

THE IMPACT OF CHATGPT ON E-COMMERCE:  
THE CASE OF PLATFORM-BASED BUSINESS

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THE IMPACT OF CHATGPT ON E-COMMERCE:  
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BY

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A final year project submitted in partial fulfilment of the  
requirement for the degree of

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- (3) Sole contribution has been made by me in completing the FYP.
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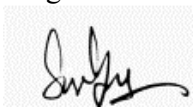
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## DEDICATION

I dedicate this research project to my family and friends, whose unwavering appreciation and support have been the cornerstone of my academic pursuits. Their belief in me has been a constant source of motivation throughout this journey.

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LIST OF ABBREVIATION

AI	Artificial Intelligence
NLP	Natural Language Processing
GPT	Generative Pre-Trained Transformer
IS	Information System
ISSM	Delone And Mclean Information System Success Model
TAM	Technology Acceptance Model
ERP	Enterprise Resource Planning
MSME	Micro, Small and Medium Enterprises
SEM	Structural Equation Modelling
PLS-SEM	Partial Least Squares Structural Equation Modelling
VIF	Variance Inflation Factor
CEO	Chief Executive Officer

## PREFACE

This research project has been prepared as part of my final year project submitted in partial fulfilment of the requirement for the degree of Bachelor of International Business (Honours) in Universiti Tunku Abdul Rahman under the supervision of Puan Ezatul Emilia binti Muhammad Arif. This study aimed to provide valuable findings and empirical result about the impact of ChatGPT on e-commerce platform-based business in the context of organizational performance. The objective of this research is to investigate the impacts of ChatGPT on platform-based business in e-commerce industry in Malaysia by using a integrate TAM and ISSM model. This study aims to investigate the relationships between information quality, system quality, and service quality with perceived usefulness, as well as to explore the influence of perceived usefulness on user satisfaction and its subsequent impact on organizational performance.



## ABSTRACT

In this digital era, ChatGPT has offered the world a peek at artificial intelligence and created a lot of discussions about its amazing advancements. Over 200 companies adopted ChatGPT in 2023. Today, certain platform-based business preparing to integrate ChatGPT into their business. Thus, this study will offer useful information to platform-based business thinking about incorporating ChatGPT into their operations, help them to make informed decisions about ChatGPT adoption and resource allocation, enabling them to harness the full potential of ChatGPT in enhancing user experiences and staying ahead in the rapidly evolving digital marketplace. The research objective is to investigate the impacts of ChatGPT on the organizational performance of platform-based businesses by using an integrated TAM and ISSM model. Quantitative research via questionnaires is used for research design to conduct an empirical result. A deeper data analysis of the 386-sample size has been made. It shows that information quality, system quality and service quality of ChatGPT will affect the users' perceived usefulness, perceived usefulness will affect the user satisfaction, whereas user satisfaction will influence the organizational performance of platform-based business. However, perceived usefulness shows there is no significant relationship with organizational performance. This final year project has provided empirical results and findings for the ChatGPT and platform-based business.

## **CHAPTER 1: RESEARCH OVERVIEW**

### **1.0 Introduction**

This research is aimed to study and investigate how the ChatGPT impacts on organizational performance of e-commerce platform-based businesses.

### **1.1 Research Background**

Artificial intelligence (AI) will impact nearly every industry, bringing both opportunities and challenges in terms of social and economic development. The rapid development of AI is making it possible to implement complex, adaptive algorithms for the processing of large unstructured data sets (Chalmers et al., 2020). More companies are looking into ways to incorporate AI-led technology into their operations as the field of artificial intelligence develops and becomes more sophisticated. Using algorithms, software, and other technologies, businesses use AI technology to carry out intuitive and empathetic jobs similar to those of humans. AI chatbots are one such technology that has attracted a lot of interest from companies all across the world (Rizomyliotis et al., 2022; Raj et al., 2023).

AI chatbots are employed in many different contexts, including appointment scheduling, reminder management, ticket sales, and pandemic support. AI chatbots are text-based conversations that facilitate information access, support, and job completion for both individuals and enterprises (Menon & K Shilpa, 2023). AI chatbots combine cutting-edge technology such as biometrics, cloud, machine learning, and natural language processing (NLP) to offer businesses instantaneous and reliable customer support while simultaneously cutting operating expenses (Chen, Gong, et al., 2022). The capabilities of chatbots have grown over time, and the most recent developments in language processing technology have resulted in the creation of extremely sophisticated AI models, such ChatGPT (Menon & K Shilpa, 2023). "Chat Generative Pre-Trained Transformer" is what the abbreviation

ChatGPT genuinely stands for. It is a tool built on deep learning and artificial intelligence that can manipulate vast amounts of data, adapt to various contexts and situations when interacting with people, and provide users precise answers, justifications, and solutions on a variety of wide-ranging topics (Frederico, 2023).

ChatGPT has offered the world a peek at artificial intelligence and created a lot of discussions about its amazing advancements (Maheshwari & Jain, 2023). One of ChatGPT's most remarkable advantages is its ability to communicate like a genuine person (Javaid et al., 2023). Additionally, ChatGPT offers tools like topic and emotion identification as well as sentiment analysis to aid users in understanding their conversation partner. It can also produce many discussion threads, allowing for more realistic interactions between the user and the bot (George et al., 2023). Users benefit greatly from its quick response time and simple information accessibility. ChatGPT has amassed over a million users in just five days following its November 2002 launch, making it the fastest-growing consumer application in history (Menon & K Shilpa, 2023; Gordon, 2023).

## **1.2 Research Problem**

Recently, business owners have come to believe that ChatGPT can be quite beneficial to their companies. An astounding 97% of business owners anticipate ChatGPT's benefits. Specifically, one in three organizations intend to use ChatGPT for creating content for their websites, and 44% intend to create materials in various languages (Maheshwari & Jain, 2023). Besides, the use of ChatGPT is anticipated to increase even more as a result of certain companies preparing to integrate it into their business. In January 2023, Microsoft, one of the OpenAI backers, stated that it will launch its Azure OpenAI service, enabling businesses to include tools like DALL-E into their cloud apps. Widening access to include ChatGPT is the goal (Malik, 2023). According to Thormundsson (2023), over 200 companies adopted ChatGPT in 2023. When OpenAI launches ChatGPT Enterprise in August 2023, the excitement surrounding ChatGPT may pick up even more steam. Improved security, privacy, extended context windows, infinite higher-speed GPT-4 access,

sophisticated data analysis capabilities, and much more are all promised by this enterprise-grade solution. This is a major step forward in the development of an AI workplace assistant that is business-specific, helps with any task, and protects data (Dominguez, 2023). Analyzing the impact of ChatGPT towards business performance to be of utmost importance to companies for their next movement.

