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Master Thesis

人工智能的影響增強了用戶在線購物的購買意願：亞馬遜電子商務研究

The Influence of AI Enhances Users' Purchase Intention in Online Shopping: A Study of Amazon Ecommerce

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商務研究

The Influence of AI Enhances Users' Purchase Intention in Online
Shopping: A Study of Amazon Ecommerce

研 究 生：米勤良 MICH KIMLIANG

經考試合格特此證明

口試委員：_____
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準碩士推薦函

本校企業管理學系管理科學碩士班研究生＿＿＿米勤良＿＿＿君在本系修業 2 年，已經完成本系碩士班規定之修業課程及論文研究之訓練。

1、在修業課程方面：＿＿米勤良＿＿ 君已修滿 36 學分，其中必修科目：研究方法、管理科學、策略管理專題、創新與創業管理、服務管理、應用統計、組織行為專題 等科目，成績及格(請查閱碩士班歷年成績)。

2、在論文研究方面：＿＿＿米勤良＿＿＿君在學期間已完成下列論文：

(1) 碩士論文：人工智能的影響增強了用戶在線購物的購買意願：亞馬遜電子商務研究。

(2) 學術期刊：2022 International Conference on Economic Development and Business Management (ICEDBM)

本人認為＿＿＿米勤良＿＿＿君已完成南華大學企業管理學系管理科學碩士班之碩士養成教育，符合訓練水準，並具備本校碩士學位考試之申請資格，特向碩士資格審查小組推薦其初稿，名稱：將人工智能 (AI) 融入應用程序對用戶意圖的影響，以參加碩士論文口試。

指導教授：＿＿＿＿＿＿＿簽章

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南華大學管理學院企業管理學系管理科學碩士班

110 學年度第 2 學期碩士論文摘要

論文題目：人工智能的影響增強了用戶在線購物的購買意願：亞馬遜電子商務
　　　　　研究

研究生：米勤良　　　　　　　　　　　　　　指導教授：范惟翔 博士

論文摘要內容：

　　本研究旨在研究人工智能（AI）對在線購物領域客戶購買意願滿意度的影響。在當今世界，互聯網影響著我們社會商業，政府，教育和私人生活的方方面面，它帶來了不斷發展的新技術，以便為全世界提供更好，更快的服務。隨著技術和數字化轉型的快速發展，企業爭相將人工智能融入幾乎每個垂直領域，無論是提高客戶滿意度還是業務運營等。在線購物中的人工智能已被用於預測用戶行為以智能化產品建議。人工智能真的很強大，並且發展迅速，並已被用於零售，教育，銀行，製造，農業，醫療保健等不同行業。該公司是一家強大的跨國電子商務零售商，使用人工智能進行在線購物。 AI 根據消費者在 AI 的支持下在線購物時獲得更多體驗和期望的方式有效地運營在線業務。在線購物正在成為一種關鍵的商業策略，在線市場競爭異常激烈，為客戶提供了眾多的購物選擇。本研究的目的是確定影響客戶滿意度的因素，例如服務 AI，AI 數據質量和 Web 質量。此外，還將確定信任在客戶滿意度和購買意願之間的中介作用。本研究採用定量方法進行調查問卷。結構化調查在線問卷是本研究的主要數據。從這項研究的結果可以看出，人工智能正在幫助組織增加商機，並幫助組織在組織環境中實現更高的客戶滿意度。這些發現為消費者服務文獻提供了新的見解，並對商業從業者俱有重要意義。

關鍵字：人工智能、服務 AI、AI 數據質量、網站質量、信任度、客戶滿意度、購買意向、在線購物

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Name of Student: Mich Kimliang   Advisor: Wei-Shang Fan, Ph.D.

ABSTRACT

This research aimed to study the influence of Artificial Intelligence (AI) on Customer Satisfaction toward Purchase Intention in the field of online shopping. In today's world, the Internet impacts on every aspect of our society business, government, education, and private life which brings new technologies that are evolving to communicate with better and faster service to the entire world. With the rapidly growth of technology and digital transformation, businesses are rushing to integrate AI in almost each single vertical sector, whether to enhance their customer satisfaction levels or their business operations, etc. AI in online shopping have been used for predicting user behavior to intelligent product suggestions. AI is really powerful and grown substantially and has been used in different industries such as retail, education, banking, manufacturing, agriculture, healthcare, and more. The business is a powerful multinational e-commerce retailer, who uses AI for online shopping. AI effectively operate an online business based on the way consumers have gained greater experience and expectations when shopping online with AI's support. Online shopping is becoming a key business tactic and the online market is incredibly competitive, offering customers numerous shopping options. The objective of this study is to determine factors that have influence on Customer Satisfaction such as Service AI, AI Data Quality, and Website Quality. In addition, mediating effect of Trust between customer satisfaction and purchase intention will be determined as well. This study conducted using the quantitative method of doing a survey questionnaire. A

structured survey online questionnaire is the primary data for this study. From the results of this study, it could be evident that AI is helping organizations boost their business opportunities and also helping organizations enable more customer satisfaction in the organizational context. These findings provide new insights into the consumer services literature and have important implications for business practitioners.

Keywords: *Artificial Intelligence (AI), Service AI, AI Data Quality, Website Quality, Trust, Customer Satisfaction, Purchase Intention, Online Shopping.*

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CHAPTER ONE
INTRODUCTION

1.1 Research Background and Research Motivation

In the last decade, the Internet has increasingly developed into a worldwide communications medium. The Internet, consisting of several technologies, offers the opportunity for individuals and organizations to create, distribute and consume interactive features. As internet connectivity becomes extremely important, new technologies are evolving to communicate with better and faster service to the entire world. Internet enabled Television Shopping (Wagner et al., 2017), E-Auctions (Li et al., 2017), online shopping (Chen & Teng, 2013; Kim, 2012; Laudon & Traver, 2016) and technology at a retail store (Evanschitzky et al., 2015). It has been seen that digital technology imparts a significant effect over the customer attraction and customer satisfaction.

There are a lot of people use internet to serve their own purposes in different things such as, study online, search for products, discover information, publish their own story, share their knowledge and experiences, create online store, etc. People can obtain any information as they need in anywhere and anytime via the internet by using technology equipment such as smartphone, tabled, computer or other alternative applications. Internet technology drives developments in security and financial transactions, marketing and advertising strategies, financial applications, media delivery, business-to-business and retail e-commerce (Laudon & Traver, 2016). Online shopping is the key part of E-commerce, and many consumers are driven by this E-commerce with regard to the way of purchasing product from the company (Souca, 2014). The rapid change towards an E-commerce society and economy is being powered by well-established business enterprises such as Tesco, Ford, IBM, Carrefours and General Electric, as well as online companies such as Google, Amazon, Apple, Facebook, Yahoo, Twitter and YouTube (Laudon & Traver, 2016).

In order to meet the requirements of customers, most firms have developed their own website that allows customers to link directly to a company. Companies can provide their specific information to those who are searching for their products or services from the online shopping system. Online shopping has become a very easy process to purchase goods from retailers on a regular basis, as the majority of people have some popular online shopping resources such as smartphones, computers, laptops, tablets (Souca, 2014), clothes, furniture, electronic accessories and many more. With the wide-ranging marketing applications have contributed to the development of online shops, customers can now shop at home or at their workplace. Online shopping has been shown to be more practical as it not only enables customers to purchase at any time but also time-efficient because consumers do not have to come to the store physically (Najib et al., 2019). This enhances customer satisfaction as shoppers can watch and read product reviews online before buying.

Moreover, online shopping has opened the way for the adoption of Artificial Intelligence (AI). For instance, Amazon, Netflix, Spotify, or YouTube, AI has used to help with recommendation of products that users might wish to buy, movies or news users may like to watch or read. Based on David, (2020), AI technology optimizes processes and enhance the efficiency from Amazon and eBay to Alibaba's payment integrations. AI becomes more knowledgeable and understands more easily with more data that it learned from the users. In the case of looking for a new shirt, AI can trigger certain dissatisfaction of the users with other clothes or accessories then can be proceed to the shopping actions. AI has been developed for more than 60 years since the first inventor; John McCarthy known as the father of Artificial Intelligence (AI). AI is manifested in intelligent performance and behaviors by machines, computers, or robots that are used to assist humans and businesses. For instance, robots for homes, health care, hotels, and restaurants have automated many parts of our lives, virtual bots turn customer service into self-service (Huang & Rust, 2018). There are many technology experts and scholars have concerns about the current and future impact of AI due to its advantages. AI is focused on various science

and technology disciplines such as computer science, mathematics, engineering psychology, and linguistics. AI is really powerful and grown substantially and has been used in different industries such as retail, education, banking, manufacturing, agriculture, healthcare, etc. AI is changing the way retailers operate and it has been used for numerous years in online shopping, by predicting user behavior and then offers product recommendations that speed up the process of customers to a digital shop since merchants are able to put the right products in front of the right customers eyes more efficiently and with greater speed.

In order to provide the customers with better services and expectations, it is important to pursue AI to respond to what the consumer is looking for or interested or anticipating, the use of AI would allow the goods to be sold successfully and profitably stand out from the box (Najib et al., 2019). For instance, Amazon have seen explosive success over the years despite having no physical store. Big data and new technologies are consistently used by Amazon to make it more or less the blueprint for what such an online shopping experience should be. AI has the powerful capacity to collect and evaluate vast quantities of data and to provide action decisions. These collected data then form the foundation of creating personalized recommendations for customers.

Advanced analytics and big data, which offers previously unavailable insights into consumer behavior and other patterns, make it possible to better understand customers (Runrun, 2020). Companies can use the AI machine algorithms to find trends and insights in the vast amount of data. AI can help them make decisions quicker and improve their place in the competitive business world. People will be able to purchase products and access services using the Internet from anywhere in the world and leverage the infinite, additional benefits that will open with the universal use of AI innovations (Spyros, 2017). AI appears likely to influence marketing strategies, including business models, sales processes, and customer service options, as well as customer behaviors (Davenport et al., 2020). AI applications allow

businesses to avoid unplanned downtime, boost operational performance, spawn new products and services, and improve risk management (Devinney et al., 2018).

AI in customer service has enabled business to gather and analyze customer feedback for more meaningful and actionable insights (Countants, 2019). Among the major benefits of AI in customer service, small and large enterprises are scaling up their customer services through the deployment of AI applications (Countants, 2019). With AI, online retailers will be able to accurately predict what customers will want; retailers will turn to a shipping-then-shopping business model when these predictions achieve high accuracy (Davenport et al., 2020). Firms can adjust their business models significantly depending on the degree of predictive accuracy, delivering products and services to customers on a continuous basis based on data and forecasts of their needs. AI in the online shopping field is being used by online retailers to provide chatbot services, evaluate customer comments and provide customized services to online shoppers. A chatbot is a software program that is used to perform an online chat talk through text, audio, or image with customers instead of direct communication with a real-life human agent. The use of chatbots automates client and consumer interaction and reduces the need to engage staff in addressing customer questions or in turning their requests around.

Online shopping is becoming a key business tactic and the online market is incredibly competitive, offering customers numerous shopping options for numerous sellers. Online consumers are influenced by various factors such as economic, demographic, technological, social, cultural, psychological, marketing and legislative, and they have different buying behaviors with respect to traditional consumers (Rahman et al., 2018). When visiting a company's online stores, web design is one of the most critical factors of customer service. Whether shopping for a product or service, customers wish to get the ease-of-use and compatibility across platforms. The firms will lose their sales if the website systems are outdated or neglect customer service. The use of online shopping is seen as a part of enhancing productivity in the business. The core of every company is customer satisfaction and

business will disappear without the customers. If customer satisfaction is met, purchase platform will ultimately be trusted. The outstanding customer service can make the most profitable for firms. If the buyers are satisfied, they will continue to return their purchasing. Whenever companies offer great service to customers, they will be more likely to advise their friends and families of these services.

The purpose of this study is to measure the factors of AI Data Quality, Service AI, and Website Quality that have an impact on Customer Satisfaction and also exploring the mediating effect of Trust between Customer Satisfaction and Purchase Intention. In other words, this study is conducted to evaluate AI aspects of how it can enhance online shopping. The results of this study will contribute for those who want to learn about AI in E-commerce and consider which factors that motivate them to be energetic to study. The results would be useful for management processes, such as company policies and strategies and sharing knowledge between managers and representatives of organizations. Additionally, this would be helped to the business.

1.2 Research Objective

There are mainly four objectives to be specified in this study. These objectives are outlined below.

(1) To examine the relationship of the variables: AI Data Quality, Service AI, Website Quality, Customer Satisfaction, Trust, and Purchase Intention.

(2) To determine the impact of AI on the Customer Satisfaction.

(3) To determine the mediating of Trust between Customer Satisfaction and Purchase Intention.

(4) To suggest some future recommendations to retailers and business owners for implementing AI in their business systems.

1.3 The Procedure and Research Structure

Firstly, this research stated the research background, objective, motivation and procedure of conducting this study. Then, the literature review will be defined the

theory for Customer Satisfaction and Purchase Intention. In addition, it will provide the theory definition of other variables, such as Service AI, AI Data Quality, Website Quality, and Trust. Moreover, the study also identifies the methodology materials that would be used for this research to analyze the outcome, and the hypothesis of each construct's interrelationship effect is also mentioned. As well, it also contains the questionnaire items that will use to survey the random respondents who had used to shop at Amazon. This data collected will be analyzed to verify its validity and intercorrelation. And then, this study will provide explanations of its results and indicate the finding of the beta values, especially the p-values and accepting or rejecting the hypothesis. The last phase is to verify the model and summarize the results of what this research needs to find out.

The results of this study were compiled using a few main tools and applications, including SPSS 25.0 and Smart-PLS 3.0. These software applications will employ the following methodological techniques:

- ✓ Quantitative Survey
- ✓ Descriptive Statistic Analysis
- ✓ Factor Loading & Reliability Test
- ✓ One-way ANOVA (Analysis of Variance)
- ✓ Independent Sample T-Test
- ✓ Simple and multiple Regression
- ✓ Partial Linear Square Structural Equation Modeling analysis (PLS-SEM)

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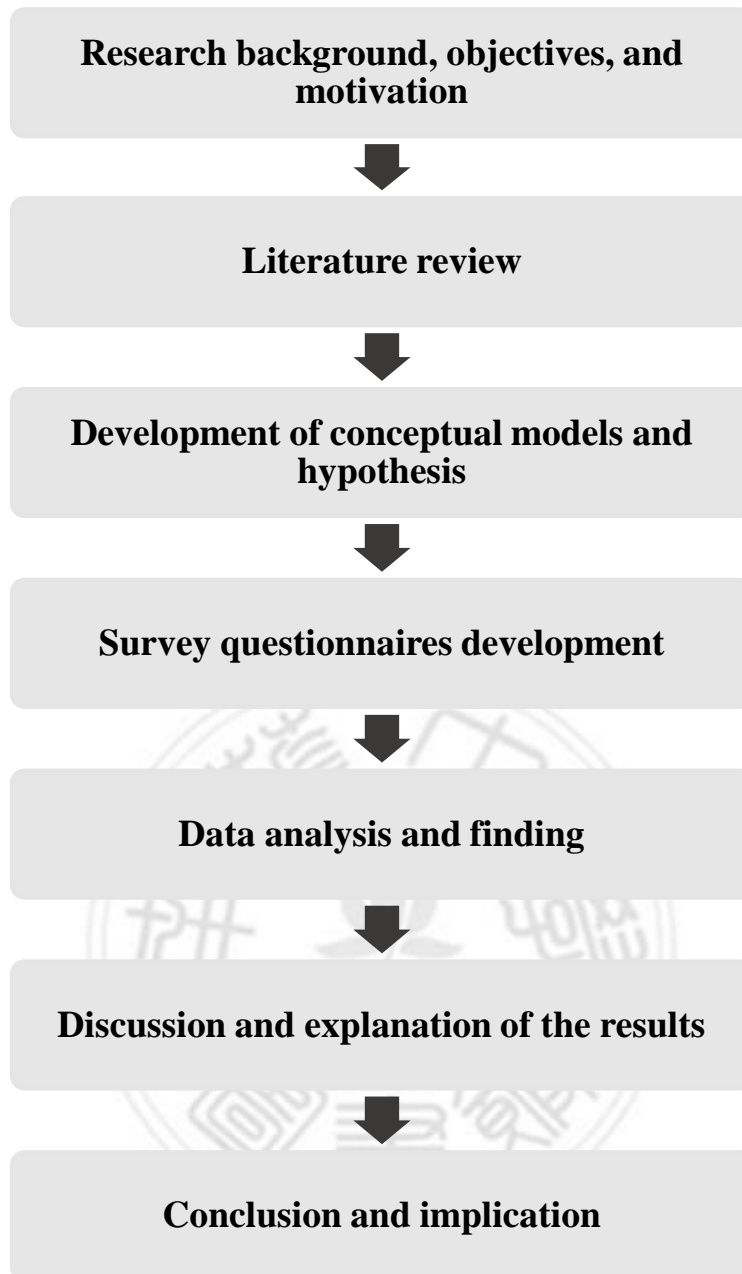
Figure 1-1 Research procedures

The contents of this study were organized into five chapters, which are mentioned below:

- Chapter one: Introduction

Chapter one indicates the research background, research objective, procedure and construct of this study.

- Chapter two: Literature Review

Chapter two is an important chapter of any dissertation which provides actual impact as well as concrete knowledge on the subject of research. This chapter

reviewed several kinds of literature and journals. It also demonstrates the theoretical background, term & definition of each construct such as AI Data Quality, Service AI, Website Quality, Trust, Customer Satisfaction, and Purchase Intention that will be used in the study.

- Chapter three: Method of Research

Chapter three reveals the research model framework, questionnaire items of each construct, translation procedure, data collection process and methodologies that will apply to analyze the data have been covered as well.

