Abstract – Logistics service quality (LSQ) is one of the most vital factors for customer satisfaction, especially in the courier industry. This study aimed to identify the determinants of customer satisfaction towards Pos Laju Malaysia service during the Movement Control Order (MCO). The study also examined the relationship between the LSQ dimensions and customer satisfaction. Based on the LSQ theory, customer satisfaction is measured based on the quality of information, condition or accuracy of order, timeliness, and quality of contact personnel. This study used a quantitative research method mainly based on the primary data. Four hundred questionnaires were distributed virtually. Descriptive analysis, reliability analysis, correlation analysis, and multiple linear regression were applied to achieve the study objectives. The study findings found a significant relationship between LSQ dimensions (quality of information, condition or accuracy of order, timeliness, and quality of contact personnel) and customer satisfaction. The study also discovered that the quality of information, condition or accuracy of order, timeliness, and quality of contact personnel were significant determinants of customer satisfaction towards the courier service of Pos Laju Malaysia during the MCO. In conclusion, this study supported all the hypotheses.
Keywords: Courier services, customer satisfaction, Logistics Service Quality (LSQ), determinant, relationship

1. Introduction

Pos Laju is a postal segment, known as a courier business, offered by Pos Malaysia Berhad through nationwide express parcel delivery. Pos Laju serves individual customers, small-medium enterprises (SMEs) and large businesses through several networks such as post offices, Pos Laju Centre and SendParcel online shopping portal. Its extensive courier network helps meet customer satisfaction for on-time delivery (Pos Malaysia, 2020). With 120 Pos Laju touchpoints at strategic locations throughout Malaysia, Pos Laju has assisted individuals, SMEs and entrepreneurs deliver items efficiently. Pos Laju Malaysia also offers value-added services such as web-based tracking, packaging solutions and insurance packages to provide the courier service effectively (Fauzan, 2018). Instead of only delivering the parcel, Pos Malaysia Berhad builds its customers’ trust by connecting people worldwide.

During the Covid-19 pandemic, Pos Malaysia Berhad was dedicated to serving the desires of all Malaysians and businesses on the parcel or mail delivery determinedly. Its dedication and determination were proved by widening and extending its network and working hours to ensure essential services can be delivered and received on time and accordingly. The 22,000 employees of Pos Malaysian played an essential role and worked more than nine hours in delivering mail and parcel services, financial services and supply chain solutions.

Surprisingly, the MCO has increased online shopping activities among Malaysian citizens. The usage of courier services surged and was in demand during the MCO, including Pos Laju Malaysia, resulting in significant growth in the courier business. Although the country is facing the Covid-19 pandemic, Pos Malaysia Berhad always focuses on their customers and improve their services, which are their top priorities. It takes this unprecedented challenge as an opportunity to innovate its business. Pos Malaysia Berhad has taken this situation as an advantage by introducing the Pos Rider to cater to the over-demand courier service. Pos Malaysia believed it created job opportunities, especially for those affected during the MCO. Nevertheless, the new initiative introduced by the Pos Malaysia Berhad might affect their current reputation and performance because the new or part-time staff hired might not be well trained. The continuous consequence may affect customer satisfaction with the service provided (Pos Malaysia, 2020).

Most previous studies highlighted that customer satisfaction towards courier service is influenced by the quality of information, condition or accuracy of order, timeliness, and availability of contact personnel. Nonetheless, in Malaysia, especially during the MCO, the exact factors influencing customer satisfaction towards courier service are not discussed widely, especially in the case of Pos Laju Malaysia. Hence, this study examined the customer satisfaction towards the courier service of Pos Laju Malaysia. The specific purpose of the study is to investigate the relationship between quality of information, condition or accuracy of order, timeliness, and availability of contact personnel with customer satisfaction towards
the courier services of Pos Malaysia during the MCO. Besides, the study also investigated
the determinants of customer satisfaction towards Pos Laju Malaysia. This study is essential
to ensure that the performance of Pos Laju Malaysia can be improved and sustained.

