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BUSINESS-TO-CONSUMER (B2C) E-COMMERCE SUCCESS OF FASHION INDUSTRY IN MALAYSIA



Thesis Submitted to
School of Business Management,
Universiti Utara Malaysia,
in Partial Fulfillment of the Requirement for the
Master of Sciences (Management)



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ABSTRACT

In Malaysia, the growing popularity and development of business-to-consumer (B2C) ecommerce have necessitated competition between existing B2C e-commerce. This growth has opened an opportunity for many fashion businesses to leverage this platform. To access and measure how this platform can contribute to their business success, this study has used the DeLone, and McLean IS success model 2003 in identifying the related factors. Five dimensions were examined: system quality, information quality, service quality, user satisfaction, and net benefit. Therefore, this study aims to analyze the influence of these variables to determine the major contributing factor on the B2C e-commerce fashion websites success in the fashion industry. Primarily, this study draws a quantitative method that was conducted through a survey questionnaire with 272 respondents who have experience purchasing apparel from B2C ecommerce websites. Statistical Package for Social Science (SPSS) was used to analyze the collected data, and Pearson correlation and multiple regression analysis were conducted to prove the hypothesis. These findings revealed that system quality, service quality, information quality, and user satisfaction significantly influence the net benefits of e-commerce fashion to achieve a successful online business. This study has provided theoretical implications to validate the DeLone & McLean Information Systems Success Model and practical implications.

Keywords: B2C e-commerce, e-commerce success, Delone & Mclean model, fashion e-commerce, Malaysia

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ABSTRAK

Di Malaysia, peningkatan populariti dan pengembangan e-dagang perniagaan-ke-pengguna (B2C) telah memerlukan persaingan antara e-dagang B2C yang ada. Pertumbuhan ini telah membuka peluang bagi banyak perniagaan fesyen untuk memanfaatkan platform ini. Untuk mengakses dan mengukur bagaimana platform ini dapat menyumbang kepada kejayaan perniagaan mereka, kajian ini telah menggunakan model kejayaan DeLone, dan McLean IS 2003 dalam mengenal pasti faktor-faktor yang berkaitan. Lima dimensi diperiksa: kualiti sistem, kualiti maklumat, kualiti perkhidmatan, kepuasan pengguna, dan keuntungan bersih. Oleh itu, kajian ini bertujuan untuk menganalisis pengaruh pemboleh ubah ini untuk menentukan faktor penyumbang utama kejayaan laman web fesyen e-dagang B2C dalam industri fesyen. Terutama, kajian ini menarik kaedah kuantitatif yang dilakukan melalui kuesioner tinjauan dengan 272 responden yang mempunyai pengalaman membeli pakaian dari laman web e-dagang B2C. Pakej Statistik untuk Sains Sosial (SPSS) digunakan untuk menganalisis data yang dikumpulkan, dan korelasi Pearson dan analisis regresi berganda dilakukan untuk membuktikan hipotesis. Hasil penemuan ini menunjukkan bahawa kualiti sistem, kualiti perkhidmatan, kualiti maklumat, dan kepuasan pengguna secara signifikan mempengaruhi keuntungan bersih fesyen e-dagang untuk mencapai perniagaan dalam talian yang berjaya. Kajian ini telah memberikan implikasi teori untuk mengesahkan Model Kejayaan Sistem Maklumat DeLone & McLean dan implikasi praktikal.

Kata kunci: e-dagang B2C, kejayaan e-dagang, DeLone & McLean Model, fesyen e-dagang, Malaysia

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LIST OF ABBREVIATION

SYSQ System Quality

SERQ Service Quality

IQ Information Quality

US User Satisfaction

NB Net Benefits



CHAPTER 1

INTRODUCTION

1.1 Introduction

Internet usage has been rapidly growing in this modern era. This internet era has evolved in the e- commerce market, and it has become an essential and innovative invention (Sirvi et al., 2021). E- commerce has developed into a critical strategy for reinforcing various types of business activities (Wei et al., 2018) and has increasingly been applied to numerous industrial companies and service providers to reach previously unreachable markets before the internet age (Varela et al., 2017). Many businesses have adopted e-commerce as an opportunity to increase sales, reduces process costs (Paris et al., 2017), ensure business operations are more cost-effective (Dirgantari et al., 2020), create significant value, and generate extra sales (Varela et al., 2017). E- commerce has been a cheaper way to access and shop in the global marketplace, increased customer satisfaction by allowing customers to purchase conveniently from any location, and enables businesses to obtain a competitive edge over competitors (Khan, 2016).

1.2 Background of Study

Malaysia has become an online country that has an impressive e-commerce market. Malaysia today is one of the most digitally connected societies, with 83% is digital consumers. The rise of digital consumers has accelerated the growth of the e-commerce market as consumer shopping habits are changing according to current trends (Afandi, 2020). According to a report by the Commonwealth of Australia (2020), the high growth of Malaysia's e-commerce market is driven by several factors, which are Malaysia's internet infrastructure, younger generation population, technologically savvy, and increasing smartphone and internet penetration rates.

The fast growth of e-commerce can expand Malaysia's economic growth, connectivity, mobility, and well-being of people.

Regional companies' e-commerce websites primarily dominate the Malaysian e-commerce market. According to the Malaysian Communications and Multimedia Commission (2018), Figure 1.1 below has shown the product categories purchase in the Malaysian e-commerce marketplace. The B2C e-commerce platforms have made it easier for consumers to buy products online, such as clothing and accessories, which have become the most popular product purchased by 68.7% of consumers.

In addition, with various shipping options, consumers can also purchase gadgets, sports-related goods, and household appliances, comprising 56.1% of consumers. Besides, groceries and online food ordering were also favoured by 43.7% of consumers. Other products and services also purchased online by consumers include airline tickets (37.9%), e-tickets (36.2%), online prepaid top-ups (33.5%), e-government (28.9%), internet content (24.8%), financial products (17.5%), reading C.D.s, DVDs, and physical materials (13.7%), and e-vouchers (11.1%).

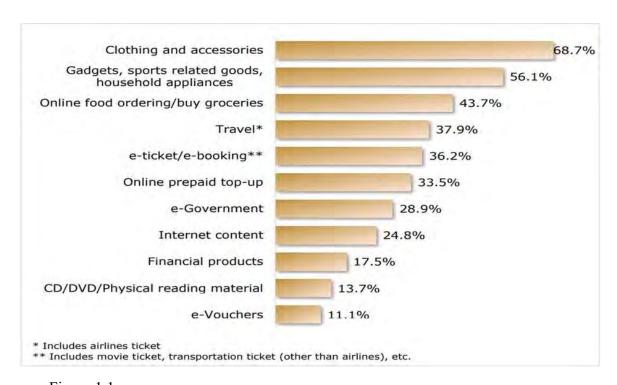


Figure 1.1

Products categories purchased by online shoppers in Malaysia in 2018

Source: Malaysian Communications and Multimedia Commission (2018), Ecommerce consumers survey

Based on the data provided in figure 1.1, the fashion industry can be classified as the largest segment that contributes to e-commerce revenue. Statista (2019) reported that the e-commerce of the fashion industry has a market size of RM3.6 billion and a market share of 9.8% of the total e- commerce activities. The fashion industry still has room to expand exponentially as the demand for different types and designs of clothes is growing from year to year (Yasmin, Farooq, & Zreen, 2018), and Statista.com (2020) estimates that 13% of all fashion purchases will be made on the online platform by 2023. Therefore, the fashion industry is booming due to online shopping portals and a growing number of customers from e-commerce websites.

Fashion has a significant role in society. Individuals use fashion styles to express themselves, serve as a means of self-identification, and symbolize their culture. Therefore, fashion can be associated with changes in economic, social, political transformation, which ends with new products (Selvarajah, 2018). One of the advantages that Malaysian fashion brands noticed with

online shopping were implementing an e-commerce model in their business operations. This implementation allowed them to expand their business efficiently and meet consumer demand (TheStar, 2017). Thus, due to the growth of e-commerce, many online fashion stores, such as Fashion Valet, Poplook, and Zalora, are becoming increasingly popular among Malaysians and continue to contribute to the Malaysian economy (Statista.com, 2020).

The growing popularity and development of e-commerce have created a competitive environment between online fashion stores. The popularity of online fashion stores has grown due to consumer acceptance based on perceived benefits from using them. Many fashion industries have leverage e-commerce to maximize customer reach within specific niche markets. However, there is no guarantee that selling in the online platform channel will be successful (Varela et al., 2017).

Business quality is frequently associated with technological advancements. The advancement of innovative technology necessitates understanding the factors that contribute to a business's success, mainly due to the players' fierce competition. Many businesses invest heavily in online retailing, but it's difficult to measure their success. One of the crucial components of online business success is the effective use of the website by users. Furthermore, Aggarwal & Aakash (2018) stated that the effectiveness and productivity of B2C online websites influence the performance of businesses. As a result, choosing B2C e-commerce websites is critical for both customers and businesses. According to Fouskas & Chatziharistou (2020), the site's initial design criteria included creating an easily adaptable site to any device size, loading quickly, and responding to customer preferences with the appropriate menu bar location. In addition, it is essential to provide top-notch customer service, interactivity, and communication with customers to meet current market expectations.

In measuring e-commerce success, several theories and models have been combined to make a comprehensive measurement system. Previous research has validated the business success by using the DeLone and McLean IS Success Model. In the research model, there is a thorough understanding of the influences that contribute to the effectiveness of an information system (Ali et al., 2018; Angelina, Hermawan, & Suroso, 2019; Chen, Tsao, & Chyou, 2019). Therefore, this study will measure and evaluate the components that contribute to the success of e-commerce websites in the fashion industry by adopting the DeLone & McLean IS Success Model (2003), which comprises five factors, namely system quality, service quality, information quality, user satisfaction, and net benefit.

1.3 Problem Statement

Globally, the fashion industry is operating in a highly competitive market dominated by multinational brands. As a result, fashion companies were constantly introducing new fashions and styles to consumers daily. According to a report by McKinsey, Deloitte Group (2019), the dynamic competitive environment in the fashion industry was characterized by abrupt changes and an increase in uncertainty. The significant difference in the current situation is the acceleration of economic digitalization. As a result, fashion is becoming increasingly reliant on the digital world. As e-commerce grows, businesses can engage customers using virtual reality (Gazzola et al., 2020). Over this, a large number of new fashion brands have started to emerge.

The online marketplace itself is a very competitive environment, with other industries also started to sell in the digital platform. Therefore, many companies worldwide, including in Malaysia, have aimed to build and operate their e-commerce websites, realizing its benefits, especially in the time of crisis. In addition, the e-commerce-oriented company also needs to compete with the traditional brick and mortar companies as they began to adopt e-commerce

as an opportunity to generate extra sales rather than solely depend on their retail stores (Chavan, 2018). However, as Varela et al. (2017) stated, creating a website may appear to them to be simple. Nonetheless, without a competitive advantage, it may be difficult for them to satisfy customers online.

Previous studies, such as Lim et al. (2016), had shown that Malaysian online fashion stores are struggling to build repeat customer bases. This could be due to a failure to satisfy and instil confidence in their customers. Therefore, the businesses tend to fail in convincing the customers to return to their website. In addition, many online businesses overlook the importance of website elements that contribute to customer satisfaction as they are too focused on online advertisements for sales. Moreover, Sothirachagan (2020) stated that one of the consumers' problems with e- commerce is websites. The website takes a long time to load and is cluttered with banners, advertisements, and pop-ups, making it especially difficult for consumers with slow internet connections. According to Rasli et al. (2018), a low-quality website may result in customer loss, cost escalation, and profit loss. Lim et al. (2016) also identify website quality as the primary reason for the failure of online apparel businesses in Malaysia. This is significant because it informs the link between customer expectations and buying decisions.

Besides that, the competitive pressure has raised a pivotal question to e-commerce companies on how to generate a satisfied customer. According to Malaysia International Digital Entrepreneurs Centre (2019), a startup e-commerce business has a failure rate of 90% after four months of its establishment due to the inability to compete, lack of online visibility, and poor online marketing. The business-to-consumer (B2C) areas in Malaysia are found to be challenging to sustain rather than business-to-business (B2B) areas (Paris et al., 2017).

According to Isa et al. (2020), an e-commerce business that can fulfill customers' needs with satisfaction will be successful. The researcher further stated that the consumer would look for appealing web design and a user-friendly website provided by online businesses because it will influence their decision to purchase the items they truly desire. In addition, the consumer also relies on helpful websites full of useful information and will ensure that the security elements are highly practised by the websites they visit. Sharma & Lijuan (2015) stated that successful e-commerce requires a well-designed website, which determines a business's ability to benefit from online sales. This statement is also supported by former researchers such as Hristoski et al. (2017) and Putri & Pujani (2019); a website can be a critical dimension to an e-commerce business's success.

Malaysia's e-commerce application has emphasized broad business sectors rather than specific industries. As a result, strategies, implementation factors, and models vary significantly across industries, resulting in inconsistent findings (Paris et al., 2017). In addition, the fashion industry in Malaysia has placed a greater emphasis on its association with social media platforms than on e-commerce sites. Therefore, this study will fill the gap by focusing on the fashion industry's B2C e-commerce websites success in Malaysia.

