) has given Saplantco the license to manufacture and commercialize the production of Cantas^{R}.

2.1. What is Cantas^{R}.

Cantas^{R} is a machine or instrument used to cut palm fronds and ripe bunches (FFB) that based in gasoline engine. The cutter uses a sickle-C or the dot of the knife as a cutting unit. Cantas^{R} harvesting palm tree could reach a height of up to 5 meters of trees 13 years old and below. Cantas^{R} is easy to use and could reduce the burden of workers with the current method of harvesting. In summation, an increase

of productivity for more than doubled, therefore, it could increase profits to the local harvest and reduces the number of employees and operating costs.

Fig. 1: A motorised cutter for oil palm harvesting - Cantas^{R}

The usage of Cantas^{R} has been introduced since 2007. The innovation was designed by MPOB to help increase worker productivity and thus reducing dependency on foreign labour. Cantas^{R} has been marketed by four local providers appointed by MPOB namely Jariz Technologies Pvt Ltd, Fancy Power Sdn. Bhd, NAFAS Jentera Sdn. Bhd., and FELDA Agricultural Services Sdn. The procedure to use Cantas^{R} was introduced to ensure the usage of Cantas^{R} is understandable so that the users could operate the machine correctly and provides optimal impact. The usage of Cantas^{R} is new to the marketplace, and it is even in the process of purification in terms of improvements, including increases its resilience, especially 'head cutter'. The head cutter acts as the 'heart' to Cantas^{R} because it works as a mechanism that delivers high power and potent enough to overcome the hardness of palm fronds and palm fruit bunches, as good as to withstand rough handling by harvesters.

2.2 Statement of Problem

MPOB realized that labor productivity and scarcity is a problem that need to be resolved. The initiation of field machinery would be act as the answer for increasing labor productivity in solving the labor shortage problem. Labor productivity can be maximized in many ways, such as the invention of technology, automation of field operations and improvement in the caliber of the work force. Accordingly, bringing up to the prime minister's program which is NKEA (National Key Economic Area), the EPP3 (Entry Point Project) aims to increase the mean productivity of harvesters and reduces dependency on foreign labor in Malaysia [3]. In the former days, bamboo was the most popular choice of pole to be utilized for harvesting FFB (Fresh Fruit Bunches) for tall palms [4]. Withal, the productivity is still more down than expected. In order to increase the productivity of the harvester thus reducing the dependency on foreign labor, the MPOB had introduced the usage of Cantas^{R}.
According to Datuk Hamzah Zainudin (2010) Cantas^{R} has been commercialized since 2007, unfortunately to this day, a total of 559 units were used Cantas^{R} by the industry as compared to palm acreage of 4.7 million hectares [4]. This figure is unsatisfying. From the current, there may be several problems that might be confronted by the harvesters which affecting the exercise of the Cantas^{R}. Probably it might be the services that the supplier offers after sales [2].

2.2.1 Research Objective

The main objective of this study is to determine the relationship between customer satisfaction and service quality of Cantas^{R} suppliers. The specific aims of this work are:

i) To evaluate the effect of after sales services by the Cantas^{R} suppliers towards customer satisfaction
ii) To determine whether the tangibility of Cantas^{R} supplier services affecting the customer satisfaction
iii) To determine whether the reliability of Cantas^{R} supplier services affecting the customer satisfaction
iv) To determine whether the responsiveness of Cantas^{R} supplier services affecting the customer satisfaction
v) To determine whether the assurance of Cantas^{R} supplier services affecting the customer satisfaction
vi) To find out whether the empathy of Cantas^{R} supplier services affecting the client satisfaction

2.2.2 Research Questions

The main question, what is the significant relationship between customer satisfaction and service quality of Cantas^{R} suppliers, and the specific questions are:

i) What is the significant relationship between customer satisfaction and tangibility of Cantas^{R} services quality?
ii) What is the significant relationship between customer satisfaction and reliability of Cantas^{R} services quality?
iii) What is the significant relationship between customer satisfaction and responsiveness of Cantas^{R} services quality?
iv) What is the significant relationship between customer satisfaction and assurance of Cantas^{R} services quality?
v) What is the significant relationship between customer satisfaction and empathy of Cantas^{R} services quality

