Salim AL IDRUS, Abdussakir ABDUSSAKIR, Muhammad DJAKFAR, Shofiyah AL IDRUS /
Journal of Asian Finance, Economics and Business Vol 8 No 1 (2021) 927–938

927

The Effect of Product Knowledge and Service Quality on Customer Satisfaction

Salim AL IDRUS[1], Abdussakir ABDUSSAKIR[2], Muhammad DJAKFAR[3], Shofiyah AL IDRUS[4]

Abstract

Small and Medium Enterprises (SMEs) is one of several activators that drives the economy of Indonesia because SMEs provide jobs, increase Gross Domestic Product (GDP), and assure the delivery of products and services. However, Indonesian SMEs are not very competitive in the industrial world, and one of the causes is the low quality of products that undermine customer satisfaction. There are several factors presumed as influencing customer satisfaction, which among others include product knowledge, service quality, and competitive advantage. The objective of this research is to reveal the contribution of product knowledge and service quality to customer satisfaction with competitive advantage as the mediation variable. This research used a quantitative approach. The causal relationship across variables was examined with Structural Equation Modeling-Partial Least Squares (SEM-PLS). The sample of this research involved 140 respondents. Data was collected through a questionnaire and the items in the questionnaire were processed with a software called SmartPLS version 3.3.2. Results of this research indicate (1) product knowledge and service quality can increase competitive advantage and customer satisfaction in East Java SMEs; (2) competitive advantage can act as a mediator in the effect of service quality on customer satisfaction (3) product knowledge can increase customer satisfaction but the increase is not significant statistically.

Keywords: Product Knowledge, Service Quality, Customer Satisfaction, Competitive Advantage, Small and Medium Enterprises

JEL Classification Code: A12, A2, B16, B21, P13

1. Introduction

One activator that drives Indonesia's economy is Small and Medium Enterprises (SMEs) (Akhmad et al., 2018;

[1]First Author and Corresponding Author. Lecturer, Department of Management, Faculty of Economics, Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia [Postal Address: Jl. Gajayana 50 Kota Malang, Jawa Timur, 65144, Indonesia] Email: salim.alaydrus@manajemen.uin-malang.ac.id
[2]Lecturer, Department of Mathematics Education, Faculty of Teacher Training and Education, Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia. Email: sakir@mat.uin-malang.ac.id
[3]Lecturer, Department of Management, Faculty of Economics, Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia. Email: djakfar@manajemen.uin-malang.ac.id
[4]Lecturer, Department of Electrical Engineering, Faculty of Informatics Engineering Education, Universitas Negeri Malang, Indonesia. Email: shofiyah.ft@um.ac.id

Yanah et al., 2018). The presence of SMEs can accelerate economic growth because SMEs provide jobs, increase Gross Domestic Product (GDP), and assure the delivery of products and services (Lapian, 2018; Tobing et al., 2018). Therefore, as one of the vital objects that drive Indonesia's economy, SMEs have absorbed more than 70% of workers in Indonesia (Ratnawati, 2020).

However, Indonesian SMEs are not competitive in the industrial world, and one of the causes is the poor quality of SMEs' products, which make those products overpowered by the products from large industry (Rahadi, 2016; Sudarmiatin, 2016). The consequence of less competitive products is that customers are no longer satisfied with the enterprises (Lekhanya & Dlamini, 2017; Tulung et al., 2017).

Customer satisfaction is one factor that determines business performance (Naveed et al., 2017). Customers who are satisfied with the company will be loyal and willing to contribute to the long-term profitability of the company (Azigwe et al., 2016). Current profits are usually used to reduce production costs, and in the future, low-cost production can deliver more profits (Gure & Karugu, 2018). Production financing structure at SMEs must always be

Salim AL IDRUS, Abdussakir ABDUSSAKIR, Muhammad DJAKFAR, Shofiyah AL IDRUS /
Journal of Asian Finance, Economics and Business Vol 8 No 1 (2021) 927–938

928

underlain by business strategies to ensure that SMEs get a competitive advantage (Gaio & Henriques, 2018).

Previous researches confirmed that less competitive products cause low customer satisfaction (Lekhanya & Dlamini, 2017; Tulung et al., 2017). Indonesian SMEs' products are usually not popular with Indonesian people (Rahadi, 2016). The products offered by SMEs always lose to the products from large industries, which are often imported from abroad (Sudarmiatin, 2016). Customers and employees of SMEs do not have strong knowledge about the products (low product knowledge) (Rahadi, 2016).

Low customer satisfaction emanates from poor service quality (Atiyah, 2017; Jamaluddin & Ruswanti, 2017). The quality of services provided by Indonesian SMEs is not better than the services given by large industries (Ismoyo et al., 2018). If the services are provided less satisfying, then it badly impacts customer satisfaction (Wijetunge, 2016).

There are three factors influencing customer satisfaction in Indonesia SMEs, respectively product knowledge, service quality, and competitive advantage. Taking this statement into consideration, the objective of this research is to reveal the contribution of product knowledge and service quality on customer satisfaction with competitive advantage as the mediation variable in the context of Indonesian SMEs.

2. Literature Review

2.1. Product Knowledge

Product knowledge is the customer's perception of a certain product based on their previous experience in using that product (Sanggor et al., 2018). Product knowledge summarizes how customers feel about the product including every direct or indirect experience they have had with the product. Product knowledge can change customer opinion of a certain product and the way he/she uses that product; however, it does not make the customer shift to alternative products (Salazar-Ordóñez et al., 2018). Customers with high product knowledge have better memory, recognition, and analysis of products than customers with low product knowledge (Sanggor et al., 2018). If individuals have more knowledge of certain products, then they will purchase the products (Le et al., 2017).

2.2. Service Quality

Service quality is defined as a set of decisions made by customers after they have experience with a product or service over time (Ismail & Yunan, 2016). Service quality is defined as the difference between customer expectation and performance experience after using the service (Joudeh & Dandis, 2018). Service quality is also seen as customer perception regarding the overall impression on the relative strength or the inferiority of a certain enterprise and its service delivery (Neupane & Devkota, 2017). The focus on service quality and providing *customers* with exceptional *quality service* is the stepping stone to convince customers to use service repeatedly (Ismail & Yunan, 2016).

2.3. Competitive Advantage

Competitive advantage is possessed by SMEs only if its profitability is higher than the average profitability level of relevant industries, and SMEs are considered successful in maintaining competitive advantage only if they can maintain a high profitability level for several years (Hosseini et al., 2018). Competitive advantage is a constant pursuit in SMEs. The benefits of this constant pursuit include giving SMEs an advanced position, enabling SMEs to introduce unique features in their products and services, helping SMEs to increase and maintain its position in the industrial sector, and strengthening the relationship with the other SMEs (Guimarães et al., 2017).