1.4 Research Objectives

- i. To identify the relationship between system quality, service quality, information quality, and user satisfaction of e-commerce fashion websites.
- ii. To identify the mediating effect of user satisfaction towards net benefits of e-commerce fashion websites.
- iii. To identify the relationship between system quality, service quality, information quality, and net benefits of e-commerce fashion websites.

1.5 Research Questions

- i. Does system quality, service quality, and information quality influence user satisfaction of e-commerce fashion websites?
- ii. Does user satisfaction mediate system quality, service quality, information quality, and net benefits of e-commerce fashion websites?
- iii. Does system quality, service quality, and information quality influence the net benefits of e-commerce fashion websites?

1.6 Scope of Research

This study's scope only aimed to determine the B2C e-commerce fashion websites success by employing dimensions from the DeLone & McLean Information Systems Success Model (2003). Furthermore, this study covers several important aspects of analyzing the relationship between system quality, service quality, information quality, and user satisfaction to achieve net benefits. The study also focused on the students of Universiti Utara Malaysia (UUM) in Sintok, Kedah, involving undergraduate and postgraduate students.

1.7 Significance of Research

This study is necessary to determine the variables that contribute to the B2C e-commerce fashion websites success in Malaysia. After analyzing the data collected from respondents, the researcher can gain insight into consumers' perceptions of the net benefits of e-commerce and how these benefits affect their satisfaction from the usage. Furthermore, this research may assist other researchers in identifying the factors that influence e-commerce websites success. Therefore, this study will discuss the implications concerning theoretical and practical of the fashion industry's e- commerce websites success.

Theoretically, this study will validate the DeLone & McLean Information Systems Success Model by determining whether it fits the data and can be applied practically in the online fashion business. Concerning the study's practical implications, the findings will assist established e-commerce companies, brick-and-mortar stores, and online startup businesses in the fashion industry in identifying the factors that can help them improve and develop an effective e-commerce system that will satisfy online shoppers. In addition, this study will expose them to which aspects require additional attention, resulting in successful e-commerce and competitive advantage. Besides that, it is beneficial for fashion website developers to enhance the quality of fashion website development in Malaysia in order to satisfy user preferences.

Therefore, as a guide, this study will help future researchers discover new insights about ecommerce success from different viewpoints. Finally, the results of this study will serve as references or a guide for future studies.

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1.8 Definition of Key Terms

1.8.1 E-commerce

E-commerce is the buying and selling of goods and services over the internet. Many people use the Internet as a source of information when shopping for products in-store or online, including comparing prices and browsing the latest product offerings (Khan, 2016).

1.8.2 System quality

Overall system performance and conformance to customer requirements are known as system quality (Delone & McLean, 2003). Poor system quality suffers from complex error handling, poor usability, and simplicity (Seddon, 1997).

1.8.3 Service quality

Service quality is defined as an e-commerce business's overall support regardless of which department provides the support as users are customers. It is critical to provide them with a high level of service quality (Delone & McLean, 2003). It is frequently quantified regarding the support organization's responsiveness, dependability, and empathy (Petter & McLean, 2009).

1.8.4 Information quality

Information quality refers to complies with information on the internet. A website must be constantly personalized, comprehensive, relevant, and easily understood while at the same time being secure (Delone & McLean, 2003).

1.8.5 User satisfaction

User satisfaction is a critical metric for measuring business customers' perceptions of ecommerce systems. It is calculated by analyzing various aspects of the business, most notably its transaction- based, informational, service, and support capabilities (Delone & McLean, 2003).

1.8.6 Net benefits

The net benefit of a business, also known as profitability, is the most important indicator of success because it registers the relative balance of positive and negative impacts on customers, suppliers, employees, organizations, markets, industries, economies, and societies (Delone & McLean, 2003).

1.9 Organization of Thesis

This study is divided into five chapters. Chapter one consists of the introduction, the background of the study, a problem statement, research objectives, research questions, the scope of the study, the significance of the research, and a definition of key terms. The second chapter conducts a literature review on system quality, service quality, information quality, user satisfaction, net benefit, and the development of hypotheses. Chapter three discusses the research methodology, including the research design, population, sample size and sampling technique, questionnaire design, research measurement, data collection, and data analysis. Chapter four contains the findings and data analysis. The researcher presents demographic profiles, descriptive, reliability analyses, multiple regression analyses, and hypothesis testing results. Finally, chapter five will discuss the study's findings, followed by implications, research limitations, and future research recommendations.

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CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter provides an overview of e-commerce and its application in the fashion industry. The following part relates to the definition and concept of net benefits and other variables: user satisfaction, system quality, service quality, and information quality. This chapter also will discuss any significant literature from the previous studies that related to the variables. In addition, at the end of this chapter will discuss on proposed hypothesis and framework, underpinning theory, and the conclusion of this chapter.

2.2 Overview of e-commerce

E-commerce has become an essential component of today's modern society. People are increasingly relying on this platform to meet their daily needs. As a result of the increased demand in the online environment, the number of online business vendors increases, with business-to- consumer (B2C) e-commerce being one of them (Lai Wie & Widjaja, 2017). In general, e- commerce is a business practice where organizations and individuals do business on the World Wide Web (Web), using mobile applications and browsers on mobile devices (Laudon & Traver, 2016). For this study, B2C e-commerce is defined as an activity of online businesses in selling products or services to individual consumers (Laudon & Traver, 2016).

The increasing number of online businesses has impacted the overall economy, including the firms, prices, and productivity (Terzi, 2011). The e-commerce platform has benefited both companies and consumers. According to Tharindu & Koggalage (2021), businesses can use B2C e-commerce to lower costs, increase demand, and develop new business models that were previously impossible due to technological constraints. Therefore, it can benefit all consumers

by reducing prices, improving products, and utilizing more advanced information transmission methods. Furthermore, Ghobakhloo, Hong, and Standing (2014) stated that while e-commerce has advanced significantly in the last decade, its fundamental role in enabling business activities and interacting critical information with business decision-makers has not changed. However, the ability of a company to generate positive net revenue from its e-commerce operations determines its long-term success or failure (Ghobakhloo, Hong, & Standing, 2014).

2.3 Application of e-commerce in the fashion industry

The increase in online purchases has created new business opportunities for online marketplace sellers, resulting in many businesses being involved in online purchasing. The rise of the e-commerce trend has expanded the online fashion market. According to Lim et al. (2016), due to consumers' preferences for touching and physically trying on clothing, online apparel purchasing was unlikely to succeed in the early days of e-commerce. However, this has changed dramatically in recent years. As a result, the volume of apparel sold has steadily increased, as have online revenues for fashion or apparel websites.

According to Gazzola et al. (2020), online platforms have grown in popularity and significance in the fashion industry in recent years. The scholar further stated that in 2018, 57% of global internet users made online purchases related to fashion. Many international e-commerce platforms, including Zalando, Amazon, and Myntra, have operated in the fashion industry by offering their own private label fashion collections. Meanwhile, China has become the most prominent fashion consumer, with further growth expected in Asia and e-commerce expanding beyond the West (Thornton, 2018). Wei, Lee, & Shen (2018), also reported that clothing has the highest transaction volume in China's online market. China's e-commerce industry has grown rapidly as consumers believe that clothing websites provide a convenient way to

purchase clothing online, as well as perceived cost savings and time savings (Wei, Lee, & Shen, 2018).

Despite the growth of online apparel stores globally, Malaysia's online fashion market is also booming, keeping up with the latest trends while meeting growing demand (Yeong & Migin, 2018). According to Harizan & Shukor (2021), the entry of leading global fashion brands such as ZARA, H&M, forever 21, PUMA, Adidas, and Nike into the Malaysian market, as well as the emergence of sales platforms such as Lazada and Shopee, have dominated the Malaysian e- commerce market. Therefore, the internationalization of the clothing industry has had a profound effect on consumers' interest in and purchasing behaviour regarding clothing. It is also has boosted Malaysia's online apparel industry.

2.4 Definition and Concept of Variables

2.4.1 Concept of net benefits

Several definitions from the previous scholar have defined the net benefits in the e-commerce context. According to Bahaddad et al. (2019), the net benefit concept differs as the end-user can be a consumer, provider, or designer. This demonstrates how viewing the net benefit from various perspectives results in different responses when using research tools. Kumar & Ayodeji (2020) define net benefit as the total benefits that customers receive when shopping online instead of the costs such as effort, money, and time. Wahyudi, Respati, & Ardianto (2017), also determine net benefits as the benefit felt by the individual due to using the system. This benefit is readily apparent in the system users' levels of engagement and overall satisfaction, which both improve due to the system's use. In the context of this study, individuals used online shoppers to refer to customers who were interested in buying online.

Another concept on net benefits by Petter, DeLone, & McLean (2008) defines net benefit as the degree to which information systems contribute to individuals, organizations, industries, and countries. For example, consumers who receive a net benefit could enhance their productivity, while companies or organizations can increase revenue, cost savings, increased profits, and market performance. In the DeLone & McLean (2003) IS success model, the scholar emphasizes net benefits as one of the most vital online platform success indicators because it includes the positive and drawbacks of e-commerce on internal and external stakeholders. The model also discusses how investing in e-commerce platforms has saved consumers time and money, led to supply-chain efficiencies, and resulted in overall net positive benefit for an organization and gross national product (GNP) growth that is a net positive (DeLone & McLean, 2003).

Furthermore, net benefits success measures are the most critical, focusing on the e-commerce system's ultimate impact (DeLone and McLean, 2004). A single user such as a consumer, an organization, or the whole sector can benefit from an e-commerce system. Therefore, the net benefit success metrics are at individual, group, organizational, and industry levels. Individual benefits of e-commerce are quantified. The e-commerce system can enhance the customer experience, provide entertainment, lower the cost of shopping, and deliver real-time marketing offers. The most frequently used metric for calculating net benefits is perceived usefulness or job impact (Petter, DeLone, & McLean, 2008). Seddon (1997) added that user satisfaction could also be used to indicate perceived net benefits.

According to Lai (2014), perceived usefulness is critical in determining an e-commerce system's success. Perceived usefulness relates to a customer's assumption that engaging in e-commerce activities will improve their task or job performance. Consumers seek many benefits from online purchases in terms of usefulness, such as saving money, time, effort, and

convenient access to the e-commerce system (Alraja & Aref, 2015). Therefore, the e-commerce system should generate quality and easy-to-use systems and information for users to gain the defined benefits.

Meanwhile, according to Wang (2008), perceived value is the most complete and consistent indication of e-commerce's net benefits. According to Zeithaml (1988, as cited in Rouibah, Lowry, and Almutairi 2015), in other words, perceived value is how consumers value products and services in general, based on what they perceive to be valuable. Perceived value encompassed both monetary and non-monetary values. According to Rouibah, Lowry, and Almutairi (2015), the non-monetary value of B2C e-commerce is the time and effort saved by using e-commerce systems when searching, purchasing, and navigating. Therefore, this study has focused on perceived usefulness and perceived values as a dimension for the net benefits.

2.4.2 Concept of user satisfaction

The concept of user satisfaction is various depending on its conceptual approaches. Every researcher evaluates the systems through different prisms and assigns them into different meanings. For example, Seddon (1997) defined it as user emotions toward a particular ecommerce business based on analyzing various aspects of the business, most importantly, its informational, transactional, service, and support functions. Similarly, Sharma & Lijuan (2015) and Ali et al. (2018) also describe user satisfaction as users' feelings, beliefs, and expectations towards using e- commerce websites by receiving a good service while using the websites. It is also considered the user's feelings after comparing the product's performance to user expectations.

Besides that, when consumers expect their systems or services to perform according to their expectations, they will feel satisfied with the procedures. Online satisfaction is paramount for

every business because a satisfied consumer will affect consumer confidence and continue purchase intention (Sharma & Lijuan, 2015). According to Noronha and Rao (2017), for the most part, satisfied customers are more likely to return to a website than those who are dissatisfied or partially satisfied. This leads to positive thoughts and feelings about online websites. Therefore, an online business needs to sustain and enhance its information systems and services, as users have a high expectation in choosing which e-commerce business websites can satisfy their needs.

According to Antonopoulou & Kotsilieris (2019), there is a general belief that evaluating customer satisfaction is crucial in measuring the e-commerce website's success as it is easily quantifiable, understandable, adaptable, and flexible in practice. Ali et al. (2018) and Wail & Sfenrisnto (2018) also identify that user satisfaction is crucial for business success in any environment, including B2C e-commerce platforms. Thus, it is critical to satisfying the needs of consumers for a business to succeed. Therefore, DeLone and McLean (2003) define several metrics for determining user satisfaction, including a user who made a repeat purchase and returns visits. User satisfaction also can be identified from a consumer survey. According to DeLone and McLean (2004), system quality, information quality, and service quality also could influence website user satisfaction.