2. Literature Review

2.1. Customer Satisfaction

Customer satisfaction is vital in affecting the customer's future behaviour, such as loyalty
through repurchase intention, word of mouth and site revisits. Customers satisfied with the
services provided by the courier service provider would surge the usage level and upcoming
usage intentions. According to Rita, Oliveira and Farisa (2019), customer satisfaction can
be defined as an indication of the customer's acceptance of a service probability, leading to
an optimistic feeling. Oni and Adeyeye (2020) described customer satisfaction as a degree
of fulfilling the customer's expectation towards the products and services provided. Hasfar
et al. (2020) indicated that consumer satisfaction is the level to which the perceived benefits
of a product (goods and services) is according to what the customer expects.

2.2. Logistic Service Quality

In logistics, Logistics Service Quality (LSQ) is utilised to study customer satisfaction
introduced by Perreault Jr and Russ. They both suggested that time, place and utility were
necessary for logistics (Grant & Philipp, 2020). The quality services of logistics are essential
in industrial purchasing decisions. The LSQ was adapted by the Service Quality
(SERVQUAL) model familiarised by Anantharanthan et al. (1985). It was designed to
follow the logistics development to fit consumers' preferences. Mentzer et al. (2001) stated
that the modified version consists of nine dimensions: condition or accuracy of order, quality
of information, quality of order, the process of ordering, condition of goods, the quantity of
order release, timeliness, handling error, and staff communication. Nevertheless, Rosli and
Taib (2020) used four LSQ dimensions to determine the most effective dimension in
analysing customer satisfaction. The quality of information, condition or accuracy of order,
timeliness, and staff communication were dimensions utilised in this study. In this study,
staff communication refers to contact personnel.

According to Gronroos (1984), service represents an intangible product involving
the delivery activity from one point to another. A service such as transport, communications
facilities, hospitals, or energy supplies offered in a planned and organised way by the
government or any official bodies is essential to everyone. Courier-delivery services have
remained necessary in today's life for the transportation or logistic sector. Additionally,
domestic and international shipping courier services have become vital in Malaysia with the
growth of online shopping during the MCO. Recently, Gulc (2020) stated that courier service
turns to a critical link in the logistics supply chains of many trading, manufacturing and
service companies. Thus, the courier service is believed to have gradually expanded and
sustained across the nation. In 2018, the global courier market's value accounted for 306
billion dollars. The value is projected to increase by 94 billion dollars in 2024.
2.3. Timeliness
Firmansyah (2020) defined timeliness as the length of time needed by the customer to receive the delivered product. Usually, the customers will measure timeliness based on the expected time provided by the courier provider. Oktaviasari and Rachma (2019) agreed that timeliness has a significant positive effect on customer satisfaction. Good timeliness will make the customer happy with the services provided. Timeliness is an essential determinant factor for customer satisfaction. Based on the previous studies, Hypothesis 1 is derived and proposed as follows:

H1: There is a significant relationship between timeliness and customer satisfaction towards the courier services of Pos Laju Malaysia during the MCO.

2.4. Condition or Accuracy of Order
Hendayani and Dharmawan (2020) indicated that order accuracy is a dimension related to the accuracy of courier service for orders taken from customers. In contrast, order condition is a dimension related to the ability of the courier services to maintain the condition of an item sent in anticipation of possible damage to the goods. The courier providers must fulfil any requests or orders from the customers. The accuracy of the product should be a concern because any mishandling provides a negative experience to the customers and definitely will change their mind to use other couriers next time (Muhammad et al., 2017). Based on these previous studies, Hypothesis 2 is suggested:

H2: There is a significant relationship between condition or accuracy of order and customer satisfaction towards Pos Laju Malaysia service during the MCO.

2.5. Quality of Information
Alemu (2016) stated that the courier providers must provide precise and correct information about the services offered. Sufficient information will help the customers to make their choice and decision accordingly. The quality of information denotes the level of helpful information that the consumer can obtain through the courier's personnel and website for order reference. In addition, the quality of information on the provider's website boosts customers' enjoyment and leads them to use the services repeatedly (Widagdo & Roz, 2021). Based on this statement, the following hypothesis is suggested:

H3: There is a significant relationship between quality of information and customer satisfaction towards Pos Laju Malaysia service during the MCO.