A broad study of the impact of ChatGPT on business performance appears. The existing literature is dedicated to the study of the impacts or potential benefits of ChatGPT on industries, such as banking and finance (George et al., 2023; Saggu & Ante, 2023), manufacturing (Wang et al., 2023), healthcare (George et al., 2023; Kalla & Smith, 2023), logistics (Frederico, 2023), marketing (George et al., 2023; Muhamad Malik Mutoffar et al., 2023), education (George et al., 2023; Lo, 2023), customer relationship management (George et al., 2023; Kalla & Smith, 2023; Raj et al., 2023; Sudirjo et al., 2023), and E-commerce (Dr.P. Suganya & K. Pranesh, 2020; George et al., 2023), among other areas. However, the impact of ChatGPT on platform-based businesses remains a critical yet unexplored dimension.

LazieChat has been introduced by Lazada Group, a well-known online shopping platform in Southeast Asia. LazieChat, which is hosted on Azure OpenAI, hopes to transform consumer interactions in the digital marketplace by leveraging the sophisticated capabilities of ChatGPT (Staff, 2023). Undoubtedly, Lazada's action will have an impact on the e-commerce sector, and other e-commerce platforms may follow suit in an attempt to gain an advantage over the competition by integrating ChatGPT into their own platforms. Additionally, eBay is incorporating a ChatGPT plug-in so that it can create product listings from a single uploaded photo automatically. With this functionality, categories and item details will be pre-populated, freeing up sellers to concentrate more on growing their businesses than entering inventory (Skeldon, 2023). Presuming this, to stay up to date with innovation, platform-based businesses would be keen to comprehend how ChatGPT affects their operational efficiency. It is obvious that in-depth understanding about ChatGPT's effects on platform-based businesses' performance is necessary.

## 1.3 Research Objectives

The main objective of this study is to investigate the impacts of ChatGPT on the organizational performance of platform-based businesses.

### 1.3.1 General Objective

The main objective is to understand how ChatGPT has an impact on the organizational performance in platform-based businesses.

### 1.3.2 Specific Objectives

1. To investigate the relationship between **information quality** and **perceived usefulness** in ChatGPT.
2. To investigate the relationship between **system quality** and **perceived usefulness** in ChatGPT.
3. To investigate the relationship between **service quality** and **perceived usefulness** in ChatGPT.
4. To investigate the relationship between **perceived usefulness** and **user satisfaction** in ChatGPT.
5. To investigate the relationship between **perceived usefulness** and **organizational performance** in ChatGPT.
6. To investigate the relationship between **user satisfaction** and **organizational performance** in ChatGPT.

## 1.4 Research Questions

1. Is there any relationship between **information quality** and **perceived usefulness** in ChatGPT.
2. Is there any relationship between **system quality** and **perceived usefulness** in ChatGPT.
3. Is there any relationship between **service quality** and **perceived usefulness** in ChatGPT.
4. Is there any relationship between **perceived usefulness** and **user satisfaction** in ChatGPT.
5. Is there any relationship between **perceived usefulness** and **organizational performance** in ChatGPT.
6. Is there any relationship between **user satisfaction** and **organizational performance** in ChatGPT.

## 1.5 Research Significance

The significance of this research lies in the timely analysis of ChatGPT's revolutionary effects on e-commerce, with a special emphasis on platform-based businesses. This research has considerable significance since it provides a conceptual framework to evaluate the impacts of ChatGPT's usefulness in e-commerce environments by utilizing well-established frameworks, namely the Technology Acceptance Model and the Information System Success Model developed by DeLone and McLean. The study fills a gap in the literature by focusing on the particular effects of ChatGPT on platform-based businesses, which advances academic understanding. The results of this study can help scholars develop a more theoretical knowledge of ChatGPT's impact on businesses.

Besides, this study also offers useful information to companies thinking about incorporating ChatGPT into their operations. The business owners in the fields of e-commerce can benefit greatly from an understanding of ChatGPT's role in improving business performance. This research can help platform-based businesses make informed decisions about ChatGPT adoption and resource allocation, enabling them to harness the full potential of ChatGPT in enhancing user experiences and staying ahead in the rapidly evolving digital marketplace. Furthermore, the research's findings can help platform-based businesses' owners to make the strategic decision on whether or not to use ChatGPT into their business models, increasing their effectiveness, efficiency and competitiveness.

## **1.6 Conclusion**

Chapter 1 summarized the research problems and significance that motivated the researcher to research on the ChatGPT's impacts on the organizational performance of platform-based businesses. The research objectives and questions have stated.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.0 Introduction**

This chapter listed down the previous studies by the scholars reviewed by the researcher during the research process.

### **2.1 ChatGPT**

ChatGPT is an intelligent chatbot that trained to adhere to the prompt's guidelines and offer thorough answers. It has many NLP features built in, such as machine translation, question answering, story construction, logical analysis, and code debugging. Character-based communication is possible with ChatGPT without being limited by time or location (Chu, 2023). The foundation of ChatGPT is the generative pre-trained transformer (GPT), a large-scale transformer-based language model initially released by OpenAI in 2018 (Javaid et al., 2023; Menon & K Shilpa, 2023; Raj et al., 2023). Using unsupervised learning techniques, GPT was trained on a sizable corpus of text data to discover the structures and patterns of natural language. This made it possible for ChatGPT to learn from unprocessed data without direct supervision (Menon & K Shilpa, 2023; Raj et al., 2023). A sizable dataset of online exchanges from forums, social media, and other sources was used to train ChatGPT. To make sure the model understood the complexities of human language and could produce excellent answers to a range of questions, the training data was carefully chosen (Raj et al., 2023). ChatGPT has the ability to offer many advantages to companies. According to Chu (2023), its ability to do basic searches and generate reports enables effective administration of both labor and time. ChatGPT in customer care can help customers right away by answering questions and fixing issues. Using ChatGPT, businesses may offer 24/7 customer assistance without requiring human contact. Given that the e-commerce, retail, and telecommunications industries frequently handle consumer inquiries regarding goods and services, this is particularly crucial for them (Javaid et al., 2023).