- Chapter four: Data Analysis and Finding

Chapter four showed the results of data that found out after analyzed data and it used tables of the results with the explanation of each finding. Those tables were related to the table of Factor loading, Reliability test, T-test and One-way ANOVA, Simple and Multiple Regression, PLS-SEM. Furthermore, it has indicated the interrelationship between each hypothesis as well.

- Chapter five: Conclusions and Implications

Chapter five would summarize all the main results into the context that we want to find out. And afterwards, the discussion and implications were presented on the basis of findings for future research.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This literature review will be built on recent scientific literature about Artificial Intelligence, quality of data automated by AI, AI using in customer service, website system quality that represents to the retailer, the trust of users, the satisfaction of customers who experienced with an online shop, value co-creation and implications of using artificial intelligence. Google scholar, ScienceDirect, ResearchGate, Tandfonline, and any websites will be served for searching related topic articles. The review is conducted to evaluate the positive sides of Artificial Intelligence that implements into the online shopping system, which impacts customer satisfaction toward purchase intention, and therefore the search terms are related to the research purpose.

2.2 Theoretical Background
2.2.1 Online Shopping

Online shopping is a process that allows customers to purchase products or services directly from a vendor through the information and communication technology (ICT) by the means of a mobile phone, an internet television or a computer that enables currency, money, information and data to be exchanged over the internet (Neger & Uddin, 2020). It also known as e-shopping or internet shopping in form of electronic commerce. Over the years, online shopping has been interpreted as encompassing a range of organizational operations, including sales, purchases, logistics and/or other organizations, such as web-based management or company through information networks (Pilík, 2013). When a customer sees an advertisement or online promotion in online communication, it may grab their audience and encourage their interest by ads for particular items. Customers choose an online

shopping/ website based primarily on references, terms of delivery clarity, graphic design, and extra services (Rahman et al., 2018).

Refer to the study of Zhang, (2013) indicated that people are seeking for a clear and simple website which provides a quick and convenient buying process as well as a timely and faster distribution while they use online shopping. The customer can find detailed information for extra help before deciding to purchase and they will compare the cost of the desired product with different other choices online and make an informed decision (Rahman et al., 2018; Zhang, 2013); via online platforms, such as using online catalogs, websites, or search engines (Laudon & Traver, 2016). There are a variety of reasons why customers shop over the Internet; for instance, customers can purchase something at any time without physically going to the store; customers can stumble on a certain product at a cheaper price by evaluating various websites at the same time; customers want to escape the pressure they experience when they meet face-to-face with the retailer; customers want to escape traffic delays that can occur on the way to the store (Vasic et al., 2019).

Online shopping has many advantages over traditional shopping, such as online shopping saves time and is accessible anytime, anywhere for connectivity. There are two different forms of online shopping, one is B2C the other one is B2B. The term "Business-to-Consumer" (B2C) relates to the process of selling products and services directly for both firms and consumers who are end-users of their products or services. Most companies that sell directly to consumers can be considered as the B2C companies, thus, the business-to-consumer (B2C) model is clearly different from the business-to-business (B2B) model. Business-to-business (B2B) is generally a transaction or business carried out directly between one business and another, such as a wholesaler and a retailer. B2C has become a trend in future Internet adoption being of the main importance in terms of the company operations strategy on how to maximize consumer satisfaction (Zhang, 2013).

2.2.2 AI Data Quality

At the earliest period of the collection of data, an AI analytics challenge can be solved by switching these huge quantities of data into trustworthy business knowledge (Ira, 2018). The developments in information technology (telecommunications, smartphone applications, the Internet of Things, etc.) have created a deluge of digital data such as user-generated data, health and scientific sensors, internet and finance firms, and supply chain systems (Hu et al., 2014). In any phase of a data collection process, a real-time, large-scale AI analysis solution is completely automated: identification, rating, and grouping – distribution of detailed notifications on adjustments of key business measures such as missed data, unforeseen data forms, nulls, or incorrect records (Ira, 2018).

Engineers are challenged to innovate the store, evaluate and handle massive volumes of complex data sets in software platforms, therefore they are unable to properly analyze these data due to garbage in (GIGO) computing behavior, without enhancing data quality in data warehouses or data centers (Dai et al., 2018). IT divisions of businesses have been focused on the use of vast volumes of data to extract valuable information and facilitate decision-making (Pacheco et al., 2014) that provide a lot of benefits to help the growth of business locations, strategies, and customers. Decision makers can use more readily available data to improve customer satisfaction and profits and foresee future risks and opportunities (Corrales et al., 2018).

Artificial Intelligence is a data-driven technology which depends on the input of data. Generating data-driven ideas extends the area for design to explore new workable ideas (Chen et al., 2019). Hence, output quality is dictated by data quality. The purpose of AI is to use the data obtained from the results of algorithms and databases to turn it into usable data (Kariman, 2017). It uses many primary technologies, for example, machine learning, natural language processing, regulatory expert systems, neural networks, deep learning, physical robotics, and automation of robotic processes (Davenport et al., 2020). AI offers a way of using these resources

to "truly interpret external data, learn from those data and demonstrate flexible adaptation" (Kaplan & Haenlein, 2019). From large amounts of customer and transaction data, AI can gain insights from different data types, including not only numeric, but also text, speech, image, and facial expression data. The response to existing data generated by consumer preferences, AI will engage customers before and after purchases (Davenport et al., 2020).

Partnering with Ocado, the Kroger company says that they have the most advanced automated grocery store in the world powered by deep learning algorithms to navigate and select the product most effectively. Amazon.com predicts real-time sales data compared to past sales and market statistics for each product (Weber & Schütte, 2019). Depending on degrees of predictive precision, companies can adjust their business models significantly and provide consumers with products and services on an ongoing basis based on data and predictions of their needs (Davenport et al., 2020). Companies using AI improve their statistical functions, such as predicting various consumer desires in which prediction results are based on the information given to the system (Raj, 2019). AI has managed to boost data accuracy by following means: automated data collection, finding duplicate records, detecting irregularities, inclusion of third-party data (Raj, 2019). Analysts and engineers can detect issues with data quality by using their own data as a guide, which is a critical feature of data quality control (Dai et al., 2018). However, traditional methods for managing data quality are focused on the experience of consumers or previously developed business rules. This reduces efficiency, as well as being very time intensive and low reliability (Dai et al., 2018).

2.2.3 Service AI

Due to increased self-service demand, digital shopping changes in customer sales efficiency, and increased competition among online and brick-and-mortar operations. AI also has been used to enhance and connect customer online and off-line experiences by retailers in chatbots, virtual assistants and product navigators

(McKinsey, 2018). AI also helps organizations to detect competing strategies by allowing quicker and more accurate analytics (AIMultiple, 2020).

Service providers have suffered massive pressure in recent years to change their way of dealing with customers and waiting lines for services may have a disruptive effect on businesses and could give the service providers a bad impression (Muhammad et al., 2014). Communicating with customers through live chat interfaces are pretty widespread in many e-commerce environments for delivering real-time customer support, and human chat service agents are increasingly replaced by automated conversations like chatbots, and systems are designed to connect with human users using the natural language often based on AI (Adam et al., 2021). The major issue for customer service providers is maintaining service efficiency with service quality: both experts and practitioners have emphasized the possible benefits of customer self-service including longer time performance, reducing cost, improved customer experience (Scherer et al., 2015), and also promises to enhance the quality of service and interactions between providers and consumers (Adam et al., 2020). AI operated in service organizations to promote sales and enhance customer loyalty as part of the services delivered to consumers (Bolton et al., 2018). For instance, AI enables stylists to recommend products based on each customer's price, size, general appearance, order history, and social media habits such as fashion images saved on Pinterest (Liang et al., 2020).

AI-related applications such as Siri on Apple's phone, Microsoft's Cortana, and Alexa's Echo on Amazon have become query-based response AI systems for retailers which significantly help consumers as they shop, whether physically or online (Grewal et al., 2017). Chatbots alone are predicted to save customer service costs in excess of $8 billion a year by 2022, tremendous growth from the $20 million estimated for 2017 (Gilchrist, 2017). The capabilities of AI-driven virtual agents like natural language processing and deep learning allow them to provide smart, conversational, fast and 24/7 services (Ping et al., 2019). AI gradually has developed from basic tasks to more complex social tasks such as understanding the feelings of

customers while intervening subsequently (Prentice et al., 2020a). AI allows here to pick the best product set for multiple stores and uses adjustments as consumer behavior changes (Leo, 2017), and automate the order and delivery to each customer (Timo, 2017).

Walmart is an American retail company has used AI applications to help analyzes the percentages of the product is damaged and how many days it can still be stored at the given storage temperature (Weber & Schütte, 2019). AI often specializes in position analytics and visual recognition technologies can provide Walmart with speed, scale and encryption to process the data required in real-time. (Chris Walton, 2018). Furthermore, AI also allowed designers to combine the trending colors, key concepts, and templates, by analyzing and storing feedback from thousands of photographs and videos through machine learning, which eliminates overall lead times, and enhances designers' creative exploration (Liang et al., 2020).

2.2.4 Website Quality

A website of a retailer serves as a key tool between a retailer and its customers; hence its features are important to the attractiveness of buyers (Song et al., 2012). To achieve success, online retailers must ensure that the shopping websites operate well and adhere with all facets of the quality of the system (Hung-Joubert et al., 2019). A webpage that is user-friendly and easy directly affects customer satisfaction and encourages users to allow skeptical online shopping by overcoming their doubts and voicing a good impression about using the service (Belanche et al., 2012). Therefore, useful online shopping websites guarantee that customers develop a positive attitude to the retailer and enable internet purchases by consumers (Lee & Kozar, 2012).

The availability of a website ensures that people can view or use it and always available 24/7 in contrast with the traditional brick-and-mortar shops. The unavailable websites prevent users from accessing or using it. This can be due to maintenance or technical problems and the developers highlight an error message. The primary objective is often to avoid downtimes when maintaining websites, but since the

holiday rhythm has shifted to online shops, success depends more on meeting the various other shoppers' needs than on the minimum level of uptime and keeping them back (Prestipino, 2012). Reliability refers to a website's ability to comply with requirements and to perform its specified purposes accurately. Reliability includes delivering reliable product and service records, securing bank transfers and safeguarding the sensitive information of consumers (Rahman et al., 2015). This ensures that it is important for websites to have a secure shopping experience in which consumers can provide personal information and make transactions. Online shopping websites also need to safeguard users and their details by using encryption security software, and build trust with users by providing users with clear contact information (Arkontaky, 2013). The user of the online shopping website decides its reliability upon this basis of the information communicated.

A sluggish response time is one of the principal factors for website abandonment; people are less likely to access slow websites because they do not enjoy waiting unconsciously (Steve, 2012). Therefore, online shopping sites with fast response times will favorably affect the desire of a customer to use the site (Longstreet, 2010). System quality factors are competitive when it comes to an online store and if customers cannot shop or do not want to access an unencrypted website with a lengthy purchasing process (George, 2011). Online sites must also be able to communicate with multiple devices, to suit different screen sizes and orientations, as well as the operating systems that will be used (Hung-Joubert et al., 2019).

2.2.5 Trust

Trust seems to be something that helps customers decide to make purchase online when consumers believe they can trust the seller (Putra et al., 2017). Trust plays an important role in customer preferences when viewing the literature on the Internet as well as in the stability of relationships for both buyers and sellers and they can execute any purchases without meeting each other via online shopping (Sevim et al., 2014).

According to a study by Pilík (2013), indicated that the growth of e-commerce raises the demands and expectations of consumers regarding the quality of the service provided, security and general trust in online shopping. The key problems relating to online shopping were distribution network issues, online purchases, safety and private customer support (Karim et.al., 2013). The problem of protection is one challenge to customers' future internet shopping (Sevim et al., 2014). However, there are trust issues may exist in online shopping when customers are unable to check the product directly (Dachyar & Banjarnahor, 2017).

Customers who are trusted are in a risky situation when shopping online because they use the internet as a medium to tell an e-vendor about their needs and send personal data. They chose to use the payment procedure and expected the website to be a secure way to satisfy the sales order, as well as to ensure that the seller was fair and trustworthy.

2.2.6 Customer Satisfaction

According to a study of Khan et.al., (2015) demonstrated the definition of customer satisfaction that defined by Oliver as the consideration of a product or service by consumers in terms of their needs and expectations. It is about the customers that set the standards for satisfaction and also the customers who make the appropriate comparisons (Petr & Maria, 2018). In the sense of competition, customer satisfaction seems to have a very powerful effect on the competitiveness of both the product and the business, so customer satisfaction needs also to be analyzed. Customer satisfaction is conceptualized by advancing the time, the outcomes, productive measurement, overall evaluation and basic emotions of fulfillment (Souca, 2014).

According to a study statement of The topic of factors affecting online shopping can also be found in the papers of many researchers (Vasic et al., 2019; Lim et al., 2016; Nittala, 2015; Bačík et al., 2014; Lian & Yen, 2014;). For instance, in a study conducted by Rajyalakshmi, (2015), the author studied a sample of 1,500

internet users in six main cities across India. The factor study performed by the author highlighted eight factors positive attitude ("I really like buying at the Internet", "I consider internet to be my first choice when I need any product or service"), perceived usefulness, product risk, perceived risk, price, traditional shopping, promotion, financial risk. It also argued that online shopping provides modern customers who prefer satisfaction and convenience with more satisfaction. Customer satisfaction plays a very important role in the brand sustainable growth of every business and maintains a long-term partnership with its consumers (Chakraborty & Sengupta, 2014).

2.2.7 Purchase Intention

Today, it has become more difficult to compete in a competitive market and, at the same time, the products and services offered by companies appear to be identical. Since AI will boost speed, cost and adaptability across the automotive supply chain, reinventing design, merchandising or marketing using AI becomes important (McKinsey, 2018).

The growing appeal of AI technologies will dramatically change how customers communicate with online brands, particularly as purchasers make their transactions using virtual aids or chatbots (Finbarr, 2017). Ability of the system means the overall quality of a website system which can be evaluated at an online store by customer's perceived degrees of ease of buying. Service quality represents the total customer evaluations and quality judgements on internet service delivery (Hsu et al., 2012). AI-driven websites are able to change purchasing habits and boost spending as shoppers focus more on smart automated shop assistants. Thanks to the development of AI-powered digital assistants, such as Amazon's Alexa and Google Home, shoppers are now starting to explore up an entire new way of online shopping (Finbarr, 2017). As AI assistants and automatons continue to take on much of consumer buying decisions, retailers will have to become much, far more intelligent

in their use of data to remain ahead of the competition, said Frank Palermo, executive vice president of global digital solutions at VirtusaPolaris (Finbarr, 2017).

AI can facilitate growing customer purchasing in other form. Speech recognition technology with AI can allow users to communicate with digital helpers so that challenges can be resolved. Fluid AI uses prediction tools of consumer behavior, when consumers are most likely to convert then it will then send promotional e-mails to customers at optimal periods to boost sales (Kas, 2019).

2.3 Research Hypothesis

2.3.1 The relationship between AI Data Quality and Service AI

There are two variables determining perception and needs of customers in the context in terms of data quality: how well the data consumers fulfill their expectations, and how well it describes real-world objects, events and concepts (Corrales et al., 2018). AI depends not on its underlying technology but rather its marketing and business applications, such as automating business operations, getting insights from data, or engaging individuals and businesses (Davenport et al., 2020). AI is a computer technology level that clearly classifies and analyzes things by learning, reasoning, and identifying using data to become a quality of AI that learnt from a vast volume of good quality data (Lee, 2020).

Hypothesis (**H1):** AI Data Quality has positive influence on Service AI.

2.3.2 The relationship between AI Data Quality and Customer Satisfaction

Data quality is highly critical in order to have a single vision of the customer, create a tailor-made cross-cutting marketing strategy, and it is also the key for customer satisfaction (Kate, 2012).

In general, as personal shopping assistants like Siri, Cortana, and Alexa mimic human interaction by using a big data which help to provide consumers with a customized shopping experience, to process customer orders through chats or live phones, constantly learn about customer experiences, to recommend items to

customers on each order query, to guarantee customer satisfaction by supplying them with all the privileged product details, ensure that specific critical products and services and the latest trends become recommended on the basis of consumer purchasing experience and customer search behavior, recognize and address any unique issues that consumers have from the catalog as well as the Internet, ensure customer care for substitutes, monitor customer shipments, and transfers, process financial improvements as vital (Matt, 2019).

The big data and machine learning help to enhance consumer service by observing their actions on the web, and predict their satisfied behavior then give some products recommendation to customers who are likely to purchase by learning from the user's data. Hence, this study posits the following hypothesis:

Hypothesis **(H2):** AI Data Quality has positive influences on Customer Satisfaction.

2.3.3 The relationship between Service AI and Customer Satisfaction

Given the unpredictable order flows, the limited time for order preparation and the short-term distribution schedules provided by e-retailers, which are now required by consumers, logistics companies must be highly effective in handling these orders and controlling the whole phase of fulfillment (Leung et al., 2018).

Based on a study by Prentice et al., (2020b) revealed that the quality of Service AI is significantly correlated with customer satisfaction. Service quality captures the excellence of a service that is perceived to match or meet customer expectations (Shi et al., 2014). According to Yap et al., (2012) viewed satisfaction as a result customer attitude towards a service provider. Related to a study by Desiyanti et al., (2018) found that service quality is significant effect on satisfaction, which means the better the service quality provided then the customer will be more satisfied. The real-time nature of the chat service has significant impacts on trust, satisfaction, buy-back, and WOM intentions (Mero et al, 2018).

Prentice et al., (2020c) shown that AI quality of service substantially impacts through staff service quality to overall service quality in the hospitality industry.