2.6. Quality of Contact Personnel
According to Mentzer et al. (2001), the quality of contact personnel is the excellent interaction between the customer and shippers' personnel. The customer expects to have good communication with the shipper's personnel while delivering the products or goods (Alemu, 2016). The way the shippers' personnel handle customers’ complaints, questions and requests are essential. Displaying a reasonable manner in handling the customers will
lead to a positive experience with the respected courier service provider (Lu, Tu, & Jen, 2011).

Tukiran et al. (2021) reviewed that the contact personnel are significant determinants for students' satisfaction towards the educators. The contact personnel are accounted for courtesy, empathy and attention shown by the teachers and the teachers' competencies of assigned duties. This study was reviewed within the education service context. The contact personnel are believed to be one of the quality dimensions for customer satisfaction towards courier service during the MCO. Therefore, the following hypothesis is formulated:

H4: There is a significant relationship between quality of contact personnel and customer satisfaction towards Pos Laju Malaysia service during the MCO.

Previous studies also highlighted that timeliness, quality of information, quality of contact personnel and condition or accuracy of the order are the factors influencing customer satisfaction. Therefore, the hypothesis is recommended as follows:

H5: Timeliness, quality of information, quality of contact personnel and condition or accuracy of the order are the main determinants of customer satisfaction towards Pos Laju Service during the MCO.

2.7. Theoretical Framework

Dandis et al. (2021) opined that the number of service quality dimensions varies from one country to another and from one industry to another, including the logistic sector. Therefore, the study will determine the relationship between logistic service quality dimensions and customer satisfaction towards Pos Laju Malaysia service during the MCO to provide findings contributing to the new literature.

By adapting the SERVQUAL theory, Figure 1 illustrates the theoretical framework on customer satisfaction towards courier services of Pos Laju Malaysia during the MCO. The two types of variables in this framework are independent and dependent variables. Independent variables comprise the quality of information, condition or accuracy of order, timeliness, and quality of contact personnel. In contrast, the dependent variable is customer satisfaction.
3. Methodology of Study

3.1. Data Collection and Data Sampling
The relationship between service quality dimensions and customer satisfaction was measured using the Pearson correlation analysis. In contrast, the determinant of customer satisfaction towards Pos Laju Malaysia services during the MCO was analysed using multiple linear regression. The study sample was the customers who had experience using Pos Laju Malaysia. As reported by Selangor Journal in September 2020, the number of Pos Laju users registered with Pos Malaysia is over 86000 people. According to Krejcie and Morgan (1970), the required sample size is 384. Nevertheless, 400 questionnaires were distributed instead of 384 questionnaires. Convenience sampling was chosen, where people who are easy to reach and provide the information became the target respondents for this study. Pos Laju Malaysia users are the unit of sampling for the research.

3.2. Questionnaire Design
This study adopted a quantitative approach. The primary data and information regarding customer satisfaction towards Pos Laju Malaysia service were collected through a survey questionnaire. Thus, the researchers could study the pertinent and applicable variables to the research objectives. Multilingual languages, Malay and English, were used to develop the questionnaire. Malay is the national language for Malaysia, while English is an international language. The respondents can easily understand and answer the questionnaires in a multilingual language. All the questionnaires were distributed through an online survey. The respondents were given a set of questionnaires and needed to allocate approximately ten minutes to complete the questionnaires.

The questionnaire was divided into three sections: section A, section B, and section C. The first part of the questionnaire gauged consumers' demographic information, including age, gender, race, occupation, monthly income, academic qualification, and other details. Section B focused on measuring customer satisfaction based on the LSQ of courier providers, consisting of quality of information, condition or accuracy of order, timeliness,
and quality of contact personnel. The last part of the questionnaire comprised questions regarding customer satisfaction towards Pos Laju Malaysia services. The questionnaire was designed using a five-point Likert scale to measure each item for sections B and C. The Likert scale ranged from 'strongly disagree' to 'strongly agree'.

3.3. Statistical Technique and Procedure
During the data collection process, 400 completed questionnaires were collected. Nevertheless, 16 completed questionnaires were rejected due to no experience as a Pos Laju user, resulting in 384 usable questionnaires for data analysis. The statistical analysis used for the study included descriptive, reliability, correlation, and multiple linear regression analysis. These analyses were aided by the Statistical Package for Social Sciences (SPSS).

