

**THE FACTORS THAT
INFLUENCE THE
CUSTOMER
SATISFACTION THROUGH
USING THE FACILITIES OF
ELECTRIC TRAIN SERVICE
(ETS) IN PERAK**

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ABSTRACT

THE FACTORS THAT INFLUENCE THE CUSTOMER SATISFACTION THROUGH USING THE FACILITIES OF ELECTRIC TRAIN SERVICE (ETS) IN PERAK

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Electric Train Service (ETS), Malaysia's high-speed rail transport, was successfully serving around 5.7 million users before the COVID-19 pandemic. It has become an integral part of Malaysian life due to the convenience and shorter travel times it offers. Despite its popularity, there have been some setbacks in maintaining customer satisfaction, as previous research has shown that ETS has received numerous complaints about train comfort, including disturbances, tremors, carriage design layout and speed. Since customer satisfaction will determine whether a business can operate in the long term, plus the goal of ETS is to achieve sustainable development, it is necessary for ETS to focus on customer satisfaction by providing the number of qualified facilities' qualities that surpass the acceptable level of customers. Consequently, the purpose of this study is to identify the factors that affect customer satisfaction when using ETS's facilities in Perak. In this research, quantitative research would be applied as it is preferred for this research to collect data from target users. Apart from that, this study used the Descriptive analysis, Reliability Analysis, Multiple Regression Analysis, and Pearson Correlation Coefficient to examine the relationship among the variables. Besides that, this study will provide recommendations and solutions. Last but not least, it is hoped that this

study will help future research to explore facility quality more and help ETS improve facility quality for more customer satisfaction. In other words, the findings of this study also contribute to the existing knowledge on facility quality and provide a basis for future research in this area.

Keyword: Electric Train Service (ETS), Customer Satisfaction, Customer Expectation

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Apart from that, we would like to thank all the lecturers and tutors from our course. With their dedication, we gain real-time knowledge and information which enables us to conduct relevant research on current issues and assist our research subjects. We also appreciate that all our confusion is answered by them and therefore very helpful for our research project.

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DECLARATION

We hereby declare that the project report is based on our original work except for quotations and citations which have duly acknowledged. We also declare that it has not been previously or concurrently submitted for any other degree at Universiti Tunku Abdul Rahman (UTAR) or other institutions.

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APPROVAL SHEET

This final year project report entitled “**THE FACTORS THAT INFLUENCE THE CUSTOMER SATISFACTION THROUGH USING THE FACILITIES OF ELECTRIC TRAIN SERVICES (ETS) IN PERAK**” was prepared by CHONG ZHAO KANG, POON WEI XIANG, TEA PEI WEN, and WEI, LING LIANG and submitted as partial fulfilment of the requirements for the degree of Bachelor of Science (HONS) Logistics and International Shipping at Universiti Tunku Abdul Rahman.

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We hereby give permission to the University to upload the softcopy of our final year project report in pdf format into the UTAR Institutional Repository, which may be made accessible to the UTAR community and public.

Yours truly,

(CHONG ZHAO KANG)

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CHAPTER 1

INTRODUCTION

1.0 Introduction

Within this chapter, the background of the study will be priorly presented, which describes the reasons why the quality of ETS facilities is crucial for consumer well-being and the progressive integration of customer satisfaction with business services. Then, the factors affecting customer satisfaction and the related facilities favouring consumer comfort are shown, as well as the further improvement of ETS facilities to overcome unwanted events. In addition, the problem statement will identify the deficiencies of the ETS's facilities that affect customer satisfaction. Furthermore, the research questions and objectives reflect the purpose and mission of this study. Apart from that, the significance of the study will be comprised followed by the scope and limitation of the study, which validates the object and area of our study.

1.1 Background of Study

As a method of mass public transportation, the Electric Train Service (ETS) provides several benefits to society. Thus, the quality of this ETS is thought to have a key part in influencing consumer happiness in business (Abdullahi Bambale et al., 2020). The quality of rail services is still subpar in comparison. There are still several difficulties with the operation

The portrayal of excellence differs from one individual to another and from one circumstance to another (Abdullahi Bambale et al., 2020). Research shows that customer satisfaction is indirectly affected by facilities (Riseetyawan et al., 2022). It has evolved into a unique and vital component of the product and service offering (Abdullahi Bambale et al., 2020). You can't attract clients based on the amount they pay for their expectations if the facilities supplied to them become an issue. When other cost variables stay constant, consumers prefer adequate and ready-to-use facilities. A great rail transit station should be able to make passengers feel comfortable and secure as they wait for the train.

Other than that, for operators to deliver quality services, facilities in trains and stops are essential. In-train amenities, station amenities, operation, maintenance, and rules are all factors that may have an impact on customer satisfaction. Informational services, amenities in the coaches, safety features, thermal comfort features, and operational technological components are only a few examples of the in-train amenities that will help make passengers more comfortable.

However, other aspects of the ETS train service must be enhanced (Soo Heong, 2019). For example, a more user-friendly app or website to assist commuters in purchasing their tickets, whether Business Class, Platinum, or Gold. For instance, the procedure for resetting a password after forgetting it ought to have been simplified simpler. Such annoyances might have been avoided if KTMB had considered the significant public demand for its ETS trains. As a result, the focus

of this study is on the ETS amenities that have a significant impact on passenger satisfaction.

1.2 Problem Statement

There are numerous consumer complaints approximately KTMB ETS. One of the reasons for the issues has been complaints with respect to internet facilities such as poor online ticketing system. According to New Straits Times, the MobTicket mobile application of KTMB ETS takes a long time to load (Rahim, 2019). In addition, KTMB corporate communications chief Ahmad Asri Khalbi also admit that their online ticketing system occasionally delays in time. This is due to the huge number of clients attempting to purchase tickets has created an interruption in its online ticket system, said chief executive officer, Datuk Kamarulzaman Zainal (Rahim et al., 2019).

In addition to this, the ETS station facilities issues are cited as setbacks in attracting customer satisfaction. According to Hassan (2022), the most notable of these is the unavailability of dedicated access for wheelchair users. Hence, these ETS facilities users did not get priority access to the carriage when people crammed in the station. According to The Star, the Majestic Ipoh Railway Station which located in Perak, has been described as a shabby station. Based on Aqilah (2023), the safety aspect in the station is deficient due to the scarcity of lighting. One of the respondents mentioned that she is concerned about her personal safety when she is waiting for the train at the station after midnight. She hopes that the station can equipped with brother lights and the opening of

shops whose lights help illuminate the surroundings. Meanwhile, poor traffic flow is founded outside the station as specific lane and limited parking space for vehicle is not developed. When the passenger has not arrived at the station, the picker needs to continue driving and make a large circle to return to the station (Aqilah, 2023).

Besides that, commuters also dissatisfied to the overall cleanliness of the facilities within the station. For instance, some of its lands have been used as illicit dumps. Then, dumps can also be founded at several areas in the parking space, which creates puddles in hallways when it rains and post a threat to the drivers. In addition, there is thick dust on the ceiling and the wall-mounted fans plus the station was covered in a lot of bird droppings and strong urine smell. This might cause infectious diseases to customers. Even the metal benches in the waiting area were suggested to be replaced. Given that there was no backrest and the seat was frequently dusty, it was regarded as being uncomfortable to sit on.

Undeniably, elevator failures have the major complaint among ETS station facility users. On June 7, 2022, at Seremban KTM station, a photo of a group of auxiliary police officers carrying a wheelchair user down the stairs due to the breakdown of the elevator went viral on social media. Meanwhile, people are outraged at the post because the problem has not been solved despite being reported and it is too dangerous for such movement as a small slip could cause substantial injury. In this case, both disabled users and ordinary users are

exposed to the risk if such facilities are malfunction or scarce (Renushara, 2022). As a result, customers will not be satisfied because they will not experience the reliability and trust that these facilities bring.

The degree of comfort facilities in the train helps the ETS to increase the users' loyalty and satisfaction since most of the users sit at their seat sedentary. However, there are many ETS users do not satisfy with the train's comfort, especially the noise and vibration problems. According to the research by Chia et al. (2021), it has a survey about the satisfaction towards the service provided by KTMB ETS, shows that only 78% of the users were satisfied on the service which did not achieve 90% that the KPI set by top management. Vibration, noise level, and the seat design layout were the main factors that determine the users' satisfaction with the comfort of the train (Chia et al., 2021).

By referring to Musa et al. (2022), it is discovered that railway transportation operated by KTMB was surpass the noise limitation. Sometimes, vibration and noise can greatly affect and make it difficult for users inside and outside the train to carry out normal activities because they can cause health problems and irritability. Hence, when there is low service quality in terms of facilities, majority of users would change their transportation from public to private since they experienced bad service. Besides, there has been a study indicating that excessive vibration and noise could make people feel discomforts such as headaches, tachypnoea or an urge to vomit (Chia et al., 2021).

1.3 Research Gap

Through the study of customer satisfaction of ETS users, we found that the service quality of ETS occupies the most that affects the customer satisfaction of ETS users. There is a wide coverage of service quality, including physical facilities, quality assurance of the service, responsiveness of the staff and so on (Abdullahi Bambale et al., 2020). However, there are not many article that solely discuss the utilization of ETS facilities influences customer satisfaction. In modern times, facilities are gradually becoming an important role for every industry sector, especially in public transportation services, as people are utilizing the facilities offered by the organization to travel from one place to another. Besides that, facilities are also considered one of the determinants of an organization's competitive advantage. For instance, appropriate facilities can bring reliability to customers and meet their expectations thus increasing customer satisfaction. Meanwhile, organization that is able to attract more customer satisfaction are said to have a more competitive advantage over their peers. Therefore, we decided to conduct this research by only focusing on the impact of the use of ETS facilities on customer satisfaction.

1.4 Research Objectives and Question

Research objectives consist of the general objective, specific objective, and research question as follows.

1.4.1 General Objective

In this study, we intend to understand the factors that influence customer satisfaction through leveraging the facilities of Electric Train Services (ETS) in Perak, including the internet side, at the station, and the interior of the train.

1.4.2 Specific Objective

- a. To identify the factors that affect customer satisfaction in using the facilities of the Electric Train Service (ETS).
- b. To determine how the service quality in terms of facilities offered by Electric Train Service (ETS) contributes to customer satisfaction.
- c. To provide recommendations for improvements to Electric Train Service (ETS) facilities.

1.4.3 Research Question

- a. What are the factors that affect customer satisfaction in using the facilities of the Electric Train Service (ETS)?
- b. How is the service quality offered by Electric Train Service (ETS) contributes to customer satisfaction?
- c. What are the recommendations for further improvements to Electric Train Service (ETS) facilities?

1.5 Significance of Study

By conducting this study, the reader is able to understand the factors that influence customer satisfaction when utilizing ETS facilities. In this way, it creates an opportunity for ETS operators to recognize their inadequacies and deficiencies in offering services in terms of various facilities to their customers. When the services provided do not meet customers' expectations, the use of such services will be decreased, thus affecting the company's revenues. Therefore, this study is able to remind ETS operators of the importance of functional facilities to customer satisfaction otherwise bear the loss of benefits. By knowing the current issues of ETS operators, they will be aware of what is not feasible and seek variable solutions to implement (Amy, 2020).

In addition, by pointing out the significant impact of service quality on customer satisfaction, this study can facilitate ETS operators to invest more efforts in the improvement or further construction of existing facilities. Apart from ETS operators, this study is also useful for operators in various industries because customer satisfaction is the primary goal for every business, and it can be maintained through adequate service quality.

1.6 Scope and Limitation of Study

This study aims to identify the factors that influence customer satisfaction in utilizing the facilities of the Electric Train Service (ETS). Our research target will be the citizens of Perak, Malaysia. The reason is that there is a total amount of 10 KTM ETS stations in Perak, which allow us to obtain sufficient

information about the facilities from the ETS station in different locations. Among these research respondents, university students will be prioritized to be examined, followed by other ETS users because some university students often take ETS to travel between their hometown and campus, and they are also more sensitive to some technological facilities. In addition, the remaining respondents would be commuters, as many of them take ETS for working or traveling purposes. Besides that, the method we used to collect and analyze data from our study subjects is a quantitative study that can be conducted by preparing an online questionnaire (Google Forms).

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This part provides a critical assessment of sources relevant to the study topic. The theoretical framework will be explored first in this chapter. There will also be a discussion of the link between the independent and dependent variables. This study's independent variables include safety features, payment methods, comfortability, and convenience, whereas the dependent variable is identifying the elements influencing consumer satisfaction of ETS facility users.

2.1 Theoretical Framework

The Expectancy Confirmation Theory (ECT) will be used for the purpose of this research.

2.1.1 Expectancy Confirmation Theory (ECT)

The marketing field has used expectation-confirmation theory (ECT) extensively to gauge consumer happiness and post-purchase behaviour, with the goal of fully conceptualizing and explaining the consuming process (Xue Mei, Jiang Hua and Felix, 2018). Oliver first introduced the expectancy confirmation theory in 1980. It was used to examine how consumer expectations and satisfaction affected future purchase intentions. The ECT is one of the well-known expectations theories (Colleen, Rudy, William and James, 2020). A process sequence is used to create the prominent mechanism underpinning ECT

(Xue Mei, Jiang Hua and Felix, 2018). Customers form initial expectations of a particular service or product before engaging in actual purchasing behavior. This initial expectation can be interpreted as the scope of the customer's expectations of the target as well as the scope of the customer's views about the service provider's capacity. Perceptions of the entire performance are progressively formed over the consuming phase. Customers then evaluate the service's perceived performance in relation to their earlier expectations in order to determine the degree to which these expectations are met. The following phase involves assessing client satisfaction with the service based on their pre-purchase expectations and verifying the disparity between those expectations and post-purchase assessments of the service.

The phases of the ECT framework range from the stage of forming perceptions of goods or services before consumption to the step of developing consumption intentions for those goods or services. Specifically, ECT contends that the following procedure (Figure 2.1) determines a person's level of contentment or dissatisfaction.

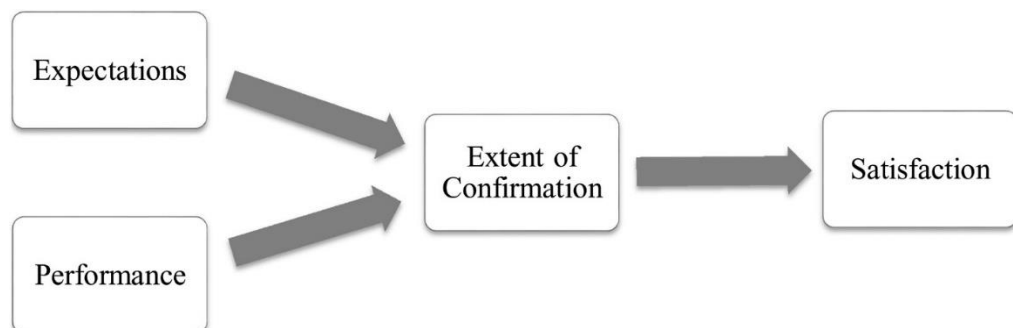


Figure 2.1 Expectancy Confirmation Theory (ECT) Framework

Source: (Xue Mei, Jiang Hua and Felix, 2018)

Firstly, on the expectation. Expectations are preconceived notions about a good or service (Colleen, Rudy, William and James, 2020). They represent expected behaviour and act as benchmarks for evaluating the performance of the product. Prior to the first use, consumers create their first expectations of a good or service. Their expectations are more likely to be reasonable if they have already used the product or service; otherwise, if they haven't used it themselves, their expectations may come from other sources. These expectations could be derived from reviews left by previous users, news stories, or marketing campaigns. However, initial expectations serve as the standard by which the performance of the good or service will be measured in the future.

Next, about the performance. The customer will assess the perceived performance of the good or service in a way that is consistent with a priori expectations if they choose to use the product or service. Then, the confirmation or disconfirmation will be arising from the gap between expectation and actual performance. At this point in the process, there are three potential consequences. First, negative disconfirmation happens when performance falls short of an individual's expectations. Second, positive disconfirmation happens when performance meets or surpasses expectations. Third, simple confirmation takes place when performance matches expectations. This indirectly indicates that negative disconfirmation leads to dissatisfaction, positive disconfirmation leads to increased satisfaction and simple confirmation indicates that there is no gap between customer expectation and performance. Thus, it is evident that the discrepancy between expectations and performance has an impact on consumer satisfaction because they directly influence the repurchase intention.

2.1.2 Theory Analysis

For this study, we have chosen the Expectancy Confirmation Theory (ECT) as our theory. The theme of this research is the customer satisfaction of ETS's facilities users, and ECT has identified the link between each component, which are the expectation, perceived performance, confirmation or disconfirmation, satisfaction, and repurchase intention. Customers will have expectations of comfortable, usability or convenience before using ETS facilities. Following their experience, customers will generate confirmation regarding the facilities, which will lead to satisfaction or discontent. If they are satisfied with this, they may increase their loyalty to ETS and use the same service provider again and again when needed. Every behaviour between the time they paid for the goods and the time they used them will have an impact on their repurchase intention, either directly or indirectly. These activities might include safety features, comfortability, convenience, and payment method. Performance may be used to gauge all of these actions. If the performance falls short of the customer's expectations, they won't be interested in buying the same service or item again.