Chatbots can enhance their info and quality of service in order to increase customer satisfaction (Muhammad et al., 2020). Evident success as a virtual one of the female characters attributed to a stereotypical definition of women as loving, genuine and empathic contact which is critical to raising the satisfaction of customers with a specific customer service (Chae et al., 2020). Thus, this study proposed the following hypothesis:

Hypothesis (**H3**): Service AI has positive influences on Customer Satisfaction.

2.3.4 The relationship between Website Quality and Customer Satisfaction

A system quality investigation examines any technological and functional components of the system which help customers access a website easily or execute online payments effectively and therefore can enhance customer satisfaction (Wang et al., 2016). System quality refers to the features and performance of websites with regarding the quality of usage or the perspective of the user on quality, which is a positive influence on consumer acceptance, user satisfaction and system use (Chen et al., 2010; Meghanathan et al., 2012).

The study by Rita et al., (2019) revealed that website quality is not only positive effect of on customer satisfaction, purchase intention and WOM, but also on customer trust and revisit of the website. Web design characteristics have affected customer satisfaction and the important relationship has been built between the usability of website and user satisfaction (Iman et al., 2019). Thus, this study hypothesized:

Hypothesis (**H4**): Website Quality has positive influences on Customer Satisfaction.

2.3.5 The relationship between Customer Satisfaction and Purchase Intention

Customer satisfaction and the decision to purchase with the online shopping relies on some few other factors such as e-store image, distribution, customer services, service quality and purchasing behavior, customization, online sales inspiration, trust, security, privacy, payment transaction, reward programs, website

design, user engagement, product encouragement, convenience, practical commitment, accessibility, market risk evaluation, etc. (Karim et.al., 2013).

If the value perceived is greater than the cost of shopping, buyers would be fulfilled and able to make a purchase. In contrast, the perceived value does not satisfy or reach the cost of the consumer, the consumer is not pleased and agrees not to buy the product (Dash et al., 2021). Customer satisfaction has a positive effect on the intention of purchase. Consumers who are satisfied would be more willing to visit the website or intent to purchase products/services than disappointed users.

In another study by Lian and Yen (2014), authors tested the two dimensions (drivers and barriers) that might affect intention to purchase online.

Hypothesis (**H5**): Customer Satisfaction has positive influence on Purchase Intention.

2.3.6 The relationship between Customer Satisfaction and Trust

When building a site with a social presence with the use of a virtual sales assistant, online trust is supposed to improve and consumers are more likely to trade with the business behind the site (Chae et al., 2020).

Based on the study of Chao-Min, (2012) shown that the sellers' trust is important to keep the partnership between buyer and seller continued. According to another study by Martínez and Bosque, (2013) stated that customer trust is seen as a fundamental structure of satisfaction in marketing and customer behavior. Customer satisfaction has been one of the most powerful predictors of consumer trust, which is a crucial element in a stable long-term partnership between customer and company (Tahir et al., 2021). Thus, this study hypothesized as following:

Hypothesis (**H6**): Customer Satisfaction has positive influence on Trust.

2.3.7 The relationship between Trust and Purchase Intention

Modern customers view social networking sites as a reference category that can satisfy their requirements by exchanging transactions in reference groups for

visibility (Shin et al., 2019). Online review thus plays a crucial role in validating and improving consumer trust in the first place (Tran, 2020).

Brand trust is generated through existing experience and actions and is a key principle in order to ensure a successful partnership between a business and its consumers (Chae et al., 2020). Trust is commonly accepted as an indicator of purchasing behavior, where the aim of purchase is typically affected by the brand trust. The brand trust will have a positive impact on purchases, minimize the risk of confusion and contribute to purchases (Chae et al., 2020). Comprehensive research shows that trust is a crucial driver of brand-customer interactions in the internet shop as it decreases the potential risk of consumers (Han et al., 2015).

In addition, accurate knowledge about the products on a website increases relative reliability and allows to complete online purchases (Yin-Yih et al., 2020). Thus, this study hypothesized as following:

Hypothesis (**H7):** Trust has positive influence on Purchase Intention.

2.3.8 The Mediating Effect of Service AI between AI Data Quality and Customer Satisfaction

In this study, AI Data Quality represents big data which refers to the quality of massive volumes from unstructured and structured data collected by businesses every day during interactions, operations, and activities.

AI plays a key role as a service in processing this data and quickly filtering through large amounts of data to uncover key trends. This can predict what people will need in the future and give better experiences by analyzing vast amounts of customer data (Rebekah Carter, 2021). The services powered by AI are often designed for the self-service model (Alam et al., 2020). AI has the ability to modify the user interface by controlling all aspects of the design, including visual components, typography, visual effects, animation, and graphical information (Irfan, 2020).

Furthermore, big data provides businesses with a behind-the-scenes perspective of their customers and their requirements which results in satisfaction and trust. Thus, this study hypothesized as following:

Hypothesis (**H8**): Service AI mediates the relationships between AI Data Quality and Customer Satisfaction.

2.3.9 The Mediating Effect of Trust between Customer Satisfaction and Purchase Intention

Based on a study by Ha, (2012) shown that five satisfaction shopping qualities were assessed as follows: convenience, service offers, service information, site design, and safety. Trust is something which the seller must take into consideration for customers in order to make customers to get a buying decision (Mahliza, 2020). When customers trust a brand, they probably want to shop that brand positively (Moreira & Silva, 2015). Trust has always been a critical factor in shaping customer attitudes towards businesses, especially in e-commerce transactions trust plays an important role as customers do not buy online unless they have trust in the retailer (Mahliza, 2020).

According to a study of Moreira et al., (2017), found that trust has overall positive effect on the customer satisfaction. A study by (Mahliza, 2020) to measure customer trust in online to purchase intention, found the trust factor has significant effect on customer purchase decision making. Refer to the study by Harris & Goode, (2010) found clear connections between the trust in the website and purchase intention. The mediating impact of trust between consumer satisfaction and behavioral intentions is possible in the retail context (Loureiro et al., 2014).

In previous research by Ilyoo et al., (2013) the mediating role of consumer trust in an online retailer has been investigated. In addition, the analysis found that trust is an important predictor of the intention to purchase (Ilyoo et al., 2013). There are a lot of papers (Mahliza, 2020; Strzelecki & Rizun, 2020; Adwan et al., 2020), studied about the online trust to the intention in online shopping context, therefore this study

will be tested the mediating effect on purchase intention. Thus, this study hypothesized as following:

Hypothesis (**H9):** Trust mediates the relationships between customer satisfaction and purchase intention.

CHAPTER THREE
RESEARCH METHODOLOGY

This research is a quantitative study and designed as Descriptive Research aiming to understand and find out factors including AI Data Quality, Service AI, Website Quality, Customer Satisfaction, and Trust that can enhance the customer buying experience intent to purchase the firm's products or services with online shopping. In this chapter, the study will describe about the Hypothesis with the framework that will raise six constructs to study and discover. In addition, this chapter will explain the method that will use to measure and analyze in this study. It also shows the main questionnaire items used to survey random respondents.

3.1 Research Model

According to the Chapter two of the literature review and the hypothesis development, the statement of hypothesis would be described as the below framework (Figure 3-1).
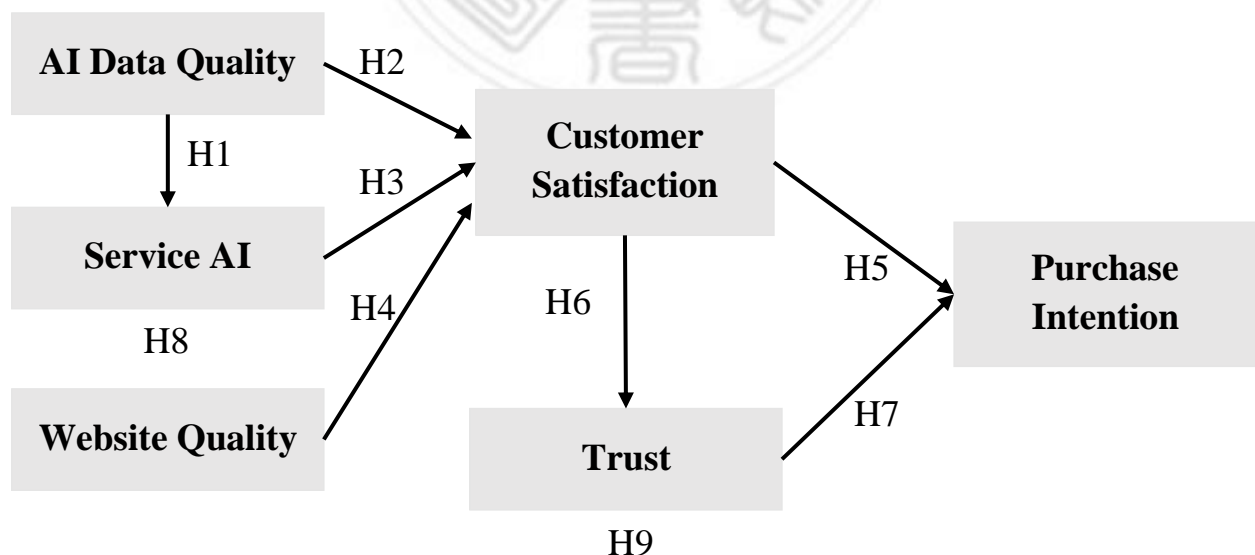
Figure 3-1 Research Model

Factors including AI Data Quality, Service AI, Website Quality, Customer Satisfaction, and Trust are considered as independent variables, while Purchase Intention is considered as a dependent variable for this study. Besides, the variable of Trust acts as mediating variable that explains the relationship between the Customer Satisfaction (independent) and the Purchase Intention (dependent) variable. Based on Figure 3-1 and the literature mentioned above, the hypotheses were constructed as the following:

Hypothesis (**H1**): AI Data Quality has positive influences on Service AI.

Hypothesis (**H2**): AI Data Quality has positive influences on Customer Satisfaction.

Hypothesis (**H3**): Service AI has positive influences on Customer Satisfaction.

Hypothesis (**H4**): Website Quality has positive influences on Customer Satisfaction.

Hypothesis (**H5**): Customer Satisfaction has positive influences on Purchase Intention.

Hypothesis (**H6**): Customer Satisfaction has positive influences on Trust.

Hypothesis (**H7**): Trust has positive influences on Purchase Intention.

Hypothesis (**H8**): Service AI mediates the relationships between AI Data Quality and Customer Satisfaction.

Hypothesis (**H9**): Trust mediates the relationships between Customer Satisfaction and Purchase Intention.

3.2 Instrument

The survey would be the target on the people who have the job as the employee, and they can be the undergraduate and graduate people or who experienced with online shopping. The questionnaire items are designed for each construct to survey random respondents. In the construct of AI Data Quality has 4 items, Service AI has 5 items, Website Quality has 4 items, Customer Satisfaction has 5 items, Trust has 5 items, and the last construct is Purchase Intention has 5 items.

This study would be used the five-point scale and start with "1" denotes as "Strongly disagree", "2" denotes as "Disagree", "3" denotes as "Neutral", "4" denotes

as "Agree" and "5" denotes as "Strongly agree". Thus, the scale will appear in the questionnaire survey by allowing the respondents rate their perception on each item.

3.3 Construct Measurement

This study focused on six mainly research constructs such as AI Data Quality, Service AI, Website Quality, Trust, Customer Satisfaction, and Purchase Intention. Those important variables have also assessed the interrelationship among each other. In addition, each of the constructs has its own component and measurement questionnaire items that are based on the previous research related to AI and e-commerce in which to develop questionnaire items for this study. Nevertheless, it was still important to validate their validity and reliability.

3.4 Questionnaire of the construct
3.4.1 AI Data Quality

AI does not rely on its underlying technologies, but on marketing and business applications, such as the automation of business processes and data collection or the presence of employees and consumers (Davenport et al., 2020).

High data quality is an essential requirement of big data to enhance predictive power in the e-commerce world (Akter & Wamba, 2016). The measurements of system quality, information quality and customer satisfaction have been used in the research by Brown et al., (2012). Information quality refers to AI data quality in this study. Based on the previous study, the questionnaire items have adopted that shown below.

(1) [DQ1] Amazon site delivers the right product recommendations.
(2) [DQ2] Amazon site provides responses to questions and queries that are exactly what I need.
(3) [DQ3] Amazon site provides sufficient information regarding the product.
(4) [DQ4] My experience with Amazon has been good in terms of getting accurate information quickly.

3.4.2 Service AI

Refer to the study by Catherine et al., (2020) mentioned that the AI management system is intended to enhance product quality and manufacturing performance in furniture firms, and an organic body composed of a data management system and an expert system. Furthermore, that study investigated a relation between service AI quality, customer satisfaction and interaction expectations of customers.

Website quality measurements are information-oriented for duties, interactive content, trust, response time, due to the ease of understanding, intuitive processes, visual appeal, creativity, stream. Based on the previous study about e-service quality was analyzed how consumers are supposed to meet technical self-service quality and proposed five major e-service quality characteristics: quick distribution, ease of use, trustworthiness, enjoyment and control (Rita et al., 2019). The questionnaire items were designed that have mentioned below:

(1) [SAI1] I am satisfied with the customer support provided by this customer service system.

(2) [SAI2] I am satisfied with the after-sales service provided by this customer service system.

(3) [SAI3] This customer service system can understand my problems and requests.

(4) [SAI4] This customer service system can respond to my requests fast enough.

(5) [SAI5] This customer service system can provide useful answers for me.

3.4.3 Website Quality

The overall website quality and satisfaction are related since the interface of the website provides interaction with the customer.

The study by Blut, (2016) showed that the quality of e-services consists of a framework of a higher-order model which links the expectations about online services quality to specific and realistic aspects, including website design, security, service to

customers and safety/privacy. The quality measurement of the website consists of the following attributes: information, design, user-friendliness, trust and compassion, concentrating on the value of easy-to-use websites (Rita et al., 2019).

Website design relates to all things that contribute to the client experience of the service, including consistency of content, cosmetic appearance of the website, ordering process, convenience of a website, product range, pricing offerings, personalization of a website and device availability (Rita et al., 2019). Questionnaire items were identified as following:

(1) [WEBQ1] The website design provides user friendly.

(2) [WEBQ2] The website labels are easy to understand.

(3) [WEBQ3] Content on the website is visually pleasing and easy to read.

(4) [WEBQ4] The text on the website is easy to read.

3.4.4 Trust

The effectiveness in e-commerce relies on a web page of high system consistency, quality of information and quality of operation (Sharma and Lijuan, 2015). Trust is an important aspect as clients consider whether or not to purchase online goods (Fortes et al., 2017). Wu et al. (2018) suggests that trust can be seen as a conviction, confidence, feeling or expectation about the purpose or probable direction of behavior of the client. The questionnaire items were designed that stated as below:

(1) [TR1] Amazon online site is trustworthy.

(2) [TR2] I trust my credit card information on Amazon online site.

(3) [TR3] Amazon online site provides ease of cancelling orders.

(4) [TR4] Amazon online site provides ease of payment procedure.

(5) [TR5] I felt secure to provide personal info for purchasing online at Amazon.

3.4.5 Customer Satisfaction

In this study, customer refers to users those who use the services or products and experienced with online shopping system. According to Chao-Min et al., (2012) showed that customer satisfaction refers to the emotion of excitement or disappointment that arises from the discrepancy between its judgments of the outcome of online shopping. Customers who are pleased with the operation of a service provider will increase their usage and prospective use. In other words, customer satisfaction is like a metric used to check how satisfied a shopper is with the offered product, service, or experience. When customers show a strong interest in the website, they are more likely to purchase a product (Rita et al., 2019). As a conclusion, the questionnaire items for this study are as follows:

(1) [CS1] I strongly recommend this online shopping site to others.

(2) [CS2] I think that I made the correct decision to use this online shopping site.

(3) [CS3] I would like to keep using this online shopping site.

(4) [CS4] I am satisfied with the service of this online shopping site.

(5) [CS5] I am satisfied with the overall of this online shopping site.

3.4.6 Purchase Intention

A key initial step for online retailers who want to take measures to optimize the efficiency and accuracy of shopping is to gain an understanding of the main dimensions of online shopping convenience and the unique domain within each dimension (Jiang et al., 2013). The convenience of shopping has been one of the key reasons why consumers choose to embrace online purchases (Colwell et al., 2008; Jiang et al., 2013). According to Ha, (2012) found that purchase intentions has to be a component not only of satisfaction, but also of the indirect effect of initially shopping attributes. The questionnaire items were listed as below:

(1) [PI1] Undamaged delivered goods.

(2) [PI2] Prices are identical to those on the order form.

(3) [PI3] Easy to return unwanted items.

(4) [PI4] Receive all the items I ordered.

(5) [PI5] I will continue to purchase services or products from this online site.

3.4.7 Demographics

The demographic characteristics of each participant taking part in this study is structured to discuss the different features. According to previous studies indicate that the demographic variable of the respondent in purchasing online could cause the desire of the variance in each dimension. This study aims to provide the descriptive of the demographic with each construct and the following measures of each particular demographic characteristic show below:

(1) Gender

(2) Age category

(3) Education

(4) How frequently purchase online

3.5 Translation

The primary respondents are people who live in Cambodia to gather test results. Therefore, the Khmer language plays an important role in gathering the survey. The questionnaire items were normally conceived by English, in which all questionnaire elements were translated carefully into Khmer as the second language for the convenience of respondents. After that, it should be double-checked of the language translated to ensure the meaning of those questionnaires is absolutely correct. Thus, the final version of the questionnaire was confirmed after carefully checked and modified.

3.6 Sampling and Data Collection

The study will conduct the quantitative data by doing survey on Google Form, and the link will send to invite people via social media such as Facebook, Gmail, Line, …etc. The link will lead the respondents to answer the questionnaire by ticking

the five scales that state the questionnaire items, and the sampling data gathered from 324 respondents. After the data has been collected and meets the requirements, it will be exported into the following files: (.sav) for SPSS, (.csv) for Smart-PLS, to be used for data analysis.