Additionally, it enables enticing deployment with minimal labor or expense requirements. ChatGPT has been used in industries including marketing, customer service, academics, travel, medical and legal services (Chu, 2023).

## **2.2 E-commerce**

Electronic commerce is the term used to describe e-commerce. E-commerce is trading goods or services with customers directly through an online vendor's website (Jain et al., 2021). E-commerce is one of the most significant channels for transactions at the moment. E-commerce transactions involve individuals, businesses, and governmental entities. Various e-commerce models have been developed according to various application circumstances. Online-to-Offline, Business-to-Business, Business-to-Customer, Customer-to-Customer, and Government-to-Business are the most popular models (Huang et al., 2018). Nowadays, e-commerce has completely changed how consumers interact with businesses. It no longer has physical boundaries and provides unparalleled accessibility and convenience (Jalal Siam et al., 2024). The improved online shopping experience, is to thank for the booming trend in e-commerce (Badreddine & CHERIF Hadjira, 2023). By employing data analytics, machine learning algorithms, and user behaviour analysis to offer customised recommendations that correspond with customers' preferences, e-commerce platforms can improve the purchasing experience (Jalal Siam et al., 2024). Additionally, the digital revolution forced customers to adopt a more online-focused style of buying, which led to a widespread move towards digital accessibility for almost all goods and services (Badreddine & CHERIF Hadjira, 2023).

## **2.3 Platform-Based Business**

Platform-based business models are used in many sectors of the modern digital economy, including telecommunications, e-commerce, and financial services (Croxon et al., 2021). A platform uses digital technology to link individuals, groups,

and resources within an interactive ecosystem where value may be created, making it easier for customers to access, buy, and use a wide range of goods and services. Platform-based marketplaces were seen as one of the key structures that allow businesses to create new methods of value generation. The product and service are not directly within the control of the platform itself. A platform's network of distinct users, their interactions with one another, and the information they share are its most important assets to enable transactions. These intangible assets give rise to a formidable competitive advantage that is difficult to imitate (Rohn et al., 2021).

Platform-based businesses act as intermediaries, facilitating simpler communication between the users, while providing guidelines, conventions, and directives to construct a successful business environment. Platform business models are often presented as innovations that enable instant connection between users. It may turn into the central organising idea of the new economy, as some other academics have anticipated. After the Covid-19 pandemic, platform business models saw an unheard-of surge in popularity, leading to an increase in shares in the stock market and real economy. Successful platform-based companies have a great chance of creating monopolies in a number of industries if they can maintain the balance of factors like scale, population ratio, and others (Cui, 2021).

## **2.4 ChatGPT on Platform-Based Business**

Well-known e-commerce platforms like Amazon and Alibaba have started utilising ChatGPT extensively (Zhang, 2023). As mentioned in Orzoł and Szopik-Depczyńska (2023), ChatGPT can be utilised for customer support inquiries including managing exchanges or refunds as well as customer data analysis for tailored recommendations and promotions. Zhang (2023) claims that ChatGPT can assist platform-based companies in providing intelligent customer service, which will raise the standard and effectiveness of customer care. Additionally, by using ChatGPT, platform-based businesses can gain a deeper understanding of customers' buying preferences and habits, leading to more sophisticated product recommendations. For instance, Amazon analyses users' search and purchase

histories using ChatGPT to suggest products that are more relevant to their needs and interests (Zhang, 2023).

40% of customers returned an online purchase due to inadequate product description. Thus, ChatGPT can be used to generate high-quality product descriptions and titles that highlight a product's unique benefits while also improving the readability and attractiveness of product information (Orzoł & Szopik-Depczyńska, 2023; Zhang, 2023). Platform-based businesses handle vast volumes of data, which requires careful analysis to derive any meaningful insights from it. ChatGPT can assist with certain fundamental tasks, such looking at publicly available datasets and creating simple code for data analysis (Orzoł & Szopik-Depczyńska, 2023).

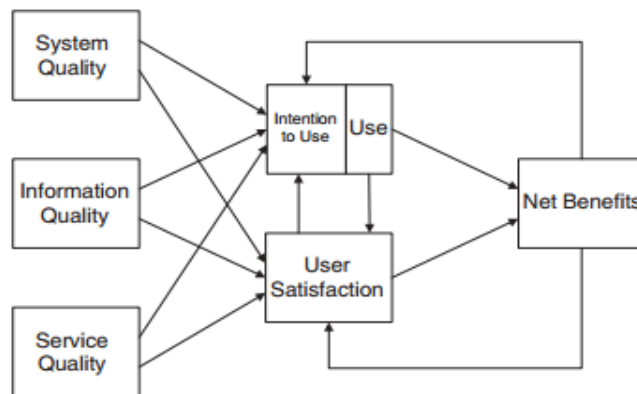
## 2.5 Underlying Theories

### 2.5.1 Delone and McLean Information System Success Model (ISSM)

The "Delone and McLean's Information System Success Model" is a model that emerged from a study on dependent variables in information system (IS) research that was published in 1992 (Chu, 2023; Jeyaraj, 2020; Viriando & Sfenrianto, 2021). It is the first study that gave priority to the selection of information system success measurement metrics (Chu, 2023). ISSM categorized information success indicators into six categories, which are "systems quality," "information quality," "use," "user satisfaction," "individual impacts," and "organizational impacts" (Jeyaraj, 2020; Viriando & Sfenrianto, 2021). It has been discovered that the ISSM provides a helpful foundation for arranging IS success measures. IS researchers have utilised the model extensively to comprehend and analyse the elements of IS success (Jeyaraj, 2020). In 2003, the ISSM was updated (Adeyemi & Issa, 2020; Viriando & Sfenrianto, 2021). The concept of "service quality" was newly

introduced and proposed to influence system usage and user satisfaction. "Intention to use" was introduced as an alternative for system usage. The terms "individual impacts" and "organizational impacts" were replaced with the term "net benefits," which encompasses many forms of benefits that are social, organizational, and individual (Adeyemi & Issa, 2020; Jeyaraj, 2020). It is recommended that the researchers precisely specify the context in which net benefits are to be measured (Adeyemi & Issa, 2020). The net benefits will be measured on an organization unit of analysis in this study, namely "organizational performance". The ISSM is thereby adopted for this study because it addresses the determinants of organizational performance using variables such as system quality, service quality, and information quality. The model is deemed appropriate for the study as it explained the relationships among some of the variables under study.