2.2 Proposed Conceptual Framework

The proposed conceptual framework for this research is as shown in Figure 2.2

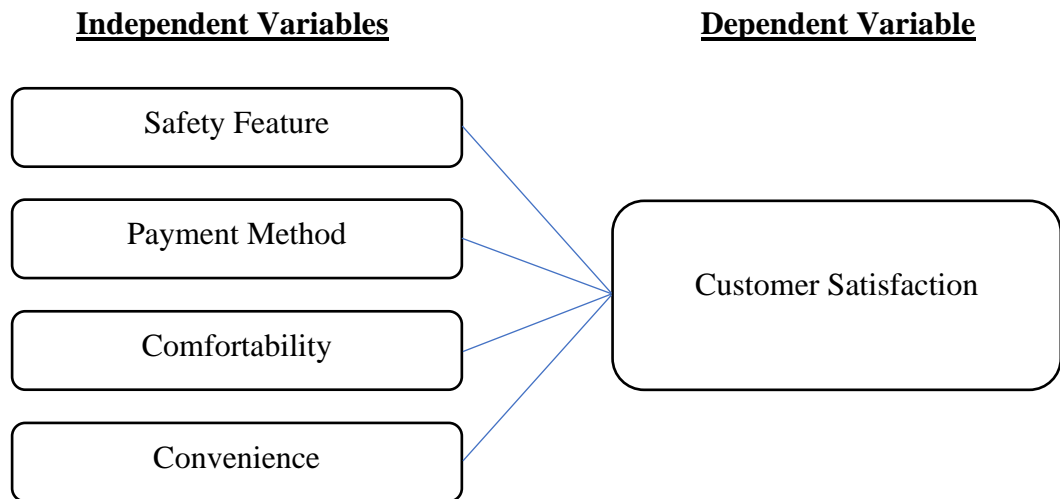


Figure 2.2 Proposed Conceptual Framework

2.3 Hypothesis of Study

The development of the thesis hypothesis is to describe a testable prediction regarding what a researcher anticipates will happen during the course of the study. It involves certain aspects, such as the population, variables, and the relationship between the independent variable and dependent variable.

Hypothesis 1

H_0 : There is no relationship between the Safety Feature to the Customer Satisfaction of ETS's Facilities Users.

H_1 : There is a significant relationship between the Safety Feature to the Customer Satisfaction of ETS's Facilities Users.

Hypothesis 2

H_0 : There is no relationship between the Payment Method to the Customer Satisfaction of ETS's Facilities Users.

H_1 : There is a significant relationship between the Payment Method to the Customer Satisfaction of ETS's Facilities Users.

Hypothesis 3

H_0 : There is no relationship between the Comfortability to the Customer Satisfaction of ETS's Facilities Users.

H_1 : There is a significant relationship between the Comfortability to the Customer Satisfaction of ETS's Facilities Users.

Hypothesis 4

H_0 : There is no relationship between the Convenience to the Customer Satisfaction of ETS's Facilities Users.

H_1 : There is a significant relationship between the Convenience to the Customer Satisfaction of ETS's Facilities Users.

2.4 Independent Variable

The independent variable in this research includes safety features, payment method, comfortability, and convenience.

2.4.1 Safety Feature

The safety of electric train transport service reflects the level of management, the quality of equipment, the quality of personnel, and the social order of the electric train service, which is an important expression of the safety of railway transport. Potential safety issues, including the recent virus spree, and staff disinfection measures for the train facilities greatly affects passenger satisfaction in terms of safety. Some passengers infected with the virus deliberately use the vulnerability to transmit the virus on the train. Luggage is stolen when a passenger goes to the toilet alone. These factors can disrupt the passenger's schedule and these security issues greatly affect the passenger's trustable in ETS. Although security issues have greatly affected customers' willingness to take ETS, many passengers are still hesitant to travel on ETS because scare that being infected by a virus or their luggage being stolen (Mat et al., 2019). In addition, the clearance of obstacles on the track is also a big part of the safety guarantee, because passengers have heard that some of the obstacles on the track are not cleared in time due to some unexpected situations, resulting in some major traffic accidents, good clearance and scanning of obstacles on the track is also a big part of the guarantee to improve the safety of passengers. Because of the increase in passenger satisfaction, passengers will improve the daily demand for electric train service (Mat et al., 2019).

These safety measures can also be monitored through social media and passenger safety concerns are a key issue when it comes to passenger safety often associated with many facilities and people. For example, the regular daily maintenance of ETS and whether he is following safety standards in his operations. There is no security staff present in times when a customer's life is in danger and the timely presence of first aiders. So these issues are: 1) regular maintenance of the facilities, 2) regular daily disinfection of the carriages, 3) coverage of the monitored areas, 4) emergency measures for the security staff, 5) detection of dangerous people, 6) Obstacle clearance of tracks (Mat et al., 2019).

2.4.2 Payment Method

As we can see, ETS users are concerned about a number of critical factors, including the payment method. The business nowadays offers a couple of ways of payment, for example, cashless payment and cash payment. Consumers purchase products and services using a variety of payment methods. The data reveal that the old methods of payment, especially cash, still dominate (Beata, Pawel and Dominik, 2021). But the trend of replacing traditional cash-based payment methods with cutting-edge ones has spread to practically every country in the world. Where convenience and security are statistically important factors influencing customer payment preference.

Both the marketing of products and the marketing of services incorporate convenience nowadays (Yuan Yuan, Joo Hwan and Woon Kyung, 2019). All

forms of convenience that offer high-quality goods, such as quick, inexpensive, and simple methods that save customers' time or effort when they buy, fall under the category of service convenience. The link between convenience and time value is supported by a number of recent research. Convenience is considered to be one of the most important factors influencing the use of payment methods. The user experience satisfaction is positively impacted when the convenience of payment methods is increased.

Payment security refers to the procedures that organizations take to secure their customers' data and avoid unapproved transactions and data breaches. Customers must accept the risks and uncertainties related to their adoption decision (Yuan Yuan, Joo Hwan and Woon Kyung, 2019). Take the mobile payment system as an example, most consumers have no prior experience with the mobile payment system. Although customers believe that mobile payment is quick, simple, and handy, they are concerned about security. Privacy, anonymity, dependability, and the capability of the payment system to meet the regulatory framework are all security criteria. Customer satisfaction rises the more security that businesses offer. Consumer satisfaction will significantly increase if they can make mobile payments with good security.

2.4.3 Comfortability

Electric train service(ETS) comfort is the level of the customer experience on an electric train service (ETS), which is the driver of customer comfort needs and customer loyalty. In order for more customers to be satisfied and enjoy an ETS,

the comfort level of electric train services (ETS) has an irreplaceable impact. In order to get more customer satisfaction and a better reputation for ETS, operators must tailor their targets for improving comfort, and rectifying them through customer feedback to raise customer expectations (Isai et al., 2020).

The level of comfort is a mixture of attributes; how comfortable it is to meet the needs of the customer. The level of comfort can be addressed in these four areas. These four components are namely noise, vibration, electric train services facilities design layout, speed, and the level of facilities clearness (Isai et al., 2020).

The comfort level of the ETS is an important part of the service and greatly influences customer demand and satisfaction with the ETS. Investigating whether there is an acceptable standard of comfort for a train, the standard of comfort is judged relatively, which means that each person has an opinion about the comfort of the train, its noise, its design, and so on. The level of comfort can also be demonstrated by the comfort level of trams in different countries, with some customers preferring trains that are less noisy and have a steady speed. Noise and design are the most important parts for many customers. Low noise levels and good seat design maintain customer satisfaction and increase customer loyalty, giving a comparative advantage over other passenger industries. If the level of comfort meets the expectations of the customer, the customer will use the ETS vehicle for a long time and become a long-term user.

2.4.4 Conveniency

In the present day, the purchasing behaviour of the consumer has significantly changed as it is affected by the convenience offered by the companies. Meanwhile, the modern consumer wants comfort in addition to high-quality services. In other words, they are seeking a convenience that spares them non-financial expenditures, including time and effort (Syeda and Arsalan, 2017). In addition, service convenience has been defined as any convenience that draws a client in and keeps them interested in that specific service such as providing services in a way that reduces the time and effort of the customer.

At the same time, Syeda and Arsalan (2017) also suggested five types of service convenience for different stages of service encounters, involving decision convenience, access convenience, transaction convenience, benefit convenience, and post-benefit convenience. All these five service conveniences play a crucial part in customer satisfaction and business achievement. The reason is that it facilitates the companies to have a better understanding of the customer perception of the different levels of time and effort used due to the fact that service delivery and consumer expectations differ. When the services provided enables to reduce the customer's time and even exceed their expectation, customer satisfaction is considered occurred.

Decision convenience represents the consumers enable to save their time and effort while making a consumption decision or choosing particular services (Roy et al., 2018). When a consumer has the opportunity and makes an attempt to

decide between competing services in order to purchase or utilize the products, this is also referred to as a decision convenience (Putri et al., 2020). In fact, decision making from the customer is actually driven by the existing information, such as the company's reputation, brand awareness, physical facilities, and employees' appearance.

Access convenience refers to the saving of time and effort by customers while contacting the service provider and traveling to the service site (Roy et al., 2018). It involves the accessibility of customers to the product or services or even the organization. In order to achieve as well as influence customer satisfaction, Syeda and Arsalan (2017) have proposed that the service provider must be equipped with accessibility by various means and availability of service provider at a convenient time. The secret to retaining customers is accessibility (Rahim and Mohamad, 2021). Because many services demand client interaction, accessibility ease is key. Customers must show up at the appropriate time and location. Companies can achieve this by giving customers a variety of ways to start services, including the use of self-service technologies, by separating the necessary front-end administrative tasks from the benefits of the service in terms of time and place, such as allowing customers to buy tickets online, and by bringing the service to the customer rather than the customer to the service (Darligton,2020).

Transaction facilitation entails the steps required for customers to seek and receive services as needed (Darligton,2020). Besides that, transaction

convenience occurs when a customer decides to obtain a service and contacts the relevant service provider. Thus, a contract occurs between them which is the exchange of products or services and money. Additionally, there is no doubt that transaction convenience has a significant impact on customer satisfaction because, as mentioned earlier, customers prefer to be provided with convenient and secure payment methods, such as multiple payment options in online facilities (Mehmood and Najmi, 2017). Furthermore, customers can commence services in person, remotely, or through a combination of the two (Darligton,2020).

In addition, benefit convenience is the stage at which customers are able to experience the benefits of certain products or services. Conversely, if the current convenience does not satisfy the customer's needs, other conveniences may be less enjoyable because they will prohibit the customers from experiencing the main advantages of the service. In other words, the products or services to be obtained must meet the customer's expectations, otherwise, it will create a setback in customer satisfaction (Syeda and Arsalan, 2017). Fairness concerns may also arise when customer convenience expectations are not met because time and effort are personal resources that consumers must sacrifice in order to pay for or utilize a service (Darligton,2020).

The last will be the post-benefit convenience, indicating that the customer still receives the benefits from the service provider throughout this phase, even if they have already enjoyed the core benefits of the service. This convenience

develops an endless relationship between the customer and the companies as customers are keeping in touch with the company and overcome the problems related to the purchase and never switch to other companies (Syeda and Arsalan, 2017).

2.5 Dependent Variable

The dependent variable in this research is Customer Satisfaction of ETS's Facilities Users.

2.5.1 Customer satisfaction of ETS's facilities users

In this research, the dependent variable of the expectancy confirmation theory is the customer satisfaction of ETS's facilities users. Based on the theoretical framework, the safety feature, payment method, comfortability, and convenience serve as the independent variable, which directly influences customer satisfaction with ETS's facilities. Customer satisfaction refers to a term used to describe how well the customer feel their overall interaction with a company that offers the goods and services over time, including the experience of making purchase and consumption of goods and services (Abdulalem and Basri, 2018). Furthermore, customer satisfaction can be sustained through achieving customer expectations. Customer expectation is known as the consumer-made prediction of results after they consume a product or service. Simultaneously, the desired results from using a product may also be included in consumer expectations (Indeed Editorial Team, 2021).

Customer expectation may also interrelate to customer characteristics, which refers to a group of people's propensity to consume a particular product or service and it can be categorized into demographics (age, gender, income level, etc.), psychographics (beliefs, thoughts, feelings, etc.), geographics (metropolitan area, climate, population density, etc.) and behaviouristics (attitude, benefits sought, loyalty rate, etc.) (RightHello, n.d.). Hence, customer expectation is determined by numerous customer characteristics. For instance, in term of ETS facilities, customers with higher income level can afford the Business Class coach (a new first-class travel experience that serves with premium facilities by ETS), they will believe that they are able to enjoy the superior service in terms of bigger comfort seat, entertainment system, facility kits and so on (RailTravel Station, n.d.). Meanwhile, for ETS users with disabilities, they expect the ETS's facilities fit to their defects such as the functional elevator and sufficient handrails for wheelchair users for migration, handrails installed with Braille for the visually impaired for navigation and so on. Based on the above situation, customer satisfaction can be achieved if the ETS's facilities are provided to meet the customer expectation in terms of the needs and wants of different characteristics of ETS users.

Customer perceived value, where Petr and Maria (2019) indicate that this is the customer's evaluation of the merits of the product or service, i.e. whether it has the capability to meet their needs and anticipations compared to the cost they pay, especially in comparison with their peers. The study also found that once consumers perceive a product to be of high value, they are likely to focus on a particular product or service. As per Amir Azlan and Mohd Farid (2020), they

also describe customers as dollar-maximizing spenders, a group of people with a fanatical need for monetary value and strive to experience the joy of every dollar they spend on the products and services. It is easy to see that the customer has a direct interest to the company, and indirectly reflects the importance of customer satisfaction. To demonstrate this, research states that satisfied customer tends to purchase more, and repeat consumption of certain products and services from the company. Satisfied customers will also gain trust in the company. In addition, both ETS operators and shareholders will enjoy the economic benefits that satisfied customers bring them. For instance, when the ETS operator is able to achieve higher customer satisfaction than its competitors did, it can be said that the ETS operator gains more competitive advantage over his competitors whereby the ETS business will be able to gain market share as customers contribute to the creation of market segment. Consequently, the overall revenues for both the ETS operator and his shareholder will be increased.

In the meantime, Amir Azlan and Mohd Farid (2020) mentioned that customer loyalty is obtained through customer satisfaction because they trust the organization's brand. Customer loyalty indicates a customer's likelihood of doing business with a company again in the future. Furthermore, customer loyalty can be measured in several ways, including 1) If a customer has made at least three additional purchases from the same company, they are regarded as loyal; 2) Looking at the proportion of businesses using the service allows for the measurement of loyalty; 3) Consumer attitudes towards the company are a determinant of loyalty; 4) By examining the degree of involvement, loyalty can be evaluated (Ady et al., 2019). When customers are satisfied with the

organization, they are willing to pay more or pay in premium, such as the ETS Business Class coach and ETS Platinum coach. A loyal customer will also affect the behaviour of others as they are human, and human has a good grasp of "what others do." For instance, because people around regularly consume certain products or services, some customers are influenced to create a demand for these products or services, so this contributes to the company's sales and revenue.

CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

Under this chapter, it will provide an outline of the research. It will involve the research design, data collection method, sampling design, research instrument, and data analysis. First, the research design which fits the research's objective will be further discussed. Furthermore, this chapter also describes the research instrument which used to collect data and also includes procedures followed by this research. Finally, this chapter also discusses the mode of analyse for data collected.

3.1 Research design

Research design help to ensure that the method of choice to use could meet the research objective and also certify that the correct method of data is applied to analyse. Basically, research design had involved several types which are the qualitative method, quantitative method, and mixed-method. In this research, quantitative research would be applied as it is preferred for this research to collect data from target users. The quantitative method was providing a “close-off” question by providing potential answers to limit the respondents to reply to questions. Besides, conducting questionnaires as quantitative method could avoid the respondents from answering too vaguely and the question is not answered, and the quantitative method is easier to convert to numerical (percentage) (Streefkerk, 2019). On top of that, the quantitative method could help to determine the relationship between the dependent variable (customer

satisfaction) and independent variables (payment method, convenience, comfortability, and safety features). It will help to ensure that how the independent variables would greatly affect customer satisfaction.

3.2 Data Collection Method

Data collection for the research mostly includes two methods which are the primary data collection method and the secondary data collection method. This research will apply both methods to collect data to make better analysis and get the desired results.

3.2.1 Primary data

Normally, primary data is the first-hand data from the researcher and data do not need to pass any existing source. Primary data is more reliable and have high accuracy as the data was not affected by personal prejudice, so the authenticity of the data is trustworthy. Not only this, but also researchers could obtain the latest data through primary data since such data would be collected in real-time and could not obtain existing source data. Primary data could be collected through questionnaires that are made in google form (Bhandari, 2020).

Nevertheless, the survey will be applied to gather primary data for this research project. The survey will be distributed to the target users in the Perak area in order to obtain a large number of information about customer satisfaction in using the facilities of ETS from the users in a way that does not threaten others.

3.2.2 Secondary data

Secondary data is data that has been collected in the past and could be used by others through any channel. The secondary data mostly is the primary data, but it became secondary when it was used by other people. Secondary data could be more easily accessible by any researchers since most of the data could be shared publicly through social media and the internet. The data would be easier to obtain compared to primary data since time consumption and cost are lower than primary data. However, because of this, the use of secondary data collection methods will reduce the authenticity of the data. It could get the data through several sources such as websites, books, journal articles, newspapers, and others (Bhandari, 2020).

3.3 Sampling Design

3.3.1 Target Population

A target population is a group of people that the researcher is interested to study in. The purpose of the target population is to strengthen the reliability and accuracy of the data get from the target population. It is essential that the researcher could determine the right target population to prevent incorrect data collected and finally leading to the wrong results of research. Hence, the target population of this research project would be focused on all ETS users where the university students will be focused priorly followed by other ETS users such as commuters.

3.3.2 Sample technique

As there have a huge number of people who are the users of ETS's facilities, it could assume that the target population for this research is massive. It is possible that researchers to use different types of sample techniques in order to collect the data they want. Hence, this research would be applied the probability sampling techniques by using the simple random sample method. Such method was not requiring any specific characteristics since it is not necessary to divide the populations into subgroups. This sampling method is the fairest way as all people who involve in the target population have an equal opportunity to be selected (Hayes, 2022).

3.3.3 Sampling size

Sample size would be determined by the following formula:

$$n = N \times X / (X + N - 1),$$

$$\text{where, } X = Z_{\alpha/2}^2 \times p \times (1 - p) / MOE^2$$

$$Z = 1.645$$

$$\alpha = 0.1$$

$$p = 0.5$$

$$MOE = 0.05$$

$$n = 270$$

Formula source: (Cochran, 1977)

In the research, the sample size is the number of participants that come from the target population. Sample size could help the researchers to estimate the characteristics of the target population since it takes the sample size to carry out the analysis. Since the target population for this research is large which is exceed 100,000, thus, the sample size will be controlled at 270 participants. In this research, the sample size is determined by the margin of error which will be at 10% with 90% confidence interval.

