

# Service Convenience and Service Quality to Customer Satisfaction among the Shipping Expeditions

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**Abstract.** Indonesia is a country consisting of thousands of islands surrounded with straits and seas. Along with the increasing online businesses, the number of shipping expeditions is growing as well. In order to win the competition, many shipping expeditions offer various conveniences and services. This research is testing the impact of service conveniences and service quality to customer satisfaction in shipping expedition businesses in Surabaya. The data are collected by questionnaires because this is a quantitative research. The questionnaires are distributed to 100 respondents who are selected from the consumers using a non-probability sampling technique. Then, the data are processed using a SmartPLS program to obtain the results that service convenience does not bring any effect on customer satisfaction, but service convenience has a positive significant effect on service quality and service quality also has a positive significant effect on customer satisfaction

**Keywords:** Customer pleasure, service excellence, service suitability.

## 1 Introduction

Nowadays, the development of Indonesian business is growing rapidly, especially with the help of the digital era, making business people or consumers able to transact goods trading easily and can cover a wider area without the need to think about how to deliver the goods to arrive on purpose precisely. Surely this is inseparable from the role of expedition services that help complete the transaction activities between business people and consumers, without the distance that limits these activities.

Expedition has an important role in the current era, plus many online business people make this business opportunity very promising. Expeditions in Indonesia itself, especially in the form of land cargo truck transportation, continue to grow from year to year. Data from the Central Statistics Agency shows that the number of trucks in Indonesia continues to increase from year to year, illustrating that the market demand for expedition services is always growing each year, the growth in the number of trucks in Indonesia including number two after the leading passenger car is 7.77 % [1]. The Surabaya Central Statistics

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Agency shows the same thing that vehicles of goods or trucks are the most vehicles after city car types and the like [2].

The expedition sector in Surabaya has a big influence on the economic contribution in Surabaya. This is not far from competition between business people in this field. Entrepreneurs are competing to improve the quality of their services so as not to lose in the competition. The rise of the expedition business makes this industry very competitive, making the perpetrators must have a good strategy so as not to compete with large companies, which already have excellent service quality, service convenience and systems, in order to guarantee customer satisfaction and increase company sales.

Customer satisfaction is closely related to service quality provided by service providers. Rauch, Collins, Nale, and Barr say that good service quality encourages a positive level of customer satisfaction, in other words the relationship of service quality is directly proportional to customer satisfaction [3]. Good service quality often makes customers come back to use services or goods from a company without considering the price given by the company. A management strategy in managing service quality is needed and will become a basis for the company to remain competitive in its industry [4].

Service quality is an expectation and perception created by the customer before using goods and services from a company, which later becomes a subjective assessment between the quality of services provided by the company and the expectations of the customer, an assessment of meeting customer expectations with the quality of the company's services will later create the level of customer satisfaction itself [4].

In addition to the quality of customer service, customer convenience (service convenience) is one of the other factors that affect the level of customer satisfaction in transactions. Berry, Seiders, and Grewal reveal that service convenience is an individual's perception of time and energy related to the purchase or use of goods and services offered [5]. According to a research from Benoit, Klose, and Ettinger, service convenience has a positive impact on consumers' experiences of goods and services that encourage increased customer satisfaction, because consumers tend to prefer service processes that can save time and energy expended to get goods and services desired by consumers [6].

Based on the background and phenomena above, this research aims to investigate the effect of Service Quality and Service Convenience on Customer Satisfaction among the shipping Expedition Customers.

### 1.1 Research framework and hypothesis

Below is the research framework and hypothesis building.

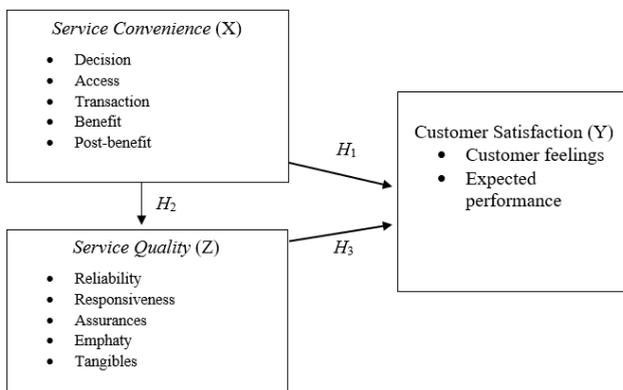


Fig.1. Research framework

From the research framework, the hypothesis are constructed as follows:

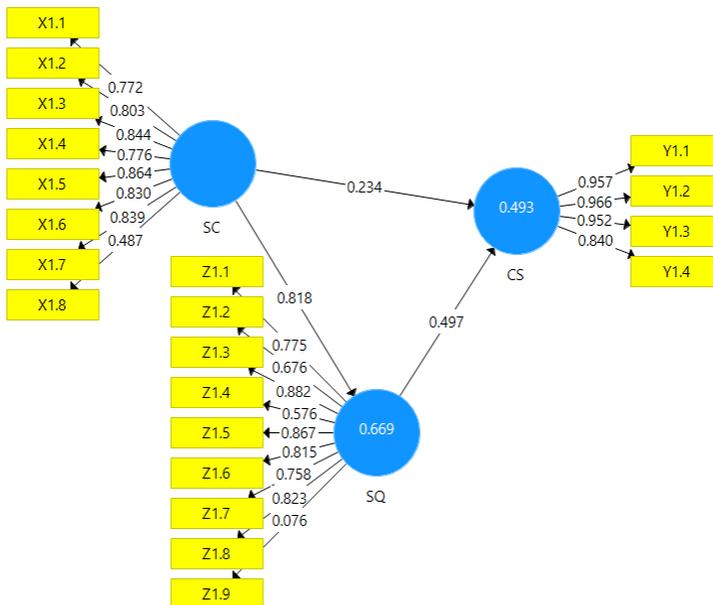
- H1: It is suspected that service convenience has a significant effect on customer satisfaction.
- H2: It is suspected that service convenience has a significant effect on service quality.
- H3: It is suspected that service quality has a significant effect on customer satisfaction.

## 2 Research method

This research is a quantitative research. The population of this research is the customers who use the service of shipping expeditions. The respondents, taken from the population, are using the purposive sampling technique. Purposive sampling is a sampling unit chosen based on certain considerations with the aim of obtaining a sampling unit that has the desired characteristics [7]. In this research, the data are obtained from 100 respondents by questionnaires distributed directly to the customers of the shipping expeditions. The statements in the questionnaire are evaluated with the Likert scale, from strongly disagree (1) to strongly agree (5). The data are analyzed with a smartPLS software to obtain the outer model and the inner model. The outer model is to measure the validity and the reliability of the questionnaire, while the inner model is to test the hypothesis.

## 3 Analysis and discussion

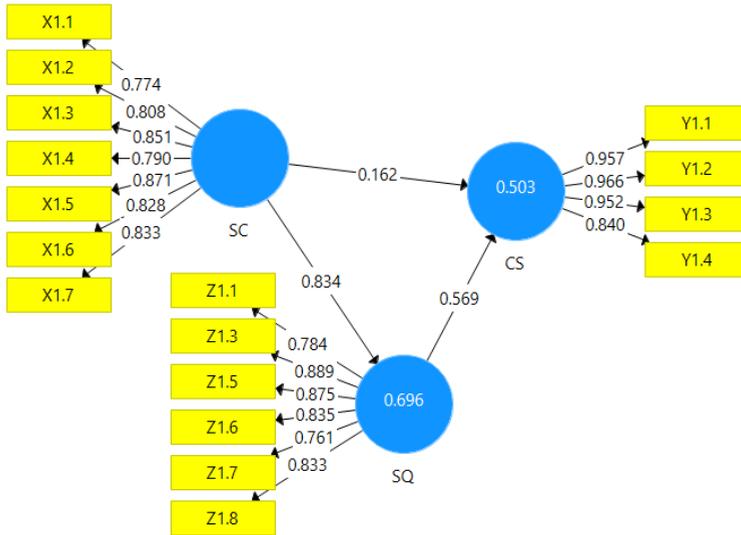
### 3.1 The PLS outer model



**Fig.2.** The outer model

The outer model shows the results of the data analysis with a smartPLS software. The results are depicted in Figure 2. There is one item that the value is below 0.5, that is X1.8, so the item is deleted from the model. Then, Figure 3. is the final result after running the PLS program again. All values from each variable to its indicators show the value above

0.5, so all indicators fulfill the requirement of the convergent validity. The results of the reliability test can be observed in Table 1, which show the values of higher than 0.6, so all variables have a good reliability. The results of the R square or the Goodnessfit Model are shown in Table 2. The R square of the customer satisfaction is 0.503, meaning that the variable of service convenience affects 50.3 % to the customer satisfaction, while the rest customer satisfaction factors are affected by other variables not being used in this research. The R square of the service quality is 0.696, meaning that the service concenience can explain the effect of the service quality as high as 69.6 %, while the rest percentage is affected by other variables not being used in this research.