3.7 Data Analysis Procedure

This research is going to use a version 25.0 of SPSS and Smart-PLS 3.0 as the primary software to discover the results by using some methodological techniques listed below:

- ✓ Descriptive Statistic Analysis
- ✓ Factor Loading & Reliability Test
- ✓ Independent Sample T-Test
- ✓ One-way analysis of variance (ANOVA)
- ✓ Regression Analysis
- ✓ PLS-SEM

To display the results, a tabular format of results was created. For the interpretation of data, descriptive statistics, analysis of correlations, t-test, standard deviation average, etc. are created.

3.7.1 Descriptive Statistic Analysis

Firstly, this research employs two types of descriptive statistical methods, which state that the frequency distribution tables are used to show the characteristics of the sample obtained in the study. Second, the simple statistical variables, including the mean and standard deviations of the results of the respondents for each item, would be illustrated in order to give the analysis a detailed view of the respondent's attitude towards these questions.

3.7.2 Factor Loading & Reliability Test

The purpose of the factor analysis is to analyze the underlying variance function of the series of correlation coefficients. Factor analysis is used not only for the purpose of summarizing or reducing evidence, but also for exploratory or confirmatory purposes. Factor analysis suggests that a small number of unobserved variables are responsible for the association between a large number of variables observed. Factor analysis is used to conclude that the variation of variable observed originates from two parts: a similar component associated with other variables that are related to stimuli, and a special part that varies from other variables. The Overall fit assessments of Factor Analysis described as below:

- ✓ KMO > 0.5
- ✓ Communality > 0.5
- ✓ Eigenvalue > 1
- ✓ Factor loading > 0.6
- ✓ Difference between loadings > 0.3
- ✓ Cronbach's alpha > 0.6
- ✓ Item to total correlation > 0.5

The item-total correlation and α of Cronbach are shown after a reliability test is conducted. These findings calculated in one factor the association between each item and the sum of the rest of the items. This method assumes that the overall score is accurate and therefore the association between the item and the total score implies convergent validity of the item. Correlating items in the analysis phase which are smaller than 0.5 are discarded from further analysis.

3.7.3 Independent Sample T-Test

In this case, an unbiased t-test sample is used to test if the differences between two groups are in relation with a single variable. In this study, differences between men and women in all six factors were compared: Service AI, AI Data Quality, Website Quality, Trust, Customer Satisfaction, and Purchase Intention.

3.7.4 One Way Analysis of Variance (ANOVA)

In this case, one-way ANOVA is used to determine if there are significant differences between two or more means in a group of selected variables. The aim of this analysis is to compare the demographic differences in the six structures between respondents (genders, ages, education, and how frequently purchase online).

3.7.5 Regression Analysis

Regression analysis was conducted to examine the impact of independent variable on dependent variable. Simple Linear Regression technique was served when there is only one independent variable and the model must determine the linear connection between it and the dependent variable. In contrast, Multiple Linear Regression used to investigate the relationship between one dependent variable and several independent variables. Another aim of multiple regression is to optimize the total predictive ability of the independent variables as shown. The goal of comparing two or more sets of independent variables to assess the predictive potential of each difference can also be accomplished by multiple regression analyzes. The overall fit assessments of Multiple Regression listed below.

- ✓ $R^2 > 0.1$
- ✓ F-value ≥ 4
- ✓ t-value > 1.96, $p < 0.05$
- ✓ Durbin-Watson between 1.5 - 2.5
- ✓ Tolerance > 0.5
- ✓ VIF < 2

3.7.6 PLS-SEM

PLS-SEM (partial least squares structural equation modeling) enables complicated inter-relationships between observed and latent variables to be examined. According to Janadari et al., (2016) stated that PLS-SEM has grown in

popularity in recent years and becoming a 2nd generation multivariate analytic approach that incorporates the features of the first wave (principal components and linear regression analysis).

PLS-SEM plays a key role in this study for analyzing data to evaluate all hypotheses proposed in the research model, especially the mediation of Trust. According to the PLS-SEM rule of thumb, The R^2 will range from 0 to 1 and its values suggested following conditions: $R^2 < 0.25$ - Very weak, $0.25 <= R^2 < 0.50$ – Weak, $0.50 <= R^2 < 0.75$ – Moderate, $R^2 >= 0.75$ - Substantial. About the average variance extracted (AVE) should be higher than 0.5. The composite reliability (CR) criteria have better values represent higher levels of its reliability, while CR value suggested to be above 7.0 while Cronbach's alpha should be greater than 0.7 as well (Hair et al., 2011). It is important to remember that a rule of thumb is a generalized and easily adapted decision-making guideline that shouldn't be applied exactly in every case.

In this study, Smart PLS 3 was used to construct the bootstrap estimates, determine the measurement and structural model parameters, and provide hypothesis predictions concerning the role of Trust as a mediator between Customer Satisfaction and Purchase Intention. Mediation takes place when a third mediator variable gets involved between two other related constructs. The figure below demonstrates a basic mediator model in which path **p3**: $Y_1 \Rightarrow Y_2$ is the direct effect, **p1·p2**: $Y_1 \Rightarrow M \Rightarrow Y_2$ is the indirect effect, while the total effect is the total of the direct effect (**p3**: $Y_1 \Rightarrow Y_2$) and the indirect effect (**p1·p2**: $Y_1 \Rightarrow M \Rightarrow Y_2$):
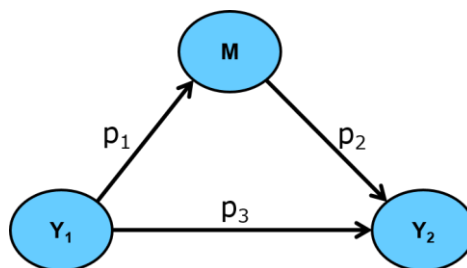
Figure 3-2 The example of a single mediator model

Note: **p1** = $Y_1 \Rightarrow M$; **p2** = $M \Rightarrow Y_2$; **p3** = $Y_1 \Rightarrow Y_2$;

   p1·p2 = $Y_1 \Rightarrow M \Rightarrow Y_2$; **p1·p2·p3** = $Y_1 \Rightarrow M \Rightarrow Y_2$, and $Y_1 \Rightarrow Y_2$;

According to Zhao et al. (2010), the direct effect of the independent variable on the mediators ($Y_1 \Rightarrow M$), the mediator on the dependent variable ($M \Rightarrow Y_2$), and the independent variable on the dependent variable ($Y_1 \Rightarrow Y_2$) needed to be tested in order to analyze the role of the mediator in the relationship between an independent variable and a dependent variable. Figure 3-3 presents the suggested model for analyzing the mediator by Zhao et al. (2010), and Hair (2017) meaning that if indirect effect ($Y_1 \Rightarrow M \Rightarrow Y_2$) is insignificant, then there is no mediation effect exist. In case that indirect effect ($Y_1 \Rightarrow M \Rightarrow Y_2$) is significant, but direct effect ($Y_1 \Rightarrow Y_2$) is insignificant, there is a full mediation exist. Otherwise, there is a partial mediation.
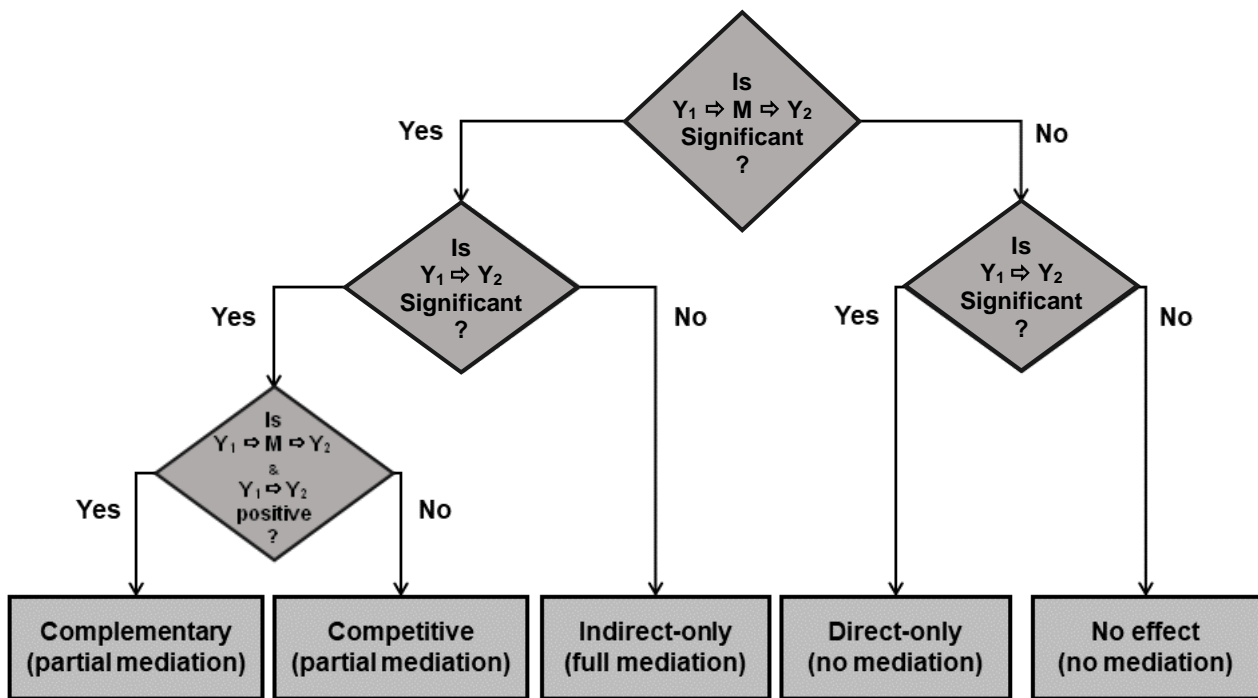
Figure 3-3 The Mediation Measurement Procedure

(adopted from Hair et al., 2017)

CHAPTER FOUR
RESEARCH RESULT

The findings of the analytic process are reported in this chapter, which show exactly what we discovered from the study and connect to the research design presented in previous chapters. A descriptive analysis of the respondents is presented in the first part, which includes response rates, respondent characteristics, and variable measurement data. The results of factor loading, independent sample t-Test, one-way analysis of variance (ANOVA), simple and multiple regression, and mediation testing (PLS-SEM) were provided in the second section. The results of data analysis relating to each research hypothesis are given for last section.

4.1 Descriptive Analysis

The descriptive statistics analysis was performed to illustrate the mean and standard deviation for all research variables, as well as the frequency for demographic information, in order to gain a better understanding of the characteristics of research structure and demographic information. This section will be separated into two sections: respondent characteristics and descriptive analysis of questionnaire items.

4.1.1 Characteristic of the Respondents

In order to analyze the data, this study is based on survey data collected from 324 respondents who filled out the online survey questionnaires via e-mail and social media invitations. Table 4-1 shows the characteristics of the respondents, which were measured in four primary categories such as gender, age, education, and online purchase frequency.

As shown in Table 4-1, there are 53.1% of respondents are male and 46.9% are female. The 0% of the respondents who are under 18 years old and over 46 years old, while 40.1%, 35.2%, and 24.7% are from 18 to 25 years old, 26 to 35 years old, and 36 to 45 years old, respectively. 4% of the overall respondents who are from high

school, while 63% from bachelor, whereas 23.8% are master, and 9.3% are doctorate or Ph.D. About the respondents are those who participate in shopping online at least once a week is 0.6%, while 19.1% of them are those who do shopping online once a month. The majority (34.6%) of these respondents are shopping online several times a month, while 15.7%, 27.8%, and 2.2% are those who are do shopping online once a year, several times a year, and less than once a year, respectively.

Table 4-1 Characteristic of respondents

Items	Description	Frequency (n=324)	Percentage
Gender	Male	172	53.1
	Female	152	46.9
Age	Under 18 years old	0	0.0
	18 - 25 years	130	40.1
	26 - 35 years	114	35.2
	36 - 45 years	80	24.7
	Over 46 years old	0	0.0
Education	High School or Lower	13	4.0
	Bachelor Degree	204	63.0
	Master Degree	77	23.8
	Doctorate or Ph.D.	30	9.3
Online Purchase Frequency	Once a week	2	0.6
	Once a month	62	19.1
	Several times a month	112	34.6
	Once a year	51	15.7
	Several times a year	90	27.8
	Less than once a year	7	2.2

Source: This study

4.1.2 Research Variables Results Measurement

The descriptive statistics identify the mean value and the standard deviation of the research questionnaire from 324 respondents.

Particularly, the construct of AI Data Quality has 4 items with the mean score rang of (4.444 to 4.506), Service AI has 5 items with the mean score range of (4.336 to 4.457), Website Quality has 4 items with the mean score range of (4.466 to 4.528), Customer Satisfaction has 5 items with the mean score range of (4.441 to 4.519), Trust has 5 items with the mean score range of (4.395 to 4.463), and Purchase Intention has 5 items with the mean score range of (4.398 to 4.488).

Based on empirical results, illustrated that the mean values for all variables in each construct are more than 4, the mean score of five-point Likert scale, while the results of standard deviations are ranging from 0.558 to 0.654, indicating that respondents had high report levels. The descriptive statistics of the questionnaire items are presented in Table 4-2.

Table 4-2 The descriptive statistics of the questionnaire items

Research variables		Mean	Std. Deviation
AI Data Quality			
DQ1	Amazon site delivers the right product recommendations.	4.488	0.622
DQ2	Amazon site provides responses to questions and queries that are exactly what I need.	4.506	0.576
DQ3	Amazon site provides sufficient information regarding the product.	4.444	0.625
DQ4	My experience with Amazon has been good in terms of getting accurate information quickly.	4.478	0.601

Source: This study

Table 4-2 The descriptive statistics of the questionnaire items (continue)

Research variables		Mean	Std. Deviation
Service AI			
SAI1	I am satisfied with the customer support provided by this customer service system.	4.457	0.626
SAI2	I am satisfied with the after-sales service provided by this customer service system	4.401	0.609
SAI3	This customer service system can understand my problems and requests.	4.404	0.630
SAI4	This customer service system can respond to my requests fast enough.	4.410	0.650
SAI5	This customer service system can provide useful answers for me.	4.336	0.630
Website Quality			
WEBQ1	The website design provides user friendly.	4.500	0.586
WEBQ2	The website labels are easy to understand.	4.528	0.558
WEBQ3	Content on the website is visually pleasing and easy to read.	4.500	0.565
WEBQ4	The text on the website is easy to read.	4.466	0.558
Customer Satisfaction			
CS1	I strongly recommend this online site to others.	4.451	0.615
CS2	I think that I made the correct decision to use this online shopping site.	4.519	0.607
CS3	I would like to keep using this online shopping site.	4.481	0.596
CS4	I am satisfied with the service of this online shopping site.	4.441	0.604
CS5	I am satisfied with the overall of this online shopping site.	4.457	0.595

Source: This study

Table 4-2 The descriptive statistics of the questionnaire items (continue)

Research variables		Mean	Std. Deviation
Trust			
TR1	Amazon online site is trustworthy.	4.395	0.608
TR2	I trust my credit card information on Amazon online site.	4.441	0.599
TR3	Amazon online site provides ease of cancelling orders.	4.463	0.606
TR4	Amazon online site provides ease of payment procedure.	4.401	0.594
TR5	I felt secure to provide personal info for purchasing online at Amazon.	4.454	0.595
Purchase Intention			
PI1	Undamaged delivered goods.	4.398	0.629
PI2	Prices are identical to those on the order form.	4.407	0.654
PI3	Easy to return unwanted items.	4.423	0.602
PI4	Receive all the items I ordered.	4.485	0.607
PI5	I will continue to purchase services or products from this online site.	4.488	0.597

Source: This study

4.2 Factor Analysis and Reliability Test

Factor analysis was used to prove the dimensions of each research concept, as well as to choose questionnaire questions with high factor loadings and compare them to theoretically proposed items. Moreover, several data purification techniques also used in this research to validate the dimensionality and reliability of the constructs including factor analysis, correlation analysis, and coefficient alpha analysis. Factor analysis provides tools for analyzing the structure of the interrelationships among a large number of variables by defining sets of highly interrelated variables known as factors, as suggested by Hair et al. (2011).

The following criteria, which were also specified in Chapter three, were applied to justify the research's reliability and its validity: (1) Factor loading > 0.60, (2) KMO >0.5, (3) eigen value >1, (4) cumulative explained variance >0.6 (>60%), (5) item-to-total correlation >0.5, and (6) Cronbach Alpha >0.6. After factor analysis, item-to-total correlation, coefficient alpha, and correlation matrix are calculated to provide the internal consistency measurements to each construct. The item-total correlation and Cronbach's alpha (α) are shown after a reliability test is conducted. These findings calculated in one factor the association between each item and the sum of the rest of the items.

This method assumes that the overall score is accurate and therefore the association between the item and the total score implies convergent validity of the item. The factor analysis and reliability test results of all constructs are demonstrated from Table 4-3 to Table 4-8.

4.2.1 Factor Analysis of AI Data Quality Results

Table 4-3 indicates the results of exploratory factor analysis and reliability for AI Data Quality construct, which consists of four dimensions.

The empirical finding revealed that all of the standardized factor loadings are ranging from 0.889 to 0.944, which are statistically significant and greater than the 0.60 of the criteria guidelines. Moreover, the value of KMO=0.844 is larger than the general standard of (0.5), while the eigenvalue is higher than 1, whereas Cumulative Explained Variance and Cronbach's α (0.934) of this construct is above the accepted limit value of 0.60. The analysis also indicated that the item to total correlation ranged from 0.803 to 0.894 which is higher than criterion value of 0.5 as mentioned above.

As a result, the validity for all items of for construct of AI Data Quality is validated, and it is safe to proceed for further analysis.