3.4 Research Instrument

3.4.1 Questionnaire Design

Questionnaire design is deciding whether the research could gather the data that match the topic. The questionnaire will be sent out by using Google Form through the link provided to the participants. The questionnaires are designed for the participants who are using ETS's facilities in the Perak area. The questionnaire will be designed into three sections. Section A of this questionnaire will focus on the demographic data of the participants in the Perak area. The demographic data would involve the gender, age, race, education level, and occupation of the participants. Besides, section A would also regard to the frequency of using ETS's facilities for the participants.

Table 3.1

Section A: Demographic data of the participants in Perak area

Variable	Measurement	Scale of Measurement
Gender	Nominal	-
Age	Ordinal	-
Occupation	Nominal	-
Frequency of using ETS's facilities	Ordinal	-

Furthermore, Section B would be aimed to explore the perspective of users which is designed to ask about the independent variable of the research. These independent variables included payment method, convenience, comfortability, and safety features. It would have a subsection for each independent variable in order to determine how these independent variables affect the dependent variable. The questionnaire would be asked based on 5-point Likert Scale which provides 5 options to the participants.

Table 3.2

Section B: User’s perception of 4 different variables, based on a 5-point Likert Scale

Variables	Measurement	Scale of Measurement
Payment method	Ordinal	5-point Likert Scale
Conveniency	Ordinal	5-point Likert Scale
Comfortability	Ordinal	5-point Likert Scale
Safety features	Ordinal	5-point Likert Scale

Table 3.2.1

5-point Likert Scale	
1	Strongly disagree
2	Disagree
3	Neither agree nor disagree
4	Agree
5	Strongly agree

Next, Section C would be designed for evaluating the customer satisfaction for facilities of ETS. This section also applied the 5-point Likert Scale in the questionnaire. Furthermore, it would also set the question about the recommendation for improvement of the facilities of ETS to the participants. The participants would need to place their suggestions which able to enhance the facilities of ETS in order to give users the opportunity that a better experience that could beyond their expectations.

Table 3.3

Section C: Customer Satisfaction Assessments and Respondents'

Recommendations for ETS Facility Improvements

Variable	Measurement	Scale of Measurement
Customer satisfaction	Ordinal	5-point Likert Scale
Recommendation for improvement	Nominal	-

3.3.1 Pilot test

It is necessary for the researcher to prepare a pilot test for the participants to ensure whether the questionnaire designed had misled the participants. It will be invited 60 people who has experience in using the facilities of ETS of Perak area to participate in the pilot test and request them to give feedback and any suggestion to optimize the questionnaire design. The pilot test also helps to ensure the timing for taking a survey since the questionnaire must minimize the time consuming of the participants.

Table 3.4

Result of Reliability Analysis

Variables	Cronbach's Alpha
Payment Method	0.7505
Convenience	0.7455
Comfortability	0.7215
Safety feature	0.7368
Customer Satisfaction	0.7550

Table 3.5

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Source: (Zahreen et al., 2018)

All variables exceeded the Cronbach's Alpha of 0.70, which means that the internal consistency was acceptable according to table 5, and therefore, after pilot testing and reliability testing, the final questionnaire was created.

3.5 Data Processing

A total number of 270 questionnaires will be given out to the respondents who are having experience in using the facilities of ETS in Perak and are pleased to fill up the questionnaire. We will review and screen to filter out the questionnaires that are insufficient information, so as to ensure that the data collected from the participants can be analysed, and the accuracy is also assured.

3.6 Data Analysis

The data collected through the survey would be checked before starting to do data analysis. The Microsoft Excel software will be used to type the data into Multiple Regression analysis then the outputs will be released.

3.6.1 Descriptive analysis

Descriptive analysis is the most common and most basic data analysis method. It helps to describe and summarize by using present data (such as mean, median, mode, percentage, frequency, and range). The purpose of applying this analysis in this research is such analysis was emphasized a high degree of objectivity and neutrality, it avoids the bias problem that occurred (Johnson, 2022). The data will be obtained after using Multiple Regression function in Microsoft Excel software.

3.6.2 Reliability Analysis

The qualities of measuring scales and the items that comprise the scales may be studied using reliability analysis (“Reliability analysis”, 2021). In addition to providing data on the correlations between the scale's constituent items, the reliability analysis technique creates a variety of regularly used scale reliability measures. Reliability of the measurements is crucial for any research project; therefore, reliability analysis is a required step that must be taken to ensure the internal dependability of each variable. For instance, does the questionnaire effectively measure consumer satisfaction? By using reliability analysis, we may find problematic items that have to be taken out of the scale, as well as the degree of the link between the items in our questionnaire and an overall measure of the repeatability or internal consistency of the entire scale. Cronbach's Alpha test is used to verify measurement consistency using SPSS Statistical Software. Cronbach's Alpha rules of thumb suggest that the higher the value of Cronbach's Alpha, the greater the dependability of the variables.

3.6.3 Inferential analysis

Another type of analysis applied will be an inferential analysis which could help to predict the characteristics of a greater population by using the summarized data from descriptive analysis (Johnson, 2022). Besides, the inferential analysis will be used to determine the connection between independent variables (payment method, convenience, comfortability, and safety feature) and dependent variable (customer satisfaction).

3.6.3.1 Multiple Regression Analysis

Multiple regression analysis is one of the most common methods which used to predict the outcome of the dependent variable by using at least two independent variables. It could say that this analysis is applied to examine how the independent variables would affect the dependent variable. Hence, it wishes to examine the effect of payment method, convenience, comfortability and safety feature on customer satisfaction of ETS's facilities users.

Multiple Regression Model Formula:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

Where Y = Dependent Variable (DV)

X_k = Independent Variable (IV)

β_0 = Intercept

β_k = The Coefficient or the Slope of IV

k = number of IV in equation (k= 1, 2, 3, 4)

Hence, for this research project, the multiple regression equation will be as below:

$$Y = \beta_0 + \beta_1 (\text{Payment method}) + \beta_2 (\text{conveniency}) + \beta_3 (\text{Comfortability}) + \beta_4 (\text{Safety feature})$$

3.6.4 Pearson Correlation Coefficient

Pearson correlation coefficient analysis was utilized to analyse the acquired data (Turney, 2022). This approach gives information on the strength, course, and relevance of all proposed variables in this study's bivariate connection. As a result, this is an excellent approach to employ because the researcher wishes to comprehend the link between each independent and dependent variable. In other words, the researcher can tell if the link between the independent and dependent variables is strong or weak, positive or negative. Following the collection of data, the input is transformed into a number and entered into SPSS, which creates the subsequent output. Albeit the designation of SPSS reflects its exclusive use in the arena of sociologies, its utilization has since been attempted in different data markets ("SPSS (Statistical Package for the Social Sciences)", 2018). SPSS is normally utilized in medical care, marketing, and schooling research. The kinds of information examined utilizing SPSS are diverse. Normal sources incorporate study outcomes, association client information bases, Google Analytics, scientific studies results, and server logging. SPSS upholds either survey and retrofit of numerous sorts of facts and arrangements of almost any organized message. The software upholds electronic forms, documents containing only text, and relational data like Structured Query Language (SQL), Serial Advanced Technology Attachment (SATA), and Serial Attached SCSI (SAS) which SCSI Stands for Small Computer System Interface. SPSS offers data analysis for descriptive and bivariate statistics, numerical outcome forecasts, and group identification forecasts. The application additionally gives direct promoting, charting, and information interpretation capacities.

CHAPTER 4

Data Analysis and Research Findings

4.0 Introduction

There are 270 sets of surveys had been given to Perak citizens who have the involvement of utilizing ETS. The collected information will be organized and clarified by utilizing SPSS Statistical Software to test each of the theory. Besides, there are few investigations will be secured inside this chapter counting the expressive investigation and inferential examination. Additionally, the link between independent variable which comprise of payment method, convenience, comfortability, safety feature and dependent variable which is users' generally fulfilment will be clarified afterward.

4.1 Descriptive analysis

This part of analysis will present the demographic profile of all respondents by using the frequency table shown to show the details.

4.1.1 Respondent' Demographic Profile

There are three questions related to demographic profile and the data is summarized within the table underneath.

Table 4.1: Demographic profile

			Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Valid	Female	137	50.7	50.7	50.7
		Male	133	49.3	49.3	100.0
		Total	270	100.0	100.0	
Age	Valid	15-24	142	52.6	52.6	52.6
		25-34	93	34.4	34.4	87.0
		35-44	20	7.4	7.4	94.4
		45-54	15	5.6	5.6	100.0
		Total	270	100.0	100.0	
Occupation	Valid	Employed	99	36.7	36.7	36.7
		Retired	8	3.0	3.0	39.6
		Student	151	55.9	55.9	95.6
		Unemployed	12	4.4	4.4	100.0
		Total	270	100.0	100.0	

The entire respondents who had filled within the surveys for this investigate is 270 individuals and 133 of them are male respondents (49.3%) whereas the female respondents comprise of 137 individuals (50.7%). 142 out of 270 respondents, or about 52.6%, were in the 15 to 24-year-old age range, followed by 93 respondents, or about 34.4%, who were in the 24 to 34-year-old range. Next, there are 20 respondents (7.4%) who are between the ages of 35 to 44, while the lowest proportion, 5.6%, is made up of 12 respondents who are between the ages of 45 to 54.

The majority of the 270 respondents, or 151 out of 270 (55.9%), are students, who are followed by 99 respondents (36.7%) who are employed. Last but not least, just 8 persons (3.0%) are retired, leaving 12 people (4.4%) are unemployed.

4.1.2 Frequency of using ETS

Table 4.2: Frequency of using ETS

		Frequency	Percent	Valid Percent	Cumulative Percent
Frequency of using ETS	Valid	Daily	14	5.2	5.2
		Monthly	92	34.1	39.3
		Weekly	33	12.2	51.5
		Yearly	131	48.5	100.0
		Total	270	100.0	100.0

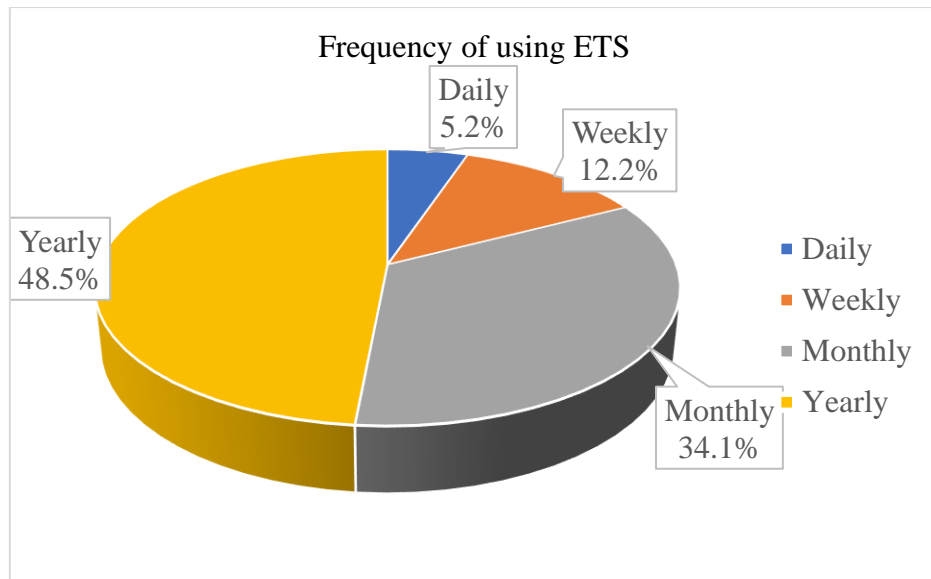


Figure 4.1: Frequency of using ETS

Agreeing to Table 4.2, 33 of the 270 respondents (12.2%) reported utilizing ETS on a week after week premise, whereas 34.1% utilized ETS month to month and 48.5% utilized it annually. As it were 5.2% detailed utilizing ETS every day. The annually utilizing ETS has most noteworthy rate which is 48.5% comprise 131 individuals out of 270.

4.1.3 Purpose for using ETS

Table 4.3: Purpose for using ETS

		Frequency	Percent	Valid Percent	Cumulative Percent
Purpose for using ETS	Valid	Business	58	21.5	21.5
		Non-business (e.g.: visit family, vacation)	211	78.1	78.1
		Not using	1	0.4	0.4
	Total	270	100.0	100.0	100.0

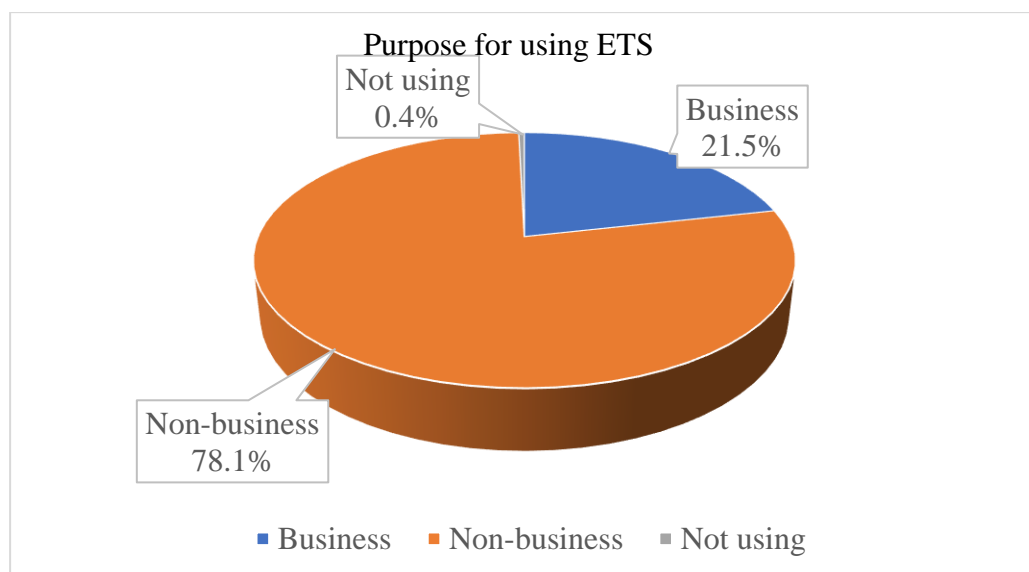


Figure 4.2: Purpose for using ETS

Table 4.3 shows the purpose for using ETS as a mode of transportation. The total sample size is 270, with 58 individuals (21.5%) using ETS for business purposes and 211 individuals (78.1%) using ETS for non-business purposes (such as visiting family or vacationing). However, there is only One person (0.4%) did not use ETS for either purpose.

4.2 Factors that Affect Customer Satisfaction of ETS's users

4.2.1 Payment Method

Table 4.4: Response from Users towards Payment Method

		Percentage %				
	N	Strongly disagree			Strongly agree	
PQ1	270	9.3	5.9	5.6	34.8	44.4
PQ2	270	9.3	6.7	4.1	40.4	39.6
PQ3	270	12.6	11.5	4.8	44.1	27
PQ4	270	8.1	10	10.7	40.4	30.7
PQ5	270	5.9	6.7	4.8	32.6	50
PQ6	270	8.5	4.8	4.4	38.1	44.1