2.4.3 Concept of system quality

System quality encompasses what is required from an e-commerce system on a website that consists of product information and site functions (Kuan, Bock, & Vathanophas, 2008). The quality of a website's content is regarded as the most important component because it is the system that generates product information and facilitates website services that customers want. In addition, the website must deliver attributes that can attract consumers to e-commerce websites, mainly convenience, navigation, visual appeal, and a fast response page. Kumar &

Ayodeji (2020) also discovered that website metrics such as quick page load, website design, appearance, availability, and layout could affect a website's performance. Thus, website performance plays a vital role in determining user satisfaction while shopping on a website.

McKinney, Yoon, and Zahedi (2002) explain the overall quality of a website. The importance of how well the website fulfils its purpose and how well the information is received and communicated to the end-user. Consumer satisfaction depends on the website's performance. For example, consumers who are dissatisfied with the uptake and delivery, such as cluttered pages, will tend to leave the site. DeLone and McLean (2004) emphasize the significance of functionality, accessibility, efficiency, ability to adapt, and responsiveness for the characteristics of e-commerce systems. A reliable and high-quality system can increase customer utilization towards e-commerce websites and increase business sales. However, if the system's quality is dissatisfying, the expected benefits will not be achieved as a user is a customer, and their use is usually volitional (DeLone & McLean, 2004).

2.4.4 Concept of service quality

According to Hwan & Gyun (2019), service quality can be described as a quality assessment that measures the gap between the desired level of service and the actual level of service of the provider. In other words, service quality is based on consumers' perceptions and judgment. Service quality is used in e-commerce to refer to consumers' overall evaluation of the competence and service quality offered in the online platform (Santos, 2003). Online businesses have to serve customers high-quality services due to the lack of face-to-face interaction in the virtual marketplace (Putri & Pujani, 2019). If the user is not getting the expected service standards, the e-commerce business will lose the customer over its competitors.

Furthermore, a website's e-service quality (e-SQ) could be defined as the extent to which shopping, purchasing, and delivery are efficient and effective (Parasuraman, Zeithaml, & Malhotra, 2005). Therefore, the scholars identify several e-SQ dimensions, including capability, service availability, assurance, confidentiality, ability to respond, and compensation. Another dimension of quality is in the context of information systems by Delone & McLean (2003), which encompasses three indices: assurance, empathy, and responsiveness. Another study by Palese & Usai (2018) found that trustworthiness, security, and compassion are critical in e-commerce customer service quality dimensions.

2.4.5 Concept of information quality

Information quality is users' perception and perceived value when presenting the information displayed on the e-commerce website (Kumar & Ayodeji, 2020; Lin, 2007). Information is essential data to determine user satisfaction and has been useful for the consumer in making a future decision. Alam et al. (2020) argue that complete and detailed information is required on a website as the products and services are intangible in the context of the online platform. Thus, the consumer entirely relies on the information displayed. According to Madiawati et al. (2020), information quality dimensions consist of accuracy, economics, timeliness, relevance, and ease. Another study by Kumar & Ayodeji (2020); Alam et al. (2020) also stresses that the e-commerce content must be accurate, timely, relevant, understandable, completeness, and detailed because high-quality information can lead to an increase in user satisfaction as well as assists the user in making a better purchase decision.

DeLone & McLean (2004) suggest several aspects of information quality in their information system success model, including personalized, comprehensive, relevant, simple to understand, and secure when making payments on an online platform. However, even if e-commerce websites frequently provide incorrect, incomplete, or ambiguous information, they could

discourage users from using the websites. (Ramayah, Ahmad, & Lo, 2010). Therefore, consumer perceptions of information quality are critical, and if they believe that it will be beneficial to them, they are more highly probable to use the websites.

2.5 Previous study on variables

2.5.1 Net benefits

Previous studies such as Civelek, İnce, & Karabulut (2016), Ali et al. (2018), Angelina, Hermawan, & Suroso (2019), and Pertiwi, Sejati, & Prasetianingrum (2020) has used net benefits as an indicator of B2C e-commerce success. According to Ali et al. (2018), consumers evaluate and assess positive and negative aspects using the websites. User satisfaction is highly linked to the benefits received by the consumer. Therefore, it has become the primary driver of user satisfaction. Similarly, Sappri & Baharudin (2016) emphasize that in order to reflect information technology success accurately, net benefits must always be linked to user satisfaction and system usage measurement. Meanwhile, Civelek, İnce, & Karabulut (2016) argued that when it comes to the success of a B2C e-commerce website, customer preference for net benefits is the most important consideration.

2.5.2 User satisfaction

Other studies on e-commerce show that the satisfaction of customers was a significant factor in e- commerce success. For example, Ferreira & Fernandes (2015) suggested that satisfaction has become a critical resource for businesses, enabling them to maintain and improve their competitiveness and ensure long-term success in a highly competitive environment with increasingly demanding customers. Devalage & Kulathunga (2019), in their study on customer satisfaction from the Sri Lanka perspective, also claimed that customer satisfaction is a crucial dimension that affects customer attraction to the company and its products and services and, as

a result, will gain customer retention. In addition, prior studies have identified user satisfaction as a mediating variable in various information system domains (Sappri & Baharudin, 2016; Civelek, İnce, & Karabulut, 2016; Wahyudi, Respati, & Ardianto, 2017; Zake & A.E., 2017; Salam & Farooq, 2020).

2.5.3 System quality

Past research has suggested that a website's user interface should be intuitive, with a limited set of elements from which a buyer can obtain essential details (Noronha & Rao, 2017). If the system quality is not up to consumer expectations thus, the consumer will stop using the websites. Another study by Ihsan, Li, & Alexis (2020) found that in an e-commerce platform, both good and unfavourable system quality depends on a company's ability to give its customers, suppliers, and employees appropriate security and privacy.

2.5.4 Service quality

According to Zhu, Kuo, & Munkhbold (2016), a website with high e-service quality can make browsing, purchasing, and delivery more efficient and effective. With the excellent service provided, the consumer will perceive the value of the website use and increase their satisfaction in using e-commerce websites. Furthermore, a study by Nisar & Prabhakar (2017) found that B2C businesses need to meet what customers expect from them to ensure customer satisfaction and market success.

2.5.5 Information quality

Past research by Rasli et al. (2018) stated that high-quality information is beneficial for customers in the following ways: assisting in comparing products, facilitating the purchasing process, and contributing to transaction security. Therefore, a website with sufficient information will encourage customers to make online purchases. Another study by Dirgantar

et al. (2020) discovered that the less precise and appealing the presentation of information, the less relevant it is, and difficult-to-understand language could reduce website use and customer satisfaction.

2.6 Hypotheses Development

This study has chosen system quality, service quality, and information quality as independent variables to associate the dependent variable, net benefits, implying that independent variables can impact net benefits.

2.6.1 System quality and user satisfaction

This study demonstrates that system quality has a significant influence on user satisfaction in e- commerce. This is evident from previous research that has empirically established a positive relationship between system quality and user satisfaction (Kumar & Ayodeji, 2020; Noronha & Rao, 2017; Rouibah, Lowry, & Al-Mutairi, 2015). Therefore, businesses must optimize their websites' performance to ensure success in e-commerce, as the website's performance is important in determining customer satisfaction while shopping on the website (Kumar & Ayodeji, 2020). Based on this empirical evidence, the following hypothesis on system quality was proposed:

H1: There is a significant relationship between system quality and user satisfaction.

2.6.2 Service quality and user satisfaction

This study demonstrates that service quality has a significant influence on user satisfaction. Several scholars have reported a significant relationship between service quality and user satisfaction, such as Zhu, Kuo, & Munkhbold (2016); Nisar & Prabhakar (2017); Ali et al. (2018); Ihsan, Li, & Alexis (2020). Furthermore, Delone & McLean (2003) also stresses that

it is important to provide the consumer with a high-quality service to ensure that they are satisfied with the services offered and revisit to make another purchase. Besides that, a study by Angelina, Hermawan, & Suroso (2019), conducted on 110 users of e-commerce in Indonesia, also found that service quality impacts user satisfaction.

H2: There is a significant relationship between service quality and user satisfaction.

2.6.3 Information quality and user satisfaction

This study demonstrates that the quality of information has a significant effect on e-commerce user satisfaction. Rasli et al. (2018), Alam et al. (2020), and Madiawati et al. (2020) established a positive correlation between information quality and e-commerce user satisfaction. In addition, Dirgantar et al. (2020) found that information quality significantly impacts user satisfaction. The information quality metric refers to the level of information delivered to the user through images that make each group easier to digest. Similarly, Mahendra et al. (2020) found that information quality has the most significant effect on user satisfaction compared to other variables.

H3: There is a significant relationship between information quality and user satisfaction.

2.6.4 User satisfaction and net benefits

This study demonstrates that customer satisfaction significantly affects net benefits (Petter, DeLone, & McLean, 2008). The previous scholar discovered that user satisfaction has a significant influence on net benefits, such as Ali, Rasool, & Pathania (2017), Ali et al. (2018), and Angelina, Hermawan, & Suroso (2019). According to Sura & Ahn (2017), consumers benefit from using e- commerce platforms as they are satisfied and believe the system is functional. Thus, increased user satisfaction results in increased net benefits for e-commerce users. Futhermore, Ghobakhloo, Hong, & Standing (2014) suggested as business owners

recognized the consumer satisfaction associated with the B2C e-commerce system, thus prompting a complete overhaul of the system's utility, resulting in overall benefits, including enhanced shopping activities, better decision making, money and time savings, and the addition of more product and service options. Therefore, the following hypothesis was proposed for user satisfaction:

H4: There is a significant relationship between user satisfaction and net benefits.

2.6.5 System quality and net benefits

The previous scholar has found a moderate relationship between system quality and net benefits (Petter, DeLone, & McLean, 2008). A study by Lai (2014), and Gorla, Somers, & Wong (2010) found that system quality has a significant influence on net benefits. For websites with high system quality, it can make users feel valuable and satisfied. However, Wahyudi, Respati, & Ardianto (2017) found that system quality does not directly influence a net benefit. Based on this empirical evidence, the following hypothesis on system quality was proposed:

H5: There is a significant relationship between system quality and net benefits.

2.6.6 Service quality and net benefits

According to Petter, DeLone, & McLean (2008), the relationship between service quality and net benefits is a moderate relationship at the individual level. On the other hand, Zake & A.E. (2017) and Gorla, Somers, & Wong (2010), reported that service quality is positively correlated towards net benefits. Meanwhile, a previous study by Pertiwi, Sejati, & Prasetianingrum (2020) found that the e-commerce services quality has no direct impact on the acquisition of net benefits. This is because e-commerce users cannot use the net benefits without any mediation of user satisfaction. Therefore, the following hypothesis was proposed for service quality:

H6: There is a significant relationship between service quality and net benefits.

2.6.7 Information quality and net benefits

According to Petter, DeLone, and McLean (2008), there is a moderate relationship between the effect of information quality on net benefits. Gorla, Somers, and Wong (2010), Lai (2014), and Pertiwi, Sejati, and Prasetianingrum (2020) have previously demonstrated that information quality has a significant influence on net benefits. However, Wahyudi, Respati, and Ardianto (2017) and Zake & A.E. (2017) found that the relationship between information quality and net benefits is not significantly affected. Therefore, increased information quality does not necessarily translate into a more significant net benefit for e-commerce users. Thus, based on the above mentioned empirical evidence, this study proposed the following hypothesis on the quality of information:

H7: There is a significant relationship between information quality and net benefits.

2.7 Theoretical Framework

Based on the theoretical and empirical literature, a proposed framework for this study was constructed. As shown in figure 2.1, the framework emphasizes the link between independent variables, namely system quality, service quality, and information quality, and mediator, namely user satisfaction, and lastly, dependent variable, namely net benefits. The proposed framework is developed based on the theoretical framework proposed by DeLone and McLean's updated IS Success Model (2003).

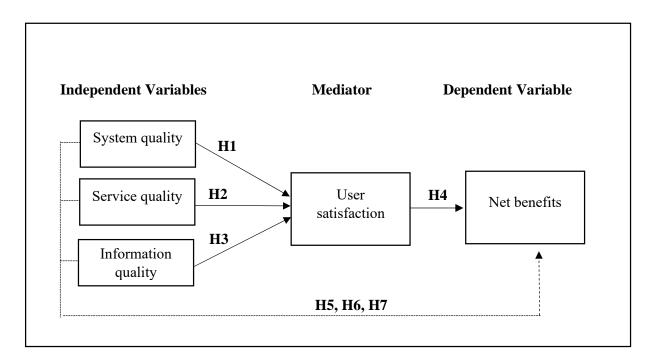


Figure 2.1

Hypothesized theoretical framework

2.8 Underpinning Theory

2.8.1 Social exchange theory

This research utilizes Homans's (1961) social exchange theory as the theoretical framework for developing the cost-benefit and reciprocity concepts. According to social exchange theory, information technology providers and users engage in exchange. When users operate information technology, it is frequently associated with information system services. This information technology can produce data and systems designed by information technology providers (Nugroho & Prasetyo, 2018).