2.3 Research Framework

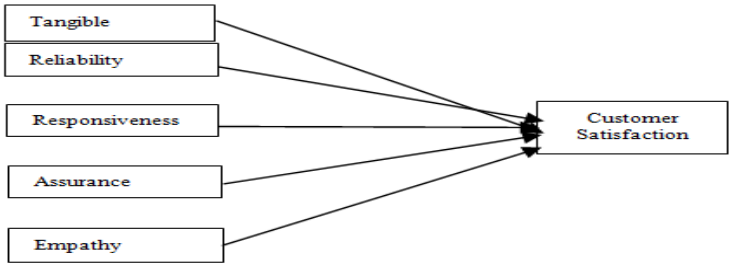

Fig. 2: Research Framework on the relationship between Customer Satisfaction and Service Quality

Operation Definition

i. Tangible - shows the existence of Cantas^R facilities, replacement of equipment, staff and reference materials.
ii. Reliability - a statement of Cantas^R ability to perform the promised service accurately harvesting
iii. Responsiveness - to show willingness of Cantas^R providers to help users or customers and provide after-sales service as soon as possible.
iv. Assurance - represent knowledge and courtesy of Cantas^R suppliers' staff and their ability to build trust and confidence of clients they are serviced.
v. Empathy - shows attention provided by Cantas^R to users or subscribers

2.4 Theoretical Framework

2.4.1 Servqual Theory

The organization must comprehend a service quality because it is a very important concepts that could help in business growth and sustaining. Thus, this concept will be meaningful when the organization could construct it from the consumer perspective that could help them identifying the consumer need and satisfy them. Service quality is considered very important because it leads to higher customer satisfaction, profitability, reduced costs, customer loyalty and retention.

Moreover, service quality is essentially focused on targeting the customer's needs and how good the service existing meets the customer's expectation of it. Nevertheless, based on the previous survey, service quality identification is hard to evaluate because it's intangible nature and deal with the anticipation and perception of the consumer. This hardship due to the complexity of human conduct which is irregular.

Service quality is generally distinct as the overall assessment of a service by the customers [5], or the extent to which a service meets customer's needs or expectations [6]. "The inconsistency between consumers' perceptions of services provided by a particular firm and their expectations about firms providing such services" is the right definition of the service quality [7]. The consumer would judge the service quality is low if what is perceived below expectation, but if what is recognized is meets or get beyond the expectation then consumer perceives quality to be gamey.

The critical part of service quality identified are consumer's expectation which is understood as what they feel service provider should offer and this is influenced by his/her personal needs, experience, word-of-mouth and service provider's communications, [8, 9] found, the intangible elements of a service (inseparability, heterogeneity and perishability) are the critical determinants influencing service quality perceived by a consumer. This demonstrates that a service must be vindicated by the provider in terms of its characteristics in society to understand how service quality is perceived by consumers.

The SERVQUAL model was included, Tangibles- physical facilities, equipment, and staff appearance, Reliability- ability to perform the promised service dependably and accurately, Responsiveness- willingness to facilitate clients and provide prompt service, Assurance- knowledge and courtesy of employees and their ability to inspire faith and confidence, Empathy -caring, individual attention the firm offers its customers [9]. These dimensions mainly focus on and the tangibles of service and the human facets of service delivery, such as responsiveness, reliability, assurance, and empathy.

Surveys carried out by Parasuraman, A., Zeithaml, V. A., & Berry, L. L. [10], stated that it is advocated that the SERVQUAL model is a good scale to apply when evaluating service quality in several specific industries, but that it is appropriate to take the most significant dimensions of this theoretical account that correspond to that particular service being measured in order to ensure authentic and valid outcomes. Service quality and customer satisfaction have received a great heap of care from both learners and practitioners because of their relevancy and relationship, according to [11] and the principal reason for focusing on these matters is improving overall public presentation of organizations [12].