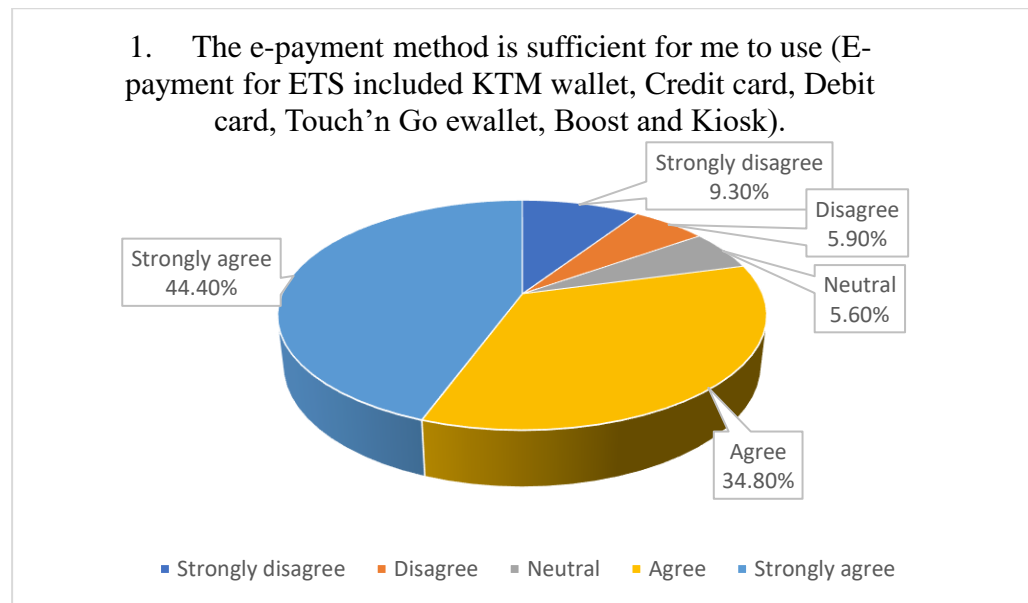


Figure 4.3: Question 1 for Payment Method

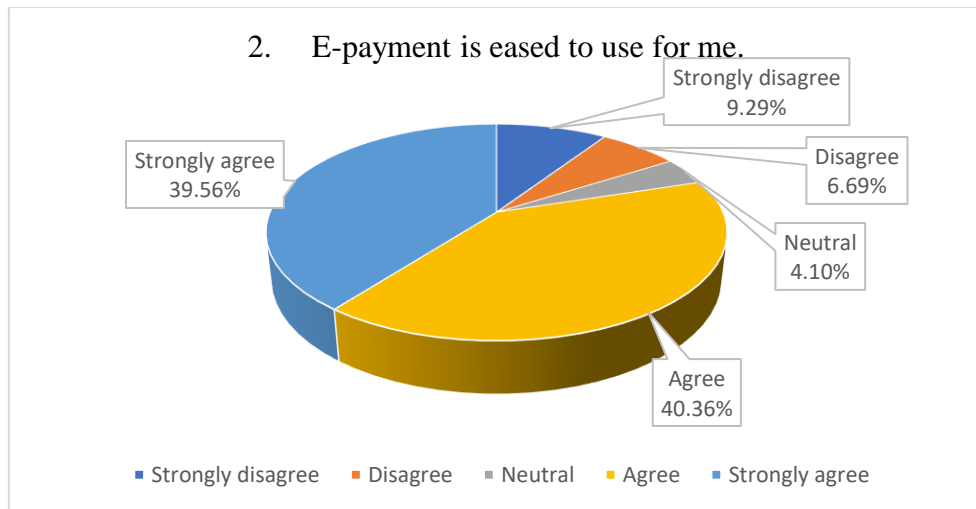


Figure 4.4: Question 2 for Payment Method

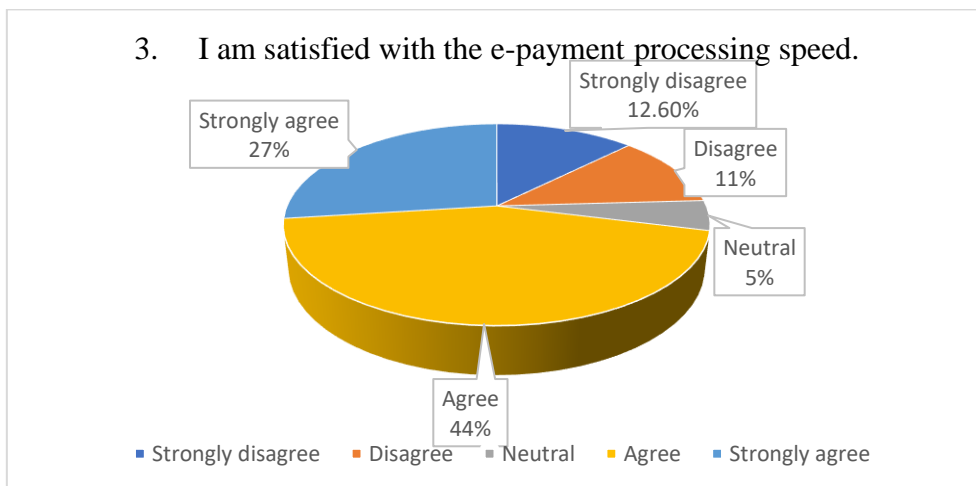


Figure 4.5: Question 3 for Payment Method

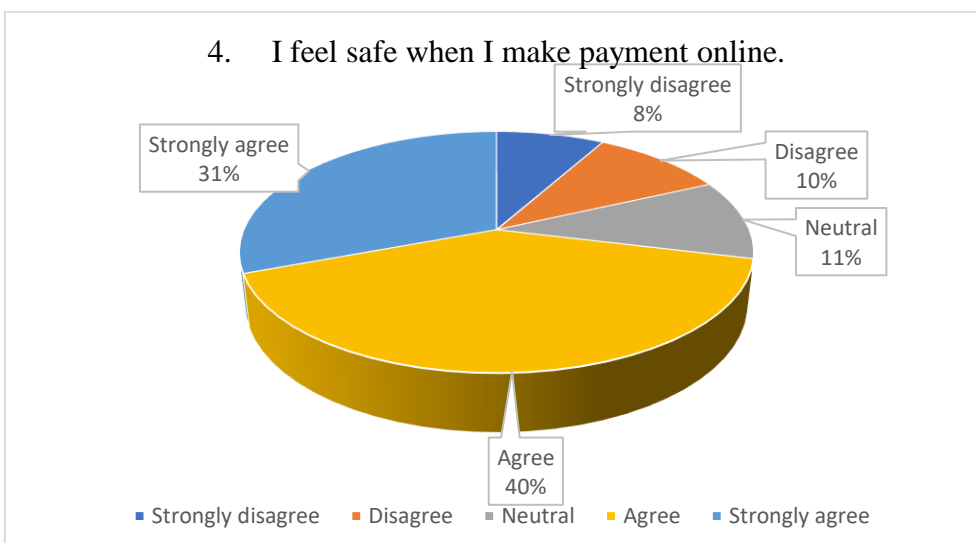


Figure 4.6: Question 4 for Payment Method

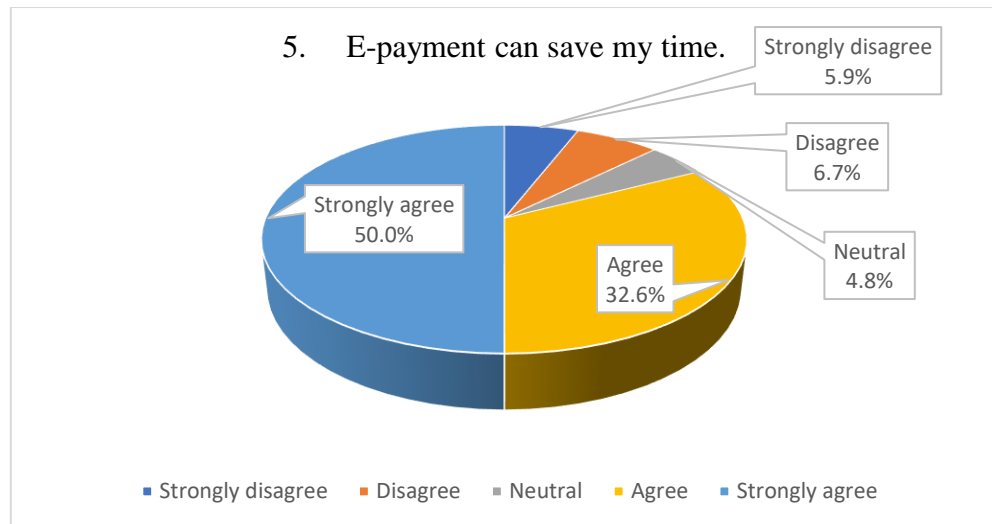


Figure 4.7: Question 5 for Payment Method

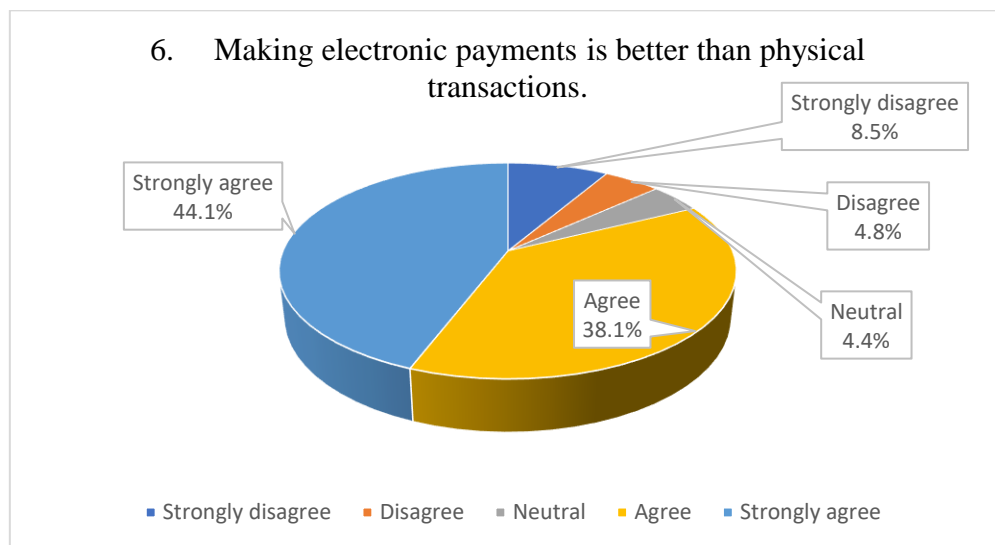


Figure 4.8: Question 6 for Payment Method

Among all respondents, most of them concur with the primary articulation of the e-payment method, which is "The e-payment method is sufficient for me to use." Other than, the larger part moreover concurs with the second statement, "E-payment is easy to use for me." In any case, for the third explanation, "I am satisfied with the e-payment processing speed," a critical number of respondents

(around 24.1%) oppose this idea or unequivocally oppose this idea. For the fourth articulation, "I feel safe when I make payment online," there's a more adjusted dispersion of suppositions, but still, 30.7% of respondents unequivocally concur. Within the fifth articulation, "E-payment can save my time," most respondents (50%) unequivocally concur. In conclusion, for the articulation "Making electronic payments is better than physical transactions," 44.1% of respondents strongly agree, whereas as it were 13.3% disagree or strongly disagree this idea.

4.2.2 Conveniency

Table 4.5: Response from Users towards Conveniency

Percentage %						
	N	Strongly disagree			Strongly agree	
PQ1	270	12.2	8.1	6.3	44.8	28.5
PQ2	270	8.9	21.1	8.9	41.1	20
PQ3	270	5.9	8.9	10	48.5	26.7
PQ4	270	7.8	10.4	11.9	41.9	28.1
PQ5	270	7.8	7.4	10.4	46.3	28.1
PQ6	270	11.9	22.2	9.6	34.8	21.5
PQ7	270	12.2	26.7	10.7	28.5	21.9