Table 4-3 The results of factor analysis and reliability for AI Data Quality

Research Items	Factor Loading	KMO	Eigen-value	Cumulative Explained Variance	Item-to-total Correlation	Cronbach's Alpha (α)
AI Data Quality		**0.844**	**3.339**	**83.473%**		**0.934**
DQ4	0.944				0.894	
DQ2	0.929				0.869	
DQ1	0.891				0.807	
DQ3	0.889				0.803	

Source: This study

4.2.2 Factor Analysis of Service AI Results

Table 4-4 illustrates the results of factor analysis and reliability test including factor loading, KMO, eigenvalue, the percentage of variance explained, item-to-total correlation, and Cronbach's α for the measurement of Service AI construct, which consists of five dimensions.

The empirical result shown that all of the standardized factor loadings are ranging from 0.875 to 0.914, which are statistically significant and greater than the 0.60 of the criteria guidelines. In addition, the value of KMO=0.896 is also greater than the general standard of (0.5), while the eigenvalue (3.981) is higher than 1. This construct has a total of 79.617 percent explained variance, and Cronbach's α (0.936) is above the accepted limit value of 0.60. The analysis also showed that the item to total correlation ranged from 0.805 to 0.861 which is higher than criterion value of 0.5 as mentioned above, indicating that these are significant underlying factors.

As a result, the validity of all items for construct of Service AI is validated, and it is suitable to proceed for further analysis.

Table 4-4 The results of factor analysis and reliability for Service AI

Research Items	Factor Loading	KMO	Eigen-value	Cumulative Explained Variance	Item-to-total Correlation	Cronbach's Alpha (α)
Service AI		**0.896**	**3.981**	**79.617%**		**0.936**
SAI1	0.914				0.861	
SAI4	0.911				0.855	
SAI5	0.882				0.813	
SAI3	0.879				0.809	
SAI2	0.875				0.805	

Source: This study

4.2.3 Factor Analysis of Website Quality Results

Table 4-5 illustrates empirical results of factor analysis and reliability test including factor loading, KMO, eigenvalue, the percentage of variance explained, item-to-total correlation, and Cronbach's α for the measurement of Website Quality construct, which consists of four dimensions.

Based on the results compared with the criteria guideline, we can see that all of the standardized factor loadings are ranging from 0.865 to 0.943, which are above 0.60, the value of KMO=0.816 is greater than the 0.5, the eigenvalue=3.193 is higher than 1, while the item to total correlation ranging from 0.764 to 0.888 are greater than 0.5, and the Cronbach's α is 0.915 above 0.6.

The empirical results suggest that all measurement items are highly reliable and it is suitable to proceed for further analysis.

Table 4-5 The results of factor analysis and reliability for Website Quality

Research Items	Factor Loading	KMO	Eigen-value	Cumulative Explained Variance	Item-to-total Correlation	Cronbach's Alpha (α)
Website Quality		**0.816**	**3.193**	**79.830%**		**0.915**
WEBQ3	0.943				0.888	
WEBQ4	0.888				0.794	
WEBQ2	0.876				0.780	
WEBQ1	0.865				0.764	

Source: This study

4.2.4 Factor Analysis of Customer Satisfaction Results

Table 4-6 presents the findings of factor analysis and reliability testing for the evaluation of the Customer Satisfaction construct, which has five dimensions. The table shows some important judgement rules including factor loading, KMO, eigenvalue, percentage of variance explained, item-to-total correlation, and Cronbach's alpha.

According to the empirical findings, all of the standardized factor loadings range from 0.846 to 0.882, which are statistically significant and higher than the 0.60 threshold set by the criterion standards. Furthermore, KMO=0.880 is greater than the usual criterion of (0.5), and the eigenvalue (3.809) is bigger than 1. This construct has an overall explained variation of 76.172 percent, and Cronbach's alpha is higher than the recognized limit value of 0.60, while the item to total correlation ranging from 0.761 to 0.809 greater than 0.5 of the criterion value.

Based on this result, the validity of all items for construct of Customer Satisfaction is validated, and it is suitable to proceed for further analysis.

Table 4-6 The results of factor analysis and reliability for Customer Satisfaction

Research Items	Factor Loading	KMO	Eigen-value	Cumulative Explained Variance	Item-to-total Correlation	Cronbach's Alpha (α)
Customer Satisfaction		**0.880**	**3.809**	**76.172%**		**0.922**
CS5	0.882				0.809	
CS4	0.881				0.808	
CS1	0.880				0.808	
CS3	0.873				0.798	
CS2	0.846				0.761	

Source: This study

4.2.5 Factor Analysis of Trust Results

Table 4-7 presents the findings of factor analysis and reliability for the evaluation of the Trust construct, which consists of five dimensions for the

measurement. The table shows some important judgement rules including factor loading, KMO, eigenvalue, percentage of variance explained, item-to-total correlation, and Cronbach's alpha.

According to the empirical results, all of the standardized factor loadings are ranging between 0.898 and 0.938, whereas the value of KMO is 0.879, and the eigenvalue is 4.192 with the overall explained variation of 83.830 percent, and Cronbach's alpha is 0.952, while the item to total correlation ranging from 0.841 to 0.899, indicating that all of these values are greater than the criterion values.

Based on this result, the validity of all items for construct of Trust is validated, and it is suitable to proceed for further analysis.

Table 4-7 The results of factor analysis and reliability for Trust

Research Items	Factor Loading	KMO	Eigen-value	Cumulative Explained Variance	Item-to-total Correlation	Cronbach's Alpha (α)
Trust		**0.879**	**4.192**	**83.830%**		**0.952**
TR5	0.938				0.899	
TR4	0.925				0.880	
TR3	0.913				0.862	
TR1	0.903				0.849	
TR2	0.898				0.841	

Source: This study

4.2.6 Factor Analysis of Purchase Intention Results

Table 4-8 presents the empirical results of factor analysis and reliability for the evaluation of the Purchase Intention construct, which consists with five dimensions for the measurement. The table shows some important judgement rules such as factor

loading, KMO, eigenvalue, percentage of variance explained, item-to-total correlation, and Cronbach's alpha.

The results illustrate that all of the standardized factor loadings are ranging from 0.853 and 0.890, whereas the value of KMO is 0.879, and the eigenvalue is 3.823 with the overall explained variation of 76.468 percent, and Cronbach's alpha is 0.923, while the item to total correlation ranging from 0.821 to 0.769, indicating that all of these values are above than the criterion values compared to each judgement rule value.

Based on this result, the validity of all items for construct of Purchase Intention is validated, and it is suitable to proceed for further analysis.

Table 4-8 The results of factor analysis and reliability for Purchase Intention

Research Items	Factor Loading	KMO	Eigen-value	Cumulative Explained Variance	Item-to-total Correlation	Cronbach's Alpha (α)
Purchase Intention		**0.879**	**3.823**	**76.468%**		**0.923**
PI4	0.890				0.821	
PI5	0.889				0.819	
PI1	0.882				0.811	
PI2	0.858				0.776	
PI3	0.853				0.769	

Source: This study

4.3 Independent Sample t-test results

This part aims to identify the differences between male and female of the respondents among the six constructs including AI Data Quality (DQ), Service AI (SAI), Website Quality (WEBQ), Customer Satisfaction (CS), Trust (TR), and Purchase Intention (PI).

The primary data were conducted for data analysis by using the independent sample t-test method. There are some important criteria rules for checking with the results such as t-value and p-value. The significant results were confirmed, if p-value

is less than 0.05, and t-value greater than 1.96. However, all of p-value are higher than 0.05, while the t-value are lower than the criterion value of (1.96).

Based on the results, we concluded that there are no differences between male and female. The results of independent sample t-test were shown in Table 4-9.

Table 4-9 The results of t-test comparison of each construct scores by gender

Construct	Male N=172	Female N=152	t-value	p-value
AI Data Quality	4.478	4.480	-0.033	0.973
Service AI	4.390	4.416	-0.423	0.673
Website Quality	4.497	4.500	-0.052	0.959
Customer Satisfaction	4.487	4.450	0.639	0.523
Trust	4.410	4.454	-0.710	0.478
Purchase Intention	4.448	4.432	0.267	0.789

Note: $*p<0.05$, $**p<0.01$, $***p<0.001$

Source: This study

4.4 One Way Analysis of Variance (ANOVA) Results

To compare the dissimilarity of the dimensions' mean score based on respondent's ages, educational level, and online shopping frequencies, the one-way ANOVA was conducted. This method is widely used to studies involving two or more groups, while the independent sample t-test method can contribute within only two groups. With the aim of gaining further understanding, one-way ANOVA method was served to find the significant difference factors of the construct among each group. The results of the comparison between each group among the constructs were separated as below.

4.4.1 The Comparison of Age Group Level Among the Constructs

There were no any factors are statistically significant among the age group levels compared to all constructs. AI Data Quality (DQ) was checked with results of

ANOVA (F = 0.824, p = 0.440), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.440, $p > 0.05$. Conclude that there were no significant differences between the mean value of AI Data Quality and Age group.

Service AI (SAI) was checked with results of ANOVA (F = 0.537, p = 0.585), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.585, $p > 0.05$. Conclude that there were no significant differences between the mean value of Service AI and Age group.

Website Quality (WEBQ) was checked with results of ANOVA (F = 1.822, p=0.163), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.163, $p > 0.05$. So, we conclude that there were no significant differences between the mean value of Website Quality and Age group.

Customer Satisfaction (CS) was checked with results of ANOVA (F = 0.020, p=0.980), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.980, $p > 0.05$. Conclude that there were no significant differences between the mean value of Customer Satisfaction and Age group.

Trust (TR) was checked with results of ANOVA (F = 0.415, p = 0.661), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.661, $p > 0.05$. Conclude that there were no significant differences between the mean value of Trust and Age group.

Purchase Intention (PI) was checked with results of ANOVA (F = 0.175, p=0.840), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.840, $p > 0.05$. Conclude that there were no significant differences between the mean value of Purchase Intention and Age group. (See Table 4-10)

Table 4-10 Results of Age Comparison Among the Constructs

Variables	Age			F-value	p-value	Scheffe /T2 /T3
	18-25 N=130 (1)	26-35 N=114 (2)	36-45 N=80 (3)			
DQ	4.4865	4.4320	4.5344	0.824	0.440	NS
SAI	4.4292	4.4088	4.3475	0.537	0.585	NS
WEBQ	4.5615	4.4715	4.4344	1.822	0.163	NS
CS	4.4769	4.4649	4.4650	0.020	0.980	NS
TR	4.4585	4.3947	4.4375	0.415	0.661	NS
PI	4.4585	4.4175	4.4425	0.175	0.840	NS

Note: *p<0.05, **p<0.01, ***p<0.001
DQ=AI Data Quality, SAI=Service AI, WEBQ=Website Quality, CS=Customer Satisfaction, TR=Trust, and PI=Purchase Intention
Source: This study

4.4.2 The Comparison of Education Group Level Among the Constructs

There were no any factors are statistically significant among the Education group levels compared to all constructs. AI Data Quality (DQ) was checked with results of ANOVA (F = 0.856, p = 0.464), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.464, $p>0.05$. Conclude that there were no significant differences between the mean value of AI Data Quality and Education group.

Service AI (SAI) was checked with results of ANOVA (F = 0.643, p = 0.588), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.588, $p > 0.05$. Conclude that there were no significant differences between the mean value of Service AI and Education group.

Website Quality (WEBQ) was checked with results of ANOVA (F = 0.636, p=0.592), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.592, $p > 0.05$. So, we conclude that there

were no significant differences between the mean value of Website Quality and Education group.

Customer Satisfaction (CS) was checked with results of ANOVA (F = 0.899, $p = 0.442$), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.442, $p > 0.05$. Conclude that there were no significant differences between the mean value of Customer Satisfaction and Education group.

Trust (TR) was checked with results of ANOVA (F = 0.644, $p = 0.587$), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.587, $p > 0.05$. Conclude that there were no significant differences between the mean value of Trust and Education group.

Purchase Intention (PI) was checked with results of ANOVA (F = 0.302, $p=0.824$), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.824, $p > 0.05$. Conclude that there were no significant differences between the mean value of Purchase Intention and Education group. (See Table 4-11)

Table 4-11 The Comparison of Education Among the Constructs Results

Variables	Education				F-value	p-value	Scheffe /T2 /T3
	N=13 (1)	N=204 (2)	N=77 (3)	N=30 (4)			
DQ	4.3462	4.4583	4.5130	4.5917	0.856	0.464	NS
SAI	4.5077	4.3971	4.4390	4.2933	0.643	0.588	NS
WEBQ	4.5000	4.5221	4.4773	4.3917	0.636	0.592	NS
CS	4.3538	4.5049	4.4078	4.4400	0.899	0.442	NS
TR	4.5385	4.4520	4.3896	4.3467	0.644	0.587	NS
PI	4.3846	4.4618	4.4026	4.4133	0.302	0.824	NS

Note: *p<0.05, **p<0.01, ***p<0.001

(1) = High School or Lower, (2) = Bachelor Degree, (3) = Master Degree, (4) = Ph.D.

Source: This study

4.4.3 The Comparison of Frequency Purchase Online Among the Constructs

The empirical results in Table 4-12 shown that there is no any significant difference between the group levels of Frequency Purchase Online and each construct. AI Data Quality (DQ) was checked with results of ANOVA (F = 1.262, p=0.280), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.280, $p > 0.05$. Conclude that there were no significant differences between the mean value of AI Data Quality and the group levels of Frequency Purchase Online.

Service AI (SAI) was checked with results of ANOVA (F = 1.647, $p = 0.147$), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.147, $p > 0.05$. Conclude that there were no significant differences between the mean value of Service AI and the group levels of Frequency Purchase Online.

Website Quality (WEBQ) was checked with results of ANOVA (F = 1.068, p=0.378), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.378, $p > 0.05$. So, we conclude that there were no significant differences between the mean value of Website Quality and the group levels of Frequency Purchase Online.

Customer Satisfaction (CS) was checked with results of ANOVA (F = 1.952, $p = 0.086$), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.086, $p > 0.05$. Conclude that there were no significant differences between the mean value of Customer Satisfaction and the group levels of Frequency Purchase Online.

Trust (TR) was checked with results of ANOVA (F = 1.216, $p = 0.301$), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.301, $p > 0.05$. Conclude that there were no significant differences between the mean value of Trust and the group levels of Frequency Purchase Online.

Purchase Intention (PI) was checked with results of ANOVA (F = 1.689, p=0.137), the F statistic generated would not have actually occurred if the null hypothesis was true with the probability of 0.137, $p > 0.05$. Conclude that there were no significant differences between the mean value of Purchase Intention and the group levels of Frequency Purchase Online.

Table 4-12 The comparison of Frequency Purchase Online group among the constructs results

Constructs	Frequency Purchase Online						F-value	p-value	Scheffe /T2 /T3
	(1)	(2)	(3)	(4)	(5)	(6)			
DQ	3.750	4.581	4.471	4.480	4.444	4.357	1.262	0.280	NS
SAI	4.200	4.306	4.461	4.325	4.469	4.057	1.647	0.147	NS
WEBQ	4.125	4.524	4.509	4.392	4.550	4.321	1.068	0.378	NS
CS	4.200	4.426	4.459	4.435	4.573	4.029	1.952	0.086	NS
TR	4.000	4.390	4.393	4.412	4.538	4.286	1.216	0.301	NS
PI	3.800	4.387	4.438	4.412	4.533	4.143	1.689	0.137	NS

Note: *p<0.05, **p<0.01, ***p<0.001

(1) = Once a week, (2) = Once a month, (3) = Several times a month,

(4) = Once a year, (5) = Several times a year, (6) = Less than once a year

Source: This study

4.5 The Relationship of the Research Constructs

In this section, bivariate correlation is used to estimate different correlation coefficients and to evaluate the validity of a relationship between two variables. According to Perinetti et al., (2019) shown that the level of relationship between variables is determined by correlation analysis, however it does not define which variable is the cause and which is the consequence.

4.5.1 The Correlation Between each Construct Results

The findings in Table 4-13 shown that, the Website Quality has the highest mean (4.498) with a standard deviation of 0.506, while the lowest mean was Service AI (4.402) with a standard deviation of 0.561. Correlation coefficients is used to visualize bivariate correlations between the six variables. All six constructs are significantly positively connected with one another, according to the correlation analysis of each variable.

Firstly, this study discusses the relationship among the variables which are used for testing the hypothesis. AI Data Quality is significant positively correlated with the variables of Service AI ($r = 0.395$, $p < 0.001$), and Customer Satisfaction ($r = 0.335$, $p < 0.001$), while Service AI, and Website Quality also found significant positively correlated with Customer Satisfaction ($r = 0.522$, $p < 0.001$; $r = 0.489$, $p < 0.001$).

Secondly, the empirical results indicated that Customer Satisfaction has significant positively correlated with Trust ($r = 0.355$, $p < 0.001$), and Purchase Intention ($r = 0.715$, $p < 0.001$), while Trust has significant positively correlated with Purchase Intention ($r = 0.386$, $p < 0.001$) as well.

While comparing the results of the correlation among these six variables, one of them has a strongest relationship which is Customer Satisfaction and Purchase Intention ($r=0.715$, $p<0.001$). (See Table 4-13)

Table 4-13 Results of the correlation between each construct

Variables	Mean	SD	DQ	SAI	WEBQ	CS	TR	PI
DQ	4.479	0.553	1					
SAI	4.402	0.561	0.395***	1				
WEBQ	4.498	0.506	0.343***	0.612***	1			
CS	4.470	0.527	0.335***	0.522***	0.489***	1		
TR	4.431	0.550	0.420***	0.601***	0.524***	0.355***	1	
PI	4.440	0.540	0.320***	0.561***	0.548***	0.715***	0.386***	1

1. *p<0.05, **p<0.01, ***p<0.001, r = Sample correlation coefficient.