2.4.2 Customer Satisfaction Theory

Client satisfaction is a term usually used in marketing to appraise about the wares or services offered by the company to fulfill customer need. Client satisfaction is defined as the number of clients or the percent of clients who have had experience with a product or services produced by an establishment to attract customer. According to [13] "satisfaction is an overall customer attitude towards a service supplier, or an emotional response to the difference between what customers expect and what they experience, regarding the fulfillment of some need, goal or desire"

Most researchers looked at a wide assortment of interests between customer satisfaction, [14] defines satisfaction as a person's tone of joy or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his/her first moments. If the performance falls short of expectations, the client would be dissatisfied and if it matches the expectations, the customer would be gratified. The importance of customer satisfaction is to ensure the sustainability of the product.

According to La Barbera, P. A & Mazursky, D., [15] there are many factors that affects customer satisfaction for example fast and efficient service, confidentiality of bank, speed of transaction, friendliness of bank personnel, accuracy of billing, billing timeliness, billing clarity, competitive pricing, and service quality are the key factors which significantly affect customer's satisfaction. In a measure to ascertain the evolution of customer satisfaction, companies must be able to fulfill the needs of providers and the willingness [16]. Whilst, an individual's internal process works as a catalyst, thus making it an issue that need to be addressed as it is another course of internal influences found in the example of consumer behavior [14]. The relationship between needs and wants is closely related to customer demands. Dependency on customers' needs in meeting their needs and wants and desires are always shifting according to environmental sites.

Customer satisfaction has a positive result on the profitability of the system. According to [17], satisfied customers form the groundwork of any successful job as customer satisfaction leads to repeat purchase, brand loyalty, and positive word of oral cavity. Established on the opinions and research performed by the researchers and academics, it can be concluded that customer satisfaction is very important, according to [17], through meeting various customer demands and demands which resultantly motivates them to go forward to do business with the organization on on-going basis.

Thus, even with no guarantee for customer satisfaction in the customer repurchase but it nevertheless acts as an important part in assuring customer loyalty to a product. This has been argued by Lunsford, B. R., & Lunsford, T. R. [18] when they alleged "the success of company sales is assured by customer loyalty, which could be determined by management action". Consequently, the supplier needs to constantly strive to assure that their customers are very satisfied in producing a product.

The customer satisfaction surveys are one way to collect all the important information on how the Cantas^R provider has met the expectations of clients, how Cantas^R provider performance in competition and how the provider can improve the process of Cantas^R provider to see and meet customer need. This survey is a very good source for customer testimonials and it is also enabled suppliers to make it as performance benchmarks for future comparison. As a researcher, we would build concept to measure customer satisfaction. More significantly, in the efforts to ensure that any measure has validity, as analysts are also requiring to consider several models of the field depends on situations of external agents and internal related with the study. As the analyst it needs to employ a very clear concept to serve the research and analysis for decision-making related to Cantas^R provider.

3. Methodology

The study employs exploratory and descriptive purpose, with quantitative approach and purposive sampling using self-administrated questionnaires, were held from 30 smallholder respondents who is currently using Cantas^R from different provider in the East Coast Region (Pahang state area), Peninsular Malaysia. Lunsford, B. R., & Lunsford, T. R. in [18] indicated that the minimal number of sample size could be 28. The instrument used in the questionnaires was adopted from Rahaman, M. M., Abdullah, M., & Rahman, D. A.