Figure 2.1: Delone and McLean Information System Success Model



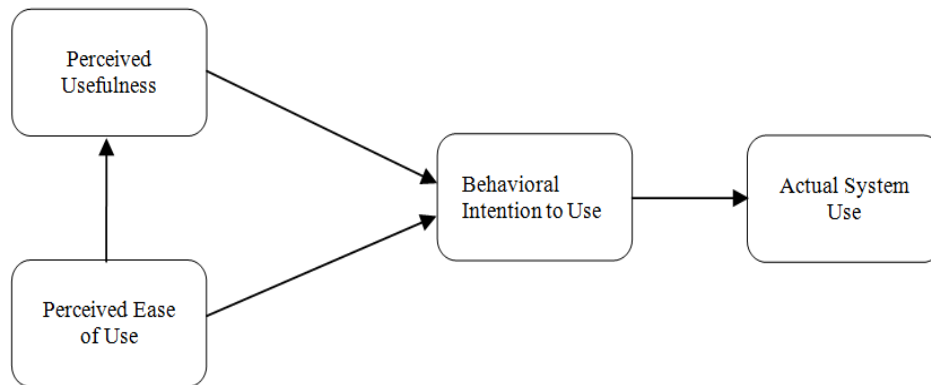
Source: Developed for the research.

### **2.5.2 Technology Acceptance Model (TAM)**

The Technology Acceptance Model (TAM), developed by Davis in 1989, is the other theory that served as the foundation for this study. Numerous academics have demonstrated the effectiveness of the TAM in examining technology acceptance, and they have employed it for various purposes and tools (Adeyemi & Issa, 2020). The TAM is currently acknowledged as the

most effective technique for comprehending information technology acceptance (Han & Sa, 2022). The fundamental elements of the model, "perceived ease of use," and "perceived usefulness," are what determine why users interact with a particular technology. Technology usage and behavioral intentions are the outcome variables. TAM thus aims to elucidate the rationale behind individuals' decisions to embrace or reject technology. Perceived usefulness of the individuals is thought to be one of the main factors that either directly or indirectly explains the outcomes indicated (Camilleri & Falzon, 2021). Perceived usefulness will affect user satisfaction and successfully parallels the TAM and ISSM criteria (Adeyemi & Issa, 2020; Han & Sa, 2022; Legramante et al., 2023). Perceived usefulness is thus taken up in this study as a significant variable.

Figure 2.2: Technology Acceptance Model



Source: Developed for the research.

## 2.6 Review of Variables

### 2.6.1 Organizational Performance

A net benefit is an outcome that the business receives as a result of the influence on information systems utilization (Brahmantyo et al., 2023). It is the effect that ChatGPT have when they are helpful in promoting successful organizational performance (Dwi Mardi Widodo et al., 2023). Net benefits

are factors that depend on user satisfaction and information system performance (Brahmantyo et al., 2023). As dependent variables in this study, "organizational performance" is obtained from the "net benefits" that are built into the ISSM. Organizational performance is defined in this study as the degree to which a user believes ChatGPT has improved overall productivity, effectiveness, and decision-making in the organization. The study conducted by Chu (2023) provides empirical evidence that ChatGPT is a significant factor in improving organizational performance. It further suggests that users' perception of ChatGPT's usefulness and satisfaction with its three quality components—information quality, system quality, and service quality—have a positive impact on organizational performance (Chu, 2023). This research defines organizational performance as the advantages that an organization experiences by utilizing ChatGPT.

### **2.6.2 User Satisfaction**

User satisfaction is taken as the result of perceived usefulness in this study. User satisfaction in the ISSM refers to how satisfied users are with the information systems they utilize. It is one of the most crucial elements for the success of an information system (Viriando & Sfenrianto, 2021). A subjective assessment of the different outcomes measured on a pleasant-unpleasant continuum is known as user satisfaction (Shah et al., 2022). It indicates the degree of satisfaction with the way in which the expectations of information system users are met (Turkmen & Ozkara, 2021). An efficient reaction that is crucial to the system's success is satisfaction (Shah et al., 2022). When an information system is required, user satisfaction should encompass the entire application experience and is a crucial means of identifying the opinions of information system users. User satisfaction describes how users assess the system prior to use and contrast its performance with real-world outcomes (Brahmantyo et al., 2023). When a system meets the needs of the user, the user is satisfied (Shah et al., 2022).

### **2.6.3 Perceived Usefulness**

In this study, perceived usefulness was explained as the outcome of information quality, system quality, and service quality. The extent to which a user feels that utilizing a specific technology would improve work performance is known as perceived usefulness. Stated differently, this concept ascertains if consumers would consider the technology beneficial for its intended purposes (Camilleri & Falzon, 2021). The idea of perceived usefulness focuses on how applicable technology may be in daily interactions (Kim et al., 2021). ChatGPT's perceived usefulness can be evaluated based on its capacity to deliver pertinent and beneficial information, resolve issues, and help users accomplish their goals. Perceived usefulness is defined in this study as the degree to which a user believes ChatGPT can be useful, raise productivity, or improve overall effectiveness. It is the belief that ChatGPT might be useful in assisting an organization in accomplishing goals (Niu & Mvondo, 2023).

### **2.6.4 Information Quality**

Measurements of the information system's output itself are used to define information quality. The output generated by information systems is known as report-style output. It has to do with the importance, advantages, relevancy, and urgency of the information produced (Dwi Mardi Widodo et al., 2023; Viriando & Sfenrianto, 2021). The information quality is revealed by the output that the information system produces (Miftahuddin et al., 2021; Prantiastio et al., 2023; Shah et al., 2022). "The characteristics of the outputs produced by the information system" are defined as information quality, and they include things like being precise, helpful, accurate, sufficient, complete, and up to date (Dwi Mardi Widodo et al., 2023; Turkmen & Ozkara, 2021). It has to do with the quality of information that the system can generate, store, or deliver. Researchers discovered that the following factors might be utilized to evaluate the quality of information: timeliness, accuracy,

completeness, relevance, and consistency (Brahmantyo et al., 2023). Prior literature has showed the importance of ChatGPT information quality as a important component of a successful work tool (Chu, 2023; Muhamad Malik Mutoffar et al., 2023; Raj et al., 2023). Thus, the data provided by ChatGPT systems must be both comprehensive and current (Chu, 2023; Prantiastio et al., 2023). According to Viriando and Sfenrianto (2021), there are three indicators of information quality, namely precise information, information as required, and recent information. When ChatGPT provides precise and up-to-date information, users tend to feel more satisfied and make quicker, more accurate decisions (Chu, 2023).