2.4. Customer Satisfaction

Customer satisfaction is an assessment made by the customer on a product or service to attain favorable consumption (Mensah & Mensah, 2018). Customer satisfaction is also defined as a psychological condition of a customer that involves feeling or attitude on experience or several specific aspects of it after receiving a product or service (Neupane & Devkota, 2017). Customer satisfaction is associated with customer demand, and a customer is satisfied only if the demand is fulfilled (Joudeh & Dandis, 2018). Better income can be attained through customer satisfaction and this surely helps the business in getting more promising long-term profitability (Veloso et al., 2017). It is necessary for SMEs to maintain loyal customers and to look for new customers by delivering satisfying services (Rizan et al., 2020).

2.5. Other Relevant Researches

Koh et al. (2016) investigated customer satisfaction as a vital factor in SME survival and in helping to maintain the overall health of the economy. They found that the Singapore service sector is dominated by SMEs. Customer satisfaction with SMEs came from the fulfillment of customer demand for high service quality. Product knowledge of employees at SMEs has enabled them not only to respond to demand-related questions of customers in a faster way but also to provide information to customers, which improves customer satisfaction.

Aftab et al. (2016) researched fast-food restaurants in Pakistan where it was discovered fast food business (SMEs)

Salim AL IDRUS, Abdussakir ABDUSSAKIR, Muhammad DJAKFAR, Shofiyah AL IDRUS /
Journal of Asian Finance, Economics and Business Vol 8 No 1 (2021) 927–938

929

has become a high revenue generated industry. Service quality plays a vital role to make the customers happy and insists them to revisit the restaurant. Service quality has a positive effect on customer satisfaction and to enhance customer satisfaction and make them loyal as well as to increase revenue, fast-food restaurants must improve service quality.

Gheorghe et al. (2018) conducted research on private ophthalmology services in Romania where it was found that competition in healthcare services is considered as a core component in the consumer value mechanism. In Romania, the emergence of private ophthalmology services focuses on the prevention, diagnosis, and treatment of eye-related diseases and disorders and improved value. They concluded that the key to gain a competitive advantage stands in providing meaningful value to consumers using differentiation features. This focus enables the provider to increase service value. In principle, a competitive advantage can increase customer satisfaction.

Orga et al. (2018) examined the role of knowledge management on the competitive advantage of food and beverage firms in Nigeria. They explained that SMEs in the food & beverage sector in Nigeria must attain a competitive advantage to survive in a tight competition. To attain a competitive advantage, the SMEs must know how to make, share, and use their knowledge about products (product knowledge) through the company and align it to the company strategy and process as well. It was found that product knowledge affects competitive advantage

Ngwenya (2017) stated that the sustainability of South African telecommunications firms is under threat. Such threats are due to the new regulations that permitted an influx of new entrants in the form of ISPs (Internet Service Providers) and the emergent of OTT (over-the-top) applications in recent years. This research sought to understand the factors that influenced a sustained competitive advantage. The research explained the relationship that exists between service quality and sustained competitive advantage.

3. Method

This research uses a quantitative approach. The causal relationship across variables is examined with Structural Equation Modeling-Partial Least Squares (SEM-PLS). The research investigates two kinds of variables, respectively latent (construct) variable as the unobserved variable and indicator variable as the observed variable of each latent variable. The latent variable consists of exogenous latent variables and endogenous latent variables. The exogenous latent variables in this research comprise Product Knowledge (PK) and Service Quality (SQ), whereas endogenous latent variables comprise Competitive Advantage (CA) and Customer Satisfaction (CS). Research design is illustrated in Figure 1.

By taking into consideration of research design in Figure 1, several alternative hypotheses are proposed as following:

H1: *Product Knowledge has a positive and significant contribution to Competitive Advantage in East Java SMEs.*
H2: *Service Quality has a positive and significant contribution to Competitive Advantage in East Java SMEs.*
H3: *Product Knowledge has a positive and significant contribution to Customer Satisfaction in East Java SMEs.*
H4: *Service Quality has a positive and significant contribution to Customer Satisfaction in East Java SMEs.*
H5: *Competitive Advantage has a positive and significant contribution to Customer Satisfaction in East Java SMEs.*

3.1. Population and Sample

The research population is Small and Medium Enterprises (SMEs) in East Java Province. The sample is taken with purposive random sampling where one criterion is used, which is, SMEs must be located in East Java Province. The sample size is determined using the Malhotra Technique (Malhotra et al., 2017), which requires the sample to be at least five to ten times the number of questionnaire indicators. This technique is used for two reasons, one because the actual population of East Java SMEs is unknown since the number of SMEs is always increasing, and two, many SMEs are not covered yet in data of the Department of Cooperative and SMEs for East Java Province. 14 indicators must be measured, and the minimum number of samples is 70 SMEs. The research sample involves 140 respondents.
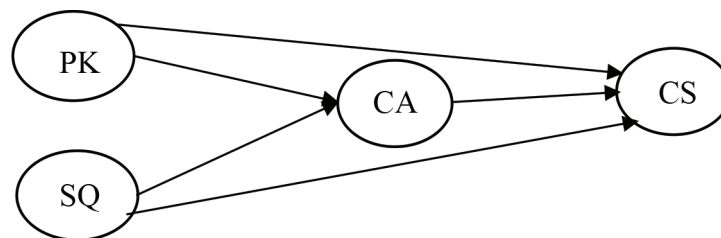

Figure 1: Research Design

3.2. Research Instrument

The questionnaire type used by this research is closed-questionnaire with Likert Scale consisting of four intervals. The scoring system comprises four alternative answers that must be chosen by respondents, and those answers are: (1) strongly agree/very compatible; (2) agree/compatible; (3) disagree/incompatible; and (4) strongly disagree/very incompatible.

The grids of the questionnaire instrument are explained as follows:

1. Product Knowledge, which is measured with two indicators, and those indicators are (a) actual knowledge and (b) self-perceived knowledge (Salazar-Ordóñez et al., 2018).
2. Service Quality, which is measured with five indicators, and those indicators include (a) dependability, (b) responsiveness, (c) assurance, (d) empathy, and (e) tangible (Neupane & Devkota, 2017; Saghier, 2015).
3. Competitive Advantage, which is measured with four indicators, and those indicators are (a) innovation, (b) quality, (c) efficiency, and (d) accountability (Hosseini et al., 2018).
4. Customer Satisfaction, which is measured with three indicators, respectively (1) product, (2) service, and (3) purchase (Palit et al., 2016).