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Furthermore, according to Homans (1958), human exchanges are formed and sustained through a subjective cost-benefit analysis. The more valuable the information exchanged, the more frequently the parties interact, and vice versa. If others in the exchange do not find a behaviour rewarding, they will reduce their production of sentiment or valuable activity. By applying the

social exchange theory to this study, this study concludes that the more consumers receive satisfaction and net benefits from purchasing on e-commerce fashion websites, the more committed they are to the websites. Therefore, it eventually leads to future purchases and revisits customers.

2.8.2 DeLone and McLean updated IS Success Model

The researchers used an updated version of DeLone and McLean's IS Success Model to identify and determine the factors contributing to this study's e-commerce success.

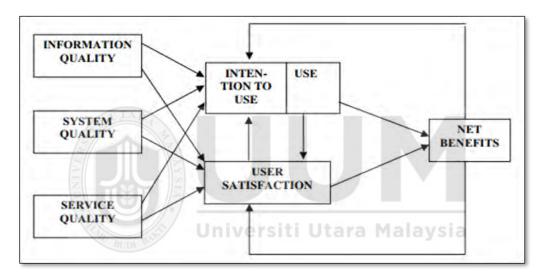


Figure 2.2

Updated DeLone & McLean IS Success Model

Source: DeLone & McLean (2003)

The first model to assess the success of information systems was developed by DeLone and McLean in 1992. The model consists of six primary variables: system quality, information quality, usage, user satisfaction, individual and organizational impact. DeLone and McLean (1992) stated these variables are interconnected and comprehensively defined the success of IS by examining the interactions between these model components and the components themselves. As a result, researchers can gain a better understanding of what constitutes

successful information systems. However, some researchers have criticized the model due to the confusion and incomplete on the IS success measure (Seddon, 1997; Ramayah, Ahmad, & Lo, 2010).

Following the model's initial presentation in 1992, some other scholars have suggested expanding the model's dimensions and proposing alternative success models (Seddon, 1997; Molla & Licker, 2001). For example, the DeLone and McLean model was augmented by the introduction of "consequences," "perceived usefulness," "expectations," and "net benefits" to help explain behavior by Seddon (1997). Molla and Licker (2001) modified the DeLone and McLean model by adding a dependent variable for e-commerce success named "Customer Ecommerce Satisfaction (CES)." Therefore, to resolve the ambiguities and errors pointed out by other researchers, the information system success model proposed by DeLone and McLean in 2003, as illustrated in Figure 2.2, was revised in 2003.

The main alteration of the new model emphasizes providing excellent customer service as an essential component of the e-commerce system's overall success. In addition, DeLone and McLean have substituted net benefits for the personal and organizational impact variables. Other factors resulting in net benefits include cost savings, increased markets, incremental sales, and lower search expenses (Ali et al., 2018). This model has been proven to identify the factors that influence information systems' success (Ali et al., 2018). As a result, the researcher adopted a portion of the DeLone and McLean (2003) information systems model, as depicted in the conceptual framework.

2.9 Chapter Summary

Overall, this chapter has explained the definition and concept of each variable and reviewed the previous studies regarding the variables identified in this study. This chapter also has developed a theoretical framework and proposed a hypothesis development. In addition, the last part of this chapter has presented the underpinning theory related to this study.



CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This section will discuss the research framework and hypotheses, research design, population, sample and sampling technique, questionnaire design, research measurement, data collection, and data analysis technique.

3.2 Research Framework and Research Hypothesis

The research framework used in this study is the possible factors affecting net benefits for ecommerce fashion websites, namely system quality, service quality, and information quality, and user satisfaction.

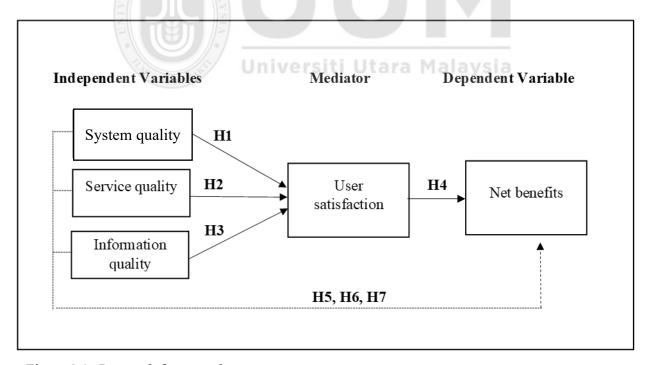


Figure 3.1: Research framework

The framework illustrated in the figure above has developed seven hypotheses which are:

H1: There is a significant relationship between system quality and user satisfaction.

H2: There is a significant relationship between service quality and user satisfaction.

H3: There is a significant relationship between information quality and user satisfaction.

H4: There is a significant relationship between user satisfaction and net benefits.

H5: There is a significant relationship between system quality and net benefits.

H6: There is a significant relationship between service quality and net benefits.

H7: There is a significant relationship between information quality and net benefits.

3.3 Research Design

This study has used a quantitative approach as a research methodology. The data of quantitative research would be analyzed numerically to identify if a correlation existed between the variables (Lowhorn, 2007). The data is collected at a particular time only and does not provide the causal effects between variables. The hypothesis that has been constructed in this study will be tested. To collect the data, the researcher will be using a set of questionnaires as it is a relatively quick and efficient way to obtain the information from respondents in a short time.

3.4 Population, sample, and sampling technique

3.4.1 Population

This study's population is drawn from a total of students in Universiti Utara Malaysia. According to Yang (2005, as cited in Tam, Loureiro, & Oliveira 2019), university students are considered the first customer segment to utilize an online platform due to their educational

status and potential income. Ali et al. (2018) also argue that university students are more aware of the adoption of online business platforms and have more experience. Based on that, the student in Universiti Utara Malaysia is considered appropriate for participating in this study. According to the Academic Affairs Department (HEA) UUM, the student population in UUM is 33,437 students, comprises 28,725 undergraduates and 4,712 postgraduate students. The study's target population will be individuals who shop at e-commerce online fashion stores and have visited and purchased at least one apparel product on the e-commerce websites.

3.4.2 Sample

The unit analysis of the study is at an individual level in which consumers of e-commerce websites in the fashion industry. According to the Krejcie and Morgan (1970) table for Determining Sample Size, a sample size of at least 380 is required for the given population of 33,437.

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3.4.3 Sampling technique

The sampling technique used in this study is convenience sampling. Convenience sampling is a type of non-probability sampling in which cases are selected haphazardly on the basis that they are easiest to obtain (Saunders, Lewis, and Thornhill, 2009). According to Dörnyei (2007, as cited in Etikan, Musa, & Alkassim 2016), convenience sampling also referred to where members of the target population that meet certain criteria such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate are included for the purpose of the study. Therefore, by using the convenience sampling technique, the researcher is able to obtain the sample size quickly and easily accessible to the researcher.

3.5 Questionnaire Design

The instrument in this study is using a set of questionnaires. This questionnaire was divided into two sections, as shown in table 3.1. Section A consists of respondents' demographic information such as gender, age, education level, income, e-commerce fashion frequencies usage, and top use of e-commerce fashion website stores. While in section B will require respondents to answer questions related to independent variables, namely system quality contains five items, service quality contains of six items, information quality contains of five items. For the mediator, namely, user satisfaction contains of six items, and the dependent variable, namely net benefits, contains of six items—the sources of each item as shown in table 3.2. The items in section B will be evaluated based on a five-point Likert scale, as shown in table 3.3. In addition, the questions will be presented in bilingual language, which is in English and Malay, to make respondents more understand the questions and avoid inaccurate translation of the questions or responses that can lead to erroneous results.

Table 3.1

Questionnaire design

Part	Content	
Section A	Demographic Information	
Section B	System Quality	
Section B	Service Quality	
Section B	Information Quality	
Section B	User Satisfaction	
Section B	Net Benefits	

Table 3.2 Sources of items for each variable

Variables		Sources	No. of items
	System quality	Adapted from Lai (2014) and	5
		Tam, Loureiro, & Oliveira (2019)	
	Service quality	Adapted from Rouibah (2014)	6
Independent	Information quality	Adapted from Noorshella,	5
		Abdullah, & Nursalihah (2015)	
		Adapted from Wang (2008), Tam,	6
Mediator	User satisfaction	Loureiro, & Oliveira (2019), and	
		Ali, Rasool, & Pathania (2017)	
		Adapted from Lai (2014) and	6
Dependent	Net benefits	Rouibah, Lowry, & Almutairi	
	Un	(2015) iversiti Utara Malaysia	

Table 3.3 Five-point Likert scale

Scale	Level of agreement		
1	Strongly disagree		
2	Disagree		
3	Neutral		
4	Agree		
5	Strongly agree		

3.6 Research Measurement

The instrument used in this study was adapted from existing research publications.

3.6.1 System quality

The independent variable, system quality, is measured using five items developed by Lai (2014) and Tam, Loureiro, & Oliveira (2019) with a five-point Likert scale as shown in table 3.4.

Table 3.4 *Items for system quality*

Variable	Operational definition	Items in questionnaire
System	The term "system quality"	1. The e-commerce website is easy to
quality	refers to a system's technical	navigate.
(SYSQ)	characteristics, such as	2. The e-commerce website allows me to
	adaptability, availability,	find the information I am looking for
	reliability, response time, and	easily.
	usability.	3. The e-commerce website is well
	,	structured.
		4. The e-commerce website is easy to use.
		5. Response time of the e-commerce
		website is acceptable.

3.6.2 Service quality

The independent variable, service quality, is measured using six items developed by Rouibah (2014) with a five-point Likert scale.

Table 3.5

Items for service quality

Variable	Operational definition	Items in questionnaire
Service	1. Service quality refers to	When I have a problem, the e-
quality	reliability, responsiveness,	commerce website service shows a
(SERQ)	assurance, and empathy, all	sincere interest in solving it.
	of which can result in	2.1.0 0 00.1.1.1.0 1.0
	future purchases.	always willing to help me.
		I feel safe in my transactions with the
	Universit	e-commerce website service in terms of
		security and privacy protection.
	4.	
		the
	_	knowledge to answer my questions.
	5.	2
		me individual attention.
	6.	
		understands my specific needs.

3.6.3 Information quality

The independent variable, information quality, is measured using five items developed by Noorshella, Abdullah, & Nursalihah (2015) with a five-point Likert scale.

Table 3.6

Items for information quality

Variable	Operational definition	Items in questionnaire
Information	The extent to which the	1. I believe that the e-commerce
quality (IQ)	information quality of	website provides accurate
	purchase website was	information.
	operationalized by the	2. The information provided on the e-
	following dimensions such	commerce website is reliable.
	as accuracy,	3. The information provided on the e-
	comprehensibility,	commerce website is easily
	completeness, and	understood. alaysia
	relevance.	4. The e-commerce website contains all
		the information that I need for the
		purpose of my purchase decision.
		5. The information on the e-commerce
		website is relevant.

3.6.4 User satisfaction

The mediating variable, user satisfaction, is measured using six items developed by Wang (2008), Tam, Loureiro, & Oliveira (2019), and Ali, Rasool, & Pathania (2017) with a five-point Likert scale.

Table 3.7 *Items for user satisfaction*

Variable	Operational definition	Items in questionnaire
User	User satisfaction as the	1. I am satisfied with making purchases
satisfaction	extent to which users	from this e-commerce website.
(US)	believe that the B2C web	2. The e-commerce website has met my
	site available to them meets	expectations.
	their information	3. The e-commerce website is of high
	requirements.	quality.
	Univer:	4. My choice to purchase from this e-
		commerce website was a wise one.
		5. If I had to purchase again, I would
		feel differently about buying from this
		e-commerce website.
		6. I would recommend this e-commerce
		website to a friend.

3.6.5 Net benefits

The dependent variable, net benefits, is measured using six items developed by Lai (2014) and Rouibah, Lowry, & Almutairi (2015) with a five-point Likert scale.

Table 3.8 *Items for net benefits*

Variable	Operational definition	Items in questionnaire
Net	The term "net benefits"	The e-commerce website enables me
benefits	refers to the extent to which	to shop easily.
(NB)	a consumer believes that	The e-commerce website is helpful
	utilizing an e-commerce	when I shop.
	system improves their	The e-commerce website enhances my
	task/job performance when	efficiency when shopping.
	4. engaging in e-commerce	
	Universiti	commerce website is very worthwhile.
	activities. 5.	Shopping on this e-commerce website
		saves my time.
	6.	Overall, the use of this e-commerce
		website would deliver me good value.

3.7 Data Collection

3.7.1 Primary data

This study has used a questionnaire survey to collect data from the respondents. The data collection instrument was a self-administered questionnaire, and the researcher has randomly distributed to the intended UUM students who shop at e-commerce online fashion stores and have visited and purchased at least one apparel product on the e-commerce websites. The researcher also distributed the questionnaire through social media platforms including Facebook, WhatsApp, and Instagram to respondents online using Google Forms. Approximately 380 questionnaires are distributed. The respondents will be given 5 to 10 minutes to answer and complete the questionnaire.

3.7.2 Secondary data

This study also used secondary data that involves using existing data on literature review from past research. This source also provides data on the outputs of scientific research, publishing, magazines, academic journals, and authors that allow analysis and research in the literature through databases used in this study.