2. DQ=AI Data Quality, SAI=Service AI, WEBQ=Website Quality, CS=Customer Satisfaction, TR=Trust, and PI=Purchase Intention

Source: This study

4.5.2 Regression Analysis Results

In this section, simple and multiple regressions are conducted to obtain results of the relationship effect between dependent and independent variables. Generally, simple regression is the study of relationship between two variables, whereas partial or multiple correlation is the study of relationship between more than two variables.

4.5.2.1 The influence factor(s) on Service AI and Customer Satisfaction

Model 1 in table 4-14 indicated the results of predictor variables sequentially, where the multiple correlation coefficient (R) is 0.395, $R^2 = 0.156$ and the adjusted R^2 is 0.153, while the F-value=59.403 which is significant, meaning that 15.3% of the variance in Service AI can be predicted from AI Data Quality (β=0.395, p<0.001). This indicates that when AI Data Quality is a significant predictor of Service AI. Another important part of the output is to check the criterion values (mentioned in Chapter three) with the results of t-value (7.707), D-W (1.913), Tolerance (1.000), and VIF (1.000), presented proof that it has a good fit result. The hypothesis test if AI Data Quality carries as significant impact on Service AI. The dependent variable Service AI was regressed on predicting AI Data Quality to test the hypothesis H1.

Additionally, results of **Model 2** in table 4-14 presented the AI Data Quality is significantly predicted Customer Satisfaction, while the results of F=40.719, p<0.001, indicating that the AI Data Quality can play a significant role in shaping Customer Satisfaction (β=0.335, p<0.001). Importantly, the value of R^2=0.112 and the adjusted R^2=0.110, which can explain 11.0% of the variance in Customer Satisfaction. Another important part of the output is to check the criterion values (mentioned in Chapter

three) with the results of t-value (6.381), D-W (1.735), Tolerance (1.000), and VIF (1.000), presented proof that it has a good fit result.

The results clearly shows that AI Data Quality (independent variable) is significant positively affected to dependent variables of Service AI, and also Customer Satisfaction, thus hypothesis H1, and H2 are supported.

Model 3 in table 4-14 indicated the results of predictor variables sequentially, where the multiple correlation coefficient (R) is 0.522, $R^2 = 0.273$ and the adjusted R^2 is 0.270, while the F-value=120.660, p<0.001, meaning that 27.0% of the variance in Customer Satisfaction can be predicted from Service AI (β=0.522, p<0.001). Another important part of the output is to check the criterion values (mentioned in Chapter three) with the results of t-value (10.985), D-W (1.797), Tolerance (1.000), and VIF (1.000), presented proof that it has a good fit result. The empirical results clearly shown that Service AI (independent variable) is significant positively affected to dependent variable of Customer Satisfaction, thus hypothesis H3 is supported.

Model 4 in table 4-14 indicated the results of predictor variables sequentially, where the multiple correlation coefficient (R) is 0.489, $R^2 = 0.239$ and the adjusted R^2 is 0.237, while the F-value=101.085, p<0.001, meaning that 23.7% of the variance in Customer Satisfaction can be predicted from Website Quality (β=0.489, p<0.001). Another important part of the output is to check the criterion values (mentioned in Chapter three) with the results of t-value (10.054), D-W (1.808), Tolerance (1.000), and VIF (1.000), presented proof that it has a good fit result. The empirical results clearly shown that Website Quality (independent variable) is significant positively affected to dependent variable of Customer Satisfaction, thus hypothesis H4 is supported.

Finally, the testing of relationship between multi-independent variables (AI Data Quality, Service AI, and Website Quality) and dependent variable (Customer Satisfaction) is presented in **Model 5** in table 4-14. The results showed that R=0.575, R^2=0.331 and the adjusted R^2=0.325, meaning that 32.5% of the variables in Customer Satisfaction can be predicted from the independent variables of AI Data

Quality, Service AI, and Website Quality. The empirical results also shown that the beta (β) value of AI Data Quality is reduced from 0.335 to 0.123 and the p-value was adjusted from 0.000 to 0.015, resulting in the flag being lowered to one star (*).

While the beta (β) value of Service AI and Website Quality also has decreased, it still maintains the three-star level (***). Another important part of the output is to check the criterion values (mentioned in Chapter three) with the results of t-value (range from 2.438-5.366), Tolerance (range from 0.587-0.828), and VIF (range from 1.208-1.704), presented proof that it has good fit results.

Therefore, the statistically significantly positive coefficients suggested that there is a higher degree relationship between AI Data Quality and Service AI, as well as factors AI Data Quality, Service, and Website Quality might lead to a higher degree of Customer Satisfaction fit. (See Table 4-14)

Table 4-14 Results of influence factor(s) on Service AI and Customer Satisfaction

Independent Factors	Dependent Factors				
	Service AI	Customer Satisfaction			
	Model 1 Beta (β)	Model 2 Beta (β)	Model 3 Beta (β)	Model 4 Beta (β)	Model 5 Beta (β)
AI Data Quality	0.395***	0.335***			0.123*
Service AI			0.522***		0.320***
Website Quality				0.489***	0.251***
R	0.395	0.335	0.522	0.489	0.575
R^2	0.156	0.112	0.273	0.239	0.331
Adj-R^2	0.153	0.110	0.270	0.237	0.325
F-Value	59.403	40.719	120.660	101.085	52.732
p-Value	0.000	0.000	0.000	0.000	0.015;0.000;0.000
t-Value	7.707	6.381	10.985	10.054	2.438;5.366;4.292
D-W	1.913	1.735	1.797	1.808	1.866
Tolerance	1.000	1.000	1.000	1.000	0.828;0.587;0.613
Max VIF	1.000	1.000	1.000	1.000	1.208;1.704;1.631

Note: *p<0.05, **p<0.01, ***p<0.001

Source: This study

4.5.2.2 The influence factor(s) on Trust and Purchase Intention

Table 4-15 indicated the results of predictor variables sequentially, where the multiple correlation coefficient (R) is 0.355 ($R^2 = 0.126$) and the adjusted R^2 is 0.123, while the F-value=46.302 which is significant, meaning that 12.3% of the variance in Trust can be predicted from Customer Satisfaction. This indicates that when Customer Satisfaction is a significant predictor of Trust, $p<0.001$. The hypothesis test if Customer Satisfaction carries as significant impact on Trust. The dependent variable Trust was regressed on predicting variable Customer Satisfaction to test the hypothesis H6.

Additionally, Customer Satisfaction is significantly predicted Purchase Intention, while the results of F=336.492, $p<0.001$, indicating that the Customer Satisfaction can play a significant role in shaping Purchase Intention ($\beta=0.715$, $p<0.001$). These results clearly direct the positive influence of the Customer Satisfaction. Importantly, the value of $R^2=0.511$ and the adjusted $R^2=0.509$, which can explain 50.9% of the variance in Purchase Intention, while the Trust (independent variable) is significant positively affected to dependent variable of Purchase Intention with the value of ($\beta=0.386$, $p<0.001$).

Finally, the equation of Customer Satisfaction and Trust regressed to Purchase Intention ($\beta=0.661$, $p<0.001$; $\beta=0.151$, $p<0.001$). The results showed that R2=0.729 and the adjusted-$R^2= 0.528$, meaning that 52.8% of the variance in Purchase Intention can be predicted from Customer Satisfaction and Trust. Furthermore, the beta value of Purchase Intention is reduced from $\beta=0.715$ to $\beta=0.151$, while both Customer Satisfaction and Trust are significantly related to Purchase Intention. Another important part of the output is to check the criterion values (mentioned in Chapter three) with the results of t-value (range from 3.699-18.344), Tolerance (range from 0.874-1.000), and VIF (range from 1.000-1.144), presented proof that it has a good fit result.

Therefore, the statistically significantly positive coefficients suggest that a higher degree of Customer Satisfaction and Trust relationship might lead to a higher degree of Purchase Intention fit. Thus, hypothesis H5, H6, and H7 were supported.

Table 4-15 Results of influence factor(s) on Trust and Purchasing Intention

Independent Factors	Dependent Factors			
	Trust	Purchase Intention		
	Model 6 Beta (β)	Model 7 Beta (β)	Model 8 Beta (β)	Model 9 Beta (β)
Customer Satisfaction	0.355***	0.715***		0.661***
Trust			0.386***	0.151***
R	0.355	0.715	0.386	0.729
R^2	0.126	0.511	0.149	0.531
Adj-R^2	0.123	0.509	0.146	0.528
F-Value	46.302	336.492	56.263	181.715
p-Value	0.000	0.000	0.000	0.000;0.000
t-Value	6.805	18.344	7.501	16.175;3.699
D-W	1.898	1.779	1.682	1.784
Tolerance	1.000	1.000	1.000	0.874
Max VIF	1.000	1.000	1.000	1.144

Note: *$p<0.05$, **$p<0.01$, ***$p<0.001$

Source: This study

4.5.3 PLS-SEM Results

4.5.3.1 Evaluation of Measurement Model Results

PLS-SEM provides for a great deal of flexibility in form of data priorities and the specification of relationships between constructs and measurement items (Sarstedt et al., 2017). This method is used to simultaneously visualize and confirm a large number the variables from existing pathways. It is suitable for structural equation models with a series of cause-and-effect relationships and many latent variables (Hair et al., 2017).

The analysis of the PLS-SEM outcomes starts with a discussion of the measurement models. To meet the requirement and validating the reliability of the measurement models (AI Data Quality, Service AI, Website Quality, Customer Satisfaction, Trust, and Purchase Intention), some important variables from the empirical results were confirmed with the suggested of the standard values. Figure 4-1 shown below presented the estimation of beta (β) value of the structure model.
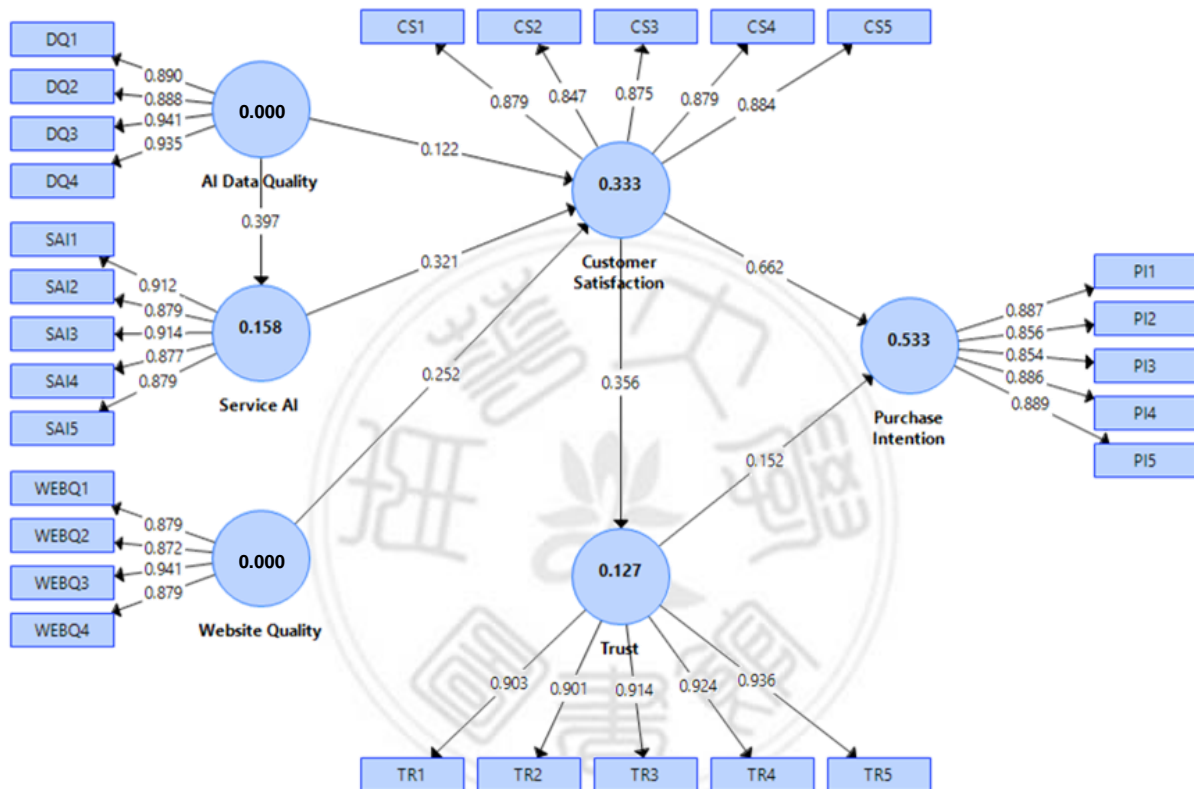
Figure 4-1 The parametric estimate (β) value of Structure Model

(Source: Original study)

Based on the empirical results shown in Table 4-16, indicating that the Cronbach's alpha (α) coefficients for reliability differing from 0.915 to 0.952, and the lowest value of CR reached to 0.940 was greater than the criterion value of 0.7. The results of AVEs values were ranged from 0.762 to 0.838, that was almost higher than the suggested standard value 0.5 for measuring the convergence of research construct.

Table 4-16 Evaluation of the Measurement Model Result

Construct	AVE	CR	Cronbach's Alpha (α)	R^2
AI Data Quality	0.835	0.953	0.934	-
Service AI	0.796	0.951	0.936	0.158
Website Quality	0.798	0.940	0.915	-
Customer Satisfaction	0.838	0.941	0.922	0.333
Trust	0.762	0.963	0.952	0.127
Purchase Intention	0.765	0.942	0.923	0.533

Source: This study

Testing discriminant validity has now become a widely recognized criterion for assessing correlations between latent variables. When two or more distinct concepts are evaluated, the discriminant validity analysis should show a poor correlation between the measurements. The discriminant validity evaluation aims to make sure that a subjective construct in the PLS path model has the strongest correlations with its own factors (Hair et al., 2022).

To examine discriminant validity, the HTMT criterion was recommended if its result values below 0.90, meaning that it has been established between two reflective constructs (Ringle et al., 2015). Table 4-17 illustrates the results of discriminant validity of alternative model, and table 4-18 indicates the result of HTMT.

Table 4-17 Discriminant validity of Alternative Model

	(1)	(2)	(3)	(4)	(5)	(6)
AI Data Quality (1)	**0.914**					
Customer Satisfaction (2)	0.337	**0.873**				
Purchase Intention (3)	0.321	0.716	**0.874**			
Service AI (4)	0.397	0.524	0.562	**0.892**		
Trust (5)	0.420	0.356	0.388	0.601	**0.916**	
Website Quality (6)	0.347	0.491	0.551	0.613	0.526	**0.893**

Table 4-18 Results of HTMT discriminant validity testing

	(1)	**(2)**	**(3)**	**(4)**	**(5)**
AI Data Quality (1)					
Customer Satisfaction (2)	0.362				
Purchase Intention (3)	0.345	0.775			
Service AI (4)	0.423	0.562	0.604		
Trust (5)	0.445	0.379	0.412	0.636	
Website Quality (6)	0.371	0.531	0.597	0.661	0.562

Note: AI Data Quality = (1), Customer Satisfaction = (2), Purchase Intention = (3)
Service AI = (4), Trust = (5), Website Quality = (6)
Source: This study

4.5.3.2 Evaluation of Structural Model Results

Beside the regression analysis used in SPSS, this study also verified the hypothesis testing used in Smart PLS. The structural evaluation was conducted by using predicted variables pathway among proposed hypotheses. A study sample of 324 respondents and a bootstrapping resampling approach with 5000 subsamples were used to identify the significance of each pathway coefficient in the context of hypothesis testing. The direct effect is the path coefficient between an independent variable and a dependent variable. The study can generate a distribution of the parameter under investigation through using the subsamples from bootstrapping, allowing us to determine the statistical significance of the original indicator weights. More specifically, it provides the calculation of t-values and p-values.

Table 4-19 revealed the results of direct effects of the hypothesis. According to the empirical results, path coefficient between independent variables and dependent variables in this study are supported. This was confirmed that hypothesis

H1: AI Data Quality has positive influence on Service AI with the β=0.397, t-value=6.606, p-value<0.001. Hypothesis **H2**: AI Data Quality has positive influence on Customer Satisfaction, resulting with the β=0.122, t-value=2.127, p-value<0.05. About the hypothesis **H3**: Service AI has positive influence on Customer Satisfaction, also verified resulting with the β=0.321, t-value=4.743, p-value<0.001. Hypothesis **H4**: Website Quality has positive influence on Customer Satisfaction, with the β=0.252, t-value=3.850, p-value<0.001. Therefore, H1, H2, H3, H4 were accepted respectively. In addition, hypothesis **H5**: Customer Satisfaction has positive influence on Purchase Intention, with the β=0.662, t-value=16.048, p-value<0.001, hypothesis **H6**: Customer Satisfaction has positive influence on Trust, with the β=0.356, t-value=5.901, p-value<0.001. And hypothesis **H7**: Trust has positive influence on Purchase Intention, with the β=0.152, t-value=3.457, p-value<0.01. As a result, the hypothesis H5, H6, and H7 were all accepted.