**Fig.3.** The revised outer model

**Table 1.** The results of the composite reliability

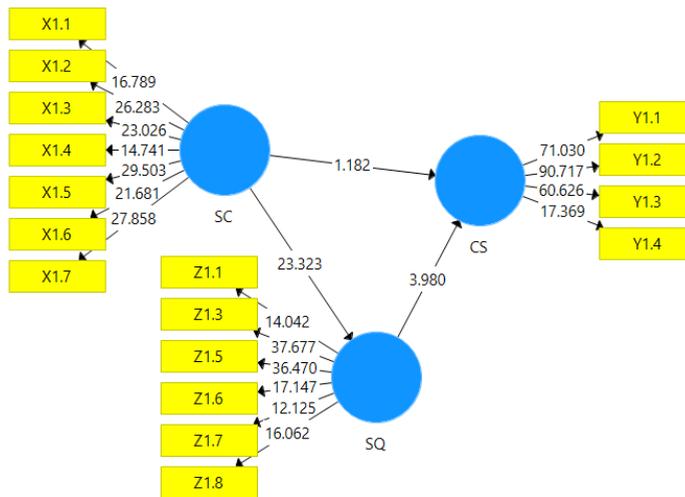
	<b>Composite Reliability</b>	<b>Cronbachs Alpha</b>	<b>AVE</b>
Service quality	0.930	0.909	0.690
Service convenience	0.936	0.921	0.677
Customer satisfaction	0.962	0.947	0.865

**Table 2.** The results of the R square

	<b>R<sup>2</sup></b>
Customer satisfaction	0.503
Service quality	0.696

### 3.2 The PLS inner model

The inner model indicates the effect among variables. If the value is higher than 1.96, the effect of one variable to another is significant. Figure 4 shows the results of the PLS Inner Model. The summary of the T-test is shown in Table 3.



**Fig. 4.** The inner model

**Table 3.** Bootstrapping

H	(O)	T Statistics	Remarks	
H1	SC → CS	0.162	1.182	Rejected
H2	SC → SQ	0.834	23.323	Accepted
H3	SQ → CS	0.569	3.980	Accepted

Based on the table above regarding hypothesis testing can be explained that:

First, H1 saying that service convenience has a significant positive effect on customer satisfaction shows the T-Statistic value of 1.182, smaller than the T-count of 1.96. Thus, the H1 is rejected. The results are not in accordance with the results of some previous studies conducted by Chen et al., [8], Benoit et al. [6], and Kaura, Prasad, and Sharma [9]. This means that service convenience perceived by the shipping expedition customers has no effect on customer satisfaction.

From the results of descriptive analysis found the mean value for the service convenience variable is in the agreed category, which means that the respondent assesses that the service convenience provided by the shipping expedition is good enough. However, the service features are still very limited as they cannot provide maximum comfort for consumers. The shipping expeditions have several service limitations, such as the absence of tracking features and the lack of delivery service. These service limitations may have created some inconvenience felt by the loyal customers. This is what makes service convenience has no effect on customer satisfaction.

Second, H2 saying that service convenience has a significant positive effect on service quality shows the T-Statistic value of 23.323, higher than the T-count of 1.96. Thus, the H2 is accepted. The results confirm the previous studies conducted by Chang et al., [10] and Pham et al., [11]. This confirms that the service convenience felt by the customers makes the perceived service quality also increase.

Although many shipping expeditions are still operating with limited features, they are able to maintain the service quality. Most of the customers are repeat users, so the shipping expeditions know the needs of their customers and can cater the needs well. This condition can satisfy the customers who send their goods regularly to smaller islands in East Indonesia. Therefore, the service convenience can affect the service quality significantly and positively.

Third, H3 saying that service quality has a significant positive effect on customer satisfaction shows the T-Statistic value of 3.980, higher than the T-count of 1.96. Thus, the

H3 is accepted. The results affirm the previous researches by [12, 13, 3]. This means that the service quality provided by the shipping expeditions can increase the customer satisfaction.

Most of the shipping expeditions are serving routes to smaller islands in East Indonesia, such as the Nusa Tenggara Islands. Since the destinations are small cities, these expeditions can focus on their target markets and serve the markets well by building relationships with the customers who send their goods regularly to those islands. The mutual understandings create the benefits for the shipping expeditions in catering the specific demands from their customers. Therefore, their service quality can affect the customer satisfaction significantly and positively.