### **2.6.5 System Quality**

System quality articulates the qualities that an information system must have (Turkmen & Ozkara, 2021). It offers immediate access, information accessibility, and ease of use (Viriando & Sfenrianto, 2021). System quality could be assessed based on a system's portability, integration, importance, usefulness, dependability, adaptability, and data quality (Brahmantyo et al., 2023). The quality within the system is determined by system quality (Prantiastio et al., 2023). It evaluates the combined processing power of a system's hardware and software (Shah et al., 2022). The overall technical quality of the information system, including its responsiveness and user-friendliness, is another definition for this variable (Prantiastio et al., 2023). Convenience and ChatGPT's superior system quality have gained a lot of attention lately (Chu, 2023). In this research, ChatGPT systems' dependability, usability, responsiveness, and availability are indicators of system quality. It is also reflected in the overall performance of the platforms' ChatGPT system and can be measured by the superiority of the quality perceived by users as they work in the organization.



### **2.6.6 Service Quality**

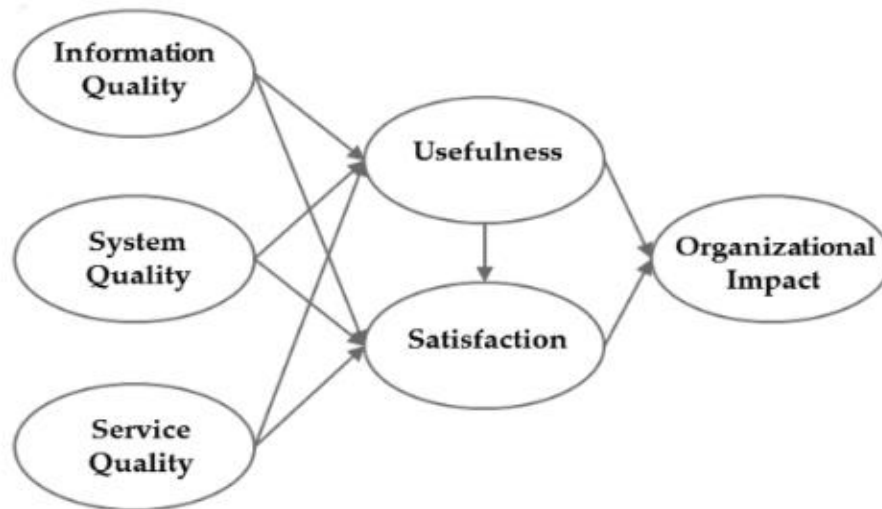
According to the ISSM, service quality is a measure of the quality of support system users receive. The system's service quality consists of a dependable manager, safe access, and input capability (Viriendo & Sfenrianto, 2021). In an information system, the system's quality of service is frequently assessed. It is the level of service provided and its ability to live up to user expectations (Brahmantyo et al., 2023). It can also be defined as the degree to which the information system's quality of service aligns with the perspective or judgment of the user (Prantiastio et al., 2023). The ability of a service to satisfy the needs of its users and function as a useful tool that can produce good outcomes in the future is what defines the quality of that service (Chu, 2023). The degree of support offered by the information system's developer determines it (Miftahuddin et al., 2021). ChatGPT's prompt, precise, and pertinent solutions help users find information and accomplish their objectives (Chu, 2023).

## **2.7 Hybrid Information System Success Model and Technology Acceptance Model**

Previous studies have made considerable use of the various indicators of the ISSM (Jeyaraj, 2020). Al-Okaily et al. (2023) based their proposed respecified information success model on the ISSM, substituting system usage for perceived usefulness as a success metric. The impact of enterprise resource planning (ERP)-related elements on organizational benefit in Jordan was investigated using the respecified information success model. An extensive framework that took into account user satisfaction, perceived usefulness, system quality, information quality, and organizational impact was used to evaluate the success of ERP. Nine research hypotheses make up the theoretical model of the study. The findings demonstrated that, with the exception of the extremely small impact of service quality on user satisfaction, the majority of the research hypotheses put out are empirically supported (Al-Okaily et al., 2023).

Figure 2.3: Hybrid Information System Success Model and Technology

Acceptance Model

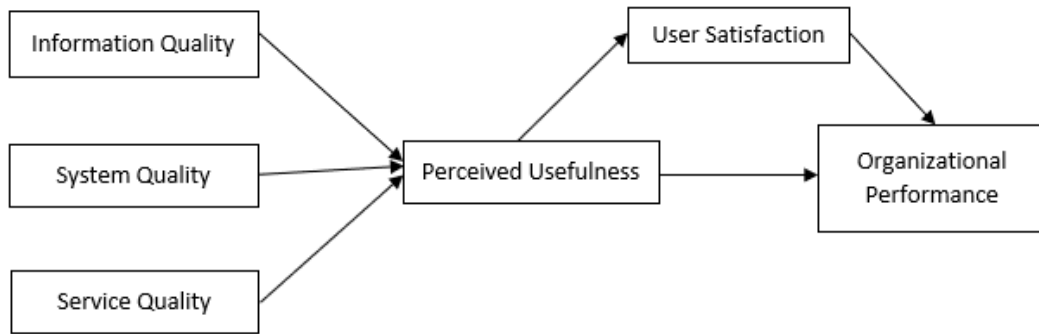


Source: Developed for the research.

## 2.8 Proposed Conceptual Framework

The proposed conceptual framework for this study is shown in the figure below. This framework was created based on the integration of ISSM with the TAM. By incorporating elements from both models, this framework aims to provide a comprehensive understanding of the impacts from ChatGPT on platform-based businesses in the context of organizational performance. Drawing upon the Hybrid Model mentioned earlier, it is established that perceived usefulness, as measured by TAM, plays a crucial role in determining the effectiveness of information systems. It has been identified that perceived usefulness has a significant relationship with various dimensions, including information quality, system quality, service quality, user satisfaction, and organizational impact, as proposed by the ISSM. This study aims to investigate the relationships between information quality, system quality, and service quality with perceived usefulness, as well as to explore the influence of perceived usefulness on user satisfaction and its subsequent impact on organizational performance.

Figure 2.4: Conceptual Framework



Source: Developed for the research.