4. Results and Discussions

Table 1: Respondents' Demographic Profile

Particular	Items	Frequency	Percentage
Gender	Male	28	93.4 %
	Female	2	6.6 %
Age	18-27	1	3.4 %
	28-37	6	20.0 %
	38-47	13	43.4 %
	48-57	5	16.7 %
	58-67	5	16.7 %
Own of Cantas^R	Yes	30	100 %
	No	0	-
Year bought Cantas^R	2009	2	6.7 %
	2010	3	10.0 %
	2011	3	10.0 %
	2012	13	43.4 %
	2013	9	30.0 %
Cantas^R Supplier	JARIZ	6	20.0 %
	FANCY POWER	18	60.0 %
	NAFAS	5	16.7 %
	FELDA	1	3.4 %
Total Cantas^R	UNIT	30	100.0 %

Table 2: Reliability Analysis

Variables	No. of items	*P*	M	SD
Customer Satisfaction (DV)	5	0.875	3.1667	0.90338
Tangible (IV_1)	3	0.744	3.9250	0.53800
Reliability (IV_2)	4	0.810	3.9000	0.83115
Responsiveness (IV_3)	4	0.885	3.2556	0.92923
Assurance (IV_4)	4	0.878	3.8167	0.49971
Empathy (IV5)	4	0.808	3.8733	0.65912

Note: M – mean, SD –Standard Deviation

Table 3: Guildford's Rules of Thumbs

"r" value	Interpretation
0.00-0.29	Slightly or negligible relationship
0.30-0.49	Low correlation or relationship
0.50-0.69	Moderate or marked relationship
0.70-0.89	High correlation or relationship
0.90-1.00	Very high, dependable relationship

Table 4: Pearson Correlation Matrix

VARIABLES	DV	IV_1	IV_2	IV_3	IV_4	IV_5
DV	1.000					
IV_1	0.652**	1.000				
IV_2	0.310	0.138	1.000			
IV_3	0.682**	0.785**	0.571**	1.000		
IV_4	0.507**	0.028	0.155	0.120	1.000	
IV_5	0.702**	0.369*	0.160	0.328	0.861**	1.000

*Note*** *Correlation is significant at the 0.01 level (two-tailed)*

* *Correlation is significant at the 0.05 level (two-tailed)*

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.855[a]	**.732**	.676	.37527

Predictors: (Constant) Tangible, Reliability, Responsive, Assurance, Empathy.

Table 6: ANOVA

Model	Sum of Square	Df	Mean Square	F	Sig.
1 Regression	9.219	5	1.844	13.092	.000[b]
Residual	3.380	24	.141		
Total	12.599	29			

a. Dependent Variable: customer satisfaction
b. Predictors (constant): IV_1, IV_2, IV_3, IV_4, IV_5