3.8 Data Analysis Technique

After all data has been collected, the researcher will conduct data analysis. The Statistical Package for Social Science (SPSS) is utilized to ensure the accuracy of the data collected in this study. Data analysis will begin with transforming raw data into an easily interpretable and understandable format, which will be accomplished using descriptive statistics. In addition, it describes a variable's distribution, central tendency, and dispersion. Distribution refers to the frequency of each value, and dispersion refers to how values are spread out, such as range, standard deviation, and variance.

Following that, a reliability test will be conducted to determine Cronbach's Alpha. Next, the researcher determines the relationship between the independent and dependent variables using the Pearson correlation coefficient. Furthermore, this study will use multiple regression to ascertain which independent variables influence the dependent variable. This analysis also will reveal which factors are most critical, which can be overlooked, and how these factors interact.

3.9 Chapter Summary

This chapter has discussed the research framework and hypotheses, research design, population, sample and sampling technique, questionnaire design, research measurement, data collection, and data analysis technique. The following chapter will explain the study's findings.



CHAPTER 4

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter discusses the results from data collected by using both descriptive and inferential statistics. This chapter is divided into three parts. The first part contains data on the frequency distribution of respondents' demographic profiles. The second part presents the results reliability test for all factors. In the last part, the correlation and multiple regression results are presented to verify the hypothesis made in this study. The remaining content in this chapter is the hypothesis summary as well as the conclusion of chapter four.

4.2 Response rate

This questionnaire survey has received responses from 305 respondents. Only 272 respondents, on the other hand, have purchased clothing from e-commerce fashion websites. Therefore, for further analysis, the total number of respondents will be 272. The total sample size obtained is 80.26% of the intended sample size.

4.3 Demographic profile of respondents

Table 4.1 illustrates the demographic characteristics of the respondents to this study. According to table 4.1, the majority of respondents (85.3%) are female, while the remainder is male (14.7%).

Table 4.1

Demographic profile of respondents

Variable	Characteristics	Frequency	Percentage (%)
Gender	Male	40	14.7
	Female	232	85.3
Age	Below 20 years old	4	1.5
	20-29 years old	256	94.1
	30-39 years old	11	4.0
	40-49 years old	1	0.4
Level of education	SPM	2	0.7
	Diploma	12	4.4
	Degree	220	80.9
	Master	32	11.8
	PhD	iti Utara Malay	1.5
	Others	2	0.7
Monthly Income	Below RM1000	188	69.1
	RM1000-RM1999	38	14.0
	RM2000-RM2999	28	10.3
	RM3000-RM3999	11	4.0
	RM4000 and above	7	2.6

Table 4.1 (Continued)

Variable	Characteristics	Frequency	Percentage (%)
Frequency of e-	Few times in a	69	25.4
commerce fashion	month	64	23.5
website usage	Once in a month	12	4.4
wessee usuge	Weekly	51	18.8
	Quarterly	76	27.9
	Yearly		
E-commerce	Zalora	169	62.1
fashion website	Fashion valet	14	5.1
store	Poplook	10	3.7
	Bella Ammara	13	4.8
	Calaqisya	10	3.7
		siti Ut <i>é</i> ra Mal	aysia 2.2
	Others	50	18.4

For the age group, the majority are between 20 - 29 years old (94.1%), comprising 256 respondents. Followed by the age group between 30 - 39 years old (4%), comprised of 11 respondents. The least age range is below 20 years old and between 40 - 49 years old, encompassing 4 (1.5%) and 1 (0.4%) respondents, respectively. For education, most of the respondents belong to a group with a bachelor's degree, 80.9% (220 respondents). Meanwhile, the majority of respondents reported having a monthly income of less than RM1,000, or 69.1% (188 respondents).

Based on the frequency of e-commerce fashion website usage, most of the respondents using e-commerce fashion websites yearly, which is 27.9% constitutes 76 respondents. Followed by using it a few times in a month with 25.4% (69 respondents), once in a month with 23.5% (64 respondents), quarterly with 18.8% (51 respondents), and least frequency use is weekly with 4.4% (12 respondents). For the e-commerce fashion website store, most of the respondents have frequent visits is Zalora, with 62.1% composed of 169 respondents.

4.4 Descriptive statistics

Table 4.2

Results of descriptive analysis

Variables	N	Mean	Std. Deviation
System Quality	272	4.3375	0.55228
Service Quality	272	4.0478	0.59618
Information Quality	272	4.1654	0.62244
User Satisfaction	U ₂₇₂ versiti Ut	4.1495	0.57798
Net Benefits	272	4.2745	0.55565

Table 4.2 shows the mean and standard deviation results for the system quality, service quality, information quality, user satisfaction, and net benefits. The results indicate that system quality has the highest mean value of 4.3375, and the lowest mean value is service quality which is 4.0478. Moreover, information quality has the highest standard deviation value with 0.62244, and system quality has the lowest standard deviation value with 0.55228.

4.5 Reliability analysis

The reliability analysis is used to determine the internal consistency of each questionnaire item. Cronbach alpha is the most frequently used internal consistency measure (Saunders, Lewis, and Thornhill, 2009). For Cronbach alpha, the closer the reliability coefficient is to 1.0, the greater the internal consistency. Furthermore, reliability values less than 0.60 are considered poor, those between 0.70 and 0.80 are considered acceptable, and those greater than 0.80 are considered excellent (Sekaran, 2003). Thus, Cronbach alpha for each variable for this study is shown in table 4.3.

Table 4.3

Results of reliability analysis

Metrics	Cronbach's Alpha	No of Items
System Quality	0.859	5
Service Quality	0.841	6
Information Quality	Utar ^{0.875} alaysia	5
User Satisfaction	0.851	6
Net Benefits	0.868	6
	System Quality Service Quality Information Quality User Satisfaction	System Quality 0.859 Service Quality 0.841 Information Quality 0.875 User Satisfaction 0.851

The highest value for the reliability test is the information quality with Cronbach alpha of 0.875 and followed by net benefits with 0.868, system quality with 0.859, user satisfaction with 0.851, and the lowest value is service quality with 0.841. Overall, it can be concluded that all variables have Cronbach alpha values greater than 0.80. Thus, all the items have a good level of reliability.

4.6 Pearson correlation analysis

The correlation test was conducted to identify the relationship between variables. The result of this correlation test is an exhibit in table 4.4.

Table 4.4

Results of correlation analysis

		SYSQ	SERQ	IQ	US	NB
SYSQ	Pearson Correlation	1				
	Sig. (2-tailed)					
SERQ	Pearson Correlation	0.640**	1			
	Sig. (2-tailed)	0.000				
IQ	Pearson Correlation	0.624**	0.734**	1		
	Sig. (2-tailed)	0.000	0.000			
US	Pearson Correlation	0.680**	0.684**	0.751**	1	
	Sig. (2-tailed)	0.000	0.000	0.000	sia	
NB	Pearson Correlation	0.697**	0.684**	0.703**	0.744**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	

Table 4.4 shows that system quality, service quality, information quality, and user satisfaction are significantly correlated at r=0.697, 0.684, 0.703, and 0.744, respectively. For system quality, it has a moderate positive relationship with net benefits as r=0.697 falls within the coefficient range of 0.50 to 0.70 and p=0.000, p<0.01. While the r-value for service quality is 0.684 and falls within the coefficient range of 0.50 to 0.70. Thus, service quality has a moderate positive relationship with net benefits, and the p-value is 0.000, p<0.01.

Besides that, table 4.4 indicated that there is a high positive relationship between information quality and net benefits as r=0.751 falls within the coefficient range of 0.70 to 0.90 and p=0.000, p<0.01. Furthermore, user satisfaction has a high positive relationship with net benefits because r=0.744 falls within the coefficient range of 0.70 to 0.90 p-value is 0.000, p<0.01. Therefore, system quality, service quality, information quality, and user satisfaction have a significant relationship with net benefits.

Moreover, system quality and service quality have a moderate positive relationship with user satisfaction. Its r value is falling within the coefficient range of 0.50 to 0.70, r=0.680 and 0.684 respectively, and both p-values are 0.000, p<0.01. Meanwhile, there is a high positive relationship between information quality and user satisfaction as r=0.751 and p=0.000, p<0.01. The r-value is falling within the coefficient range of 0.70 to 0.90. Therefore, system quality, service quality, and information quality have a significant relationship with user satisfaction.

Thus, it can conclude there is a significant relationship between independent variables, mediator, and dependent variables.

4.7 Multiple regression analysis

Multiple regression analysis was used to understand better the relationship between system quality, service quality, and information quality towards user satisfaction and the relationship between system quality, service quality, information quality, and user satisfaction and net benefits.

4.7.1 Independent variables towards user satisfaction

The obtained R2 value indicates the percentage of variance in the dependent variable that can be explained by the independent variables. Based on table 4.5, the R2 is 0.649, which indicates that 64.9% of system quality, service quality, and information quality explain the variance of

user satisfaction. Another 35.1% is explained by other variables. Besides that, the F value is 165.046, and it indicates that the model is fit as F value is more than 1. It is highly significant as the p-value is 0.000 less than 0.05.

Table 4.5

Multiple regression- coefficients for the relationship between independent variables and user satisfaction

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	.432	.174		2.480	.014
SYSQ	.309	.052	.296	5.995	.000
SERQ	.165	.055	.170	3.002	.003
IQ	.410	.052	.441	7.900	.000
R= 0.805 F Value = 165.046					
$R^2 = 0.649$	Significance level = .000 ^b				
Adjusted $R^2 = 0.645$					

Based on table 4.5, information quality has the highest beta value, which is 0.441, and therefore it has the highest contribution to user satisfaction. Then followed by system quality with a beta value of 0.296 and service quality with a beta value of 0.170. For independent variables to be significantly related to the dependent variable, the p-value must be less than 0.05. Thus, the results show that all the independent variables, which are system quality (p=0.000), service quality (p=0.003), and information quality (p=0.000), are significantly related to user satisfaction.

4.7.2 Independent variables and user satisfaction towards net benefits

Based on table 4.6, the R2 is 0.659, which indicates that 65.9% of system quality, service quality, information quality, and user satisfaction explain the variance of net benefits. Another 34.1% is explained by other variables. The F value of 128.936 indicates that the model is fit as the F value is more than 1. It is highly significant as the p-value is 0.000 less than 0.05.

Table 4.6

Multiple regression- coefficients for the relationship between independent variables, user satisfaction, and net benefits

	Unstane	dardized	Standardized		
Model	Coefficients		Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	.567	.167		3.390	.001
SYSQ	.266	.052	.264	5.088	.000
SERQ	.158	.053	.169	2.969	.003
IQ	.157	.055	.175	2.865	.005
US	.305	.058	.317	5.259	.000
R= 0.812 F Value = 128.936					
$R^2 = 0.659$	= 0.659 Significance level = .000b				
Adjusted R ² =	= 0.654				

According to table 4.6, user satisfaction has the highest beta value of 0.317, followed by system quality at 0.264, information quality at 0.175, and service quality at 0.169. Furthermore, the results indicate that system quality (p=0.000), service quality (p=0.003), information quality (p=0.005), and user satisfaction (p=0.000) are significantly related to net benefits.

4.9 Hypothesis testing

Table 4.7 summarizes the hypothesis testing results from multiple regression analysis and SPPS output presented in Appendix B.

Table 4.7
Summary of hypothesis

No.	Hypothesis	Results
H1	There is significant relationship between system quality and user satisfaction.	Supported
H2	There is significant relationship between service quality and user satisfaction.	Supported
НЗ	There is significant relationship between information quality and user satisfaction.	Supported
H4	There is significant relationship between user satisfaction and net benefits.	Supported
Н5	There is significant relationship between system quality and net benefits.	Supported
Н6	There is significant relationship between service quality and net benefits.	Supported
Н7	There is significant relationship between information quality and net benefits.	Supported

4.10 Conclusion

This chapter described the analysis performed in this research, as well as its interpretation and conclusion. To begin, this chapter summarized the findings from the frequency analysis of respondents' demographic information, consists of gender, age, education level, monthly income, frequency of fashion e-commerce usage, and e-commerce fashion website store usage. Then, all variables were examined using descriptive statistics. All factors have a Cronbach alpha for internal consistency, as determined by the reliability analysis. Finally, correlation and multiple regression are used to address and achieve the research question and objective. The findings indicated a significant relationship between net benefits and system quality, service quality, information quality, and user satisfaction. The following chapter will summarize and discusses this chapter's findings.



CHAPTER 5

DISCUSSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter explains and describes the research findings conducted according to the study's objectives and research question. Then, it will examine the study's implications and limitations in greater detail. Finally, the final section includes a recommendation for future research and a conclusion.

5.2 Discussion of the findings

This study's discussion is guided by the research objective stated in Chapter 1 and the literature review presented in Chapter 2. In addition, the result analysis for the demographic profile of respondents also will be discussed in this chapter. The demographic profile information and research objective are indicated as follow:

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5.2.1 Demographic profile information

The respondents' demographic information was classified using their gender, age, level of education, monthly income, frequency of e-commerce fashion website usage, and the most used e-commerce fashion website store. In this study, females make up the majority of respondents (85.3%). In comparison to men, women shop for pleasure, spend more time browsing, expend more mental energy researching available options, compiling information from multiple sources to make informed decisions, and purchase more apparel (Naim & Khan, 2018). Furthermore, the majority of respondents are aged between 20 and 29, as younger generations are more likely to shop online. The respondent of this study was selected from UUM students. Therefore, most of the respondents are bachelor's degree students.