## 2.9 Hypotheses Development

### 2.9.1 Relationship Between Information Quality and Perceived Usefulness

When presenting processed data in reports that can be used to develop strategies to boost organizational performance, information quality is a crucial consideration (Dwi Mardi Widodo et al., 2023). According to Legramante et al. (2023), high-quality information improves the perceived usefulness of the system. Users will generally believe that the ChatGPT system can be a helpful tool and can enhance their performance if they believe that it offers them accurate and timely regular information content that meets their needs (Al-Okaily et al., 2023). Therefore, the perceived usefulness of ChatGPT could be influenced by the quality of the information generated. A higher quality of generated information results in less effort being required to complete tasks, which in turn increases the perceived usefulness of using ChatGPT (Legramante et al., 2023). Predictably, high information quality in ChatGPT would induce high perceived usefulness in line with the following hypothesis.

**H1:** There is a significant relationship between information quality and perceived usefulness in ChatGPT.

### **2.9.2 The Relationship Between System Quality and Perceived Usefulness**

It is believed that system quality evaluates the intended features of an information system (Miftahuddin et al., 2021). A system is considered to be of high quality if it possesses the expected flexibility, dependability, intelligence, responsiveness, and ease of use that come with information-generating systems (Dwi Mardi Widodo et al., 2023). Aeni Hidayah et al. (2020) and Rafique et al. (2019) showed that “increases in system quality will cause increase in perceived usefulness” and found that system quality is a crucial factor of perceived usefulness. High-level system's capabilities improve user tasks and productivity, which boosts usefulness. These capabilities include hardware performance, network connectivity, and system structure. The perceived usefulness of a system is positively correlated with its overall operation quality. This means that when users perceive the system to be more useful, it is because they can easily and conveniently operate all of its capabilities (Chen & Tsai, 2019).

**H2:** There is a significant relationship between system quality and perceived usefulness in ChatGPT.

### **2.9.3 The Relationship between Service Quality and Perceived Usefulness**

Service quality in the ISSM can be explained as a representation of the quality of support received by system users (Viriando & Sfenrianto, 2021). It is often acknowledged that the quality of a service directly affects its ability to meet performance objectives (Al-Okaily et al., 2023). The relationship between service quality and perceived usefulness proposed in the conceptual model developed by Aeni Hidayah et al. (2020) and Al-Okaily et al. (2023) was shown empirically to be significant in their studies. The finding states that if users find the service of the system useful enough

in terms of promptness and accuracy, users will believe it to be useful therefore improve their performance and productivity. As a result, it is hypothesized that ChatGPT's service quality could impact on its perceived usefulness.

**H3:** There is a significant relationship between service quality and perceived usefulness in ChatGPT.

#### **2.9.4 The Relationship between Perceived Usefulness with User Satisfaction, with Organizational Performance**

The effectiveness of ChatGPT is largely determined by perceived usefulness and satisfaction. Previous studies have looked at the relationship between satisfaction and perceived usefulness (Niu & Mvondo, 2023). According to earlier research, perceived usefulness has a beneficial impact on user satisfaction (Boubker, 2023). Legramante et al. (2023) and Niu and Mvondo (2023) indicated that users' satisfaction is significantly predicted by usefulness. Furthermore, a user would be more likely to be satisfied by ChatGPT if they believe the system offers value (Al-Okaily et al., 2023). When users realize that they are benefiting from using ChatGPT, their satisfaction level increase (Boubker, 2023). ChatGPT that fulfils tasks is believed to be more valuable and useful, therefore it is expected that a useful ChatGPT should increase user satisfaction and organizational performance.

**H4:** There is a significant relationship between perceived usefulness and user satisfaction in ChatGPT.

**H5:** There is a significant relationship between perceived usefulness and organizational performance in ChatGPT.

### **2.9.5 User Satisfaction**

A subjective or perceptual indicator of a system's effectiveness is satisfaction. Research in the literature has demonstrated that organizational benefit is significantly influenced by user satisfaction (Al-Okaily et al., 2023; Chu, 2023). The results of the literature showed that while high user satisfaction with the system influences user performance directly, it also increases organisational effectiveness, competitiveness, productivity, and decision-making for the benefit of the business (Al-Okaily et al., 2023). Additionally, marketing research demonstrated that shorter transaction times and faster consumer responses through ChatGPT produce great results, as customer satisfaction has a big impact on sales rates. This suggests that organizational performance of a business is enhanced when users are satisfied with the three quality components of ChatGPT (Chu, 2023). According to the above illustration, user satisfaction may enhance organizational performance, supporting the following hypotheses.

**H6:** There is a significant relationship between user satisfaction and organizational performance in ChatGPT.

## **2.10 Conclusion**

In this chapter, literature reviews and hypotheses are discussed and evaluated. The research method will be discussed in the next chapter.

## **CHAPTER 3: METHODOLOGY**

### **3.0 Introduction**

This chapter discusses the details of research methodology employed in carrying out this study.

### **3.1 Research Philosophy**

Research philosophy is a framework of assumptions and mindsets regarding the development of knowledge. This study employs positivism research philosophy, which is associated with the natural scientist's philosophical perspective, producing law-like generalisations requires dealing with an observable social reality. Deductive approach is being used in this research, since it can use measurement and observation to test research hypotheses (Saunders et al., 2009).

### **3.2 Research Design**

Research design is to give a study a suitable structure. The selection of the research approach is a crucial step in the research design process since it dictates how important information will be gathered for the study (Sileyew, 2019). Research methods have been proposed and developed by many authors, and can be classified into two categories: quantitative and qualitative methods (Pandey et al., 2023).

#### **3.2.1 Quantitative Research Method**

The quantitative research approach is frequently regarded as the classic scientific method. It entails testing hypotheses and collecting objective data

to produce findings that are systematic, generalizable, and amenable to replication by other researchers (Tukur, 2023). To achieve the research objectives, this research applied the quantitative methods in analysing data. Using statistical or computational methods and procedures along with the collection of numerical data, quantitative research entails a methodical analysis of a phenomenon (Pandey et al., 2023). This research will be conducted using a survey questionnaire. The objectivity-focused field of quantitative research is especially well-suited to situations where conclusions may be drawn from population percentages and measurable measurements of variables are obtained. The data is collected fairly and wisely (Ghafar, 2023).

### **3.3 Data Collection Method**

To accomplish the goals of scholars' research, the data collecting method is a competitive, long-term, actionable, and practical way. It is a methodical, scientific, and scholarly approach of gathering information from the samples and units of analysis to address the research problem (Ganesha & Aithal, 2022). The data used in this study was obtained from primary sources.