4. Findings and Discussion

4.1. Demographic Profile of Respondents
Table 1 explains the detailed descriptive statistics of the respondents.

| Demographic Profile | Group          | Frequency (N) | Percent (%) |
|---------------------|----------------|---------------|-------------|
| Gender              | Male           | 56            | 14.6        |
|                     | Female         | 328           | 85.4        |
| Race                | Malay          | 338           | 88.0        |
|                     | Chinese        | 23            | 6.0         |
|                     | Indian         | 18            | 4.7         |
|                     | Others         | 5             | 1.3         |
| Age                 | 21-25 years old| 307           | 79.9        |
|                     | 26-30 years-old| 40            | 10.4        |
|                     | 31-35 years-old| 28            | 7.3         |
|                     | 36-40 years-old| 7             | 1.8         |
|                     | Others         | 2             | 0.5         |
| Marital Status      | Single         | 314           | 81.8        |
|                     | Married        | 67            | 17.4        |
|                     | Others         | 3             | 0.8         |
| Occupation          | Student        | 295           | 76.8        |
|                     | Self-Employed  | 22            | 5.7         |
|                     | Government Sector | 34        | 8.9         |
|                     | Private Sector | 28            | 7.3         |
|                     | Others         | 5             | 1.3         |
Among the 384 respondents, most were female respondents (85.4%), while the male respondents were 14.6%. The Malays dominated the data collection, with 88.0%. The majority of the respondents were from the 21-25 years old group (79.9%). Additionally, 81.8% of the respondents were single, and 75.4% had a degree. More than half of the respondents were students (76.8%) and had an income range of less than RM 1,000. Moreover, 74.9% of the Pos Laju users used its services with a frequency of 1-2 times a month. Lastly, 39.7% of respondents stated that the last time they used Pos Laju was in the current month.

4.2. Reliability Analysis

Table 2 indicates the reliability of all the constructs through Cronbach's alpha value. The table shows the timeliness = 0.700, condition or accuracy of order = 0.700, quality of information = 0.847, quality of contact personnel = 0.887 and customer satisfaction = 0.973.

Table 2. Reliability analysis

| Variable                        | Number of items | α   |
|---------------------------------|-----------------|-----|
| Timeliness                      | 5               | 0.700 |
| Condition or accuracy of order  | 5               | 0.700 |
| Quality of information          | 5               | 0.847 |
| Quality of contact personnel    | 5               | 0.887 |
| Customer satisfaction           | 4               | 0.973 |
4.3. Pearson Correlation Analysis

Pearson's correlation coefficient was used to examine the statistical relationship between LSQ dimensions and customer satisfaction towards Pos Laju Malaysia service during the MCO. The correlation coefficient values range from +1 to -1. A positive one value indicates a perfect positive relationship, while a negative one reflects a perfect negative relationship. On the other hand, zero value shows no relationship between LSQ dimensions and customer satisfaction.

Table 3. Pearson correlation analysis

| Variable               | Timeliness  | Condition or Accuracy of Order | Quality of Information | Quality of Contact Personnel |
|------------------------|-------------|---------------------------------|------------------------|-----------------------------|
| Pearson Correlation    | 0.328**     | 0.302**                         | 0.312**                | 0.148**                     |
| Sig. (2-tailed)        | 0.000       | 0.000                           | 0.000                  | 0.005                       |
| N                      | 384         | 384                             | 384                    | 384                         |

**. Correlation is significant at the 0.01 level (2-tailed).

Based on Table 3, the correlation and p-value between timeliness and customer satisfaction are 0.328 and 0.000, respectively. Thus, a significant and moderate positive linear relationship exists between these two variables. For condition or accuracy of order and customer satisfaction, the Pearson correlation value is 0.302 and \( p = 0.000 < 0.01 \), indicating a significant and moderate positive linear relationship between condition and accuracy of order and customer satisfaction. Besides, the quality of information also shows a significant and moderate positive linear relationship between the two variables (\( r = 0.312, p = 0.000 < 0.01 \)). Lastly, the correlation between contact personnel's quality and customer satisfaction indicated a weak positive linear but significant relationship between these two variables. In conclusion, all the service quality dimensions: timeliness, condition or accuracy of order, quality of information, and quality of contact personnel, have a significant relationship with customer satisfaction towards Pos Laju service during the MCO.