3.3. Analysis of Research Data

Data analysis was conducted using Structural Equation Modeling-Partial Least Squares (SEM-PLS), which is useful in any research that examines the relationship between the exogenous latent variables and endogenous latent variables. Data analysis is conducted with SmartPLS version 3.3.2. The research model comprises four latent variables, and each variable has an indicator. This model is depicted in Figure 2.
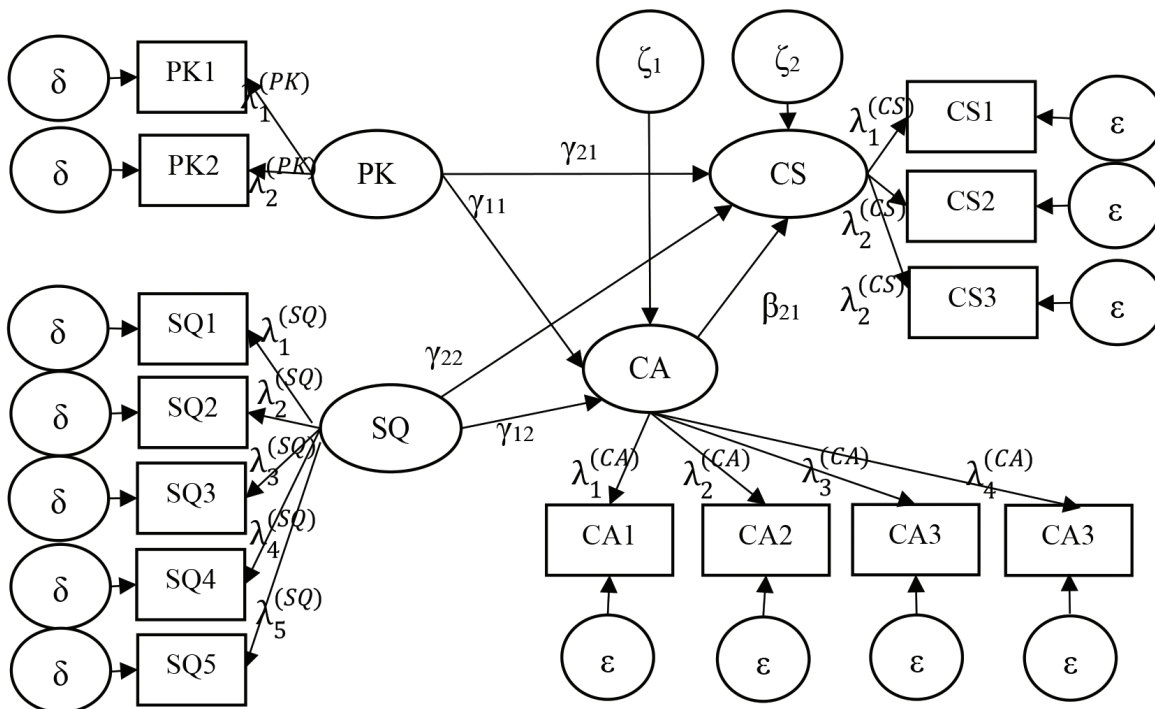
4. Results

Hypotheses are tested using the goodness-of-fit test on the outer model and inner model (Jogiyanto, 20113). The process of the test is facilitated by SmartPLS version 3.3.2.

4.1. Goodness-of-Fit Test on Outer Model

Goodness-of-Fit Test on the outer model involves measuring three items, respectively (1) convergent validity, which is indicated by (a) loading factor value and (b) AVE value; (2) discriminant validity, which is explained through cross-loading value; and (3) reliability, which is shown by Composite Reliability (CR). The result of the convergent validity test by loading factor is shown in Figure 3.

Results of both goodness-of-fit tests of outer and inner models are summarized in Table 1.

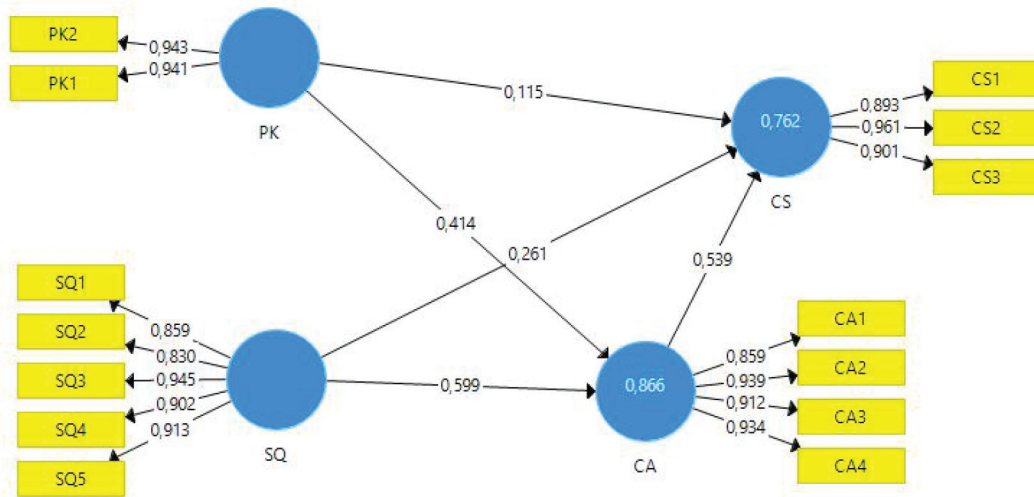**Figure 2:** Path Diagram of Research Model

Figure 3: Result of Loading Factor Calculation

Table 1: Summary of Goodness-of-Fit Test

Goodness-of-Fit		Parameter	Rule of Thumbs	Decision
Outer Model	Convergent Validity	Loading factor	Loading factor of all indicators must be > 0.7	The condition of convergent validity is met.
		AVE	AVE of all indicators must be > 0.5	
	Discriminant Validity	Cross loading	The loading factor of all indicators in one latent variable must be greater than the other latent variable.	The condition of discriminant validity is met.
	Reliability	Composite Reliability	Composite Reliability must be > 0.7	The model is reliable.
Inner Model	R² Evaluation	R² Value	R² must be > 0.25	Model is fit.

Table 1 shows that all criteria of goodness-of-fit are met, including goodness-of-fit for the outer model (Hair et al., 2017,) and goodness-of-fit for the inner model (Hair et al., 2017, p. 186). The result of the goodness-of-fit test shows that the research model is considered fit and therefore, the model can be used for the hypothesis test.

4.2. Hypothesis Test

The hypothesis test is done based on values obtained from the bootstrapping process, and this process is facilitated by SmartPLS 3.3.2. The alternative hypothesis (Ha) is accepted if $t_{count} \geq 1.96$ (Hair et al., 2017). The summary of the t-statistic calculation (t_{count}) for the direct effect test is presented in Table 2.

As shown in Table 2, variable SQ has a direct and significant effect on variable CS, while variable PK does not have a direct and significant effect on variable CS. Therefore, referring to Baron & Kenny's Norm (Hair et al., 2017), which requires the mediation or moderation effect to be tested only if a direct effect is significant, then it can be said that (1) hypothesis test on the mediation effect of variable CA in the effect of variable SQ on variable CS can be conducted, and (2) hypothesis test on the mediation effect of variable CA in the effect of variable PK on variable CS cannot be executed. Hypothesis test for the indirect effect involves processing values from bootstrapping formulation, and the processing is facilitated by SmartPLS 3.3.2. The result of the t-statistic summary (t_{count}) for the mediation effect test is shown in Table 3.