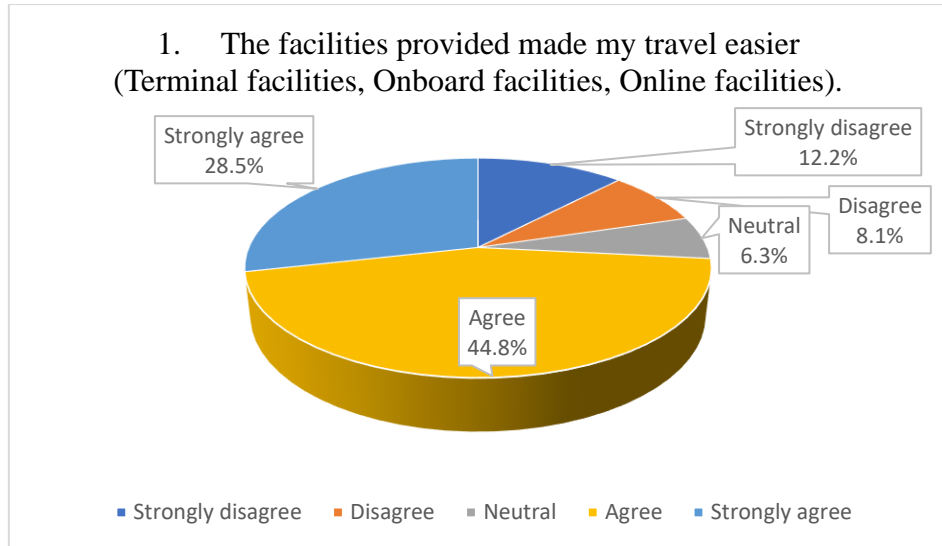


Figure 4.9: Question 1 for Convenience

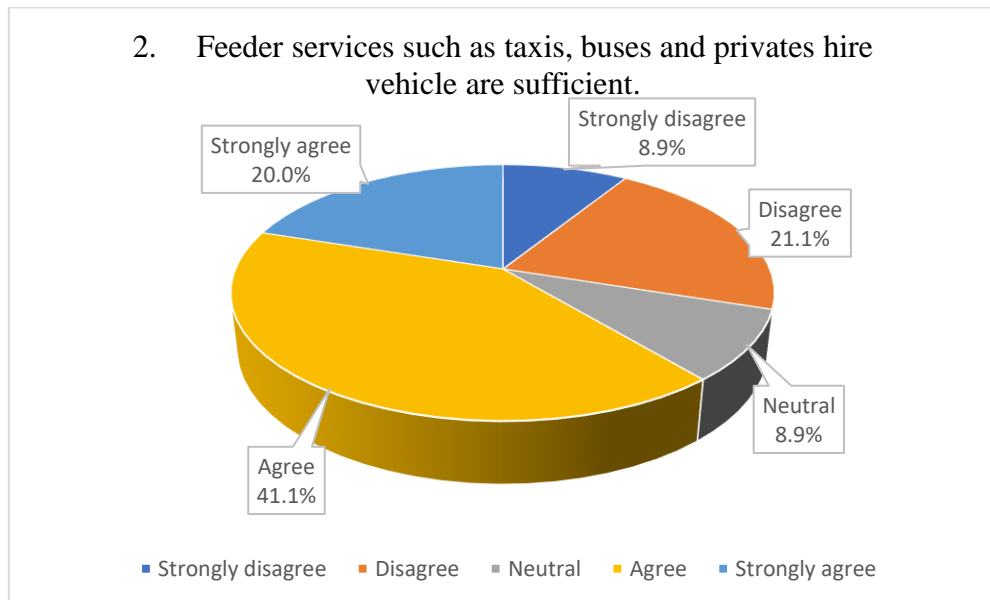


Figure 4.10: Question 2 for Convenience

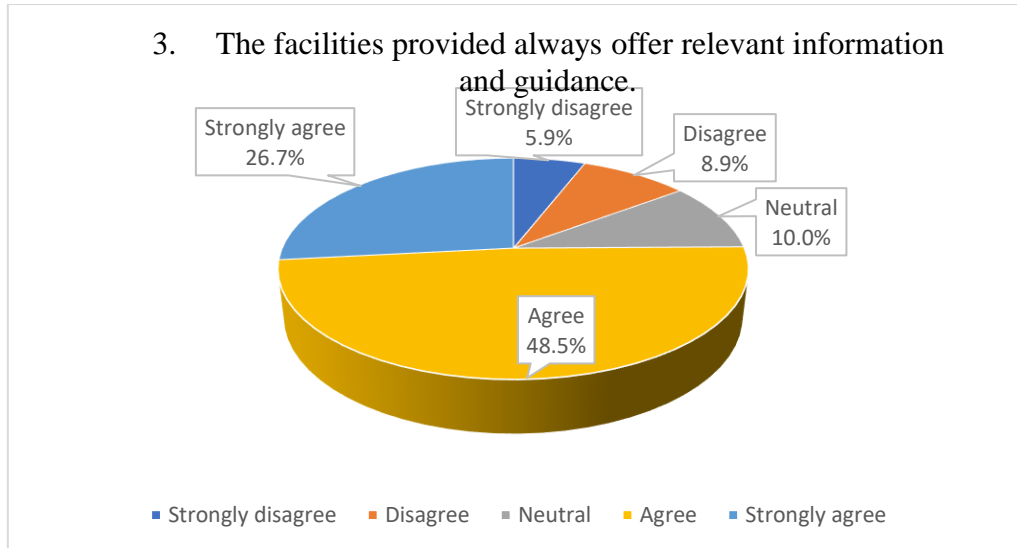


Figure 4.11: Question 3 for Convenience

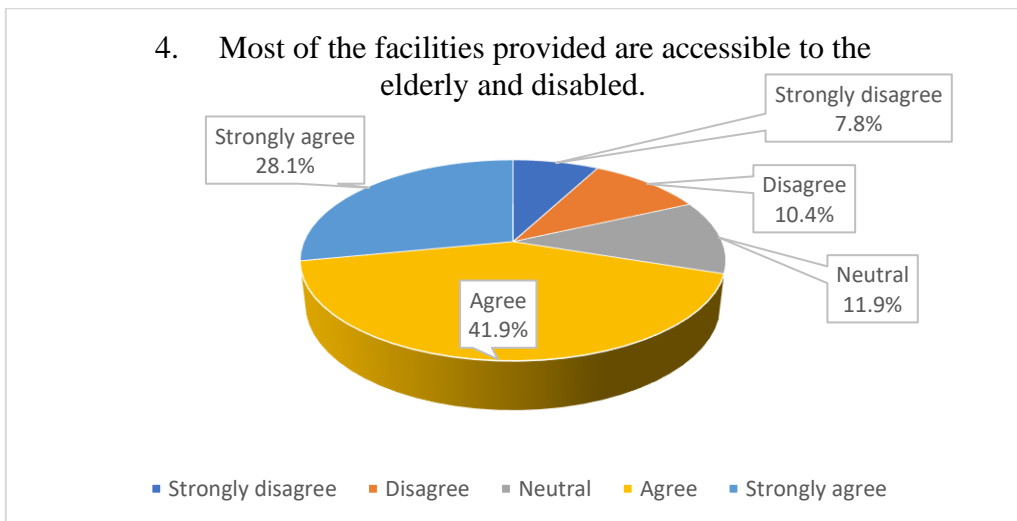


Figure 4.12: Question 4 for Convenience

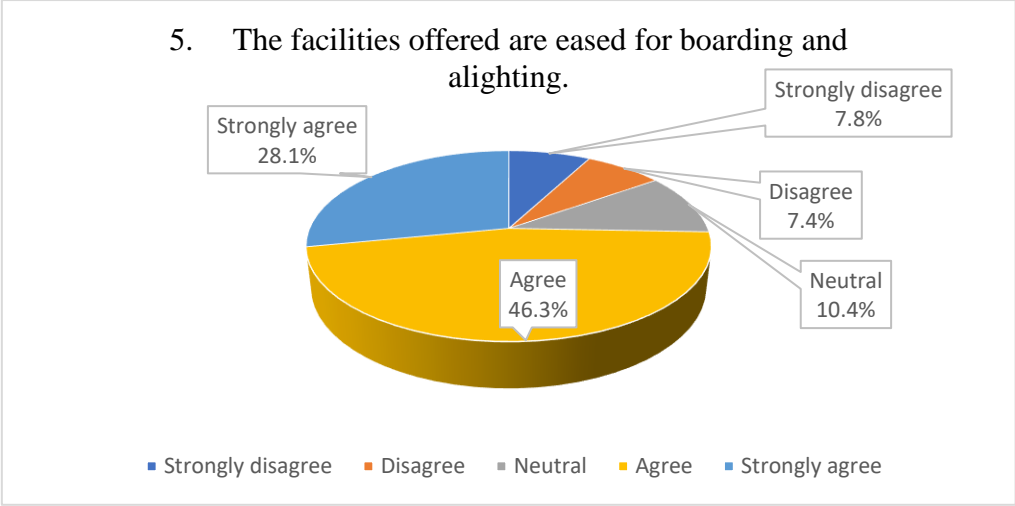


Figure 4.13: Question 5 for Conveniency

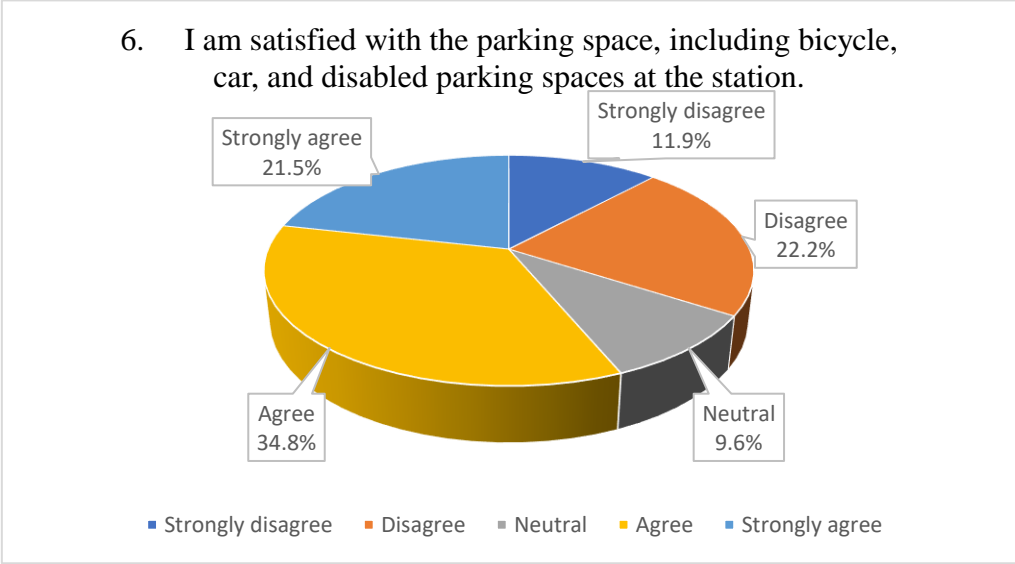


Figure 4.14: Question 6 for Conveniency

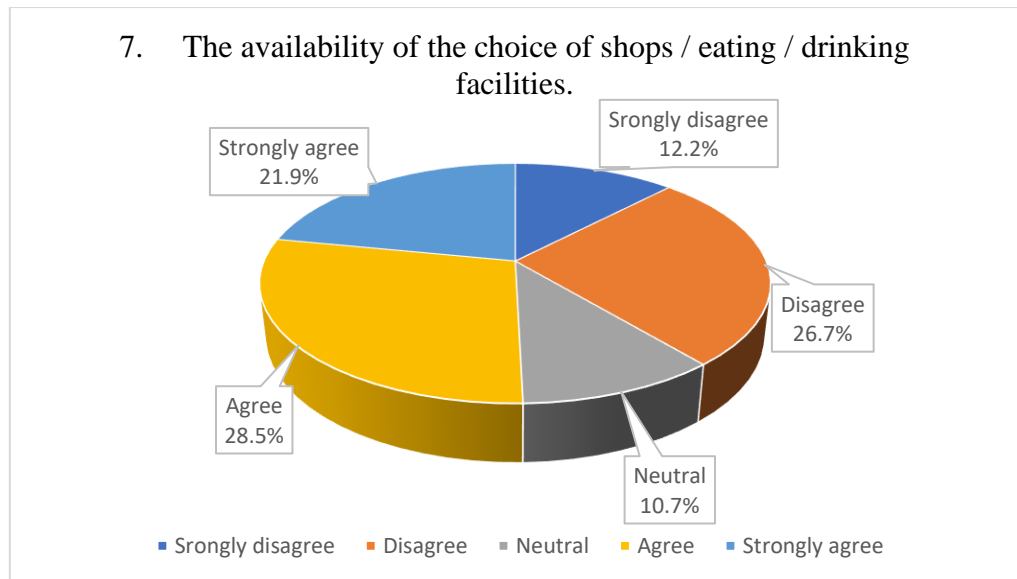


Figure 4.15: Question 7 for Convenience

The first statement on convenience, "The facilities provided made my travel easier (Terminal facilities, Onboard facilities, Online facilities)." is supported by the majority of respondents. Furthermore, a majority of them agree with the third statement, "The facilities provided always offer relevant information and guidance." The second assertion, "Feeder services such as taxis, buses and private hire vehicles are sufficient," was contradicted or severely contradicted by a sizable portion of responders (about 30%). The opinions are fairly evenly split for the fourth statement, "Most of the facilities provided are accessible to the elderly and disabled," yet 28.1% of respondents still strongly concur. Similar results are shown in the fifth statement, "The facilities offered are eased for boarding and alighting," where 28.1% of respondents strongly agree. Only 21.5% of respondents strongly agreed with the sixth statement, "I am satisfied with the parking space, including bicycle, car, and disabled parking spaces at the station," while 34.1% strongly disagreed or disagreed. Finally, a significant percentage of respondents (38.9%) disagree or strongly disagree with the statement, "The

availability of the choice of shops / eating / drinking facilities," while 21.9% definitely approve.

4.2.3 Comfortability

Table 4.6: Response from Users towards Comfortability

Percentage %						
	N	Strongly disagree			Strongly agree	
PQ1	270	9.3	7.8	10	39.3	33.7
PQ2	270	6.3	11.9	9.3	41.5	31.1
PQ3	270	8.5	9.3	10.7	47.8	23.7
PQ4	270	5.9	8.9	10.7	48.1	26.3
PQ5	270	5.2	11.5	8.1	41.9	33.3
PQ6	270	8.9	14.1	8.1	42.2	26.7

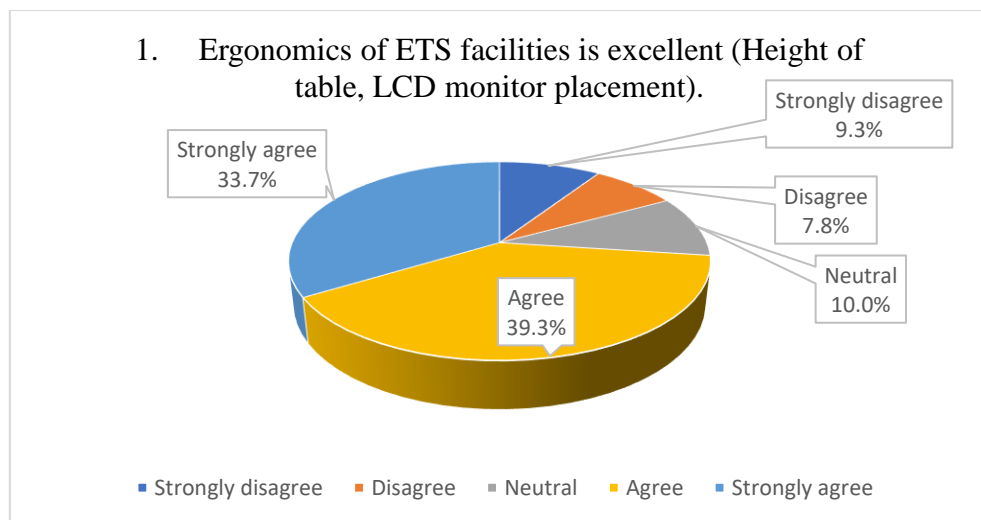


Figure 4.16: Question 1 for Comfortability

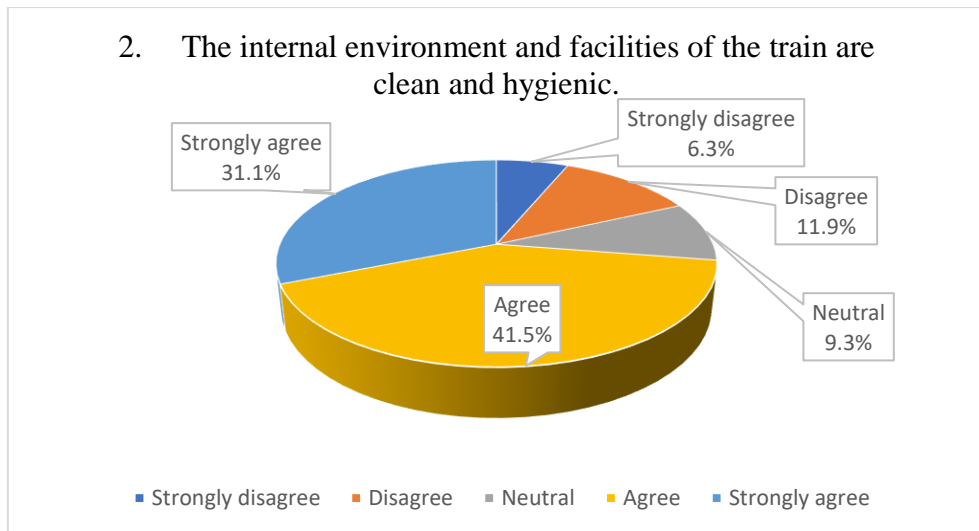


Figure 4.17: Question 2 for Comfortability

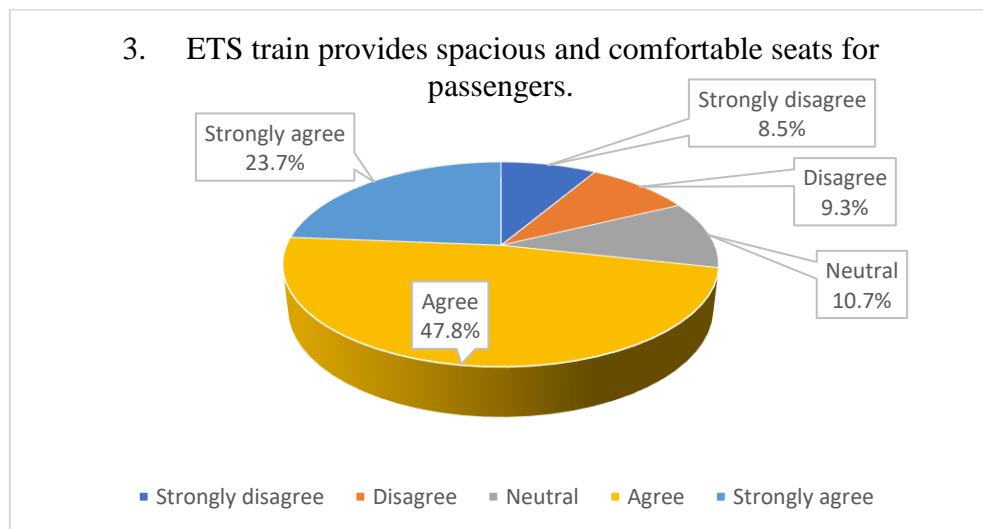


Figure 4.18: Question 3 for Comfortability

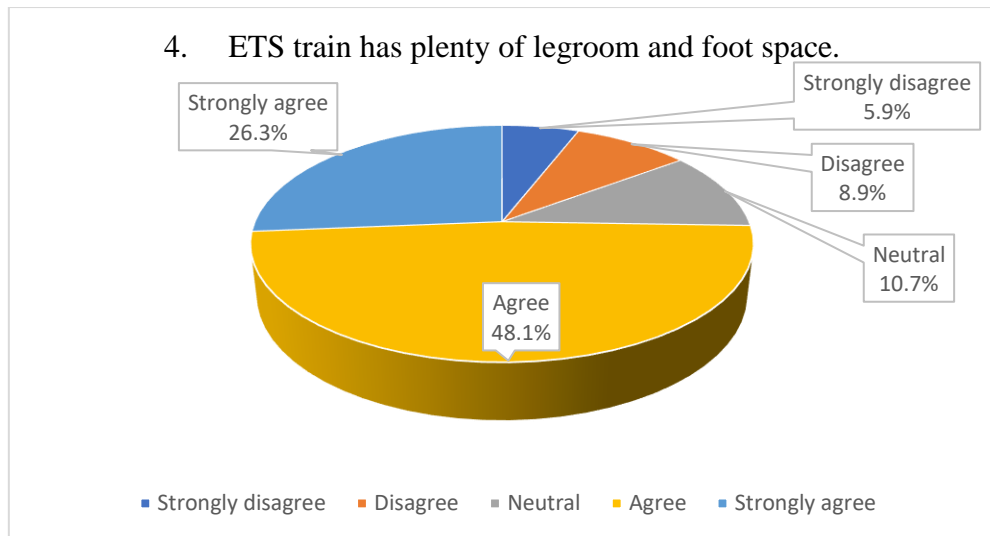


Figure 4.19: Question 4 for Comfortability

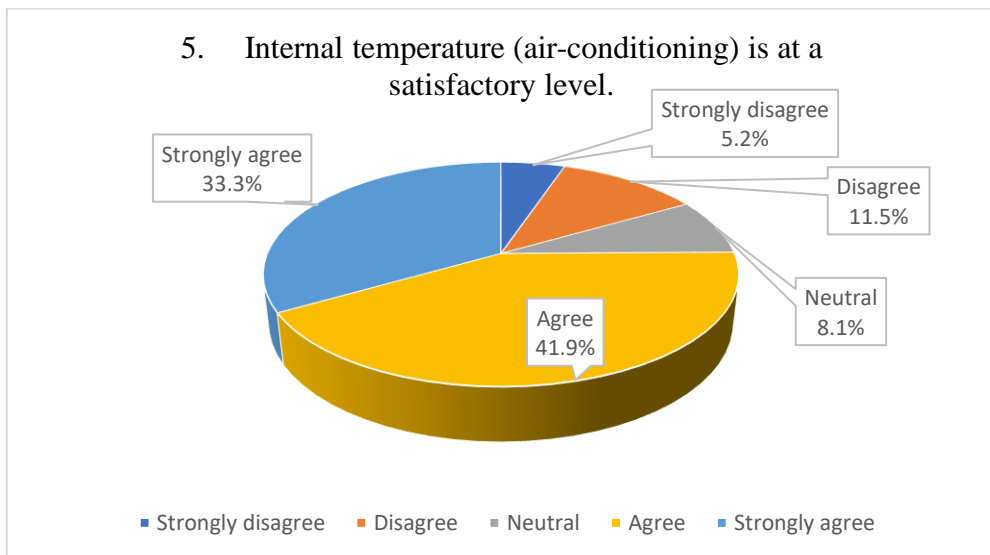


Figure 4.20: Question 5 for Comfortability

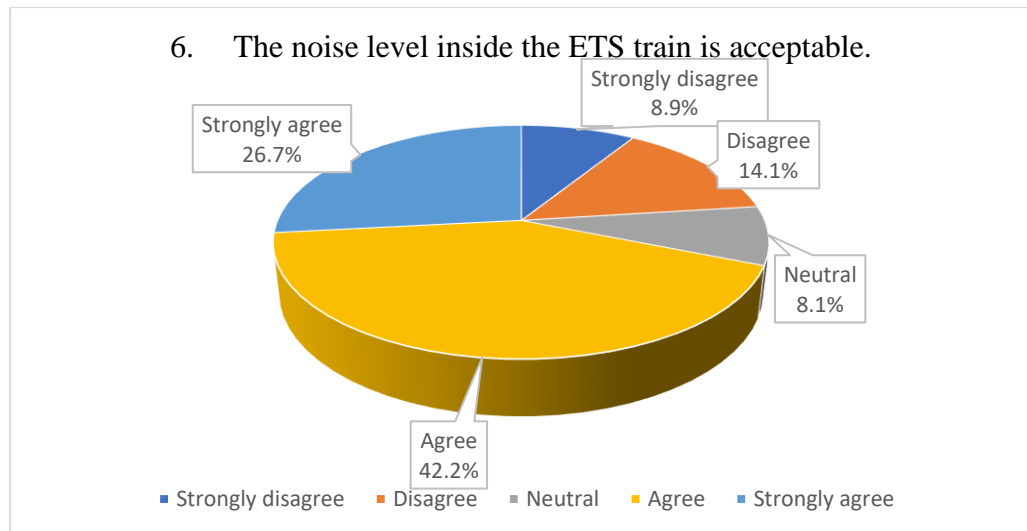


Figure 4.21: Question 6 for Comfortability

Based on the table over, respondents concur with the primary articulation, which is "Ergonomics of ETS facilities is excellent." Following, they assert that the internal environment and facilities of the train are clean and hygienic. In any case, around 30% of the respondents give input that there's room for enhancement within the spaciousness and comfort of the seats. The lion's share of respondents concurs that the ETS train provides plentiful legroom and foot space, satisfactory internal temperature, and acceptable noise levels.