Forth, to understand the intervening effect of the service quality variable, it is necessary to calculate the indirect effect from the service convenience to customer satisfaction. The calculated result is  $0.834 \times 0.569 = 0.474546$ . The result indicates that the value of indirect effect is higher than the direct effect of 0.162, so service quality acts as the intervening variable, which strengthens the effect of service convenience to customer satisfaction. Service convenience itself has no direct effect on customer satisfaction.

## 4 Conclusion

As the aim of this research is to investigate the effect of Service Quality and Service Convenience on Customer Satisfaction among the shipping Expedition Customers, the results from the data collection, data process, and data analysis show that the service convenience has no effect on customer satisfaction, but service convenience has a positive effect on service quality. The service quality has a positive effect on customer satisfaction, and service quality also acts as an intervening variable which strengthen the influence between service convenience and customer satisfaction.

## References

1. BPS. *Statistik Transportasi Darat 2017*, Jakarta: Badan Pusat Statistik Indonesia (2017).  
<https://www.bps.go.id/publication/2018/11/27/43cba6b697f03cc2b272dfb7/statistik-transportasi-darat-2017.html>
2. BPS. *Statistik Transportasi Darat Kota Surabaya 2015*, Jakarta: Badan Pusat Statistik Indonesia (2015).  
<https://www.bps.go.id/publication/2016/11/21/fdd38bc5a2f1b12931ba2396/statistik-transportasi--darat--2015.html>
3. D.A. Rauch, M.D. Collins, P.B. Barr, *International Journal of Contemporary Hospitality Management*, **27**,1:2–7(2015).  
<https://www.emeraldinsight.com/doi/abs/10.1108/IJCHM-06-2013-0254>
4. C.H. Li, H.B. Wang, *The International Journal of Organizational Innovation*, **6**,3:31–41(2014). [http://www.ijoi-online.org/attachments/article/38/FINAL\\_ISSUE\\_VOL\\_6\\_NUM\\_3\\_JANUARY\\_2014.pdf#page=31](http://www.ijoi-online.org/attachments/article/38/FINAL_ISSUE_VOL_6_NUM_3_JANUARY_2014.pdf#page=31)
5. L.L. Berry, K. Seiders, D. Grewal, *Journal of Marketing*, **66**,4:1–17(2002).  
<https://journals.sagepub.com/doi/abs/10.1509/jmkg.66.3.1.18505>
6. Y. Benoit, S. Klose, A. Ettinger, *Journal of Services Marketing*, **31**,6:527–538(2017).  
<https://www.emeraldinsight.com/doi/abs/10.1108/JSM-10-2016-0353>
7. J.F. Hair, W.C. Black, D.J. Babin, *Multivariate Data Analysis*, New Jersey: Pearson Prentice Hall (2010). [https://is.muni.cz/el/1423/podzim2017/PSY028/um/Hair\\_-\\_Multivariate\\_data\\_analysis\\_7th\\_revised.pdf](https://is.muni.cz/el/1423/podzim2017/PSY028/um/Hair_-_Multivariate_data_analysis_7th_revised.pdf)

8. M.C. Chen, K.C. Chang, C.L. Hsu, I.C. Yang, *Asia Pasific Journal of Marketing and Logistics*, **23**,3:386–410(2011).  
<https://www.emeraldinsight.com/doi/abs/10.1108/13555851111143277>
9. V. Kaura, S.D. Prasad, S. Sharma, *International Journal of Bank Marketing*, **33**,4:404–422(2014). <https://www.emeraldinsight.com/doi/abs/10.1108/IJBM-04-2014-0048>
10. K.C. Chang, M.C. Chen, C.L. Hsu, N.T. Kuo, *Industrial Management & Data System*, **110**,9:1420–1443(2010).  
<https://www.emeraldinsight.com/doi/abs/10.1108/02635571011087464>
11. Q.T. Pham, X.P. Tran, S. Misra, R. Maskeliunas, R. Damasevicius., *Sustainability*, **10**,1:156(2018). <https://www.mdpi.com/2071-1050/10/1/156>
12. C. Silvestri, B. Aquilani, A. Ruggieri, *The TQM Journal*, **29**,1:55–81(2017).  
<https://www.emeraldinsight.com/doi/abs/10.1108/TQM-06-2015-0089>
13. K.F. Yuen, V.V. Thai, *International Journal of Quality and Service Sciences*, **7**,3:170–183(2015). <https://www.emeraldinsight.com/doi/abs/10.1108/IJQSS-02-2015-0024>