Besides that, the monthly income of respondents is mostly below RM1,000. The reason is as the respondent are students, and thus they will not have a fixed or stable income yet. Probably, their income is from doing a part-time job or engage in online business. In addition, the majority of respondents shopping-clothes yearly. This may be because of the changes in cultures, lifestyles, and behaviours towards fashion. Therefore, they might shop for new clothes every year. In addition, Zalora has become the top use of e-commerce fashion website store because, as reported by Müller (2021), Zalora is Malaysia's most popular fashion e-commerce site, with approximately 1.15 million monthly web visitors.

5.2.2 Research Objective 1

Research objective 1: To identify the relationship between system quality, service quality, information quality, and user satisfaction of e-commerce fashion websites.

System Quality and User Satisfaction

The results of this study found that system quality has a significant relationship with e-commerce fashion user satisfaction. The findings are consistent with a study by Kumar & Ayodeji (2020), which found a positive correlation between system quality and user satisfaction. Similarly, Rouibah, Lowry, and Almutairi (2015) discovered that high-quality websites that are uncomplicated, accessible, and reliable could increase customer satisfaction.

A plausible reason for this finding is that the website's performance can determine if the customer is satisfied to continue looking for the apparel product or intent to purchase it. If the website is slow, lacks time response, and seems fibrous or not well structured, the customer will be disappointed and unmotivated to shop, thus leading to finding another online store. The website quality gives the first impression for the potential customer as it is the first point of contact with them. Besides that, the visual of the websites is also important. A well-designed

and well-built website can attract first-time customers because people are usually drawn to visually appealing items.

Service Quality and User Satisfaction

The result of this study found there is a significant relationship between service quality and user satisfaction in e-commerce fashion. The result is consistent with the previous research conducted by Ali et al. (2018), which discovered that service quality has a positive effect on user satisfaction in e-commerce to achieve the net benefits. Other research conducted by Angelina, Hermawan, & Suroso (2019) established that service quality, as well as the presence of friendly support staff, has a significant impact on user satisfaction, which allowed users to feel more at ease when using the websites.

In this study, service quality has the least impact on user satisfaction. Although it has the least influence among other variables, the e-commerce fashion business owner should not underestimate the importance of e-service and should remain vigilant in this regard. A plausible explanation for this result is each customer has a reasonable expectation of service. Without them, the business risks losing customers in today's competitive online business environment. The majority of online businesses fail because of inadequate service quality that falls short of customer expectations throughout the transaction and delivery process. Dissatisfaction with customers and a decline in their trust and commitment to the website are frequently the result of service failures. For instance, when a customer encounters an issue with a product they purchased, they expect the problem to be resolved immediately. As a result, satisfied customers will return and recommend the service to others, resulting in future purchases.

Information Quality and User Satisfaction

The results of this study found that there is a significant relationship between information quality and user satisfaction in e-commerce fashion. The findings are consistent with a previous study by Rasli et al. (2018), in which the information provided by an online store significantly affects customer satisfaction. The result of this study also indicates that information quality has the most significant impact on user satisfaction. This is in accordance with the study by Mahendra et al. (2020), where the quality of information and customer satisfaction has the most effect compared to other variables.

A plausible explanation for this result is that information is crucial in customers' decision-making process as there is no direct physical touch with the apparel in the digital context, which helps them through the process. Thus, they expect the websites will provide all reliable, relevant, and accurate information regarding the product. For example, the information on the size of the clothes should be delivered in detail and accurately. Therefore, the customer will match the measurement of the clothes with the size. In addition, providing sufficient and easily understandable information on a website encourages a new visitor. If they feel satisfied with the information, it can create a desire to purchase after visiting.

5.2.3 Research Objective 2

Research objective 2: To identify the mediating effect of user satisfaction towards net benefits of e-commerce fashion websites.

Based on the results of multiple regression in chapter 4, there is a significant relationship between user satisfaction and net benefits of e-commerce fashion. These results align with the previous study by Ali et al. (2018) and Angelina, Hermawan, & Suroso (2019). Both studies asserted that user satisfaction has a positive effect on net benefits. The results of this study also

demonstrate that user satisfaction has the most significant impact on net benefits. A plausible reason for this result is that if customers feel satisfied with the e-commerce fashion websites, they will have perceived more net benefits such as enhancing performance, increasing productivity and effectiveness, and decision-making. In addition, users who perceive positive net benefits are more likely to continue using e-commerce fashion websites. Thus, increased user satisfaction will likely increase the net benefits received and lead to more successful businesses.

5.2.4 Research Objective 3

Research objective 3: To identify the relationship between system quality, service quality, information quality, and net benefits of e-commerce fashion websites.

System Quality and Net Benefits

The findings of this study reveal that system quality has a significant relationship with the net benefits of e-commerce fashion. The results were similar to the previous research conducted by Rouibah, Lowry, & Almutairi (2015) and Putri & Pujani (2019), where indicated system quality plays a significant role in influencing net benefits. This is contrary to a study by Wahyudi, Respati, & Ardianto (2017), which reported that system quality has no direct influence on net benefits. A plausible reason for this finding is the better the performance of the website's system, the more benefits that customer will gain. For example, if a website is usable, quick and easy to navigate, and uncomplicated to use, it facilitates customers to shop easily and navigate the website smoothly, without encountering issues such as slow response time or cluttered pages. In addition, an easy- to-use e-commerce system increases the likelihood that the website will generate a favourable impression, thereby increasing its perceived usefulness.

Service Quality and Net Benefits

The result of this study indicates that there is a significant relationship between service quality and e-commerce fashion's net benefits. The study's finding that service quality has a significant effect on net benefits is consistent with findings by Zake & A.E. (2017) and Putri & Pujani (2019), who found that perceived service quality results in perceived net benefit. A plausible reason for this finding is the service provided by an online store is different from that of an offline store. In this case, the consumer is not in direct contact with the sellers. Therefore, providing a high level of service, such as personalized product recommendations, order tracking delivery, responsive customer support, and secure transactions, will more than likely increase the perceived value of websites. For e-commerce fashion users who receive superior service, they will continue to use the website and increase its benefits.

Information Quality and Net Benefits

The results of this study reveal that there is a significant relationship between the quality of information and the net benefits of e-commerce fashion. The findings are consistent with a study by Pertiwi, Sejati, and Prasetianingrum (2020), which found that information quality has a positive effect on net benefits. This is in contrast to Zake & A.E. (2017), who discovered that there is no significant effect of information quality on the relationship between perceived net benefits and perceived net benefits. A plausible reason for this result is a website is an interface between a seller and its customers. It needs to be designed to appeal to the customer and minimize their perception of risk. Therefore, they heavily rely on e-commerce websites for the quantity and quality of the details and information provided. Information provided assists with the user in their quest for knowledge. Thus, they can make informed decisions. Moreover, a clear and valuable presentation of information to customers saves customers time navigating, searching and making purchasing decisions. Thus, a customer who perceived the high

information quality from the website will experience an increase in the system's perceived value.

5.3 Implication of the study

5.3.1 Theoretical implications

This study contributes empirical evidence towards the net benefits research by examining the effect of system quality, service quality, information quality, and user satisfaction on net benefits. The DeLone & McLean Information Systems Success Model (2003) was used in this study to determine the relationship between variables used to determine the success of e-commerce fashion websites. The study's findings indicate that the proposed model fits the data well. Therefore, it is feasible and applicable to the e-commerce business of the fashion industry.

5.3.2 Practical implications

The results obtained in chapter four suggest that the online apparel industry should invest in improving the quality of its website, as it is one of the characteristics that contribute to the business's achievement. The website owner must ensure the system's quality can be easily accessed, usable, fast loading, and page responsive to customer preferences. The system also should be upgraded and maintained regularly to prevent any problem that can affect the websites. Furthermore, it is vital to ensure high-quality services and consistency because a good service could persuade customers to make future purchases. The website owner also should provide clear and precise information regarding the product. Therefore, a successful online apparel website should provide customers with a pleasant experience while browsing its site. It is also beneficial for their business as it can help them expand their reach in the whole Malaysian market.

5.4 Limitation of the study

This study has several limitations that have been examined. Firstly, the respondents of this study are limited to students from Universiti Utara Malaysia only. Therefore, the sample sizes derived from respondents may not be representative of the e-commerce fashion user population as a whole. In addition, due to the small sample size, the research findings may not be generalizable.

Secondly, in this research, the success of B2C e-commerce is determined by several factors, including system quality, service quality, information quality, user satisfaction, and net benefits. Thus, additional predictors for the success of B2C e-commerce fashion websites could be discovered. Thirdly, this study using a quantitative method to gather the data. Therefore, it may be affected by response bias that can cause the inaccuracy of data. In addition, the questionnaire was also based on the existing sample of previous literature.

5.5 Recommendation for future research

The findings of this study have facilitated the development of numerous theoretical studies on e- commerce website success. The researcher would like to make several recommendations for future research to improve the results and discussion outcome outcomes. The following are some suggestions for the future researcher in terms of where to look for findings in this field of study:

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- Conduct further studies with larger populations of students from various universities across Malaysia and other groups throughout Malaysia. Thus, the research results can be valid globally.
- ii. Examine other variables that affected the success of e-commerce fashion not included in this study, such as trust, privacy, security, portability, and others.

- iii. This study only adopted user satisfaction as a mediator. Further studies may be needed to examine other mediating variables that may impact the relationship between website quality and net benefits.
- iv. Future studies could extend and replicate scale measurement of e-commerce success dimensions to compare findings across cultures, ethnic groups, and industries.

5.6 Conclusion

To summarize, this study's purpose is to explore the dimensions of B2C e-commerce websites' success in the fashion industry by partially adopting the DeLone & McLean Information Systems Success Model, particularly the influence of system quality, service quality, information quality, and user satisfaction net benefits. While net benefit success metrics are critical, they cannot be fully understood or analyzed without considering a system, information, and service quality metrics. Furthermore, it is difficult for an online business to achieve business success without net benefits and user satisfaction. As a result, every business must prioritize quality in operating their websites. To be successful in e-commerce, businesses must understand the impact usability has on potential customers, user satisfaction with various aspects of the website, and, most relevantly, the factors that influence users to purchase items on their website. Therefore, an online business must expend significant effort to differentiate itself from competitors through the quality features of its website. Overall, this study concludes that system quality, service quality, information quality, and user satisfaction significantly influence the net benefits of e-commerce fashion to achieve a successful online business.

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APPENDIX A: RESEARCH QUESTIONNAIRE



BUSINESS-TO-CONSUMER (B2C) E-COMMERCE SUCCESS OF FASHION INDUSTRY IN MALAYSIA

Dear respondents,

I am a Master's student at Universiti Utara Malaysia (UUM) and currently conducting a project paper on the Business-to-consumer (B2C) e-commerce success of fashion industry in Malaysia.

This questionnaire aims to study the critical success factors in B2C e-commerce fashion. The questions are to find out the degree of your agreement or disagreement with the given statements. Your response will remain anonymous and will be used solely for academic purposes.

Therefore, I would like to invite you to fill up this questionnaire. It may take 5-10 minutes to answer this survey. I genuinely appreciate your cooperation in answering all the questions.

Thank you for your time and participation.

Yours faithfully,

Siti Nur Afiqah binti Mohammad Tarmizi School of Business Management College of Business Universiti Utara Malaysia

Section A: Demographic Information

INSTRUCTIONS: Please read the questions carefully and select which appropriate answer or fill in the detail in the space provided.

(ARAHAN: Sila baca soalan dengan teliti dan pilih jawapan yang sesuai atau isikan butiran di ruangan yang disediakan.)

1. Gender:
Male (Lelaki)
Female (Perempuan)
2. Age:
Below 20 years old (bawah 20 tahun)
20-29 years old (20 hingga 29 tahun)
30-39 years old (30 hingga 39 tahun)
40-49 years old (40 hingga 49 tahun)
50 years old and above (50 tahun dan keatas)
3. Level of education (Tahap Pendidikan): SPM (SPM)
Diploma (Diploma)
Degree (Ijazah)
Master (Sarjana)
PhD (Doktor Falsafah)
If others, please specify
4. Monthly income (Pendapatan bulanan):
Below RM1000 (Kurang dari RM1000)
RM1000-RM1999
RM2000-RM2999

RM3000-RM3999
RM4000 and above (RM4000 dan keatas)
5. Have you ever purchased any apparel on e-commerce fashion websites? (Adakah anda
pernah membeli pakaian di laman web fesyen e-dagang?)
Yes (Ya)
No (Tidak)
6. Frequency of e-commerce fashion website usage? (Kekerapan penggunaan laman web fesyen e-dagang?)
Few times in a month (Beberapa kali dalam sebulan)
Once in a month (Sebulan sekali)
Weekly (Setiap minggu)
Quarterly (Setiap 3 bulan)
Yearly (Setiap tahun) Universiti Utara Malaysia
7. What kind of e-commerce fashion website brand have you ever purchased? (Apakah jenis
jenama laman web fesyen e-dagang yang pernah anda beli?)
Zalora
Fashion valet
Poplook
Doublewoot
Bella Ammara
Calaqisya
Twenty3
OxWhite
If others, please specify.