The summary of bootstrapping calculation for t-statistic (t_{count}) of the hypothesis model is elaborated in Figure 4.

Table 2: Summary of t_{count} Calculation for Direct Effect Test

No	Direct Effect	Hypothesis		Path Coeff.	t_{count}	Decision	Explanation
		H_0	H_a				
1.	PK on CA (PK→CA)	$H_{0(1)}: \gamma_{11}= 0$	$H_{a(1)}: \gamma_{11} \neq 0$	0.420	9.508	H_0 is rejected; H_a is accepted.	The effect is positive and significant.
2.	SQ on CA (SQ→CA)	$H_{0(2)}: \gamma_{12}= 0$	$H_{a(2)}: \gamma_{12} \neq 0$	0.594	14.982	H_0 is rejected; H_a is accepted.	The effect is positive and significant.
3.	PK on CS (PK→CS)	$H_{0(3)}: \gamma_{21}= 0$	$H_{a(3)}: \gamma_{21} \neq 0$	0.113	1.832	H_0 is accepted; H_a is rejected.	The effect is negative and not significant.
4.	SQ on CS (SQ→CS)	$H_{0(4)}: \gamma_{22}= 0$	$H_{a(4)}: \gamma_{22} \neq 0$	0.242	3.214	H_0 is rejected; H_a is accepted.	The effect is negative but significant.
5.	CA on CS (CA→CS)	$H_{0(5)}: \beta_{21}= 0$	$H_{a(5)}: \beta_{21} \neq 0$	0.553	5.742	H_0 is rejected; H_a is accepted.	The effect is positive and significant.

Table 3: Summary of t_{count} Calculation for Mediation Effect Test

No	Indirect Effect	Hypothesis		Path Coeff.	t_{count}	Decision	Explanation
		H_0	H_a				
1.	SQ on CS through CA (SQ → CA → CS)	$H_{0(6)}: \gamma_{22}+\beta_{21}=0$	$H_{a(6)}: \gamma_{22}+\beta_{21}\neq0$	0.328	4.809	H_0 is rejected; H_a is accepted.	The effect is positive and significant.

(Source: Result of Analysis with SmartPLS at a significance level of 5%)
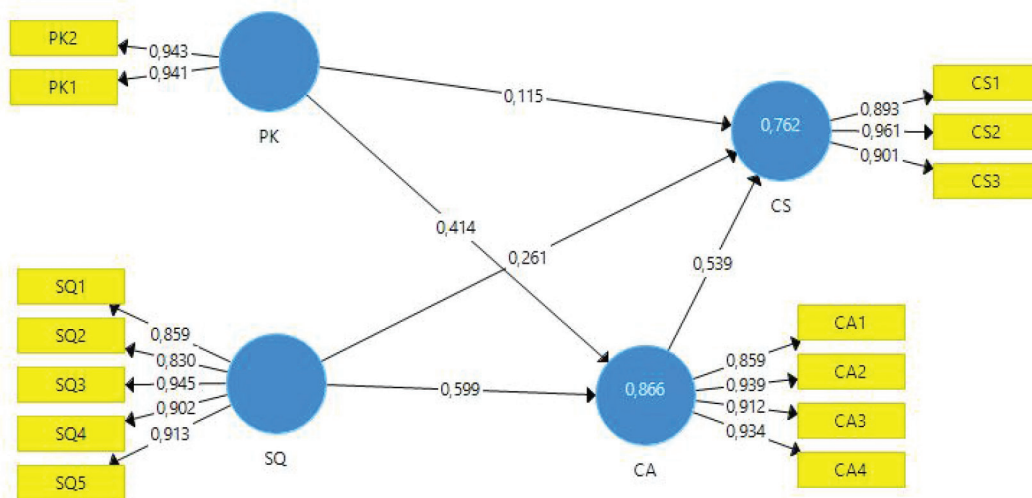
Figure 4: Summary of Hypothesis Model

(Source: Result of Analysis with SmartPLS at a significance level of 5%)

Salim AL IDRUS, Abdussakir ABDUSSAKIR, Muhammad DJAKFAR, Shofiyah AL IDRUS /
Journal of Asian Finance, Economics and Business Vol 8 No 1 (2021) 927–938

933

5. Discussion

5.1. Contribution of Product Knowledge on Competitive Advantage

The result of the research shows that product knowledge in East Java SMEs can significantly increase competitive advantage. This result signifies that product knowledge in East Java SMEs has a positive contribution to competitive advantage. This result is consistent with the result of previous research, which indicated that product knowledge has a positive effect on competitive advantage (Suchánek & Králová, 2019)

Product knowledge is one factor that determines SMEs' success in competing with other businesses (Butuner, 2019). Product knowledge is the initiator of intellectual transformation that involves activities such as establishing a knowledge-based enterprise, determining implementation strategy, and changing business behavior (Raguž et al., 2015). Product knowledge is one driving force that enables SMEs in drafting a business strategy and then applying this strategy in a competitive economical environment.

Moreover, product knowledge is considered important because it helps any enterprise to survive in market competition, where product knowledge is used to generate competing ability that suits the business strategy (Orga et al., 2018). Good business strategy always needs good resources and excellent workers who can manage resources properly. Workers with product knowledge can manage the resources to develop a sustainable competitive advantage. These workers strengthen corporate activity by focusing on competition and the customer, and also in coping with the global challenge (Rahimli, 2012). Product knowledge enables workers to build capacity and capability from customers' reflections and global challenges - the output of this process is a competitive advantage.

Furthermore, product knowledge is a meaningful concept to SMEs. The implementation of this concept can help SMEs to develop competing ability and performance (Nuryanti & Andreas, 2017). Customers who have good understandings of product knowledge are those who will be loyal to the brand image constructed by the producer, and this customer loyalty helps the producer to develop a sustainable competitive advantage (Sanggor et al., 2018). Loyal customers usually repurchase the product or repeat their purchase. The activity to repurchase or reuse certain products signifies that customers already have strong product knowledge and this gives assurance that the product has won the competition over the other product of other SMEs (Suchánek & Králová, 2019).

5.2. Contribution of Service Quality to Competitive Advantage

The result of research indicates that service quality in East Java SMEs can increase competitive advantage significantly. Regarding this result, it can be said that service quality has a positive contribution to competitive advantage. This result is in line with the result of previous research (Syapsan, 2019), which asserted that service quality has a positive effect on competitive advantage.