4.1 Discussion

Table 1 represents the demographic profile of 30 respondents which comprises gender, age, owns of Cantas^R, years buy a Cantas^R, Cantas^R suppliers and total Cantas^R. From the table, the majority of the respondents are male with the sum of 93.4%, while the rest 6.6% are female. Bearing on the age of respondents, 43.4% Cantas^R owner is between 38 to 47 years old, followed by harvesters who age between 28 to 37 years old with frequency 20.0 %. 16.7 % of harvester age between 48 to 57 and 58-67 have their own Cantas^R. The correspondence of being 3.4 % with the age between 18 to 27 years old. Among all the suppliers, Fancy Power is the main suppliers to the harvester which consist of 60.0 %, followed by Jariz, Nafaz and Felda with the percentage 20.0 %, 16.7 %, 3.4 % respectively. None of the respondents do not own the Cantas^R. Finally, all the respondents (100%) did have the Cantas^R.
Table 2 shows the Alpha value Reliability for the customer satisfaction (Dependent Variable) and all the independent variables which are tangibility, reliability, responsiveness, assurance, and empathy. The table illustrates that all dependent and independent variables has relatively strong reliability as their Alpha value more than 0.6 with the highest 0.885 which is responsiveness, followed by assurance with 0.878, customer satisfaction with 0.875, reliability with 0.810, empathy with 0.808 and the least is tangible with 0.744.
Table 4 displays the Pearson Correlation Matrix between Dependent Variable and all Independent Variables. Among all variables, the highest correlation is between customer satisfaction (DV) and empathy (IV_5) with "r" value of 0.702, second is correlation between customer satisfaction (DV) and responsiveness (IV_3) which has "r" value 0.682, followed by correlation between customer satisfaction (DV) and tangible (IV_1) with "r" value 0.652, next correlation between customer satisfaction (DV) and assurance (IV4) with "r" value 0.507 and lastly is correlation between customer satisfaction (DV) and reliability (IV_2) which has the least "r" value of only 0.310.
Table 5 shows the R Square value of the model summary is 0.732. This value indicates that all the independent variables which are tangible, reliability, responsiveness, confidence and empathy contributes to the customer satisfaction (Dependent Variable) as much as 73.2 %. Table 6 establishes the significant value of 0.000. This indicates that the model is fitted as the significant value below 0.05.
Based on the survey conducted, the technology used by Cantas^R is achieve customer satisfaction due to its specification and usefulness. Cantas is an individual motorized harvesting tool that could help in increasing productivity while reducing labor need [18]. There are several elements that make customer accept and satisfy when using Cantas, they are productivity in harvesting operation and labour requirement. Compared to the manual harvesting using conventional sickle, Cantas is shown high productivity where 560 to 750 bunches per day where it is increase for 163% in productivity. In addition, using Cantas could reduce the energy used where the working time is more compared to the conventional harvesting from 7 hours to 10 hours per day. Thus, working time would be more effective because it could perform extra work rather than sickle [19]. Furthermore, it is also cost effective by calculate the unit cost, operational and maintenance cost where it is only RM0.70 t-1 [5]. Although the cost is higher than the conventional sickle, it could reduce the number of labour, thus, production cost also reduces. Hence, productivity and performance shown by Cantas is well accepted by the oil palm industry.

5. Conclusion

This chapter represent the conclusions and recommendations for the research entitled Relationship between Cantas^R Suppliers Handling and Customer Satisfaction. The conclusion was developed through the process on how the results answering all the research questions. First and foremost, the research results from data analysis were strongly concluded that the service quality as tangibility, reliability, responsiveness, assurance and empathy plays an important role for determining the customer satisfaction on Cantas^R handling.
Among the five independent variables (IV) the empathy services influence the most as the relationship indicated in the Pearson Correlation Analysis was the highest. It means that the Customer Satisfaction of Cantas^R users in Felda Maran, Pahang is strongly affected by the fifth independent variable which is empathy. However, other independent variables still contributed as factors associated.
Above and beyond, a hypothesis testing for all variables concluded that an alternate hypothesis has been accepted whereas a null hypothesis has been eliminated. The accepted hypotheses include firstly "there is a relationship between tangibility of services and customer satisfaction", following with "there is a relationship between reliability of services and customer satisfaction", next "there is a relationship between responsiveness and customer satisfaction", also " there is a relationship between assurance services and customer satisfaction and lastly "there is a relationship between empathy services with client satisfaction".

6. Recommendations

The corrective action should be taken by Cantas^R supplier is: -

6.1 Build Rapport with Customers

To have empathy for another individual, it is important to have some sort of relationship with that person first. This doesn't have to be terribly involved; a pleasant rapport with your customers is enough for setting that empathy machine in motion. Educate your staff to exchange pleasantries with customers when they arrive into your agency. Through easy conversation, your reps and customers will come to experience one another enough that empathy will be a natural response when a client comes in with a problem. Ensure that specific training drills are available for agents and focus on the following fields. Lastly is to identify suitable empathic questions in guild to collect the information required what questions require to be answered to help, how to ask for this information and in what spirit.

6.2 Introduce an Emphatic Buddy System.

The primary benefit of carrying out a buddy scheme, whereby an agent pairs up with another agent, is that they are granted the chance to get honest feedback from one another. Agents can not only praise one another when a call has gone well, but they can likewise learn from each other by acting together as a team to identify areas of improvement. The substance and delivery of these training programs and drills will be dependent upon the specifics of your operation.