#### **3.3.1 Primary Data Collection**

While secondary data are documentary or not directly gathered by the researcher, primary data are frequently referred to as field measurements, observations, or statistics produced from the field. Data can be classified according to whether or not they were gathered expressly for a researcher's particular study. If so, Bello (2023) refers to it as the primary data. They should be unpublished previously, original, authentic, trustworthy, and legitimate (Ganesha & Aithal, 2022). Therefore, primary data collection for this research is ideal because this research intends to find out the relationships between the impacts of ChatGPT and organizational



performance of platform-based businesses in Malaysia. Survey is a common method to gather the primary data. Google forms is being used as the primary data collection tool. The main advantage of primary data is that they are most suited to answering a certain research topic because they are gathered in a manner particularly designed to address it (Bello, 2023).

### **3.4 Sampling Design**

#### **3.4.1 Target Population**

A particular subset or sector of the general population that serves as the main focus of a research project, intervention, or marketing plan is referred to as the target population. It stands for a more limited set of people who fit particular requirements or have particular qualities. The study question or the goals of a certain programme serve as the basis for identifying the target population (Willie, 2023). The research aims to focus on the target population of the platform-based Micro, Small and Medium Enterprises (MSMEs) in Malaysia.

#### **3.4.2 Sampling Frame and Sampling Location**

The list of sample units that the sample is taken from is known as the sampling frame. According to Vicente (2023), a perfect frame is one in which every element of the population is listed separately just once, and does not include any other irrelevant or extraneous elements. The sample of this study that was selected to represent the target population is the MSMEs from Malaysia in Lazada platforms. This decision is grounded in several key considerations. Firstly, Lazada Malaysia has recently integrated ChatGPT technology into its operations, offering a unique opportunity to examine how ChatGPT impact business processes and customer interactions

within MSMEs. Further, given the challenge of accessing total population data on other e-commerce platforms such as Shopee, the accessibility to a well-defined total population in Lazada platform further solidifies its position as an ideal sampling frame.

Besides, this research required potential respondents from participating MSMEs to be owners or directors of the company or from higher levels of the management hierarchy, such as executives, or managers. To attain this, a question about the respondent's position in the company was included in the survey. The answer to this specific question determines whether the respondent was qualified for the study and helped to eliminate responses from lower-level employees who could provide less reliable answers.

The sampling location is the location where the data related to this study was collected. However, this study had no specific location and the Google form as an online survey instrument to distribute the questionnaire.

### **3.4.3 Sampling elements**

Sampling elements refer to the unit in a population that is being analysed. Owners, directors, managers, and executives who work in the platform-based MSMEs from Lazada Malaysia are recognized as the sample in this research. Therefore, owners, directors, managers, or executives from MSMEs in Lazada Malaysia are selected to fill in the questionnaire.

### **3.4.4 Sample Technique**

Non-probability sampling was used in the current study. Non-probability sampling refers to a sampling technique in which the probability of each member of the population being picked for the sample is unknown (Bhardwaj, 2019). The snowball sampling method is suitable for situations

where it is difficult to reach the target population. The fact that Lazada has a policy that restricts users from sending hyperlinks from external sources through Lazada Chat resulted in the survey not being able to be sent directly to the target population directly through the Lazada platform, but rather other channels needed to be found (Guidelines and Policies for Chat | Lazada Seller Center, n.d.). Therefore, by using snowball sampling, some of the respondents able to help to recruit more participants by sharing the survey to the Lazada Malaysia sellers' communities in different social media platforms. With this technique, this research able to get more samples.

### **3.4.5 Sampling Size**

Sample size needed to be determined to ensure the efficiency prior the data collection. To meet the desire outcomes, there must be adequate amount of data to be examined. The target population is 155, 000 sellers in Lazada (Lazada, 2024). This means 384 or more measurements/surveys are needed.

## **3.5 Research Instrument**

### **3.5.1 Questionnaire Design**

The survey questionnaire has been split into two sections and it was designed in the English language with all close-ended questions.

Section A consists of 7 questions which require the respondents to provide their general demographic information and some screening questions to qualify the respondents based on the targeted characteristics. For instance, age, gender, job title, the number of employees in their company, and the company's sales turnover amount.

Section B includes 22 questions that pertain to the variables of information quality, system quality, service quality, perceived usefulness, user satisfaction, and organizational performance. The measurement items in this section will be based on a Five-Point Likert Scale, where 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree.

## **3.6 Construct Measurement**

### **3.6.1 Origin and Measure of the Construct**

The origin of constructs will be illustrated in Figure 3.1 and 3.2 below, obtained from various published literature, with minor modifications where necessary, and has been adopted the existing research instruments as below:

Figure 3.1: Research Instrument and Measurement Scale of Section A

<b>Question</b>	<b>Options</b>	<b>Construct Measurement</b>
<b>Gender</b>	Female Male	Nominal Scale
<b>Age</b>	18 years old to 24 years old 25 years old to 34 years old 35 years old to 44 years old 45 years old to 54 years old 55 years old and above	Ordinal Scale
<b>Job Title</b>	Business Owner Director/CEO Manager/Senior Manager Executive/Senior Executive	Nominal Scale
<b>Company size based on sales turnover per annum.</b>	Micro (Sales turnover of <RM300K) Small (Sales turnover of RM300K - < RM3 Million) Medium (Sales turnover of RM3 Million - < RM20 Million) Sales turnover of >RM20 Million	Ordinal Scale
<b>Company size based on numbers of employees.</b>	Micro (1 to 4 employees) Small (5 to 29 employees) Medium (30 to 74 employees) More than 75 employees	Ordinal Scale
<b>Your company is one of the businesses in Lazada platform from Malaysia</b>	Yes No	Nominal Scale
<b>Does your company adopt the ChatGPT in the operations?</b>	Yes No	Nominal Scale
<b>If Yes, how long has your company adopted the ChatGPT?</b>	Less than 1 month 1 month to 6 months 7 months to 1 year More than 1 year	Ordinal Scale

Source: Developed for the research.