Service quality is an important concept for SMEs where SMEs must deliver service quality in a way that customer expectation relates to the company's marketing strategy (Syapsan, 2019). High service quality will put SMEs in a competitive advantage, which enables SMEs to maintain customer satisfaction to ensure sustainability and to develop the capability to understand customers (Eldejany, 2016). Service quality must be used by SMEs as a business strategy to satisfy customers and to produce market orientation.

Using service quality as a business strategy not only helps SMEs to serve customers in a positive way, which later leads to customer satisfaction but also facilitates SMEs to develop a competitive advantage that is surely needed for SMEs' viability (Atiyah, 2017). SMEs have been emerging in huge numbers, resulting in intense and fierce competition among SMEs. Service quality affects SMEs' capability in competing with one another (Syapsan, 2019). It is difficult for SMEs to survive in a competitive environment unless SMEs give better service quality to their customers (Al-Ababneh et al., 2018). In essence, service quality is a concept that must be taken into consideration by any enterprise for its survival in a competitive situation.

In this matter, SMEs must learn about customer taste, market pressure, and competitor maneuver, and all these knowledge help SMEs to deliver service properly (Ratny et al., 2017). Service quality is another factor besides service innovation that determines competitive advantage (Martinović, 2018). It is suggested that SMEs not only improve service quality but also focus on solving the customer's problem, deliver defect-free products, and convince the customer that the service will be given promptly (Eldejany, 2016). Competitive advantage can be attained holistically through a synergy between service quality and the related aspects such as the innovation in service delivery and the perfection of the problem-solving method.

5.3. Contribution of Product Knowledge to Customer Satisfaction

The result of the research revealed that product knowledge in East Java SMEs can increase customer satisfaction but

934

Salim AL IDRUS, Abdussakir ABDUSSAKIR, Muhammad DJAKFAR, Shofiyah AL IDRUS /
Journal of Asian Finance, Economics and Business Vol 8 No 1 (2021) 927–938

the increase is not significant statistically. According to this result, product knowledge has a positive contribution to customer satisfaction but the contribution is not significant. This result corresponds to the result of previous research (Suchanek & Kralova, 2018), who discovered that product knowledge does not have a significant effect on customer satisfaction.

Product knowledge is one aspect that influences customer satisfaction. It is said so because product knowledge determines customer inclination to decide whether to buy or reject a certain product (Rossanty et al., 2018). Therefore, it can be said that the decision to buy a product comes from product knowledge, and this relationship is determined by how customers are treated and how customers see the way the product is packed and delivered (Singh et al., 2020). Employees and customers of SMEs must know about products but the current research emphasizes more on the customer perspective. When customers do not have new knowledge about the product, they may still be loyal and satisfied, but their satisfaction is dormant (Singh et al., 2020).

The decision to buy a product depends on product characteristics. If the product has a unique characteristic, then this characteristic not only supports the brand image of the product but also increases customer satisfaction (Subaebasni et al., 2019). Product knowledge in East Java SMEs affects customer satisfaction positively but the effect is not significant. This is related to the fact that the products offered by East Java SMEs are less competitive to the imported products or the products offered by larger enterprises.

Previous research found that one of the problems faced by Indonesian SMEs is poor product quality (Rekarti & Doktoralina, 2017). If the quality of products from SMEs is below customer expectation, then the customer is not satisfied (Fawzeea et al., 2019). Concerning this matter, what SMEs must do is improving product quality or at least offering products that suit the market taste but at a competitive price. Indeed, price is always a factor that determines customer satisfaction and has become one of many parts that constitute product knowledge (Subaebasni et al., 2019). Thus, it can be said that product knowledge has a positive contribution to customer satisfaction but this contribution is not significant.

5.4. Contribution of Service Quality to Customer Satisfaction

The result of the research explains that service quality in East Java SMEs can increase customer satisfaction significantly. Referring to this result, it can be said that service quality has a positive contribution to customer satisfaction. This finding conforms with the result of previous research (Rahayu et al., 2019), which said that service quality has a positive effect on customer satisfaction.

Service quality affects customer perception of the service that the customer has accepted. Customer perception of optimum service delivery will strengthen the relationship between service quality and customer satisfaction (Rahayu et al., 2019). Friendly customer service and the betterment of service infrastructure will persuade customers to access the product, and this easy access can increase customer satisfaction (Octabriyantiningtyas & Suryani, 2019). Good service quality might convince the customers to use the product again at another moment (Octabriyantiningtyas & Suryani, 2019). Satisfied customers tend to have a behavioral intention that emphasizes trusting in products offered by SMEs and repurchasing products in the future (Sundaram et al., 2017, p. 66).

Reliability and responsibility of SMEs are important dimensions that affect the trust of potential buyers in SMEs before they become loyal customers (Octabriyantiningtyas & Suryani, 2019; Sundaram et al., 2017). Loyal customers are those who have strong commitment and trust (Sundaram et al., 2017). Commitment and trust of the customers must be considered by SMEs in their business strategy because both can affect brand image and help SMEs to improve customer satisfaction (Hsieh et al., 2018). Customer trust will increase public trust in SMEs, and such trust is built through positive perception and positive experiences during the transaction (To et al., 2020). Consequently, customers with high customer satisfaction will surely continue their purchases in the future. They do not care whether the offered product is new or just a modification of the old product and they are always willing to praise the product (Vikaliana & Evitha, 2019).

5.5. Contribution of Competitive Advantage to Customer Satisfaction

The result of this research shows that competitive advantage in East Java SMEs can increase customer satisfaction significantly. This result signifies that competitive advantage has a positive contribution to customer satisfaction. This result is consistent with previous research (Gheorghe et al., 2018) that found the positive effect of competitive advantage on customer satisfaction.

Competitive advantage is the capability to cope with competitors based on customer perception (Rcardianto et al., 2019). Customer perception is affected not only by the characteristic of the product that makes it competitive with other product but also the quality of the product that makes the customer satisfied (Rahayu et al., 2019).

It must be noted that customer satisfaction is like a road that SMEs must pass on to maintain customer loyalty (Harryani & Gunadarma, 2017). One way to go through that road is by developing market orientation to keep the product competitive (Herman et al., 2018). Besides developing

Salim AL IDRUS, Abdussakir ABDUSSAKIR, Muhammad DJAKFAR, Shofiyah AL IDRUS /
Journal of Asian Finance, Economics and Business Vol 8 No 1 (2021) 927–938

935

market orientation, it is also necessary for SMEs to build competitive advantage by taking into account local values, the culture of buyers, and the importance of efficiency and effectiveness (Herman et al., 2018). Another way toward customer satisfaction involves improving worker quality, strengthening job motivation, giving job opportunities, and initiating product innovation (Rcardianto et al., 2019).

Nonetheless, competitive advantage enables SMEs to control market share, and their performance will surely increase after they successfully maintain the quality of their product at a competitive price affordable by customers (Herman et al., 2018). The marketing rank of SMEs can ascend only when they care about how to increase customer satisfaction in a competitive market (Leninkumar, 2017).