4.2.4 Safety feature

Table 4.7: Response from Users towards Safety Feature

Percentage %						
	N	Strongly disagree			Strongly agree	
PQ1	270	15.6	10.4	10	35.2	28.9
PQ2	270	10	15.9	8.5	38.1	27.4
PQ3	270	7.8	12.6	10.4	46.3	23
PQ4	270	11.9	18.9	9.6	33	26.7
PQ5	270	7	10.7	12.2	40	30
PQ6	270	9.6	17.8	13	38.9	20.7

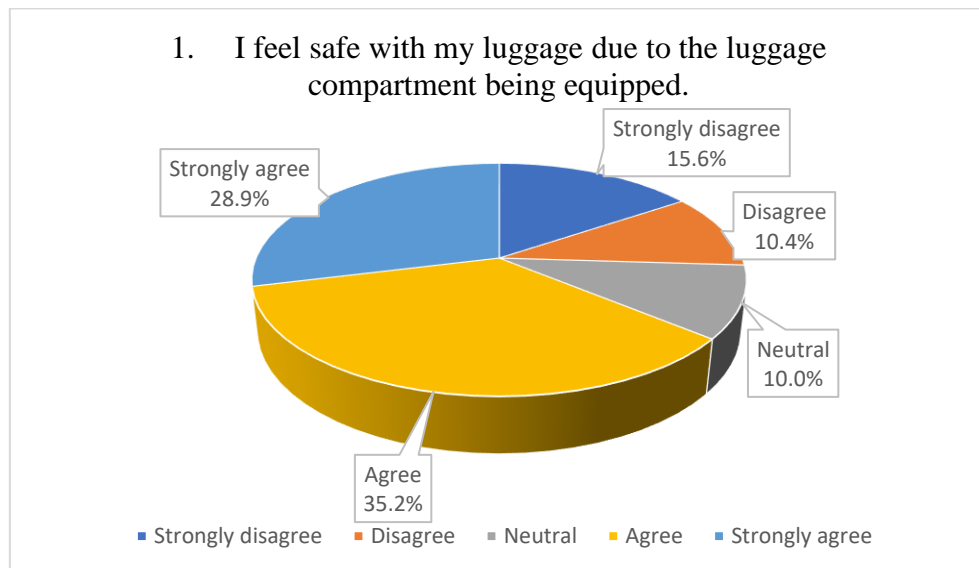


Figure 4.22: Question 1 for Safety Feature

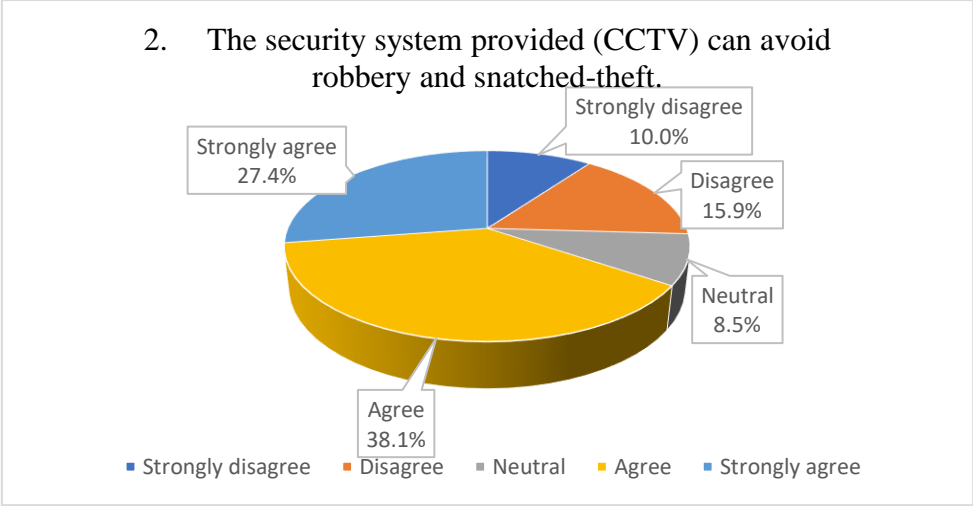


Figure 4.23: Question 2 for Safety Feature

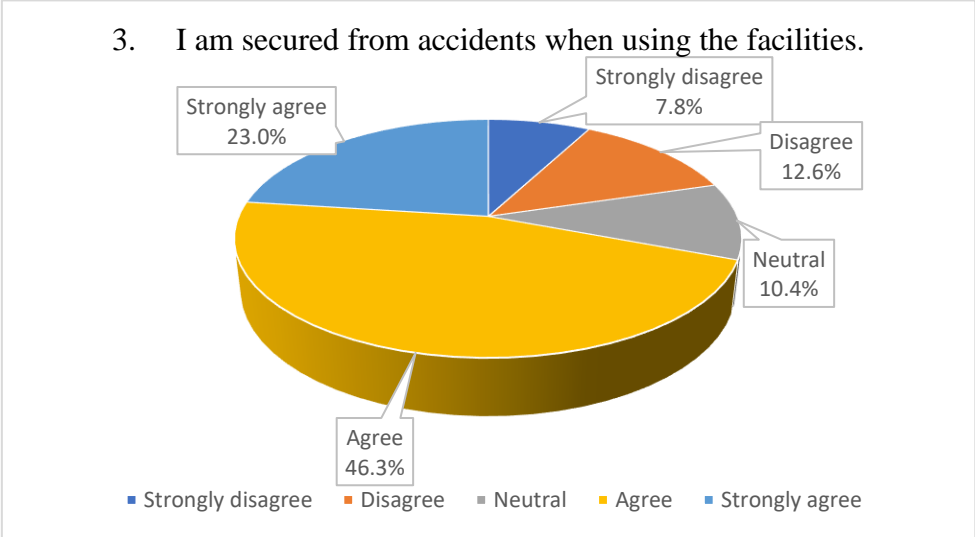


Figure 4.24: Question 3 for Safety Feature

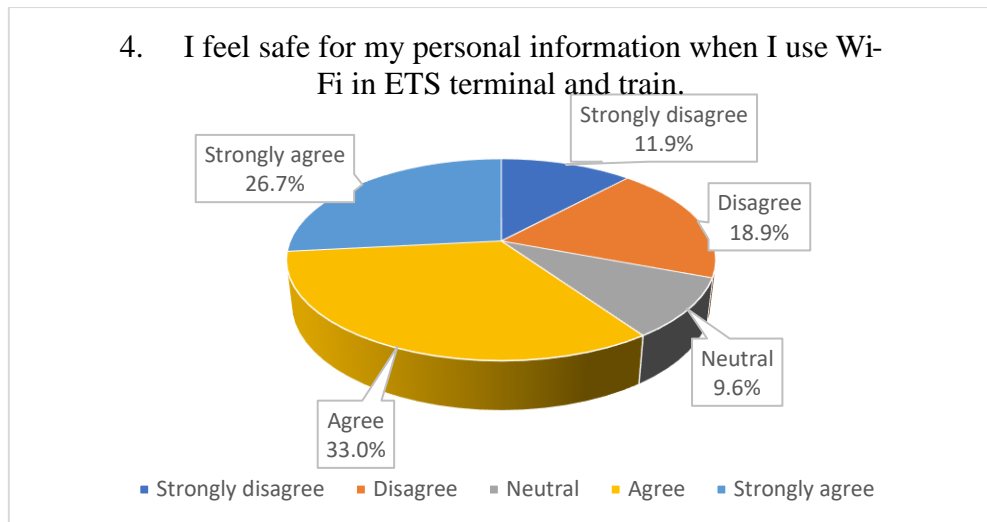


Figure 4.25: Question 4 for Safety Feature

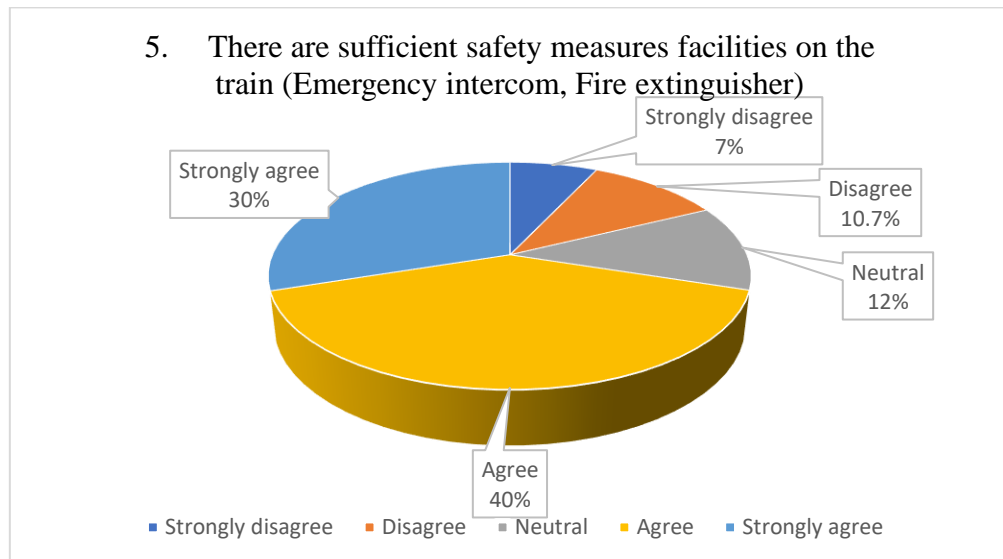


Figure 4.26: Question 5 for Safety Feature

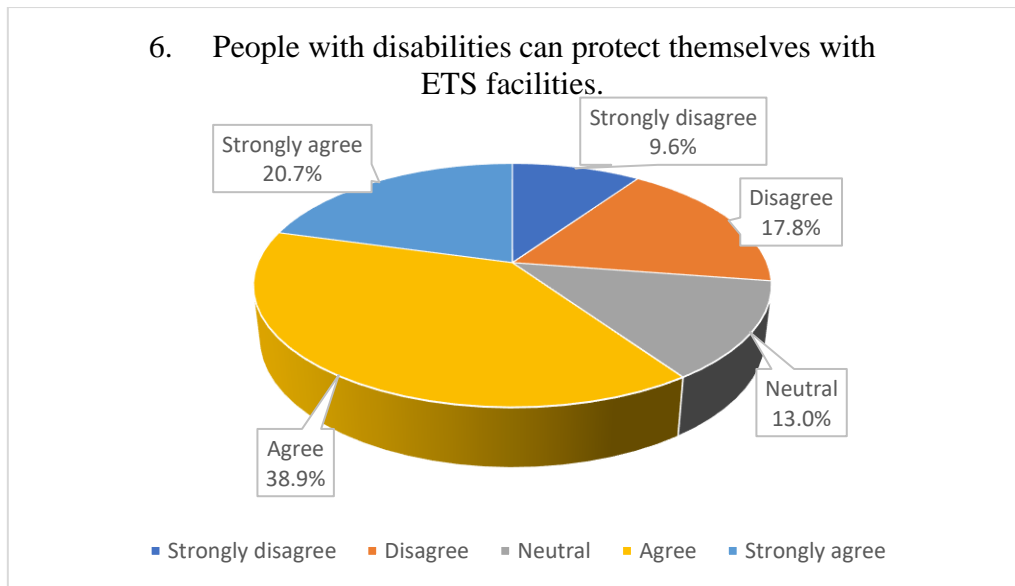


Figure 4.27: Question 6 for Safety Feature

As can be seen from the table, many respondents (64.1%) agree with the first statement, stating that they feel safe with their luggage due to the equipped luggage compartment. However, there is a notable percentage (26%) that disagrees or strongly disagrees. For the second statement, the majority (65.5%) believe that the security system provided, such as CCTV, can help prevent robbery and snatched-theft. In terms of personal safety when using facilities, 69.3% of respondents feel secure. However, there is some concern regarding personal information safety when using Wi-Fi in ETS terminals and trains, with 30.6% disagreeing or strongly disagreeing. Most respondents (70%) agree that there are sufficient safety measures on the train, such as emergency intercoms and fire extinguishers. Finally, only 59.6% of respondents agree that people with disabilities can protect themselves with ETS facilities, indicating that there may be room for improvement in this area.

4.3 Dependent variable

4.3.1 Users' Overall Satisfaction

Table 4.8: Customers' Overall Satisfaction towards Facilities

Percentage %						
	N	Strongly disagree			Strongly agree	
PQ1	270	10	11.1	10	41.9	27
PQ2	270	6.7	14.1	10.4	33.3	35.6
PQ3	270	6.3	13	13	40.4	27.4
PQ4	270	6.7	14.4	13	45.6	20.4
PQ5	270	5.2	11.5	9.3	38.9	35.2
PQ6	270	7.8	11.1	13	35.6	32.6