Section B: E-Commerce Fashion Critical Success Factors

INSTRUCTIONS: Please indicate how much you agree or disagree to each statement by placing the (.) upon your response according to the following option:

(ARAHAN: Sila nyatakan seberapa banyak anda setuju atau tidak setuju dengan setiap pernyataan dengan meletakkan (.) pada jawapan anda mengikut pilihan berikut:)

- 1-Strongly disagree (Sangat tidak bersetuju)
- 2-Disagree (Tidak bersetuju)
- 3-Neutral (Tidak pasti)
- 4-Agree (Setuju)
- 5-Strongly agree (Sangat setuju)

	System Quality	SD	D	N	A	SA
1.	The e-commerce website is easy to navigate.	1	2	3	4	5
	Laman web e-dagang ini mudah dilayari.					
2.	The e-commerce website allows me to find the	1	2	3	4	5
	information I am looking for easily.			Y		
	Laman web e-dagang ini membolehkan saya		_			
	mencari maklumat yang saya cari dengan	Utara	a Mal	aysia		
	mudah.					
3.	The e-commerce website is well structured.	1	2	3	4	5
	Laman web e-dagang ini tersusun dengan baik					
4.	The e-commerce website is easy to use.	1	2	3	4	5
	Laman web e-dagang ini mudah digunakan.					
5.	Response time of the e-commerce website is	1	2	3	4	5
	acceptable.					
	Masa respons laman web e-dagang ini boleh					
	diterima.					
	Service Quality					
1.	When I have a problem, the e-commerce	1	2	3	4	5
	website service shows a sincere interest in					
	solving it.					

	Apabila saya menghadapi masalah,					
	perkhidmatan laman web e-dagang ini					
	menunjukkan minat yang tulus untuk					
	menyelesaikannya.					
2.	The e-commerce website service is always	1	2	3	4	5
	willing to help me.					
	Perkhidmatan laman web e-daganginisentiasa					
	bersedia membantu saya.					
3.	I feel safe in my transactions with the e-	1	2	3	4	5
	commerce website service in terms of security					
	and privacy protection.					
	Saya berasa selamat dalam urus niaga saya					
	dengan perkhidmatan laman web e-dagang ini					
	dari segi keselamatan dan perlindungan					
	privasi.					
4.	The e-commerce website service has the	1	2	3	4	5
	knowledge to answer my questions.					
	Perkhidmatan laman web e-dagang					
	ini mempunyai pengetahuan untuk	Utara	Mal	aysia		
	menjawab					
	soalan saya.					
5.	The e-commerce website service gives me	1	2	3	4	5
	individual attention.					
	Perkhidmatan laman web e-dagang					
	ini					
	memberi saya perhatian secara individu.					
6.	The e-commerce website service understands	1	2	3	4	5
	my specific needs.					
	Perkhidmatan laman web e-dagang					
	ini					
	memahami keperluan khusus saya.					

1.	I believe that the e-commerce website provides	1	2	3	4	5
1.	accurate information.	1	2	3	-	3
	Saya percaya bahawa laman web e-dagang ini					
	memberikanmaklumat yang tepat.	1	2	2		
2.	The information provided on the e-commerce	1	2	3	4	5
	website is reliable.					
	Maklumat yang diberikan di laman web e-					
	dagang ini boleh dipercayai.					
3.	The information provided on the e-commerce	1	2	3	4	5
	website is easily understood.					
	Maklumat yang diberikan di laman web e-					
	dagang ini mudah difahami.					
4.	The e-commerce website contains all the	1	2	3	4	5
	information that I need for the purpose of my					
	purchase decision.					
	Laman web e-dagang ini mengandungi semua					
	maklumat yang saya perlukan untuk tujuan					
	keputusan pembelian saya.			×		
5.	The information on the e-commerce website is	Utlara	2	3	4	5
	relevant.	Utara	Па	dySid		
	Maklumat di laman web e-dagang ini relevan.					
	User Satisfaction					
1.	I am satisfied with making purchases from this	1	2	3	4	5
1.	e-commerce website.	1	2	3	7	3
	Saya berpuas hati dengan membuat pembelian					
	daripada laman web e-dagang ini.					
2.	The e-commerce website has met my	1	2	3	4	5
	expectations.					
	Laman web e-commerce ini telah memenuhi					
	jangkaan saya.					
3.	The e-commerce website is of high quality.	1	2	3	4	5
	Laman web e-dagang ini berkualiti tinggi.					
<u> </u>		l		1		l

4.	My choice to purchase from this e-commerce	1	2	3	4	5
	website was a wise one.					
	Pilihan saya untuk membeli dari laman web e-					
	dagang ini adalah pilihan yang bijak.					
5.	If I had to purchase again, I would feel	1	2	3	4	5
	differently about buying from this e-commerce					
	website.					
	Sekiranya saya perlu membeli lagi, saya akan					
	berasa berbeza tentang membeli dari laman					
	web e-dagang ini.					
6.	I would recommend this e-commerce website	1	2	3	4	5
	to a friend.					
	Saya akan mengesyorkan laman web e-dagang					
	ini kepada rakan.					
	Net Benefits					
1.	The e-commerce website enables me to shop	1	2	3	4	5
	easily.					
	Laman web e-dagang ini membolehkan saya					
	berbelanja dengan mudah.	Utara	Mal	avsia		
2.	The e-commerce website is helpful when I	1	2	3	4	5
	shop.					
	Laman web e-dagang ini sangat berguna ketika					
	saya berbelanja.					
3.	The e-commerce website enhances my	1	2	3	4	5
	efficiency when shopping.					
	Laman web e-dagang ini					
	meningkatkan					
	kecekapan saya ketika membeli-belah.					
4.	The effort I put in to shop on this e-commerce	1	2	3	4	5
	website is very worthwhile.					
	Usaha yang saya lakukan untuk membeli-belah					
	di lamanwebe-daganginisangat berbaloi.					
		1				

5.	Shopping on this e-commerce website saves	1	2	3	4	5
	my time.					
	Membeli-belah di laman web e-dagang ini					
	menjimatkan masa saya.					
6.	Overall, the use of this e-commerce website	1	2	3	4	5
	would deliver me good value.					
	Secara keseluruhan, penggunaan laman web e-					
	dagang ini akan memberikan nilai yang baik					
	kepada saya.					

Thank you for your participation.



APPENDIX B: RESULTS OF SPSS TEST

FREOUENCIES

Statistics

		Gender	Age	Level of Education	Monthly Income	Frequency usage	E-commerce fashion website store
N	Valid	272	272	272	272	272	272
	Missing	0	0	0	0	0	0
Mean		1.85	2.03	3.11	1.57	3.00	3.13
Median		2.00	2.00	3.00	1.00	3.00	1.00
Mode		2	2	3	1	5	1
Std. Devi	iation	.355	.263	.552	1.003	1.601	3.202
Skewnes	S	-2.004	2.693	1.373	1.807	.032	1.078
Std. Erro	r of	.148	.148	.148	.148	.148	.148
Skewnes	S UT/	RA					
Kurtosis	6/1	2.032	20.048	7.844	2.523	-1.637	618
Std. Erro	r of	.294	.294	.294	.294	.294	.294
Kurtosis							
Range	F. 1 (8		3	5	4	4	8
Minimun	1	1	Jni ¹ vers	iti Utar	a Mala	vsia 1	1
Maximur	n BUD	2	4	6	5	5	9

Gender

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1	40	14.7	14.7	14.7
	2	232	85.3	85.3	100.0
	Total	272	100.0	100.0	

Age

			8-		
				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1	4	1.5	1.5	1.5
	2	256	94.1	94.1	95.6
	3	11	4.0	4.0	99.6
	4	1	.4	.4	100.0
	Total	272	100.0	100.0	

Level of Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	.7	.7	.7
	2	12	4.4	4.4	5.1
	3	220	80.9	80.9	86.0
	4	32	11.8	11.8	97.8
	5	4	1.5	1.5	99.3
	6	2	.7	.7	100.0
	Total	272	100.0	100.0	

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Monthly Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	188	69.1	69.1	69.1
vanu	1				
	2	38	14.0	14.0	83.1
	3	28	10.3	10.3	93.4
	4	11	4.0	4.0	97.4
	5	7	2.6	2.6	100.0
	Total	272	100.0	100.0	

Frequency Usage

Frequency Osage					
-				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1	69	25.4	25.4	25.4
	2	64	23.5	23.5	48.9
	3	12	4.4	4.4	53.3
	4	51	18.8	18.8	72.1
	5	76	27.9	27.9	100.0
	Total	272	100.0	100.0	

E-commerce Fashion Websites Store

		Frequency	Percent	Valid Percent	Cumulative Percent	\vee
Valid	1	169	62.1	62.1	62.1	
	2	14	5.1	5.1	67.3	
	3	10	3.7	3.7	71.0	lavela
	5	13 mm	4.8	4.8	75.7	laysia
	6	10	3.7	3.7	79.4	
	8	6	2.2	2.2	81.6	
	9	50	18.4	18.4	100.0	
	Total	272	100.0	100.0		

RELIABILITY TEST

System Quality

Reliability Statistics

Cronbach's	
Alpha	N of Items
.859	5

tem statistics				
	Mean	Std. Deviation	N	
SYSQ1	4.38	.655	272	
SYSQ2	4.36	.673	272	
SYSQ3	4.26	.662	272	
SYSQ4	4.44	.685	272	
SYSQ5	4.24	.772	272	

Item-Total Statistics

		Scale	Corrected	Cronbach's
	Scale Mean if	Variance if	Item-Total	Alpha if Item
	Item Deleted	Item Deleted	Correlation	Deleted
SYSQ1	17.31	5.128	.697	.825
SYSQ2	17.33	5.158	.659	.834
SYSQ3	17.42	5.079	.706	.822
SYSQ4	17.25	5.028	.693	.825
SYSQ5	17.45	4.868	.634	.843

Scale Statistics

	1011	Std.	N of
Mean	Variance	Deviation	Items
21.69	7.625	2.761	5

Service Quality

Reliability Statistics

Tremasiney Statustics				
Cronbach's				
Alpha	N of Items			
.841	6			

ti Utara Malaysia

	Mean	Std. Deviation	N
SERQ6	3.99	.819	272
SERQ7	4.08	.742	272
SERQ8	4.07	.805	272
SERQ9	4.08	.800	272
SERQ10	4.00	.840	272
SERQ11	4.07	.784	272

Item-Total Statistics

	UTA	Scale	Corrected	Cronbach's
	Scale Mean if	Variance if	Item-Total	Alpha if Item
	Item Deleted	Item Deleted	Correlation	Deleted
SERQ6	20.30	9.156	.599	.819
SERQ7	20.21	9.266	.659	.808
SERQ8	20.22	9.462	ver .542 Ut	ara.830 ay
SERQ9	20.21	8.919	.678	.803
SERQ10	20.28	8.816	.657	.807
SERQ11	20.21	9.393	.580	.822

Scale Statistics

		Std.	N of
Mean	Variance	Deviation	Items
24.29	12.796	3.577	6

Information Quality

Reliability Statistics

iteliability buddetes				
Cronbach's				
Alpha	N of Items			
.875	5			

	12 12 13 15 15				
-		Std.			
	Mean	Deviation	N		
IQ12	4.13	.789	272		
IQ13	4.12	.820	272		
IQ14	4.25	.704	272		
IQ15	4.13	.765	272		
IQ16	4.21	.730	272		

Item-Total Statistics

		Scale	Corrected	Cronbach's
	Scale Mean if	Variance if	Item-Total	Alpha if Item
	Item Deleted	Item Deleted	Correlation	Deleted
IQ12	16.70	6.204	.728	.842
IQ13	16.71	6.096	.720	.844
IQ14	16.58	6.658	.696	.850
IQ15	16.70	6.536	.656	.859
IQ16	16.62	6.472	.722	.844

Scale Statistics

	Scale	e Statistics	Jniversi	iti Utara	Malaysi
		Std.	N of		
Mean	Variance	Deviation	Items		
20.83	9.686	3.112	5		

User Satisfaction

Reliability Statistics

Cronbach's	
Alpha	N of Items
.851	6

		Std.	
	Mean	Deviation	N
US17	4.26	.703	272
US18	4.19	.728	272
US19	4.18	.697	272
US20	4.20	.701	272
US21	3.85	.949	272
US22	4.22	.772	272

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
US17	20.64	8.527	.732	.810
US18	20.71	8.591	.681	.818
US19	20.72	8.512	.745	.808
US20	20.70	8.595	.715	.813
US21	21.04	8.773	.418	.880
US22	20.67	8.605	.624	.828