Acknowledgement

The authors would like to thank the students from the item for their contribution featuring all inputs and data, and also to thank Universiti Tenaga Nasional (UNITEN) for giving the permission to publish this paper.

References

[1] Malaysia Oil Palm Planted Area. Economic Indicators CEIC. (2018). Retrieved September 24, 2018, from https://www.ceicdata.com/en/malaysia/planted-area-oil-palm/oil-palm-planted-area.
[2] Zainon M. S. (2009a). Learner Motivation, Training-related Factors, Work Environment and Learning as Determinants of Transfer of Learning to the Workplace. Unpublished Ph.D. Thesis, Universiti Putra Malaysia. 91234567890 Mechanical Engineering, Science and Technology International Conference IOP Publishing IOP Conf. Series: Materials Science and Engineering 203 (2017) 012027 doi:10.1088/1757-899X/203/1/012027.
[3] NKEA (2011).National Key Economic Area, Ministry of Plantation Industries & Commodities, Malaysia 2011.
[4] Teppot, J., June 30, 2010, MPOB lancar versi ketiga Cantas, Berita Harian.
[5] Jelani, A. R., Hitam, A., Jamak, J., Noor, M., Gono, Y., & Ariffin, O. (2008). Cantas TM–A tool for the efficient harvesting of oil palm fresh fruit bunches. Journal of Oil Palm Research, 20, 548-558.
[6] Eshghi, A., Roy, S. K., & Ganguli, S. (2008). SERVICE QUALITY AND CUSTOMER SATISFACTION: AN EMPIRICAL INVESTIGATION IN INDIAN MOBILE TELECOMMUNICATIONS SERVICES. Marketing Management Journal, 18(2).
[7] Asubonteng, P., McCleary, K. J., & Swan, J. E. (1996). SERVQUAL revisited: a critical review of service quality. Journal of Services marketing, 10(6), 62-81.
[8] Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. the Journal of Marketing, 41-50.
[9] Ladhari, R. (2008). Alternative measures of service quality: a review. Managing Service Quality: An International Journal, 18(1), 65-86.
[10] Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual: A multiple-item scale for measuring consumer perc. Journal of retailing, 64(1), 12.
[11] Magi, A., & Julander, C. (1996). Perceived service quality and customer satisfaction in a store performance framework. An empirical study of Swedish grocery retailers. Journal of Retailing and consumer services, 1(3), 33-41.
[12] Hansemark, O. C., & Albinsson, M. (2004). Customer satisfaction and retention: the experiences of individual employees. Managing Service Quality: An International Journal, 14(1), 40-57.
[13] Kotler, P. (2000). Marketing Management. 10th ed., New Jersey, Prentice-Hall.
[14] Hokanson, S., January 2, 1995, The Deeper You Analyse, The More You Satisfy Customers, Marketing News, p.16.
[15] La Barbera, P. A & Mazursky, D., 1983, A Longitudinal Assesment of Consumer Satisfaction, Disatisfaction: the Dynamic Aspect of Cognitive Process, Journal of Marketing Research, Vol. 20, November, pp.393-404
[16] Hoyer, W. D. & MacInnis, D. J., 2001, Consumer Behaviour. 2nd ed., Boston,Houghton Houghton Mifflin Company.
[17] Gerpott, T. J., Rams, W., & Schindler, A. (2001). Customer retention, loyalty, and satisfaction in the German mobile cellular telecommunications market. Telecommunications policy, 25(4), 249-269.
[18] Lunsford, B. R., & Lunsford, T. R. (1995). Research Forum - the research sample part II: Sample size. JPO, 7(4), 137-141.
[19] Azahar, M. A. H. (2017). Adoption and acceptance of harvesting technology for smallholder in Felda Tun Ghaffar, Jasin, Melaka.