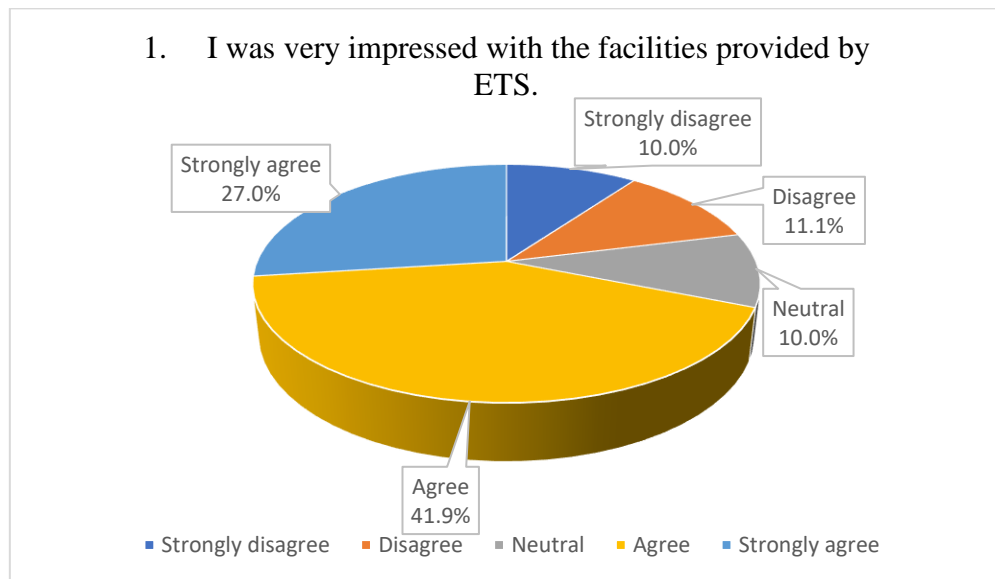


Figure 4.28: Question 1 for Customer Satisfaction

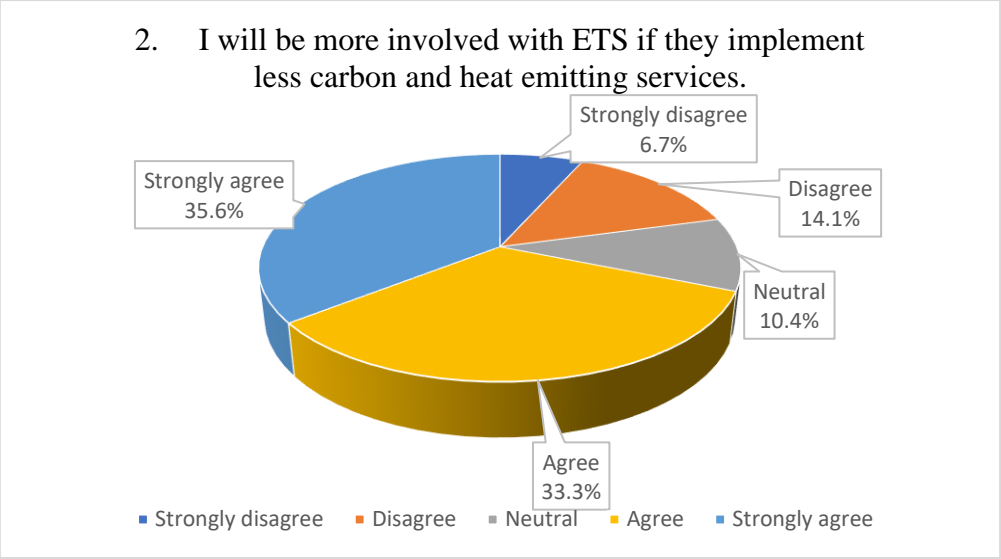


Figure 4.29: Question 2 for Customer Satisfaction

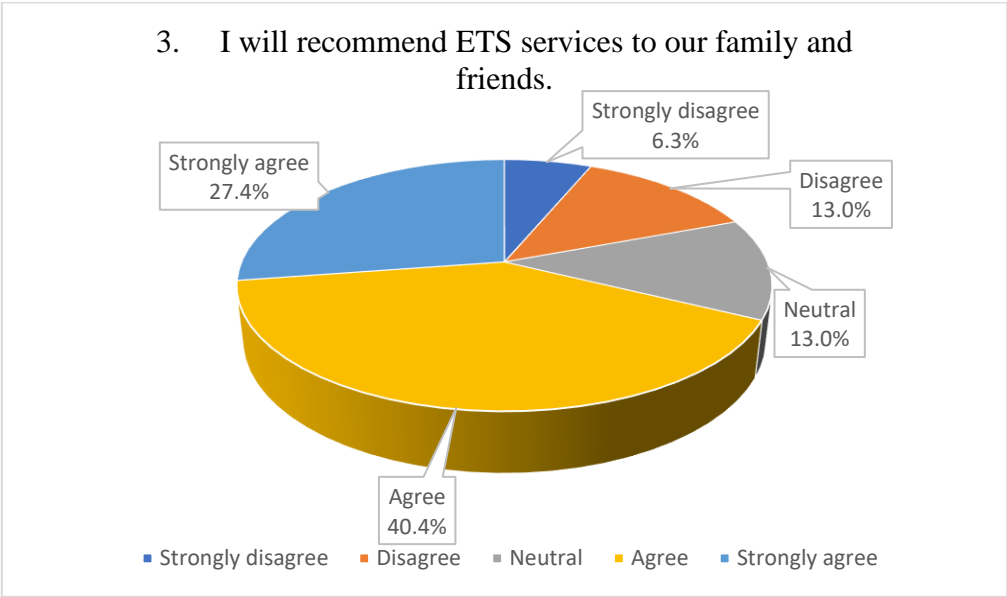


Figure 4.30: Question 3 for Customer Satisfaction

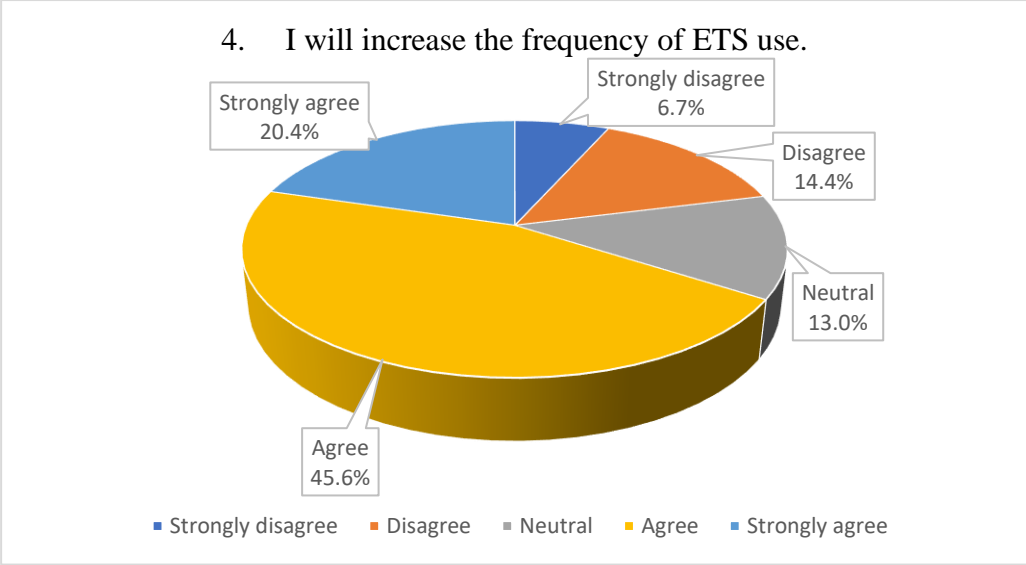


Figure 4.31: Question 4 for Customer Satisfaction

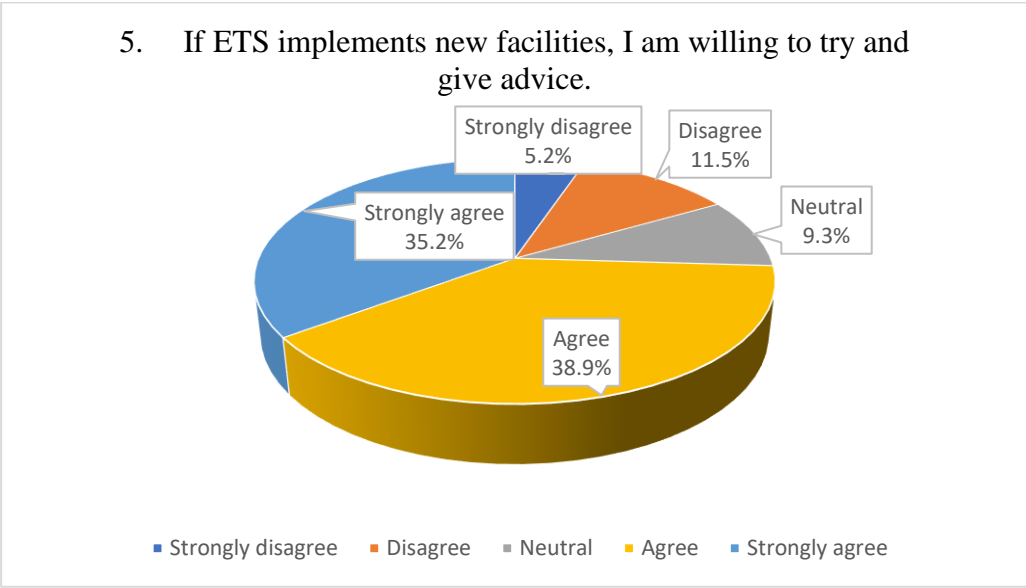


Figure 4.32: Question 5 for Customer Satisfaction

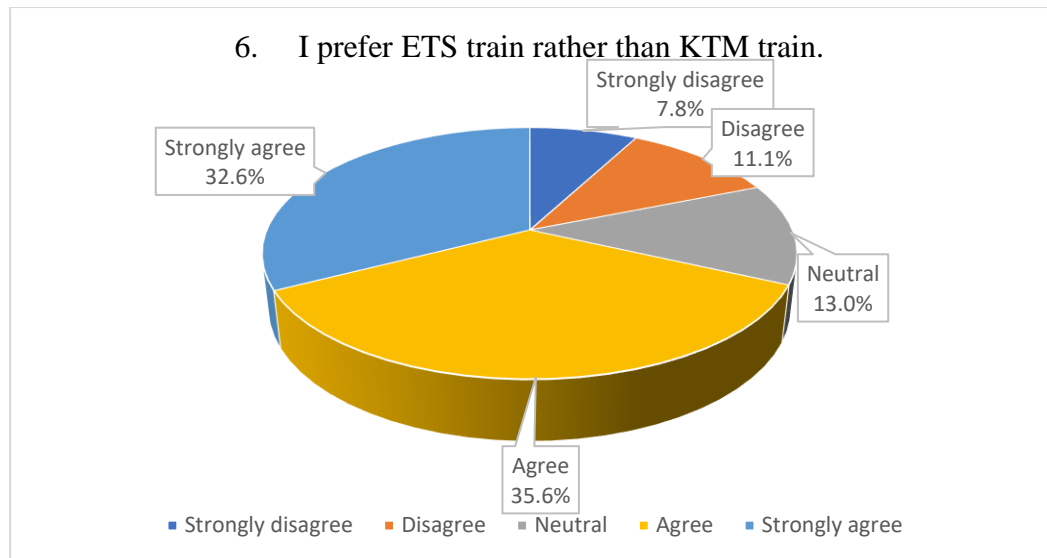


Figure 4.33: Question 6 for Customer Satisfaction

Based on the table above, it shows the customers' overall satisfaction towards facilities provided by ETS. The percentage of respondents who strongly agree with the statements is the highest for PQ1, which is "I was very impressed with the facilities provided by ETS." For PQ2, PQ3, PQ4, and PQ5, the percentage of respondents who agree with the statements is higher than those who disagree. However, for PQ6, the percentage of respondents who strongly agree is the lowest among all the statements, indicating that some customers prefer KTM trains over ETS trains.

4.4 Reliability analysis

Table 4.9: Total respondents

Case Processing Summary			
		N	%
Cases	Valid	270	100.0
	Excluded ^a	0	.0
	Total	270	100.0

The case processing summary for the reliability analysis is shown in Table 4.9. According to the table, 270 valid instances made up the whole dataset, or 100% of all cases. All cases were included in the study since there were no excluded instances (0%).

Table 4.10: Results of reliability analysis

Variable	Cronbach's Alpha	N of Items
Payment method	0.777	6
Conveniency	0.756	7
Comfortability	0.784	6
Safety feature	0.775	6
Customer satisfaction	0.785	6

Table 4.10 presents the results of the reliability analysis for each variable in the study. Cronbach's Alpha is a measure of internal consistency and is commonly used to assess the reliability of a set of items or questions in a survey. A higher Cronbach's Alpha value indicates better reliability. The generally accepted threshold for Cronbach's Alpha is 0.7, with values above this considered reliable.

1. Payment method: The Cronbach's Alpha for the Payment method variable is 0.777, indicating good reliability. This variable consists of 6 items.
2. Conveniency: The Cronbach's Alpha for the Conveniency variable is 0.756, indicating good reliability. This variable consists of 7 items.
3. Comfortability: The Cronbach's Alpha for the Comfortability variable is 0.784, indicating good reliability. This variable consists of 6 items.
4. Safety feature: The Cronbach's Alpha for the Safety feature variable is 0.775, indicating good reliability. This variable consists of 6 items.
5. Customer satisfaction: The Cronbach's Alpha for the Customer satisfaction variable is 0.785, indicating good reliability. This variable consists of 6 items.

As a result, the findings demonstrate that all of the study's variables have sufficient reliability, as their Cronbach's Alpha values are all above the 0.7 threshold. This suggests that the survey items used to measure these variables are internally consistent and can be considered reliable for the analysis.

4.5 Inferential analysis

4.5.1 Pearson's Correlation Coefficient Analysis

4.5.1.1 Correlations between the Payment Method and Customer Satisfaction

Table 4.11: Pearson's Correlation Coefficient Analysis between Customer Satisfaction and Payment Method

Correlations			
		Customer Satisfaction	Payment method
Customer Satisfaction	Pearson Correlation	1	0.491**
	Sig. (2-tailed)		<0.001
	N	270	270
Payment method	Pearson Correlation	0.491**	1
	Sig. (2-tailed)	<0.001	
	N	270	270

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

Source: Developed from SPSS

Significance: The p-value is <0.001 , which is lower than the commonly used significance level of 0.1. This indicates that there is a statistically significant relationship between the Payment Method and Customer Satisfaction.

Direction: The Pearson correlation coefficient value is 0.491, which is positive. This indicates that there is a positive relationship between the Payment Method and Customer Satisfaction. As the Payment Method improves (or is perceived more positively), Customer Satisfaction tends to increase as well.

Strength: The value of Pearson correlation coefficient of both payment method and Customer Satisfaction was 0.491, which belongs to the moderate range (0.3 to 0.5). This means there is a moderate correlation between the Payment Method and Customer Satisfaction. While the relationship is significant, it is not exceptionally strong, suggesting other factors may also influence Customer Satisfaction.

4.5.1.2 Correlations between The Conveniency and Customer Satisfaction

Table 4.12 Pearson's Correlation Coefficient Analysis between Customer Satisfaction and Conveniency

Correlations			
		Customer Satisfaction	Conveniency
Customer Satisfaction	Pearson Correlation	1	0.488**
	Sig. (2-tailed)		<0.001
	N	270	270
Conveniency	Pearson Correlation	0.488**	1
	Sig. (2-tailed)	<0.001	
	N	270	270

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

Source: Developed from SPSS

Significance: The p-value is <0.001, which is lower than the commonly used significance level of 0.1. This indicates that there is a statistically significant relationship between Conveniency and Customer Satisfaction.

Direction: The Pearson correlation coefficient value is 0.488, which is positive. This indicates that there is a positive relationship between Conveniency and Customer Satisfaction. As the Conveniency improves (or is perceived more positively), Customer Satisfaction tends to increase as well.

Strength: The value of Pearson correlation coefficient of both payment method and Customer Satisfaction was 0.488, which belongs to the moderate range (0.3 to 0.5). This means there is a moderate correlation between Convenience and Customer Satisfaction. While the relationship is significant, it is not exceptionally strong, suggesting other factors may also influence Customer Satisfaction.

4.5.1.3 Correlations between the Comfortability and Customer Satisfaction

Table 4.13: Pearson’s Correlation Coefficient Analysis between Customer Satisfaction and Comfortability

Correlations			
		Customer Satisfaction	Comfortability
Customer Satisfaction	Pearson Correlation	1	0.593**
	Sig. (2-tailed)		<0.001
	N	270	270
Comfortability	Pearson Correlation	0.593**	1
	Sig. (2-tailed)	<0.001	
	N	270	270

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

Source: Developed from SPSS

Significance: The p-value is <0.001, which is lower than the commonly used significance level of 0.1. This indicates that there is a statistically significant relationship between Comfortability and Customer Satisfaction.

Direction: The Pearson correlation coefficient value is 0.593, which is positive. This indicates that there is a positive relationship between Comfortability and Customer Satisfaction. As the Comfortability improves (or is perceived more positively), Customer Satisfaction tends to increase as well.

Strength: The Pearson correlation coefficient value of 0.593 belongs to the moderate to strong range (0.5 to 0.7). This means there is a moderate to strong correlation between Comfortability and Customer Satisfaction. The relationship is quite notable, suggesting that Comfortability is an important factor in influencing Customer Satisfaction.

4.5.1.4 Correlations between the Safety Feature and Customer Satisfaction

Table 4.14: Pearson's Correlation Coefficient Analysis between Customer Satisfaction and Safety Feature

Correlations			
		Customer Satisfaction	Safety Feature
Customer Satisfaction	Pearson Correlation	1	0.601**
	Sig. (2-tailed)		<0.001
	N	270	270
Safety Feature	Pearson Correlation	0.601**	1
	Sig. (2-tailed)	<0.001	
	N	270	270

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

Source: Developed from SPSS

Significance: The p-value is <0.001, which is lower than the commonly used significance level of 0.1. This indicates that there is a statistically significant relationship between Safety Feature and Customer Satisfaction.

Direction: The Pearson correlation coefficient value is 0.601, which is positive. This indicates that there is a positive relationship between Safety Feature and Customer Satisfaction. As the Safety Feature improves (or is perceived more positively), Customer Satisfaction tends to increase as well.

Strength: The Pearson correlation coefficient value of 0.601 belongs to the moderate to strong range (0.5 to 0.7). This means there is a moderate to strong correlation between Safety Feature and Customer Satisfaction. The relationship

is quite notable, suggesting that Safety Feature is an important factor in influencing Customer Satisfaction.

4.5.2 Multiple Regression Analysis

Multiple Regression Model Formula:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

Where Y = Dependent Variable (DV)

X_k = Independent Variable (IV)

β_0 = Intercept

β_k = The Coefficient or the Slope of IV

k = number of IV in equation (k= 1, 2, 3, 4)

A variation of simple linear regression is multiple regression, also known as the simplified of multiple linear regression (MLR). It is utilized while attempting to forecast the value of a variable based on the values of two or more additional variables. The term “dependent variable” (Y) refers to the variable we want to predict while the variables that use to predict the dependent variable are called the independent variables (X_k). Besides that, the intercept (β_0) reflects the mean value of the response variable when each predictor variable in the model is equal to zero. The coefficient or the slope (β_k) is not zero or it may test whether a relationship exists between the dependent variable (Y) and independent variable (X_k). It can also be interpreted as the change of (Y) for a one unit increase in (X_k).

Table 4.15: Regression statistics

Model Summary^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.731	0.535	0.528	0.57823

a. Predictors: (Constant), safety feature, payment method, convenience, comfortability

b. Dependent Variable: Customer Satisfaction

The research's R-Value is 0.731, which denotes a rather strong linear association between the dependent variable (Customer Satisfaction) and independent variable (Safety Feature, Payment, Convenience, Comfortability), as shown in the table of regression statistics. Separated from that, the esteem of R Square is 0.535, which indicates that 53.5% of the Customer Satisfaction can be explained by the independent variables which are Safety Feature, Payment, Convenience and Comfortability. Furthermore, the Adjusted R Square is displayed as 0.528, explaining 52.8% of the variation in the response variable after adjusting for the number of predictor variables in the model. The Standard Error of the Estimate shows that 0.57823 units of the dependent variable exist in the average distance between the observed values and the predicted values.

Table 4.16: ANOVA Table

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	101.960	4	25.490	76.238	.000 ^b
	Residual	88.602	265	.334		
	Total	190.562	269			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), safety feature, payment method, conveniency, comfortability

The results are shown in the table above with an F-value of 76.238 and a P-value of 0.000. Also, because the P-value is below the level of significance (0.1), the null hypothesis will be rejected, and the F-value is significant. So, it is appropriate to show how the independent and dependent variables relate to one another.

Table 4.17: Summary of Hypothesis Testing Research

Hypothesis	Result
H₁ : There is a significant relationship between the Safety Feature to the Customer Satisfaction of ETS's Facilities Users.	Supported P-value = <0.001
H₁ : There is a significant relationship between the Payment Method to the Customer Satisfaction of ETS's Facilities Users.	Supported P-value = <0.001
H₁ : There is a significant relationship between the Comfortability to the Customer Satisfaction of ETS's Facilities Users.	Supported P-value = <0.001
H₁ : There is a significant relationship between the Convenience to the Customer Satisfaction of ETS's Facilities Users.	Supported P-value = <0.001

4.6 Conclusion

As a result, it appears that all four hypotheses have been supported, as evidenced by very low p-values (<0.001) associated with each hypothesis. This suggests that there is a significant relationship between each of the respective factors (safety feature, payment method, comfortability, and convenience) and customer satisfaction of ETS's facilities users.

CHAPTER 5

Discussion, Recommendation and Conclusion

5.0 Introduction

This chapter serves to review and examine the main findings from chapter 4. This chapter will also cover the implications of the research, as well as suggestions and potential follow-up problems. Last but not least, this chapter will also offer information about research limitations and ideas for future research.

5.1 Summary of Findings

It is clear from Chapter 4 of the multiple regression model that this technique is useful for looking at the relationship between independent variables (Safety Feature, Payment, Conveniency, Comfortability) related to customer satisfaction. The model helps identify the variables that affect customer satisfaction levels. The P-value is important for understanding the results. The results of the study are regarded as statistically significant when the P-value is less than the significant threshold of 0.1, demonstrating that there is a positive link between the independent variables and customer satisfaction. In other words, the greater the link between the variables, the lower the P-value.

5.1.1 What are the factors that affect customer satisfaction in using the facilities of the Electric Train Service (ETS)?

H1 : There is a significant relationship between the **Payment Method** to the Customer Satisfaction of ETS's Facilities Users.

The first independent variable is the payment method that shows a significant relationship between the payment method and customer satisfaction of ETS's facilities users, as confirmed by the hypothesis results. This is because the p-value of this variable is <0.001 which is smaller than 0.1. Based on the Alhammadi and Tariq (2020), the payment method will have a positive impact on customer satisfaction of ETS's facilities users. This is because the e-payment will be easier and more affordable for the customers due to the technology development across the world, and E-payment was provided high efficiency to the customers.

H1 : There is a significant relationship between the **Convenience** to the Customer Satisfaction of ETS's Facilities Users.

Convenience was discovered to have a substantial influence to the Customer Satisfaction of ETS's facilities users. According to the findings, there is a substantial link between convenience and overall satisfaction. The multiple regression model corroborated this, with a P-value of 0.001 for this variable. This number is less than 0.1, showing that customers who find ETS's facilities

convenient, on the other hand, are more likely to be happy with their experience. As a result, the convenience is also a key determinant of customer satisfaction in ETS's facilities, according to the analysis. Research has also shown that convenience has a substantial influence on consumer satisfaction (Sobanah et al., 2022). Apart from that, based on our research, convenience focuses on the accessibility of services and public facilities available to passengers. Consumers often prefer convenience since it can reduce their time and effort.

H1 : There is a significant relationship between the **Comfortability** to the Customer Satisfaction of ETS's Facilities Users.

Comfortability is another important feature that impacts customer satisfaction when they use ETS's facilities. According to the findings, there is a significant relationship between comfortability and customer satisfaction. The multiple regression model, which indicated a P-value of 0.001 for comfortability and below the significance level of 0.1, also corroborated this conclusion. This suggests that the two variables have a positive association. In summary, maintaining a pleasant customer experience is critical to achieving high levels of satisfaction with ETS's services. Studies have also shown that comfort has a significant impact on customer satisfaction (Lye et al., 2018). This is because a more convenient, safer and more comfortable riding environment not only reduces passenger discomfort but also has a significant impact on the behavioral purchase intentions of passengers.

H1 : There is a significant relationship between the **Safety Feature** to the Customer Satisfaction of ETS's Facilities Users.

The safety feature appears to have a considerable effect on customer satisfaction of ETS's facilities users as the last independent variable, according to the research. The findings of the hypothesis testing, which showed a significant relationship between the safety feature and customer satisfaction, served as the foundation for this conclusion. This conclusion was further validated by the multiple regression model, where the P-value for the safety feature was 0.001, which is below the significance level of 0.1. In other words, the safety feature is a key determinant of customer satisfaction in ETS's facilities, according to the analysis. Based on Gardezi (2021), the safety feature will have an impact on customer satisfaction of ETS's Facilities Users. This is because, while there are clearly a wide range of advantages to the digitization of the public transportation sector, increased connectivity also broadens the attack surface that malevolent actors might use as a target.

5.2 Summary of Findings in Relation to the Research Objectives

The hypothesis states that there is a significant relationship between different factors (Safety Feature, Payment Method, Comfortability, and Convenience) and customer satisfaction of ETS's facilities users. The null hypothesis would be that there is no significant relationship between these factors and customer satisfaction.

The p-values for each factor are less than 0.001, which means that the results are statistically significant. This indicates that there is indeed a significant relationship between these factors and customer satisfaction.

In other words, the study found that the safety features, payment method, comfortability, and convenience of ETS's facilities significantly contribute to customer satisfaction. These factors are important considerations for ETS to improve its service quality and enhance customer satisfaction.