Scale Statistics

		Std.	N of
Mean	Variance	Deviation	Items
24.90	12.026	3.468	6

Net Benefits

Reliability Statistics

Cronbach's	
Alpha	N of Items
.868	6

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		Std.	
	Mean	Deviation	N
NB23	4.31	.681	272
NB24	4.29	.699	272
NB25	4.26	.698	272
NB26	4.20	.749	272
NB27	4.30	.762	272
NB28	4.29	.702	272

Item-Total Statistics

		Scale	Corrected	Cronbach's
	Scale Mean if	Variance if	Item-Total	Alpha if Item
	Item Deleted	Item Deleted	Correlation	Deleted
NB23	21.34	8.152	.643	.850
NB24	21.35	7.838	.712	.838
NB25	21.39	7.995	.667	.846
NB26	21.44	7.643	.703	.839
NB27	21.35	8.042	.577	.863
NB28	21.36	7.862	.701	.840

Scale Statistics

		Std.	N of
Mean	Variance	Deviation	Items
25.65	11.115	3.334	6

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CORRELATIONS

Correlations

		Correlations				
		SYSQ	SERQ	IQ	US	NB
SYSQ	Pearson	1	.640**	.624**	.680**	.697**
	Correlation					
	Sig. (2-tailed)		.000	.000	.000	.000
	N	272	272	272	272	272
SERQ	Pearson	.640**	1	.734**	.684**	.684**
	Correlation					
	Sig. (2-tailed)	.000		.000	.000	.000
	N	272	272	272	272	272
IQ	Pearson	.624**	.734**	1	.751**	.703**
	Correlation					
	Sig. (2-tailed)	.000	.000		.000	.000
	N	272	272	272	272	272
US	Pearson	.680**	.684**	.751**	1	.744**
	Correlation					
	Sig. (2-tailed)	.000	.000	.000		.000
	N	272	272	272	272	272
NB	Pearson	.697**	.684**	.703**	.744**	1
	Correlation					
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	Univ 272	272	272	rsia 272	272

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

MULTIPLE REGRESSION

Relationship between independent variables and mediator

Descriptive Statistics

	Mean	Std. Deviation	N
MEANUS	4.1495	.57798	272
MEANSYSQ	4.3375	.55228	272
MEANSERQ	4.0478	.59618	272
MEANIQ	4.1654	.62244	272

Correlations

		US	SYSQ	SERQ	IQ
Pearson	US	1.000	.680	.684	.751
Correlation	SYSQ	.680	1.000	.640	.624
	SERQ	.684	.640	1.000	.734
	IQ	.751	.624	.734	1.000
Sig. (1-tailed)	US		.000	.000	.000
É	SYSQ	.000		.000	.000
\rangle \rangl	SERQ	.000	.000		.000
Z	IQ	.000	.000	.000	
N	US	272	272	272	272
	SYSQ	272	272	ra Ma ₂₇₂	sia 272
	SERQ	272	272	272	272
	IQ	272	272	272	272

Variables Entered/Removed^a

	Variables	Variables	
Model	Entered	Removed	Method
1	MEANIQ,		Enter
	MEANSYSQ,		
	MEANSERQ ^b		

a. Dependent Variable: MEANUSb. All requested variables entered.

Model Summary^b

			Std. Erro		Change Statistics		S
		R	Adjusted	of the	R Square	F	
Model	R	Square	R Square	Estimate	Change	Change	df1
1	.80	.649	.645	.34443	.649	165.046	3
	5 ^a						

ANOVA^a

Mo	odel	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	58.738	3	19.579	165.046	.000 ^b
	Residual	31.793	268	.119		
	Total	90.531	271			

a. Dependent Variable: MEANUS

b. Predictors: (Constant), MEANIQ, MEANSYSQ, MEANSERQ

Coefficients^a

	Committee									
NO		Unstandardized Coefficients		Standardized Coefficients						
	Model	В	Std. Error	Beta	1alaysi	a Sig.				
1	(Constant)	.432	.174		2.480	.014				
	MEANSYSQ	.309	.052	.296	5.995	.000				
	MEANSERQ	.165	.055	.170	3.002	.003				
	MEANIQ	.410	.052	.441	7.900	.000				

a. Dependent Variable: MEANUS

Residuals Statistics^a

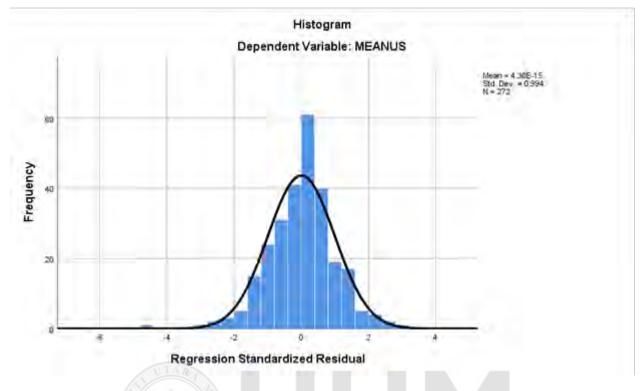
			-		
				Std.	
	Minimum	Maximum	Mean	Deviation	N
Predicted Value	1.6250	4.8537	4.149	.46556	272
			5		
Std. Predicted Value	-5.423	1.512	.000	1.000	272
Standard Error of	.022	.123	.039	.014	272
Predicted Value					
Adjusted Predicted	1.6921	4.8630	4.149	.46446	272
Value			3		
Residual	-1.60003	.99876	.0000	.34252	272
			0		
Std. Residual	-4.645	2.900	.000	.994	272
Stud. Residual	-4.669	2.918	.000	1.004	272
Deleted Residual	-1.61632	1.01141	.0002	.34901	272
			2		
Stud. Deleted Residual	-4.862	2.960	.000	1.011	272
Mahal. Distance	.064	33.641	2.989	3.646	272
Cook's Distance	.000	.101	.005	.012	272
Centered Leverage	.000	.124	.011	.013	272
Value					

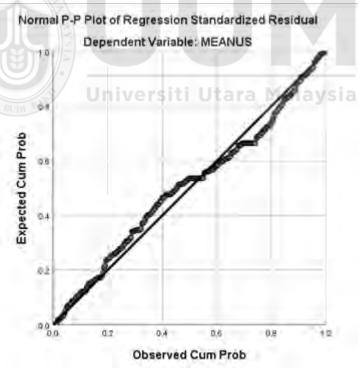
a. Dependent Variable: MEANUS

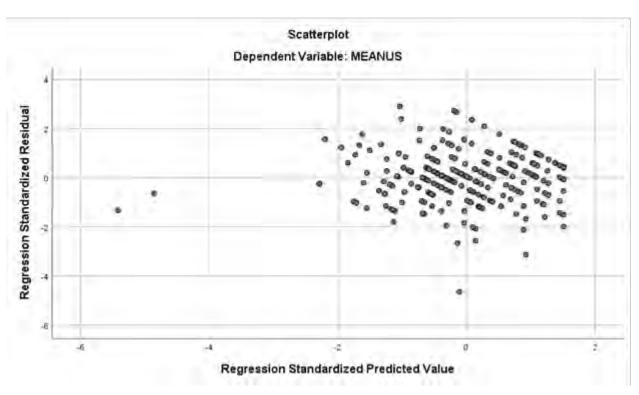
95

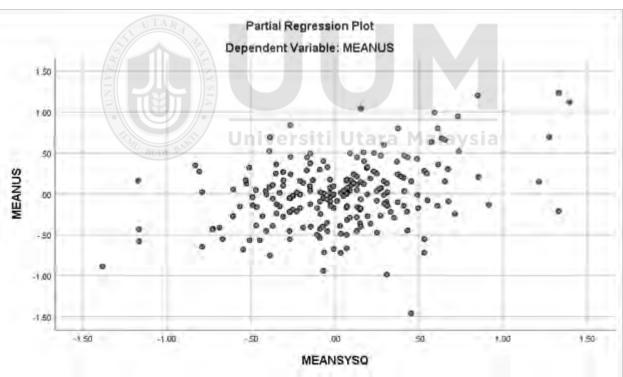
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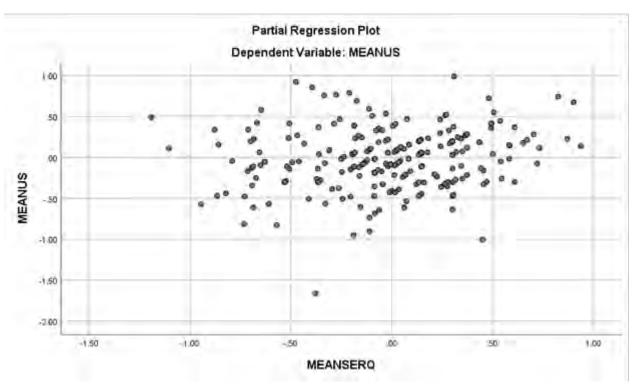
Charts

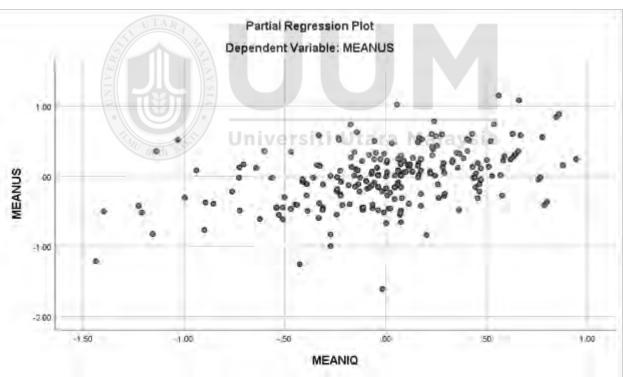












Relationship between independent variables, user satisfaction, and net benefits

Descriptive Statistics

	Mean	Std. Deviation	N
MEANNB	4.2745	.55565	272
MEANSYSQ	4.3375	.55228	272
MEANSERQ	4.0478	.59618	272
MEANIQ	4.1654	.62244	272
MEANUS	4.1495	.57798	272

Correlations

		NB	SYSQ	SERQ	IQ	US
Pearson	NB	1.000	.697	.684	.703	.744
Correlation	SYSQ	.697	1.000	.640	.624	.680
	SERQ	.684	.640	1.000	.734	.684
,	IQ	.703	.624	.734	1.000	.751
(2)	US	.744	.680	.684	.751	1.000
Sig. (1-tailed)	NB		.000	.000	.000	.000
No.	SYSQ	.000		.000	.000	.000
(0)	SERQ	.000	.000		.000	.000
	IQ	.000	.000	· = .000	sia	.000
	US	.000	.000	.000	.000	
N	NB	272	272	272	272	272
	SYSQ	272	272	272	272	272
	SERQ	272	272	272	272	272
	IQ	272	272	272	272	272
	US	272	272	272	272	272

Variables Entered/Removed^a

		Variables	
Model	Variables Entered	Removed	Method
1	MEANUS,		Enter
	MEANSYSQ,		
	MEANSERQ,		
	MEANIQ ^b		

- a. Dependent Variable: MEANNBb. All requested variables entered.
- Model Summary^b

			- 1. 1. 1. J					
_				Std. Error	Change Statistics		S	
		R	Adjusted	of the	R Square	F		
Model	R	Square	R Square	Estimate	Change	Change	df1	
1	.812	.659	.654	.32695	.659	128.936	4	

ANOVA^a

	177			3161 W 6616		
_		Sum of				
Mo	del	Squares	df	Mean Square	F	Sig.
1	Regression	55.129	4	13.782	128.936	.000 ^b
	Residual	28.540	267	.107		
	Total	83.670	271			

- a. Dependent Variable: MEANNB
- b. Predictors: (Constant), MEANUS, MEANSYSQ, MEANSERQ, MEANIQ

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Mod	del	В	Std. Error	Beta	t	Sig.
1	(Constant)	.567	.167		3.390	.001
	MEANSYS	.266	.052	.264	5.088	.000
	Q					
	MEANSER	.158	.053	.169	2.969	.003
	Q					
	MEANIQ	.157	.055	.175	2.865	.005
	MEANUS	.305	.058	.317	5.259	.000

a. Dependent Variable: MEANNB

Residuals Statistics^a

	Minimu	Maximu		Std.		
UT	R m	m	Mean	Deviation		N
Predicted Value	1.6973	4.9905	4.2745	.45103		272
Std. Predicted Value	-5.714	1.588	.000	1.000		272
Standard Error of	.020	.120	.042	.015		272
Predicted Value	<i>J.J.</i> -/ -					
Adjusted Predicted	1.7279	4.9975	4.2745	.45053	ia	272
Value	(6)					
Residual	84720	1.13481	.00000	.32452		272
Std. Residual	-2.591	3.471	.000	.993		272
Stud. Residual	-2.615	3.497	.000	1.003		272
Deleted Residual	86265	1.15215	.00003	.33171		272
Stud. Deleted Residual	-2.644	3.574	.001	1.010		272
Mahal. Distance	.065	35.431	3.985	4.367		272
Cook's Distance	.000	.091	.004	.010		272
Centered Leverage	.000	.131	.015	.016		272
Value						

a. Dependent Variable: MEANNB

Charts