Table 4-19 Results of the direct effects

Hypothesis	Path	Standardized Estimate (β)	t-value	p-value	Remarks
H1	AI Data Quality ➜ Service AI	0.397	6.606	0.000	accepted
H2	AI Data Quality ➜ Customer Satisfaction	0.122	2.127	0.033	accepted
H3	Service AI ➜ Customer Satisfaction	0.321	4.743	0.000	accepted
H4	Website Quality ➜ Customer Satisfaction	0.252	3.850	0.000	accepted
H5	Customer Satisfaction ➜ Purchase Intention	0.662	16.048	0.000	accepted
H6	Customer Satisfaction ➜ Trust	0.356	5.901	0.000	accepted
H7	Trust ➜ Purchase Intention	0.152	3.457	0.001	accepted

Source: This study

4.5.3.3 Testing the Mediating Effect of Service AI between AI Data Quality and Customer Satisfaction

The PLS-SEM technique and the bootstrap procedure in Smart PLS 3.0 resulted in the direct and total indirect effect for the mediation investigation (Hair et al., 2017). In the current study has employed PLS-SEM to explore the mediating effect of Service AI on the relationship of AI Data Quality and Customer Satisfaction. Service AI was discovered as a significant mediator to support the effect of AI Data Quality on Customer Satisfaction. Figure 4-2 shown the mediation of Service AI between AI Data Quality and Customer Satisfaction.
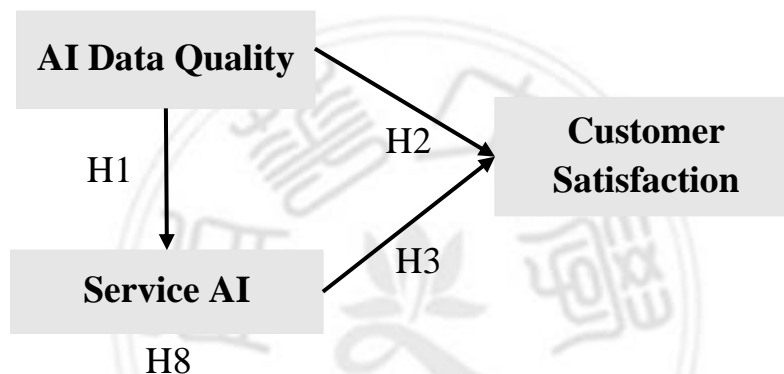
Figure 4-2 The Mediating Effect of Service AI between AI Data Quality and Customer Satisfaction

Table 4-20 shown the results from the estimation of mediation effect of Service AI between AI Data Quality and Customer Satisfaction. The study initial to show that AI Data Quality had a positive effect on Customer Satisfaction by ignoring the mediator of Service AI, which resulted with $\beta=0.122$, t-value=2.127, p-value < 0.05. Besides that, AI Data Quality was directly affected on Service AI ($\beta=0.397$, t-value=6.606, p-value < 0.001). And the Service AI was confirmed of having an effect on Customer Satisfaction ($\beta=0.321$, t-value=4.743, p-value < 0.001). Thus, this study identified Service AI plays important role as the major of mediator to endorse the influence of AI Data Quality on Customer Satisfaction ($\beta=0.127$, t-value=4.008, p-value < 0.001).

Based on the section 3.7.6 mentioned in chapter three and the current results, this led to the final conclusion that Service AI is partially mediated the influence of AI Data Quality on Customer Satisfaction. As a result, H8 was supported.

Table 4-20 Results Testing for Mediation of Service AI

Hypothesis	Path	Standardized Estimate (β)	t-value	p-value	Remarks
H8	AI Data Quality ➔ Customer Satisfaction	0.122	2.127	0.033	Significant
	AI Data Quality ➔ Service AI	0.397	6.606	0.000	Significant
	Service AI ➔ Customer Satisfaction	0.321	4.743	0.000	Significant
	AI Data Quality ➔ Service AI ➔ Customer Satisfaction	0.127	4.008	0.000	Significant

Source: This study

4.5.3.4 Testing the Mediating Effect of Trust between Customer Satisfaction and Purchase Intention

This section provides the testing results for the mediation effect of Trust between the relationship of Customer Satisfaction and Purchase Intention. Trust was discovered as a significant mediator in the current study to support the effect of Customer Satisfaction on Purchase Intention. Figure 4-3 clearly demonstrates the importance of Trust as a mediator between Customer Satisfaction and Purchase Intention.
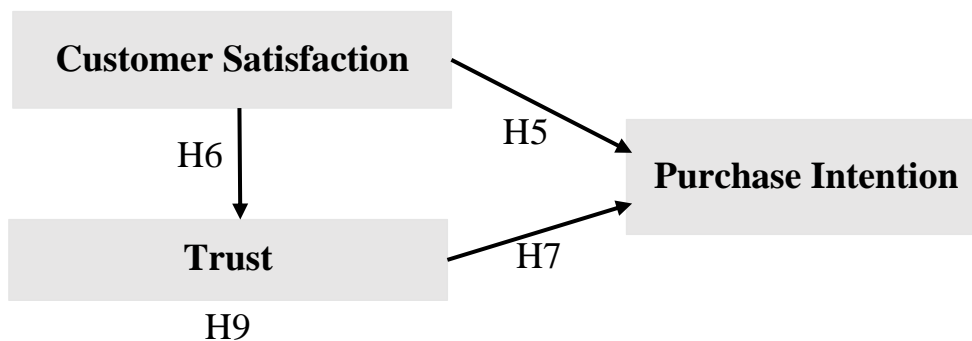
Figure 4-3 The Mediating Effect of Trust between Customer Satisfaction and Purchase Intention

Table 4-21 shown the results from the estimation of mediation effect of Trust between Customer Satisfaction and Purchase Intention. The study initial to show that Customer Satisfaction had a positive effect on Purchase Intention by ignoring the mediator, which resulted with β=0.716, t-value=21.084, p-value $<$ 0.001. Besides that, Customer Satisfaction was directly affected on Trust (β=0.356, t-value=5.901, p-value $<$ 0.001). And Trust was confirmed of having an effect on Purchase Intention (β=0.152, t-value=3.457, p-value $<$ 0.01). Thus, this study identified Trust plays crucial role as the major mediator to endorse the influence of Customer Satisfaction on Purchase Intention (β=0.054, t-value=2.681, p-value $<$ 0.01).

Based on the mentions in section 3.7.6 and the current results, this led to the final conclusion that Trust is partially mediated the influence of Customer Satisfaction on Purchase Intention. As a result, H9 was supported.

Table 4-21 Results Testing for Mediation of Trust

Hypothesis	Path	Standardized Estimate (β)	t-value	p-value	Remarks
H9	Customer Satisfaction ➔ Purchase Intention	0.662	16.048	0.000	Significant
	Customer Satisfaction ➔ Trust	0.356	5.901	0.000	Significant
	Trust ➔ Purchase Intention	0.152	3.457	0.001	Significant
	Customer Satisfaction ➔ Trust ➔ Purchase Intention	0.054	2.681	0.007	Significant

Source: This study

CHAPTER FIVE
CONCLUSION

This chapter provides a thorough research conclusion, management implications, limitations, and recommendations for more research. The first section describes the summary of proposed hypotheses; also, the study results from chapter four are reviewed. Managerial recommendations are highlighted as a result among those analyses. Finally, future research directions and study limitations are also discussed.

5.1 Conclusions

5.1.1 Hypothesis Snippet

The study model was built using contingency theories that were supported the research model framework, as shown in figure 3-1 to highlight the path influence of the variables on one another. In order to have clear evidence to support our research objectives, data collected from a random online survey were implicated in a number of evaluation procedures, including factor analysis and reliability testing, independent sample t-tests, one-way analyses of variance (ANOVA), regression analysis, and PLS-SEM. All primary nine hypotheses were established and evaluated using a variety of statistical approaches and two statistical analysis programs including SPSS 25 and Smart PLS 3.0. The table 5-1 presented the summary from the study results provided by Smart PLS 3.0 software which was highlighted the final explanations of its finding belong to the proposed hypotheses framework.

Table 5-1 Summary of Research Hypotheses

Hypotheses	Relationship	Hypotheses Statement	Assessment
H1	AI Data Quality ➔ Service AI	AI Data Quality has positive influences on Service AI.	**Significant** - Beta = 0.397 - t-value = 6.606 - p-value < 0.001

Hypotheses	Relationship	Hypotheses Statement	Assessment
H2	AI Data Quality → Customer Satisfaction	AI Data Quality has positive influences on Customer Satisfaction.	▪ **Significant** ▪ Beta = 0.122 ▪ t-value = 2.127 ▪ p-value < 0.05
H3	Service AI → Customer Satisfaction	Service AI has positive influences on Customer Satisfaction.	▪ **Significant** ▪ Beta = 0.321 ▪ t-value = 4.743 ▪ p-value < 0.001
H4	Website Quality → Customer Satisfaction	Website Quality has positive influences on Customer Satisfaction.	▪ **Significant** ▪ Beta = 0.252 ▪ t-value = 3.850 ▪ p-value < 0.001
H5	Customer Satisfaction → Purchase Intention	Customer Satisfaction has positive influences on Purchase Intention.	▪ **Significant** ▪ Beta = 0.662 ▪ t-value=16.048 ▪ p-value < 0.001
H6	Customer Satisfaction → Trust	Customer Satisfaction has positive influences on Trust.	▪ **Significant** ▪ Beta = 0.356 ▪ t-value = 5.901 ▪ p-value < 0.001
H7	Trust → Purchase Intention	Trust has positive influences on Purchase Intention.	▪ **Significant** ▪ Beta = 0.152 ▪ t-value = 3.457 ▪ p-value < 0.01
H8	AI Data Quality → Service AI → Customer Satisfaction	Service AI mediates the relationships between AI Data Quality and Customer Satisfaction.	▪ **Significant** ▪ Beta = 0.127 ▪ t-value =4.008 ▪ p-value < 0.001
H9	Customer Satisfaction → Trust → Purchase Intention	Trust mediates the relationships between Customer Satisfaction and Purchase Intention.	▪ **Significant** ▪ Beta = 0.054 ▪ t-value =2.681 ▪ p-value < 0.01

Source: This study

5.1.2 The Conclusion of Research Objectives

The aims of this study were to investigate the relationship between the variables illustrated in the research model framework and to determine the impact of AI on customer satisfaction toward purchase intention. In addition, it intends to explore the role of Service AI in mediating the relationship between AI Data Quality and Customer Satisfaction; and also, the role of Trust in mediating the relationship between Customer Satisfaction and Purchase Intention.

Within the existing empirical results were confirmed that AI Data Quality has significant influence on Service AI. Reflecting to the studies by Davenport et al., (2020) and Lee, (2020) were mentioned that AI can have ability to perform the task by relying on the amount of data, which mean AI needs the quality of data in order to provide services to the user or generating the right product suggestion to the customer in the online shopping context. The empirical results also provided a clearly evidence that both AI Data Quality and Service AI have significant influence on Customer Satisfaction. The previous research by Prentice et al., (2020b) found that both AI information and AI services or tools was positively and significantly effect on customer satisfaction. This is reflected to our study objectives and the section of literature review. Hence, this study defined AI Data Quality as the data that are used by AI to utilize and automate in terms of managing the data in delivering new efficient data.

Besides this, as the statistical evidence revealed, Website Quality has a positive and significant influence on Customer Satisfaction, which is consistent with earlier research by Rita et al., (2019) and Iman et al., (2019). According to Belanche et al., (2012) suggested that, a user-friendly website is directly affecting customer satisfaction. This mean that, when purchasing goods or services online, shoppers who believe the website seems to be of good quality are more satisfied with their purchase than those who think it is of bad quality. Similarly, this study results found that, Customer Satisfaction has positive influence on Purchase Intention, which is matched to the studied by Belanche et al., (2012) and Rita et al., (2019).

Furthermore, the mediation factors of Service AI and Trust were evaluated using the PLS-SEM approach to determine whether they are supported or not. The mediation testing procedure used PLS-SEM in this study, which was adopted from Hair et al., (2017). Our empirical results indicated that, Service AI has a partial mediating influence on the relationship between AI Data Quality and Customer Satisfaction. However, we cannot find any evidence from previous studies which investigated the role of Service AI as a mediation effect between the relationship of AI Data Quality and Customer Satisfaction. Thus, this study results could provide evidence that Service AI significantly mediated the relationship between AI Data Quality and Customer Satisfaction.

In addition, the study results also found the factor of Trust has a partial mediating influence on the relationship between Customer Satisfaction and Purchase Intention. Refer to the study by Loureiro et al., (2014) also supported that trust has a significant mediation effect between customer satisfaction and purchase intention, while other studied by Chae et al., (2020) and Mahliza, (2020) were mentioned that trust has positive influence on purchase intention. Based on the evidence provided from this study and other researchers, it could become more strongly evidence that trust is a critical factor in shaping customer satisfaction towards purchase intention, especially in online shopping.

Future research should validate and evaluate the influence of some aspects that this study did not examine, but as an outcome, our study has delivered a beneficial discovery for individuals who want to know more about factors that might aid businesses or provide more knowledge for individual objectives.

5.2 Discussion and Implications

The evidence from the results of this research presents some inspiring implications for academic research that may be studied and highlighted the treasure for future discoveries regarding the ability of AI to enhance both business and customer experience in form of online shopping.

First, this study designed questionnaire items for conducting an online survey by relying on the research scope and the relationship between each construct in research model. Then, the primary data gathered from respondents was analyzed using difference data analysis methods as mentioned above, to better understand the similarities and differences between previous research on the causes, mediators, and effects of AI in online shopping. The results may provide more clear illustration for business or organization in considering to implement AI technology into their own system which could be increase their ability to expand more opportunities for them such as attract more customers, reduce cost and increase more profits, thus it could help their organization or business keep growing.

The AI revolution has reshaped business operations across various industries seeing as AI can learn, generate new insights, eliminate human error, and offer reliable decisions as it feeds on updated data, demonstrating AI as a highly autonomous and useful tool. Depending on the quality of the data, AI can operate it to identify and make smart predictions, supposed to allow the ongoing algorithmic development and the expansion of productivity as well as increase customer engagement, outstanding service, and creativity. According to Gilchrist, (2017) provided some key information that support the AI technology in form of chatbot which was expected to save businesses $8 billion by 2022. This study results have confirmed all factors relate to AI, have positive significant effect on customer satisfaction, indicating that AI technology could help to keep customer satisfaction, trust or customer intent to continue using the products or services, and may even increase the possibility that customers will continue to buy products or services through AI-generated services that satisfy their needs.

This study is intended to provide a contribution by delivering benefits and knowledge regarding effect of AI on customer satisfaction and other significant aspects that could lead to purchase intention in case of online shopping. As evidenced by the empirical findings and the detailed literature review, this is clearly indicating

a possible relationship between AI Data Quality, Service AI, Website Quality, Customer Satisfaction, Trust, and Purchase Intention.

This study placed an emphasis on deeper understanding, perspective, and the interaction experience with AI, which offers a solid reference for AI technology to promote long-term growth in the context of online shopping. This research encourages businesses to strengthen the sustainable growth of AI technology across a variety of sectors, including e-commerce, education, robotics, finance, manufacturing, logistics, cybersecurity, etc.

5.3 Limitations and Research Directions

This study contributed significantly to the academic and practitioner sectors; however, several limitations were discovered, which may inspire additional research studies. Because of several challenges as well as the length of time that the survey was performed, the study was able to collect data with a limited sample size, and this sample was primarily used as data for the analysis phase. Nevertheless, it seems as a common problem that appeared during the data collection. Hence, further research should be conducted with a larger sample size in order to identify the differences and similarities among the respondents. Future study might also conduct a more in-depth analysis combining long-term and cross-sectional studies using an alternate research style to better gain better understanding.

Furthermore, this study evaluated just highlighting some aspects, whereas it did not include any moderating effect factor. Thus, this study suggests that future research should investigate some of the moderating effects in the context of online shopping, as well as compare which one is more important than the others, and even the positive and negative effects of the moderator variables that could provide a more in-depth understanding of the study.

Additionally, this study did not examine the effect of some factors such as AI Data Quality, Service AI, and Website Quality on Trust and Purchase Intention. This

would be important for future research to examine these relationships in order to gain greater insight and depth for the next study.

Last but not lease, the results from this study were provided many supported evidences for AI aspects in the context of online shopping, however the quality of AI or website are generally difference depend on individual business system structure. When various AI products and services are currently being offered, the findings of this study may serve as primary data for understanding the vital component, as well as significant information for addressing the function of AI in which it performs an important part in the development of the technology industry, and how AI benefits organizations, customers, and society as a whole.

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APPENDIX QUESTIONNAIRE

<u>Topic</u>: **The Influence of AI enhances users' purchase intention in online shopping: A study of Amazon ecommerce**

Dear Sir / Madam

Thank you for taking the time to complete this survey. A brief questionnaire is being conducted to determine the relationship between AI Data Quality, Service AI, Website Quality, Trust, Customer Satisfaction, and Purchase Intention. Your participation will be able to help us discover the use of AI to improve online shopping system, as well as develop the necessary methods and suggestions for retailers and company owners to incorporate AI into their online shopping systems.

You will need approximately 5 minutes to complete this survey. We will keep your responses and answers anonymous, and no one will be able to identify you. So we encourage you to fill out this questionnaire to the best of your ability. I greatly appreciate your participation in this research.