5.6. Contribution of Service Quality to Customer Satisfaction with Competitive Advantage as the Mediation Variable

The result of this research shows that service quality in East Java SMEs has an indirect and significant contribution to customer satisfaction through competitive advantage. It can also be said that service quality has a positive effect on customer satisfaction if competitive advantage is involved.

Competitive advantage is a factor that must be considered in improving service quality, and this factor is associated with the capability of SMEs to set a competitive price to supply the demanded products and to provide a warranty for the products (Lestari et al., 2020). Service quality helps SMEs to understand the expectation and demand of customers, and those understandings must be used by SMEs to maximize the good experience and minimize customers' bad experience in using the products (Octabriyantiningtyas & Suryani, 2019). Service quality is one of the key procedures that enable SMEs to survive in the competition (Vikaliana & Evitha, 2019). The capability to survive in the competition will strengthen the competitive advantage of SMEs.

The survival in business competition is attained by SMEs by implementing competitive advantage to produce positive customer perception (Rcardianto et al., 2019). Positive perception of customers on SMEs will hold out if the aspects of tangible, reliability, responsiveness, and assurance are fulfilled by giving the customer a better experience in using the products, and this surely will increase customer satisfaction (Andrew et al., 2019). Based on this position, it can be said that customer satisfaction is affected by service quality and competitive advantage.

6. Conclusion

This research has arrived at several conclusions. Among these conclusions is that product knowledge and service quality can increase competitive advantage and customer

satisfaction in East Java SMEs. The next conclusion is that competitive advantage can act as a mediator in the effect of service quality on customer satisfaction. It is also concluded that product knowledge can increase customer satisfaction in East Java SMEs, but the increase is not significant statistically. As a consequence, competitive advantage cannot act as a mediator in the effect of product knowledge on customer satisfaction.

References

Aftab, J., Sarwar, H., Sultan, Q., & Qadeer, M. (2016). Importance of service quality in customer satisfaction: A study on fast food restaurants. *Entrepreneurship and Innovation Management, 4*(4), 161-171.

Akhmad, K. A., Ravik Karsidi, Endang Siti Rahayu, & Mahendra Wijaya. (2018). The role of government policy in SMEs facilitating institutions in Indonesia: A case study on business development services provider. *Asian Journal for Poverty Studies*, *4*(1), 12–15. https://doi.org/10.33369/ajps.v4i1.4897

Al-Ababneh, M. M., Masadeh, M. A., Al-Shakhsheer, F. J., & Habiballah, M. A. (2018). The impact of internal service quality on job satisfaction in the hotel industry. *Research in Hospitality Management*, *8*(1), 55–62. https://doi.org/10.1080/22243534.2018.1501182

Andrew, L., Haris, N., Fatimah, S., Latiff, A., & Zakariah, H. (2019). Service quality and customer satisfaction in the retailing industry : Evidence from Sarawak, Malaysia. *International Journal of Engineering and Advanced Technology*, *8*(5C), 166–169. https://doi.org/10.35940/ijeat.E1024.0585C19

Atiyah, L. A. (2017). Impact of service quality on customer satisfaction. *Australian Journal of Basic and Applied Sciences*, *11*(5), 20–28. http://ajbasweb.com/old/ajbas/2017/April/20-28.pdf

Azigwe, J. B., Maryir, G., Asunka, B. A., & Manamzor, F. (2016). Customer satisfaction for company growth: the roles, responsibilities, and skills required of the sales force in Ghana. *British Journal of Marketing Studies*, *4*(5), 74–88. http://www.eajournals.org/wp-content/uploads/Customer-Satisfaction-for-Company-Growth.pdf

Butuner, H. (2019). A practical approach to determining the competitive advantages of a business. *American Journal of Operations Management and Information Systems*, *4*(2), 63–70. https://doi.org/10.11648/j.ajomis.20190402.13

Eldejany, R. (2016). Dimensional analysis of service quality: Small construction business and Australian household. *International Journal of Business and Management*, *11*(12), 1. https://doi.org/10.5539/ijbm.v11n12p1

Fawzeea, B. K., Sofiyah, F. R., Sudardjat, I., & Muda, I. (2019). The role of technology marketing in micro-business, small and medium enterprises (SMEs) agents for repurchase intention and its impact on community satisfaction: Case in Indonesia. *International Journal of Scientific and Technology Research, 8*(12) 1724-1730.

936

Salim AL IDRUS, Abdussakir ABDUSSAKIR, Muhammad DJAKFAR, Shofiyah AL IDRUS /
Journal of Asian Finance, Economics and Business Vol 8 No 1 (2021) 927–938

Gaio, C., & Henriques, R. (2018). Are large firms more profitable than small and medium firms in the European Union ? *The European Journal of Management Studies*, *23*(1), 25–48.

Gheorghe, C. M., Purcărea, V. L., & Gheorghe, I. R. (2018). A marketing perspective on consumer perceived competition in private ophthalmology services. *Romanian Journal of Ophthalmology*, *61*(2), 123–134. https://doi.org/10.22336/rjo.2018.18

Guimarães, J., Severo, E., & Vasconcelos, C. (2017). Sustainable competitive advantage: A survey of companies in Southern Brazil. *Brazilian Business Review*, *14*(3), 352–367. https://doi.org/10.15728/bbr.2017.14.3.6

Gure, A. K., & Karugu, J. (2018). Strategic management practices and performance of quantity surveying firms in Nairobi City County, Kenya. *International Academic Journal of Human Resource and Business Administration*, *2*(1), 280–293. http://www.iajournals.org/articles/iajhrba_v3_i1_1_26.pdf

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks, CA: Sage Publications.

Harryani, S., & Gunadarma, U. (2017). Customer relationship management influences customer value, product quality, and service quality in improving customer satisfaction and its implication. *Jurnal Ekonomi Bisnis*, *22*(2), 160–165. https://media.neliti.com/media/publications/178575-EN-customer-relationship-management-influen.pdf

Herman, H., Hady, H., & Arafah, W. (2018). The influence of market orientation and product innovation on the competitive advantage and its implication toward small and medium enterprises (UKM) performance. *International Journal of Science and Engineering Invention*, *04*(08), 8–21. https://doi.org/10.23958/ijsei/vol04-i08/02

Hosseini, A., Soltani, S., & Mehdizadeh, M. (2018). Competitive advantage and its impact on new product development strategy: Case Study: Toos Nirro technical firm. *Journal of Open Innovation: Technology, Market, and Complexity*, *4*(2), 17. https://doi.org/10.3390/joitmc4020017

Hsieh, S., Lu, C., & Lu, Y. (2018). A study on the relationship between brand image, service quality, customer satisfaction, and customer loyalty: Taking ' the Bao Wei Zhen Catering team as an empirical study. *The 2018 International Conference of Organizational Innovation*, *2018*, 1768–1781. https://doi.org/10.18502/kss.v3i10.3512