4.4 Multiple Linear Regression Analysis

Table 4. Multiple linear regression

| Variable               | Std Error | Beta  | t-value | p-value | R-Square |
|------------------------|-----------|-------|---------|---------|----------|
| Timeliness             | 0.110     | 0.178 | 2.233   | 0.026   | 0.149    |
| Condition or accuracy of order | 0.083     | 0.133 | 2.007   | 0.046   |          |
| Quality of information | 0.134     | 0.275 | 2.929   | 0.004   |          |
| Quality of contact personnel | 0.119     | -0.238 | -3.153  | 0.002   |          |

As shown in Table 4, the quality of information obtained the highest \( \beta \) value at 0.275, followed by timeliness (\( \beta = 0.178 \)), condition or accuracy of order (\( \beta = 0.133 \)), and quality of contact personnel (\( \beta = -0.238 \)). The \( \beta \) values depicted that the quality of information and contact personnel are the strongest and least factors influencing customer satisfaction,
respectively. Based on Table 4, all the service quality dimensions, namely timeliness, condition and accuracy of order, quality of information, and quality of contact personnel, offer a p-value below 0.05. Therefore, timeliness, condition or accuracy of order, quality of information, and contact personnel significantly influence customer satisfaction towards courier service during the MCO. Based on the table, a 14.9% variance exists in customer satisfaction towards timeliness, condition or accuracy of order, quality of information, and quality of contact personnel.

5. Discussions

This study aimed to examine the relationship between LSQ dimensions and customer satisfaction and determinants of customer satisfaction towards Pos Malaysia Berhad during the MCO. The findings discovered that all four LSQ dimensions have a significant relationship with customer satisfaction. The finding also proved that all these four LSQ dimensions were the determinants of customer satisfaction towards Pos Laju service during the MCO. Among these four determinants, the quality of information obtained the highest beta value at 0.275, which was the most substantial factor in influencing customer satisfaction. The finding was supported by Alemu (2016). The service provider must always display the correct information to the customer to help them obtain the best and most precise facts and figures. The information provided will be a basis for them to decide. By providing accurate and reliable information, the customer will be satisfied with the courier services.

The quality of contact personnel was the least influential factor on the customer satisfaction towards Pos Laju Malaysia service during the MCO. Nevertheless, the quality of contact personnel negatively influenced customer satisfaction and was supported by Tukiran et al. (2021). They opined that the service provider must pay extra attention to this situation and take a necessary effort to know, and fulfil customers' expectations in enjoying the service provided. These necessary actions are undertaken frequently and coped accordingly depending on the priority. For this study, intensive communication is required for the new Pos Rider segment to enhance communication skills in facilitating compatibility between the Pos Malaysia Berhad and customers.

6. Conclusions and Recommendations

High quality of services is vital to guarantee customer satisfaction towards service provided. The study examined the relationship between LSQ dimensions and customer satisfaction and the determinant of customer satisfaction towards the courier service of Poslaju Malaysia during the MCO. The LSQ dimensions such as the quality of information, condition or accuracy of order, timeliness, and quality of contact personnel are the primary determinant for customer satisfaction towards courier services. The findings revealed that these four LSQ dimensions have a significant relationship with customer satisfaction. The result also showed that all four LSQ dimensions significantly influenced the customer satisfaction of Pos Malaysia Berhad during the MCO.
In conclusion, this study benefits the Poslaju Malaysia industry, courier service providers, government sectors, and customers. The findings obtained from this study can be a guideline for all stakeholders to improve the quality and performance of the logistic service in Malaysia. By ensuring that the customers are satisfied with the services provided, Poslaju Malaysia can become more successful and excellent in the future for better business performance.

7. Limitations of the Study
The study is limited to the customer satisfaction of the Pos Laju Malaysia Berhad. Thus, the study findings are mainly applicable to this courier service only.

8. Suggestions for Future Research
Based on the study limitations, future studies should expand the study area. The study will be more informative by considering other courier services in Malaysia such as J&T Express, ninja van, GDex, Pigeon Delivery, ABX Express, Skynet Express, City Link, DHL, FedEx, and other relevant courier services. Additionally, the finding will be more attractive by including a comparison study among these courier services.

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