Sincerely yours,

Researcher Investigator

Dr. Wei-Shang Fan

Distinguished Professor

Department of Business Administration

Nanhua University

Email: *wsfan@nhu.edu.tw*

Research Student

Mr. Mich Kimliang

Master Student

Department of Business Administration

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កម្រងសំណួរ

<u>ប្រធានបទ៖</u> **ឥទ្ធិពលនៃ AI** បង្កើនគោលបំណងទិញរបស់អ្នកប្រើប្រាស់ក្នុងការទិញទំនិញតាមអ៊ីនធឺ
ណិតៈការសិក្សាអំពីពាណិជ្ជកម្មអេឡិចត្រូនិក **Amazon**

សូមគោរពលោក/លោកស្រី

សូមអរគុណចំពោះការចំណាយពេលដើម្បីបំពេញការស្ទង់មតិនេះ។
កម្រងសំណួរខ្លីមួយនេះ គឺត្រូវបានធ្វើឡើងដើម្បីកំណត់ទំនាក់ទំនងរវាង គុណភាពទិន្នន័យ AI សេវា
កម្ម AI គុណភាពគេហទំព័រ ទំនុកចិត្ត ការពេញចិត្តរបស់អតិថិជន និងបំណងទិញ។ ការចូលរួមរបស់
អ្នក នឹងអាចជួយឱ្យយើងរកឃើញនូវរបៀបសម្រាប់ AI ក្នុងការកែលម្អប្រព័ន្ធទិញទំនិញអនឡាញ ក៏ដូច
ជាការបង្កើតវិធីសាស្ត្រ និងផ្ដល់ការណែនាំចាំបាច់សម្រាប់អ្នកលក់រាយ និងម្ចាស់ក្រុមហ៊ុនក្នុងការ
បញ្ចូល AI ទៅក្នុងប្រព័ន្ធទិញទំនិញអនឡាញរបស់ពួកគេ។

អ្នកនឹងត្រូវការពេលប្រហែល ៥ នាទី ក្នុងការបំពេញការស្ទង់មតិនេះ។ យើងនឹងរក្សាការឆ្លើយតប និង
ចម្លើយរបស់អ្នកជាអនាមិក ហើយគ្មាននរណាម្នាក់អាចកំណត់អត្តសញ្ញាណអ្នកបានទេ។ ដូច្នេះ យើង
លើកទឹកចិត្តអ្នកឱ្យបំពេញកម្រងសំណួរនេះឱ្យអស់ពីសមត្ថភាព។ ខ្ញុំសូមថ្លែងអំណរគុណយ៉ាងជ្រាល
ជ្រៅចំពោះការចូលរួមរបស់អ្នកនៅក្នុងកិច្ចការស្រាវជ្រាវនេះ។

ដោយសេចក្ដីគោរព,

អ្នកពិនិត្យកិច្ចការស្រាវជ្រាវ · និស្សិតស្រាវជ្រាវ

បណ្ឌិត. Wei-Shang Fan · **លោក. មិច គឹមលាង**

សាស្ត្រាចារ្យ · និស្សិតថ្នាក់អនុបណ្ឌិត

នាយកដ្ឋានរដ្ឋបាលពាណិជ្ជកម្ម · នាយកដ្ឋានរដ្ឋបាលពាណិជ្ជកម្ម

សាកលវិទ្យាល័យ Nanhua · សាកលវិទ្យាល័យ Nanhua

អ៊ីមែល: *wsfan@nhu.edu.tw* · អ៊ីមែល: *kimliangmich@gmail.com*

The Respondent Information
ព័ត៌មានអ្នកឆ្លើយសំណួរ

౸ဆ֍ᣚ᠅ᢀᢀᡃ᠑

Section 1: **Personal Information** ផ្នែកទី១៖ **ព័ត៌មានផ្ទាល់ខ្លួន**		
1. Gender ភេទ	○ Male ប្រុស	○ Female ស្រី
2. Your age អាយុរបស់អ្នក	○ Under 18 years ក្រោម ១៨ ឆ្នាំ ○ 26 - 35 years ២៦ - ៣៥ ឆ្នាំ ○ 46 - 55 years ៤៦ - ៥៥ ឆ្នាំ	○ 18 - 25 years ១៨ - ២៥ ឆ្នាំ ○ 36 - 45 years ៣៦ - ៤៥ ឆ្នាំ ○ Above 55 years លើសពី ៥៥ ឆ្នាំ
3. Education ការអប់រំ	○ High School or Lower វិទ្យាល័យ ឬក្រោម ○ Master Degree អនុបណ្ឌិត	○ Bachelor Degree បរិញ្ញាប័ត្រ ○ Ph.D. បណ្ឌិត
4. How often do you shop online? តើអ្នកទិញទំនិញអនឡាញញឹកញាប់ប៉ុណ្ណា?	○ Once a week ម្ដងក្នុងមួយសប្ដាហ៍ ○ Several times a month ច្រើនដងក្នុងមួយខែ ○ Several times a year ច្រើនដងក្នុងមួយឆ្នាំ	○ Once a month មួយខែម្ដង ○ Once a year មួយឆ្នាំម្ដង ○ Less than once a year តិចជាងម្ដងក្នុងមួយឆ្នាំ

Section 2: **AI Data Quality**
ផ្នែកទី២៖ **គុណភាពទិន្នន័យ AI**

Your answers to the "AI Data Quality" part should be based on your experience at Amazon.com.

ចម្លើយរបស់អ្នកចំពោះផ្នែក "គុណភាពទិន្នន័យ AI" គួរតែផ្អែកលើបទពិសោធន៍របស់អ្នកនៅ Amazon.com។

Please kindly read the questions below that relevant to your experience with AI Data Quality, and then **CIRCLE** your level of agreement with each of the answers depending on your opinions. សូមអានសំណួរខាងក្រោម ដែលទាក់ទងនឹងបទពិសោធន៍របស់អ្នកអំពី គុណភាពទិន្នន័យ AI ហើយបន្ទាប់មកសូមគូសរង្វង់ កម្រិតនៃការយល់ព្រមរបស់អ្នកជាមួយនឹងចម្លើយនីមួយៗអាស្រ័យលើគំនិតរបស់អ្នក។	Level of Agreement កម្រិតនៃការយល់ព្រម				
	Strongly disagree មិនយល់ស្របជាខ្លាំង	Disagree មិនយល់ស្របប	Neutral អព្យាក្រឹត	Agree យល់ប្រម	Strongly Agree ពិត្រពេញទំហឹង
1 **[DQ1]** Amazon site delivers the right product recommendations. គេហទំព័រ Amazon ផ្ដល់នូវការណែនាំពីផលិតផលបានត្រឹមត្រូវ។	1	2	3	4	5
2 **[DQ2]** Amazon site provides responses to questions and queries that are exactly what I need. គេហទំព័រ Amazon ផ្ដល់នូវការឆ្លើយតបទៅនឹងសំណួរដែលពិតជាអ្វីដែលខ្ញុំត្រូវការ។	1	2	3	4	5
3 **[DQ3]** Amazon site provides sufficient information regarding the product. គេហទំព័រ Amazon ផ្ដល់ព័ត៌មានគ្រប់គ្រាន់ទាក់ទងនឹងផលិតផល។	1	2	3	4	5
4 **[DQ4]** My experience with Amazon has been good in terms of getting accurate information quickly. បទពិសោធន៍របស់ខ្ញុំជាមួយក្រុមហ៊ុន Amazon គឺល្អក្នុងការទទួលបានព័ត៌មានត្រឹមត្រូវយ៉ាងឆាប់រហ័ស	1	2	3	4	5

Section 3: **Service AI**
ផ្នែកទី៣៖ **សេវាកម្ម AI**

Your answers to the "Service AI" part should be provided.
ចម្លើយរបស់អ្នកចំពោះផ្នែក "សេវាកម្ម AI" គួរតែត្រូវបានផ្តល់ជូន។

	Level of Agreement កម្រិតនៃការយល់ព្រម				
Please kindly read the questions below that relevant to your experience with Service AI, and then **CIRCLE** your level of agreement with each of the answers depending on your opinions. សូមអានសំណួរខាងក្រោម ដែលទាក់ទងនឹងបទពិសោធន៍របស់អ្នកអំពី សេវាកម្ម AI ហើយបន្ទាប់មកសូមគូសរង្វង់កម្រិតនៃការយល់ព្រមរបស់អ្នកជា មួយនឹងចម្លើយនីមួយៗអាស្រ័យលើគំនិតរបស់អ្នក។	Strongly disagree មិនយល់ស្របជាខ្លាំង	Disagree មិនយល់ស្រប	Neutral អព្យាក្រឹត	Agree យល់ស្រប	Strongly Agree ពិព្រមញ់ជាទំហឹង
1 [SAI1] I am satisfied with the customer support provided by this customer service system. ខ្ញុំពេញចិត្តនឹងជំនួយដល់អតិថិជនដែលផ្តល់ដោយ ប្រព័ន្ធសេវាកម្មអតិថិជននេះ។	1	2	3	4	5
2 [SAI2] I am satisfied with the after-sales service provided by this customer service system. ខ្ញុំពេញចិត្តនឹងសេវាកម្មនៅក្រោយការលក់ដែលផ្តល់ដោយប្រព័ន្ធសេវាកម្មអតិថិជននេះ។	1	2	3	4	5
3 [SAI3] This customer service system can understand my problems and requests. ប្រព័ន្ធសេវាអតិថិជននេះអាចយល់ពីបញ្ហា និង សំណើរបស់ខ្ញុំ។	1	2	3	4	5
4 [SAI4] This customer service system can respond to my requests fast enough. ប្រព័ន្ធសេវាកម្មអតិថិជននេះអាចឆ្លើយតបទៅនឹង សំណើរបស់ខ្ញុំបានលឿនគ្រប់គ្រាន់។	1	2	3	4	5

5	**[SAI5]** This customer service system can provide useful answers for me. ប្រព័ន្ធសេវាអតិថិជននេះអាចផ្តល់ចម្លើយមានប្រយោជន៍សម្រាប់ខ្ញុំ។	1	2	3	4	5

Section 4: **Website Quality**
ផ្នែកទី៤៖ **គុណភាពគេហទំព័រ**

Your answers to the "Website Quality" part should be provided.
ចម្លើយរបស់អ្នកចំពោះផ្នែក "គុណភាពគេហទំព័រ" គួរតែត្រូវបានផ្តល់ជូន។

Please kindly read the questions below that relevant to your experience with Website Quality, and then **CIRCLE** your level of agreement with each of the answers depending on your opinions. សូមអានសំណួរខាងក្រោមដែលទាក់ទងនឹងបទពិសោធន៍របស់អ្នកអំពី គុណភាពគេហទំព័រ ហើយបន្ទាប់មកសូមគូសរង្វង់កម្រិតនៃការយល់ព្រមរបស់អ្នក ជាមួយនឹងចម្លើយនីមួយៗអាស្រ័យលើគំនិតរបស់អ្នក។	Level of Agreement កម្រិតនៃការយល់ព្រម				
	Strongly disagree មិនយល់ស្របបេ្បាខ្លាំង	Disagree មិនយល់ស្រប	Neutral អព្យាក្រឹត	Agree យល់ព្រម	Strongly Agree យល់ព្រមយ៉ាងខ្លាំង
1 **[WEBQ1]** The website design provides user friendly. ការរចនាគេហទំព័រផ្តល់ភាពងាយស្រួលដល់អ្នកប្រើប្រាស់។	1	2	3	4	5
2 **[WEBQ2]** The website labels are easy to understand. ស្លាកគេហទំព័រងាយស្រួលយល់។	1	2	3	4	5
3 **[WEBQ3]** Content on the website is visually pleasing and easy to read. មាតិកានៅលើគេហទំព័រគឺគួរឱ្យចាប់អារម្មណ៍និងងាយស្រួលអាន។	1	2	3	4	5
4 **[WEBQ4]** The text on the website is easy to read. អត្ថបទនៅលើគេហទំព័រគឺងាយស្រួលអាន។	1	2	3	4	5

Section 5: **Trust**						
ផ្នែកទី៥៖ **ទំនុកចិត្ត**
Your answers to the " Trust " part should be provided.
ចម្លើយរបស់អ្នកចំពោះផ្នែក "ទំនុកចិត្ត" គួរតែត្រូវបានផ្ដល់ជូន។

		Level of Agreement កម្រិតនៃការយល់ព្រម				
Please kindly read the questions below that relevant to your experience with Trust, and then **CIRCLE** your level of agreement with each of the answers depending on your opinions. សូមអានសំណួរខាងក្រោម ដែលទាក់ទងនឹងបទពិសោធន៍របស់អ្នកអំពី ទំនុកចិត្ត ហើយបន្ទាប់មកសូមគូសរង្វង់កម្រិតនៃការយល់ព្រមរបស់អ្នកជា មួយនឹងចម្លើយនីមួយៗអាស្រ័យលើគំនិតរបស់អ្នក ។		Strongly disagree មិនយល់ស្របបែបខ្លាំង	Disagree មិនយល់ស្រប	Neutral អព្យាក្រឹត	Agree យល់ព្រម	Strongly Agree តាំប្រេពេញទំហឹង
1	**[TR1]** Amazon online site is trustworthy. គេហទំព័រអនឡាញ Amazon គួរឱ្យទុកចិត្ត។	1	2	3	4	5
2	**[TR2]** I trust my credit card information on Amazon online site. ខ្ញុំជឿជាក់លើព័ត៌មានកាតឥណទានរបស់ខ្ញុំនៅលើគេហទំព័រ Amazon។	1	2	3	4	5
3	**[TR3]** Amazon online site provides ease of cancelling orders. គេហទំព័រ Amazon ផ្ដល់ភាពងាយស្រួលក្នុងការលុបចោលការបញ្ជាទិញ។	1	2	3	4	5
4	**[TR4]** Amazon online site provides ease of payment procedure. គេហទំព័រ Amazon ផ្ដល់នូវភាពងាយស្រួលនៃនីតិវិធីបង់ប្រាក់។	1	2	3	4	5

5	**[TR5]** I felt secure to provide personal info for purchasing online at Amazon. ខ្ញុំមានអារម្មណ៍ថាមានសុវត្ថិភាពក្នុងការផ្តល់ព័ត៌មានផ្ទាល់ខ្លួនសម្រាប់ការទិញតាមអ៊ីនធឺណិតនៅ Amazon ។	1	2	3	4	5

Section 6: **Customer Satisfaction**
ផ្នែកទី៦៖ **ភាពពេញចិត្តរបស់អតិថិជន**

Your answers to the "Customer Satisfaction" part should be provided.

ចម្លើយរបស់អ្នកចំពោះផ្នែក "ភាពពេញចិត្តរបស់អតិថិជន" គួរតែត្រូវបានផ្តល់ជូន។

	Please kindly read the questions below that relevant to your experience with Customer Satisfaction, and then **CIRCLE** your level of agreement with each of the answers depending on your opinions. សូមអានសំណួរខាងក្រោម ដែលទាក់ទងនឹងបទពិសោធន៍របស់អ្នកអំពី ភាពពេញចិត្តរបស់អតិថិជន ហើយបន្ទាប់មក សូមគូសរង្វង់ កម្រិតនៃការយល់ព្រម របស់អ្នកជាមួយនឹងចម្លើយនីមួយៗអាស្រ័យលើគំនិតរបស់អ្នក។	Level of Agreement កម្រិតនៃការយល់ព្រម				
		Strongly disagree មិនយល់ស្របខ្លាំង	Disagree មិនយល់ស្រប	Neutral អព្យាក្រឹត	Agree យល់ស្រម	Strongly Agree គាំទ្រពេញទំហឹង
1	**[CS1]** I strongly recommend this online site to others. ខ្ញុំសូមណែនាំគេហទំព័រអនឡាញនេះយ៉ាងខ្លាំងដល់អ្នកដទៃ។	1	2	3	4	5
2	**[CS2]** I think that I made the correct decision to use this online shopping site. ខ្ញុំគិតថាខ្ញុំបានសម្រេចចិត្តត្រឹមត្រូវក្នុងការប្រើប្រាស់គេហទំព័រទិញទំនិញអនឡាញនេះ។	1	2	3	4	5
3	**[CS3]** I would like to keep using this online shopping site. ខ្ញុំចង់បន្តប្រើប្រាស់គេហទំព័រទិញទំនិញអនឡាញនេះ។	1	2	3	4	5

4	**[CS4]** I am satisfied with the service of this online shopping site. ខ្ញុំពេញចិត្តនឹងសេវាកម្មនៃគេហទំព័រទិញទំនិញអនឡាញនេះ។	1	2	3	4	5
5	**[CS5]** I am satisfied with the overall of this online shopping site. ខ្ញុំពេញចិត្តនឹងគេហទំព័រលក់ទំនិញអនឡាញទាំងមូល។	1	2	3	4	5

Section 7: **Purchase Intention**
ផ្នែកទី៧៖ **បំណងទិញ**

Your answers to the "Purchase Intention" part should be provided.
ចម្លើយរបស់អ្នកចំពោះផ្នែក "បំណងទិញ" គួរតែត្រូវបានផ្តល់ជូន។

Please kindly read the questions below that relevant to your experience with Purchase Intention, and then **CIRCLE** your level of agreement with each of the answers depending on your opinions. សូមអានសំណួរខាងក្រោម ដែលទាក់ទងនឹងបទពិសោធន៍របស់អ្នកអំពី បំណងទិញ ហើយបន្ទាប់មកសូមគូសរង្វង់ កម្រិតនៃការយល់ព្រមរបស់អ្នកជាមួយនឹងចម្លើយនីមួយៗអាស្រ័យលើគំនិតរបស់អ្នក។	Level of Agreement កម្រិតនៃការយល់ព្រម				
	Strongly disagree មិនយល់ស្របជាដាច់ខាត	Disagree មិនយល់ស្របប	Neutral អព្យាក្រឹត	Agree យល់ស្រប	Strongly Agree យល់ស្របពេញទំហឹង
1 **[PI1]** Undamaged delivered goods.. ទំនិញដែលបានដឹកជញ្ជូនមិនខូច។	1	2	3	4	5
2 **[PI2]** Prices are identical to those on the order form. តម្លៃគឺដូចគ្នាបេះបិទទៅនឹងតម្លៃនៅលើទម្រង់បញ្ជាទិញ។	1	2	3	4	5

3	**[PI3]** Easy to return unwanted items. ងាយស្រួលត្រឡប់ទៅវត្ថុដែលមិនចង់បាន។	1	2	3	4	5
4	**[PI4]** Receive all the items I ordered. ទទួលទំនិញទាំងអស់ដែលខ្ញុំបានបញ្ជាទិញ។	1	2	3	4	5
5	**[PI5]** I will continue to purchase services or products from this online site. ខ្ញុំនឹងបន្តទិញសេវាកម្ម ឬផលិតផលពីគេហទំព័រ អនឡាញនេះ។	1	2	3	4	5