The findings of this study suggest that ETS can improve customer satisfaction by focusing on enhancing these factors, such as improving safety features, offering convenient payment methods, and ensuring a comfortable ride. By doing so, ETS can create a better customer experience, which can lead to increased customer loyalty and positive word-of-mouth recommendations.

5.3 Implication of Research

The study was conducted on customer satisfaction with the use of public transport facilities, in which the facilities of the Electronic Train Service (ETS) in Perak, Malaysia, will be observed. The goal of ETS is to provide mobility and accessibility to Malaysian in response to the traffic barriers. To attract more users, ETS service providers should strengthen their facility's performance in

terms of safety features, payment methods, comfortability, and convenience to achieve customer satisfaction.

The primary objective is to understand the factors that influence customer satisfaction through leveraging the facilities of ETS in Perak. Each factor identified has a significant relationship with customer satisfaction. Based on the finding, the **safety feature** offered by ETS is the first factor that influences the customer satisfaction of ETS users. Facilities with enough safety features enable customers to utilize the services without any caution and the possibility of accidents and physical threats can be significantly reduced especially for the female users. However, additional costs may incur when the inadequate safety features in ETS facilities. The cost involves the compensation of the injured and financial loss of consumers.

Furthermore, another significant factor that influences customer satisfaction by using ETS's facilities is the **payment method**. According to Talwar et al.,(2020), payment method includes cash payment and cashless payment. A variety of payment methods offers customers a seamless payment experience as they have different payment preferences. For example, older consumers prefer cash payments while younger consumers prefer digital payments. Conversely, a single payment method offered will cause the business to inadvertently prevent or put off some shoppers from purchasing altogether (Koksal, 2019).

Subsequently, **comfortability** is another major concerns in influencing customer satisfaction when utilizing the facilities of ETS. Li and Ma (2022) states that comfort refers to the pleasure, ease, and worry-free perceived by individuals. As a result of feeling valued and understood, comfortability plays a significant role in encouraging customers to develop and sustain positive connections with service providers. Yet, facilities that are not well designed and maintained to be user-friendly, it will result in poor ergonomics. It will cause musculoskeletal disorders such as carpal tunnel syndrome, tendonitis, and back pain. For those customers who use ETS frequently or engage in strenuous occupations, they have a high chance of getting the above symptoms.

Last but not least, **convenience** is listed as the last factor that influences the customer satisfaction of ETS's facilities users. Convenience is generated from the ease of use, providing consumers with a comprehension of legibility hence reducing their confusion and emotional discomfort. However, if a facility lacks convenience, customers' consuming activities can easily be impeded and further harm their well-being. Therefore, convenience should be equipped in facilities to gain positive responses from consumers.

Additionally, we learn a lot after this research has been conducted. As we have generated the questionnaire survey to collect information from the respondents about their thoughts on ETS facilities, we understand how the demographics (age, gender), occupation, and the frequency of using ETS by consumers affect their decisions in determining their level of satisfaction towards the facilities of

ETS. For instance, female users may have more rigorous reviews on the safety manner of ETS facilities. So, it may significantly affect the level of customer satisfaction as compared to male users. Also, we also understand the basic requirements (accessibility, convenience) of people with disabilities on ETS facilities and how are the facilities (design, function) can achieve their acceptable level. At the same time, most of the respondents actively put forward suggestions for improving ETS facilities, and their creative and innovative ideas lighten our burden when answering the recommendation.

5.4 Recommendations

5.4.1 What are the recommendations for further improvements to Electric Train Service (ETS) facilities?

The overall conclusion indicates that consumer satisfaction with using the amenities of the Electric Train Service is influenced by Safety Feature, Payment method, Convenience, and Comfortability (ETS). To boost consumer satisfaction in using the services provided by the Electric Train Service, greater attention must be paid to these issues (ETS). High-quality ETS not only encourages existing users to continue using it to meet their travel needs but also draws in new users. We cannot deny that each public transport company offers a different degree of payment method quality and that each person has a different level of satisfaction.

First and foremost, **payment method**. A payment method may be a way for customers to exchange cash in trade for products or services. It incorporates all the diverse ways of payment such as cash, credit cards, charge cards, portable installments, and so on. Using E-payment methods as an example, E-payment methods in public transport have become increasingly popular and convenient for passengers. However, not everyone fully understands the use of online payment tools, some older people would not really understand the online payment operation, so ETS authorities are strongly encouraged to develop a simpler and more comprehensive payment solution (Yang, Yang and Chang, 2023). In addition, ETS authorities ought to conduct instruction and mindfulness campaigns to inform customers approximately of the benefits of online payment tools and how to utilize them.

Besides that, the **comfortability** level of ETS facilities contribute to customer satisfaction of ETS users. Customers who feel comfortable when utilizing the facilities will likely increase their repurchase or reuse intention. This is because they are satisfied with the relevant services which can fulfil their needs and preferences. In fact, customers pay more attention to the hygiene of the facility in public transportation than any other factor (Sung and Monschauer, 2020). Improper hygiene conditions can lead to the occurrence of infectious diseases and cause harm to the human body. Therefore, we suggest ETS service provider which is Malaysian national railway operator Keretapi Tanah Melayu Berhad to conduct a regular cleaning on their facilities especially the high-touch areas such as door handles, seats, handrails, and ticket machines. Then, ETS authority can consider to improve the ventilation system to ensure adequate ventilation in

vehicles such as implementing more air conditioning and air purification systems, which allows consumers to take a board with the most comfortable way.

Apart from comfortability, the **convenience** of using the facilities of ETS is also associate with the degree of customer satisfaction. There is no deny that convenience can significantly reduce the energy and time consuming for the consumer when they utilizing the facilities of ETS (Michael , 2022). In order to maintain customer satisfaction, ETS authority must frequently engage in offer ease of use to the customer through its facilities. So, we would recommend ETS authority to increase the visibility of information on the facilities, including install additional information board at the station to provide guidance to the customer. As such, they will not easily get confused and feel discomfortable. At the same time, ETS authority also can implement the online chatbot or online support, which can offer quick and efficient assistance to customers without the need to wait on hold for extended periods.

Last but not least, the **safety measure** is also an important criteria in customer satisfaction. Passengers are likely to pay special attention to public transportation safety measures because of concerns for their personal safety and financial information safety (Ubongeh, 2022). Customers want to know that the transport provider is taking the necessary precautions to guarantee their safety, including upkeep of the vehicles, and the use of safety features. Therefore, ETS authorities are strongly encouraged to perform safety drills and simulations to

prepare passengers and workers for emergency circumstances. Moreover, ETS authorities should also conduct timely infrastructure improvements, such as better signage, better lighting and better maintenance, which can also help improve the safety of transportation with a certain minimum level of security to meet customer expectations and experiences and to ensure they have a certain level of satisfaction.

5.5 Limitation of study

There are maybe some limitations in this research study. As with the majority of studies, the design of current study is subject to limitations. The first limitation will be the lack of prior research studies on the specific topic of service quality of the facilities of ETS. While there have been studies conducted on the overall service quality by other researchers, however there is a paucity of literature on the quality of facilities specifically. It may be difficult to compare and contrast the results of this study with previous studies, and the lack of prior research could make it challenging to develop a comprehensive understanding of the factors that affect the customer satisfaction with the facilities of ETS.

The second limitation concerns the accuracy of the questionnaire even though pilot test have been conducted. This is because most users may not even deliberately notice the facilities provided by ETS. The results of the study may not be accurate. On the other hand, participants may provide responses that are socially desirable or acceptable, rather than truthful, which can affect the accuracy of the results. In addition, the questionnaire respondents included only

participants from a certain demographic group, so the results may not be generalizable to other populations.

Another limitation of study is regions bias, research only focuses on Perak which may not be representative of the entire country. The findings of this study may not stand for other states in Malaysia as it might have different infrastructure, cultural, or socioeconomic conditions that could influence customer satisfaction levels. Apart from Perak, other states in Malaysia also have ETS, maybe other areas ETS's facilities would provide more comprehensively. By conducting research from different state genera, some additional opinions, insights and perspectives can be gained and contribute to a more in-depth literature study of the factors that influences the customer satisfaction through using the facilities of electric train service (ETS)

5.6 Future Research suggestions

For the purpose of future studies, the future research can examine other dimensions that are connected to the variables that affect facility users' customer satisfaction at ETS. Only four factors—payment method, comfortability, convenience, and safety feature—were considered in this study. More investigation should be made of other important service characteristics like cost and reliability, etc.

Apart from that, there have been 270 sets of questionnaires gathered for the study, which exclusively includes respondents from Perak. Nevertheless, given the variables that affect customer satisfaction when utilizing the electric train service (ETS), this may not accurately reflect Malaysians' genuine level of contentment. To address this limitation, future research could consider expanding the scope of study to include multiple states in Malaysia. Also, data for this investigation was acquired from customers with prior ETS usage experience. The research's findings may be impacted by the respondents' prejudice. Future studies might focus on different regions to examine the perspectives of other respondents.

Lastly, future studies can investigate the impact of demographic factors on customer satisfaction. It is possible to do research to find out how demographic variables like age, gender, and income affect how satisfied customers are with ETS. This study can shed light on the various wants and preferences of customers as well as how transportation authorities might customize their services to suit those needs.

5.7 Conclusion

ETS's users satisfaction study can aid in understanding the users behavior towards the ETS's facilities service and establish the ground for future development to monitor service quality, evaluate the performance of the system, recognise the customer dissatisfaction, and suggest improvements. In this research, we applied the Expectancy Confirmation Theory (ECT) which was

used to examine how consumer expectations and satisfaction affected future purchase intentions. Our independent variable includes payment method, comfortability, conveniency, and safety features. Through multiple regression analysis, it was found that these four variables have a significant relationship with customer satisfaction. The research findings could provide the direction and suggestions towards the facilities' quality to the Keretapi Tanah Melayu Berhad (KTMB) in order to develop the future improvement and encourage the potential users to use the ETS. In addition, this research could help the ETS gain the competitive advantage in public transportation on customer satisfaction. KTMB could be based on four independent variables (payment method, comfortability, conveniency, safety features) that are significant for their future improvement towards the facilities they provided.

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APPENDIX

Appendix A: Questionnaire

Customer Satisfaction on Facilities of Electric Train Service (ETS) Survey Questionnaire

Dear respondents,

We are final year students from Bachelor of Science (HONS) Logistics and International Shipping from Universiti Tunku Abdul Rahman (UTAR). Currently, we are undergoing the final year project on "The factors that influence the customer satisfaction on the facilities of Electric Train Service (ETS) in Perak". The purpose of this research is to ...

There are a total of three (3) sections included in this questionnaire. The questionnaire would take about 10 minutes to complete. Kindly complete ALL questions in this questionnaire. The information will be collected and kept privately; all the information will be used for academic purpose only. Thank you for your kind cooperation and willingness.

If there are any enquiries, please contact our members without any hesitation, their contact will be provided as following:

1. Tea Pei Wen 010-3724943
2. Chong Zhao Kang 016-4179562
3. Poon Wei Xiang 012-8191363
4. Wei Ling Liang 014-9026869

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4. UTAR is committed in ensuring the confidentiality, protection, security, and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

1. By submitting this form you hereby authorize and consent to us processing (including disclosing) your personal data and any updates of your information, for the purposes and / or for any other purposes related to the purpose.

2. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfil our obligations or to contact you or to assist you in respect of the purposes and / or for any other purposes related to the purpose.

Acknowledgement of Notice *

- I have been noticed by you and that I hereby understood, consented and agreed per UTAR above notice.
- I disagree, my personal data will not be processed.

Section A: Demographic Profile



Description (optional)

1. Gender *

- Male
- Female

2. Age *

- 15-24
- 24-34
- 35-44
- 45-54
- Other...

3. Occupation *

- Student
- Employed
- Unemployed
- Retired

4. How frequent do you use ETS? *

- Daily
- Weekly
- Monthly
- Yearly

5. What is the purpose for using ETS? *

Business

Non-business (e.g.: visit family, vacation)

Other...

Section B: Independent variable

i) Payment Method

ii) Conveniency

iii) Comfortability

iv) Safety Feature

The section would be according to the Likert Scale which range from strongly disagree, disagree, neutral, agree, and strongly agree.

(1) = Strongly Disagree; (2) = Disagree; (3) = Neutral; (4) = Agree; (5) = Strongly Agree

i) Payment Method

Description (optional)

1. The e-payment method is sufficient for me to use (E-payment for ETS included KTM wallet, Credit card, Debit card, Touch'n Go ewallet, Boost and Kiosk). *

1 2 3 4 5

2. E-payment is eased to use for me. *

1 2 3 4 5

3. I am satisfied with the e-payment processing speed. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. I feel safe when I make payment online. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. E-payment can save my time. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Making electronic payments is better than physical transactions. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ii) Conveniency

Description (optional)

1. The facilities provided made my travel easier (Terminal facilities, Onboard facilities, Online facilities). *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Feeder services such as taxis, buses and privates hire vehicle are sufficient. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. The facilities provided always offer relevant information and guidance. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Most of the facilities provided are accessible to the elderly and disabled. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. The facilities offered are eased for boarding and alighting. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. I am satisfied with the parking space, including bicycle, car, and disabled parking spaces at the station. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. The availability of the choice of shops / eating / drinking facilities. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

iii) Comfortability

Description (optional)

1. Ergonomics of ETS facilities is excellent (Height of table, LCD monitor placement). *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. The internal environment and facilities of the train are clean and hygienic. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. ETS train provides spacious and comfortable seats for passengers. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. ETS train has plenty of legroom and foot space. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Internal temperature (air-conditioning) is at a satisfactory level. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. The noise level inside the ETS train is acceptable. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

iv) Safety Feature

Description (optional)

1. I feel safe with my luggage due to the luggage compartment being equipped. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. The security system provided (CCTV) can avoid robbery and snatched-theft. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. I am secured from accidents when using the facilities. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. I feel safe for my personal information when I use Wi-Fi in ETS terminal and train. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. There are sufficient safety measures facilities on the train (Emergency intercom, Fire extinguisher) *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

⋮

6. People with disabilities can protect themselves with ETS facilities. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

i) Customer Satisfaction

Description (optional)

1. I was very impressed with the facilities provided by ETS. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. I will be more involved with ETS if they implement less carbon and heat emitting services. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. I will recommend ETS services to our family and friends. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. I will increase the frequency of ETS use. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. If ETS implements new facilities, I am willing to try and give advice. *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. I prefer ETS train rather than KTM train. *

1

2

3

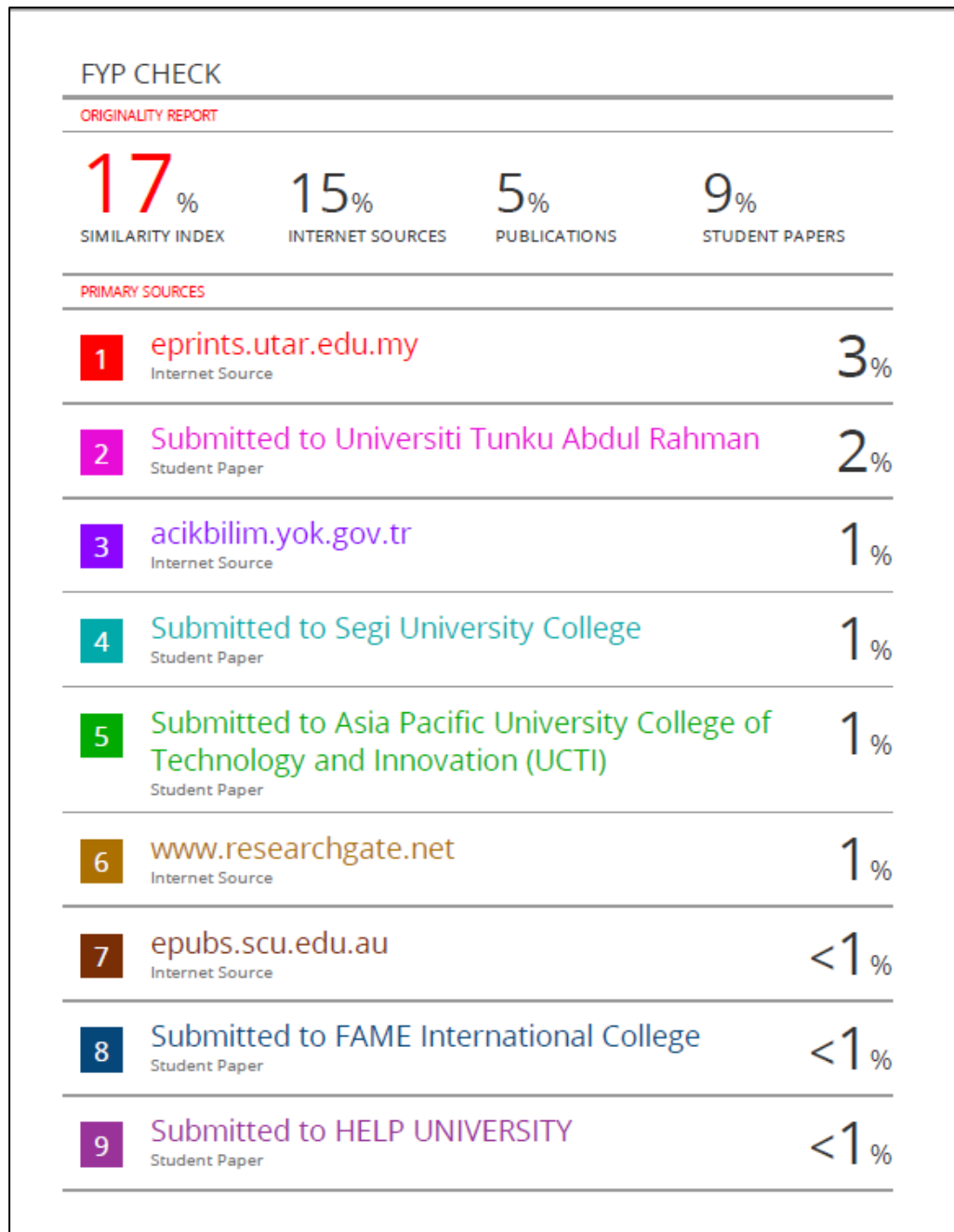
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7. Suggestion for improvements to ETS facilities

Short answer text

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