Ismail, A., & Yunan, Y. S. M. (2016). Service quality as a predictor of customer satisfaction and customer loyalty. *Log Forum*, *12*(4), 269–283. https://doi.org/10.17270/J.LOG.2016.4.7

Ismoyo, N. B., Hadiwidjojo, D., Rahman, F., & Rahayu, M. (2018). Service quality perception's effect on customer satisfaction and repurchase intention. *European Business & Management*, *3*(3), 37. https://doi.org/10.11648/j.ebm.20170303.11

Jamaluddin, J., & Ruswanti, E. (2017). Impact of service quality and customer satisfaction on customer loyalty: A case study in a private hospital in Indonesia. *IOSR Journal of Business and Management*, *19*(05), 23–33. https://doi.org/10.9790/487x-1905012333

Jogiyanto, H. M. (2011). *Concept and application of variant-based structural equation modeling (SEM) in business research.* Yogyakarta: Publishing and Printing Unit of STIM YKPN.

Joudeh, J. M. M., & Dandis, A. O. (2018). Service quality, customer satisfaction, and loyalty in Internet service providers. *International Journal of Business and Management*, *13*(8), 108. https://doi.org/10.5539/ijbm.v13n8p108

Koh, K. S. W., Chan, L. S. L., & Ho, S. K. M. (2016). SME customer service excellence : A Singaporean case study. *Nang Yan Business Journal*, *4*(1), 13–22. http://www.cjournal.cz/index.php?hid=clanek&cid=221

Lapian, A. L. C. P. (2018). Small and medium enterprises towards economic growth in North Sulawesi, Indonesia. *Scientific Research Journal*, *6*(1), 20–23. http://journal.unnes.ac.id/nju/index.php/jejak

Le, H. T. P. M., Nguyen, P. V, Dinh, H. P., & Dang, C. N. (2017). Effects of the country of origin and product feature on customer purchase intention : A study of imported powder milk. *Academy of Marketing Studies Journal*, *21*(1), 1–19. https://www.abacademies.org/articles/Effect-of-Country-1528-2678-21-1-104.pdf

Lekhanya, L. M., & Dlamini, H. L. (2017). Customer's perception towards product quality of automotive SMEs operating in metropolitan areas, and consideration of environmental impact. *Environmental Economics*, *8*(1), 36–45. https://doi.org/10.21511/ee.08(1).2017.04

Leninkumar, V. (2017). The relationship between customer satisfaction and customer trust in customer loyalty. *International Journal of Academic Research in Business and Social Sciences*, *7*(4), 450–465. https://doi.org/10.6007/IJARBSS/v7-i4/2821

Lestari, S. D., Leon, F. M., Widyastuti, S., Brabo, N. A., & Putra, A. H. P. K. (2020). Antecedents and consequences of innovation and business strategy on performance and competitive advantage of SMEs. *Journal of Asian Finance, Economics, and Business*, *7*(6), 365–378. https://doi.org/10.13106/jafeb.2020.vol7.no6.365

Malhotra, N. K., Nunan, D., & Birks, D. F. (2017). *Marketing research an applied approach* (5th ed.). London, UK: Pearson.

Martinović, M. (2018). Competitiveness through consumer loyalty: The influence of switching costs. In: *6th International OFEL Conference on Governance, Management and Entrepreneurship. New Business Models and Institutional Entrepreneurs: Leading Disruptive Change.* April 13th - 14th, 2018, Dubrovnik, Croatia.

Mensah, I., & Mensah, R. D. (2018). Effects of service quality and customer satisfaction on repurchase intention in restaurants on University of Cape Coast campus. *Journal of Tourism, Heritage & Services Marketing*, *4*(1), 27–36. https://doi.org/10.5281/zenodo.1247542

Naveed, T., Akhtar, I., & Cheema, R. (2017). The impact of innovation on customer satisfaction and brand loyalty : A

Salim AL IDRUS, Abdussakir ABDUSSAKIR, Muhammad DJAKFAR, Shofiyah AL IDRUS /
Journal of Asian Finance, Economics and Business Vol 8 No 1 (2021) 927–938

937

study of the students of Faisalabad. *International Journal of Management & Organizational Studies, 2*(2), 62-68. https://mpra.ub.uni-muenchen.de/53197/

Neupane, R., & Devkota, M. (2017). Evaluation of the impacts of service quality dimensions on patient/customer satisfaction: A study of private hospitals in Nepal. *International Journal of Social Sciences and Management*, *4*(3), 165–176. https://doi.org/10.3126/ijssm.v4i3.17520

Ngwenya, M. (2017). Achieving a sustained competitive advantage in the South African telecommunications sector. *Universal Journal of Management*, *5*(6), 278–290. https://doi.org/10.13189/ujm.2017.050603

Nuryanti, H., & Andreas, P. (2017). The influence of knowledge management on business performance and competitive advantage In Riau food products on small and medium enterprises In Pekan Baru. *International Journal of Scientific & Technology Research*, *6*(10), 372–379. https://www.ijstr.org/final-print/oct2017

Octabriyantiningtyas, D., & Suryani, E. (2019). The effect of service quality on t-cash customer satisfaction using system dynamics framework. *Journal of Information Systems Engineering and Business Intelligence*, *5*(1), 76–84. https;//doi.org/10.20473/jisebi.5.1.76-84

Orga, J. I., Nnadi, S., & Chioma, N. (2018). The role of knowledge management on the competitive advantage of food and beverage firms in Southeast Nigeria. *Scholars Journal of Economics, Business, and Management*, *5*(7), 612–622. https://doi.org/10.21276/sjebm.2018.5.7.8

Palit, H. C., Kristanti, M., Anne, D., Aysia, Y., & Priskila, A. (2016). The effect of service quality and customer satisfaction on customer loyalty of small scale Indonesian food enterprises in Surabaya. *4th International Conference on Disciplines in Humanities and Social Sciences (DHSS-2016)*, *10*, 32–37.

Raguž, I. V., Zekan, S. B., & Peronja, I. (2015). Knowledge as a source of competitive advantage. *Management and Organisation*, *3*(1), 533–544. https://hrcak.srce.hr/187409

Rahadi, R. A. (2016). Opportunities and challenges for micro-small and medium business in Indonesia facing Asean Economic Community (AEC). *Jurnal Manajemen Dan Kewirausahaan*, *18*(1), 45–53. https://doi.org/10.26905/jmdk.v5i1.1342

Rahayu, R., Yahya, D. R., Tinggi, S., Ekonomi, I., & Surabaya, I. (2019). Service quality, consumer perception, brand awareness, and consumer satisfaction on Instagram. *EKSIS*, *14*(1), 1–12.

Rahimli, A. (2012). Knowledge Management and Competitive Advantage. *Journal of Information & Knowledge Management*, *2*(7), 37–43. https://ejournal.stiedewantara.ac.id/index.php/001/article/view/313/219

Ratnawati, K. (2020). The influence of financial inclusion on MSMEs' performance through financial intermediation and access to capital. *Journal of Asian Finance, Economics, and Business*, *7*(11), 205–218. https://doi.org/10.13106/jafeb.2020.vol7.no11.205

Ratny, S., Arshad, A. M., & Gaoliang, T. (2017). The effect of service-driven market orientation on service innovation: Literature review and new research framework. *Journal of Applied Business Research*, *33*(5), 999–1012. https://doi.org/10.19030/jabr.v33i5.10022

Rcardianto, P., Firdaus, M., & Gunawan, A. (2019). The factors affecting competitive advantages and their implementation on the consumer loyalty of Transjakarta transport service users. *International Journal of Development and Sustainability*, *8*(2), 116–131. https://isdsnet.com/ijds-v8n2-04.pdf

Rekarti, E., & Doktoralina, C. M. (2017). Improving business performance: A proposed model for SMEs. *European Research Studies Journal*, *20*(3), 613–623. https://doi.org/10.35808/ersj/732

Rizan, M., Warokka, A., Wibowo, A., & Febrilia, I. (2020). Leadership styles and customer loyalty: A lesson from emerging Southeast Asia's airlines industry. *Journal of Asian Finance, Economics, and Business*, *7*(9), 477–488. https://doi.org/10.13106/jafeb.2020.vol7.no9.477

Rossanty, Y., Dharma, M., & Putra, T. (2018). Information search and intentions to purchase : the role of country of origin image, product knowledge, and product involvement. *Journal of Theoretical and Applied Information Technology*, *96*(10), 3075–3085. http://www.jatit.org/volumes/Vol96No10/27Vol96No10.pdf

Saghier, N. M. El. (2015). Managing service quality: Dimensions of service quality: A study in Egypt. *International Journal of African and Asian Studies*, *9*(1), 56–63. https://doi.org/10.1002/lary.26024

Salazar-Ordóñez, M., Rodríguez-Entrena, M., Cabrera, E. R., & Henseler, J. (2018). Understanding product differentiation failures: The role of product knowledge and brand credence in olive oil markets. *Food Quality and Preference*, *68*(August 2017), 146–155. https://doi.org/10.1016/j.foodqual.2018.02.010

Sanggor, E. M., Pangemanan, S. S., & Rumokoy, F. S. (2018). Evaluating brand image and consumer product knowledge of Apple smartphone in Manado. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, *6*(1), 251–260.

Singh, S., Mondal, S., Singh, L. B., Sahoo, K. K., & Das, S. (2020). An empirical evidence study of consumer perception and socioeconomic profiles for digital stores in Vietnam. *Sustainability*, *12*(1716), 1–30. https://doi.org/10.3390/su12051716

Subaebasni, S., Risnawaty, H., & Wicaksono, A. R. A. (2019). Effect of brand image , the quality and price on customer satisfaction and implications for customer loyalty PT Strait Liner Express in Jakarta. *International Review of Management and Marketing*, *9*(1), 90–97. https://doi.org/10.32479/irmm.7440

Suchanek, P., & Kralova, M. (2018). The influence of customers' characteristics on their satisfaction with the food industry. *Journal of Competitiveness*, *10*(4), 151–170.

938

Salim AL IDRUS, Abdussakir ABDUSSAKIR, Muhammad DJAKFAR, Shofiyah AL IDRUS /
Journal of Asian Finance, Economics and Business Vol 8 No 1 (2021) 927–938

Suchánek, P., & Králová, M. (2019). Customer satisfaction, loyalty, knowledge, and competitiveness in the food industry. *Economic Research - Ekonomska Istrazivanja*, *32*(1), 1237–1255. https://doi.org/10.1080/1331677X.2019.1627893

Sudarmiatin, S. (2016). Sustainable Competitive Advantage on SMEs : Bringing Local Product toward Global Market. *Journal of Business and Management*, *18*(7), 46–53. https://doi.org/10.9790/487X-1807034653

Sundaram, V., Ramkumar, D., & Shankar, P. (2017). Impact of E-Service quality on customer satisfaction and loyalty empirical study in India online business marketing department, government sector of India Government Arts College, Paramakudi Indira Colleges of Engineering & Management, Pune. *KINERJA*, *21*(1), 48–69. https:doi.org/ 10.24002/kinerja.v21i1.1034

Syapsan, S. (2019). The effect of service quality, innovation towards competitive advantages, and sustainable economic growth: Marketing mix strategy as a mediating variable. *Benchmarking*, *26*(4), 1336–1356. https://doi.org/10.1108/BIJ-10-2017-0280

To, T. H., Do, D. K., Bui, L. T. H., & Pham, H. T. L. (2020). Factors affecting customer satisfaction when buying on Facebook in Vietnam. *Journal of Asian Finance, Economics, and Business*, *7*(10), 267–273. https://doi.org/10.13106/jafeb.2020.vol7.n10.267

Tobing, D. S. K., Fathorazz, M., & Wulandari, G. A. (2018). Mapping the competitive advantage of SMEs in East Java, Indonesia. *Jurnal Dinamika Manajemen*, *9*(1), 23–32. https://doi.org/10.15294/jdm.v9i1.14649

Tulung, J. C., Lapian, J., & Rumokoy, F. S. (2017). Analyzing the relation between the e-commerce development and small medium enterprise in Manado. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, *5*(3), 2958–2966. https://doi.org/10.35794/emba.v5i3.17226

Veloso, C. M., Magueta, D. M., Fernandes, P. O., & Ribeiro, H. (2017). The effects of customer satisfaction, service quality, and perceived value on behavioral intentions in the retail industry. *23rd International Scientific Conference on Economic and Social Development – Madrid, 15-16 September 2017*, 330-342.

Vikaliana, R., & Evitha, Y. (2019). Enhancing service quality to increase customer satisfaction : a phenomenological method of low-cost carrier airlines companies in Indonesia. *International Journal of Recent Technology and Engineering (IJRTE)*, *8*(2S9), 965–973. https://doi.org/10.35940/ijrte.B1103.0982S919

Wijetunge, W. A. D. . (2016). Service quality, competitive advantage, and business performance in service providing SMEs in Sri Lanka. *International Journal of Scientific and Research Publications*, *6*(7), 720–728. http://www.ijsrp.org/research-paper-0716.php?rp=P555663

Yanah, Y., Nakhwatunnisa, H., & Sukarno, T. (2018). Strategy to Increase the Competitiveness of SME's entreprises. *JEJAK : Jurnal Ekonomi Dan Kebijakan*, *11*(17), 138–150. https://doi.org/https://doi.org/10.15294/jejak.viii.11705