Figure 3.2: Research Instrument and Measurement Scale of Section B

Sources	Construct	Item	Operation Definition	Construct Measurement
(Chu, 2023)	<b>Information Quality</b>	IQ1	ChatGPT provides enough information.	Ordinal Scale
		IQ2	The information provided by ChatGPT is up-to-date.	
		IQ3	The information provided by ChatGPT is reliable.	
(Rafique et al., 2019)	<b>System Quality</b>	SQ1	I would find it easy to get access to the ChatGPT.	Ordinal Scale
		SQ2	The ChatGPT is accessible 24 h a day, 7 days a week.	
		SQ3	The layout and system design of the ChatGPT is friendly.	
		SQ4	I feel comfortable using the functions and services that are provided by the ChatGPT.	
(Chu, 2023)	<b>Service Quality</b>	SEQ1	ChatGPT provides a solution that is accurate and suitable for our organization's needs.	Ordinal Scale
		SEQ2	ChatGPT provides instant response.	
		SEQ3	ChatGPT has a great interface to convey our organization's needs.	
(Al-Okaily et al., 2023)	<b>Perceived Usefulness</b>	PU1	ChatGPT improves our organization's work quality.	Ordinal Scale
		PU2	ChatGPT increases our organization's productivity.	
		PU3	ChatGPT enhances our organization's work effectiveness.	
		PU4	ChatGPT is useful in our organization's work.	
(Al-Okaily et al., 2023)	<b>User Satisfaction</b>	US1	I am satisfied with ChatGPT system quality.	Ordinal Scale
		US2	I am satisfied with ChatGPT information quality.	
		US3	I am satisfied with ChatGPT service quality.	
		US4	Overall, I am satisfied with ChatGPT.	
(Al-Okaily et al., 2023)	<b>Organizational Performance</b>	OP1	ChatGPT enhances our organization's competitive advantage	Ordinal Scale
		OP2	ChatGPT increases our organization's overall productivity	
		OP3	ChatGPT reduces our organization's organizational costs	
		OP4	ChatGPT improves our organization's decision-making	

Source: Developed for the research.

### **3.6.2 Measurement Scale**

There are 2 scales that will be used in this research. The utilization of which type of scale is depending on what type of questions are asked and what kind of answer the researcher intended to receive.

#### **3.6.2.1 Nominal Scale**

There is no inherent ordering to the categories, hence the nominal scale entails collecting data that can be split into two or more groups (Shukla, 2023). Consequently, rather of gathering statistical data, respondents are classified using nominal scale questions. The scale is used in Section A for the identification of each respondent's demographic information such as the gender, and job title in their company.

#### **3.6.2.2 Ordinal Scale**

Data is categorised using an ordered ranking system when using an ordinal scale of measurement (Shukla, 2023). The age group is one of the research's examples. The ordinal scale ranks and arranges items based on their relative importance in an ordered connection, going from highest to lowest (Allanson & Notar, 2020). Five-point Likert scale is being applied to the questionnaire in Section B to determine the agreeability of the respondents towards the statements of each variable in this study. The options available for the respondents to choose from are 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree.

### **3.7 Data Processing**

To facilitate interpretation, rigorous data management strategies, statistical expertise, and critical thinking abilities are all necessary for data processing (Kotronoulas et al., 2023). It occurs following data collection and consists of all actions intended to transform the "raw" survey data into a cleaned and corrected state for use in analysis, presentation, and distribution (Psihoda et al., 2022). To guarantee that the study project is high-quality and thorough, the questionnaire was proofread for grammar mistakes, sentence construction mistakes, and sequence issues before it was distributed. For this study, data processing consisted of data editing, data cleaning, and data coding during data processing.

#### **3.7.1 Data Editing**

When a researcher adds, removes, or modifies variables, values, or cases, this is known as data editing. A few examples of data editing include selecting between different measurements, altering a number that seems unreasonable, and deleting a few outlier cases (Leahey, 2008). To reduce the bias and guarantee consistency, data will be verified and fixed in this step for mistakes or omissions on the questionnaire or during data entry.

#### **3.7.2 Data Coding**

The next step is to code the data that has been edited. According to Psihoda et al. (2022), data coding is the act of classifying and allocating code numbers or categories to raw survey data so that they can be used for tabulation, analysis, and estimation.



Figure 3.3: Data Coding for Data Collected

Question	Operation Definition	Coding
<b>Gender</b>	Female	1
	Male	2
<b>Age</b>	18 years old to 24 years old	1
	25 years old to 34 years old	2
	35 years old to 44 years old	3
	45 years old to 54 years old	4
	55 years old and above	5
<b>Job Title</b>	Business Owner	1
	Director/CEO	2
	Manager/Senior Manager	3
	Executive/Senior Executive	4
<b>Company size based on sales turnover per annum.</b>	Micro (Sales turnover of <RM300K)	1
	Small (Sales turnover of RM300K - < RM3 Million)	2
	Medium (Sales turnover of RM3 Million - < RM20 Million)	3
	Sales turnover of >RM20 Million	4
<b>Company size based on numbers of employees.</b>	Micro (1 to 4 employees)	1
	Small (5 to 29 employees)	2
	Medium (30 to 74 employees)	3
	More than 75 employees	4
<b>Does your company adopt the ChatGPT features provided by the platform in the operations?</b>	Yes	1
	No	2
<b>If Yes, how long has your company adopted the ChatGPT?</b>	Less than 1 month	1
	1 month to 6 months	2
	7 months to 1 year	3
	More than 1 year	4
<b>All questions in Section B (Total 22 questions)</b>	Strongly Disagree	1
	Disagree	2
	Neutral	3
	Agree	4
	Strongly Agree	5

Source: Developed for the research.

### **3.7.3 Data Cleaning**

To enhance the quality of data, data cleaning deals with finding and eliminating mistakes and inconsistencies from data. Single data sets can have issues with data quality because of data input errors, missing information, or other erroneous data. Consolidation of various data representations and the removal of redundant information is essential in order to enable access to correct and consistent data (Rahm & Hai Do, 2000).

## **3.8 Proposed Data Analysis Tools**

### **3.8.1 Descriptive Analysis**

To obtain a general understanding, descriptive analysis organises the data from the entire population into a graphical representation and then summarises the data. The results are displayed as statistics, graphs, charts, or tables, and it only describes or arranges data on the population being studied without making any conclusions (Allanson & Notar, 2020). In this study, Microsoft Excel used to analyse the questionnaire survey results for demographic data on the respondents.

### **3.8.2 Inferential Analysis**

Formal techniques are used in inferential statistics to make inferences about the larger population based on conclusions drawn from sample data (Allanson & Notar, 2020). A powerful statistical method called structural equation modelling (SEM) combines the structural model and measurement model, into a single statistical test. When the pattern of interactions between the study constructs has been established and based on accepted theory, SEM is very useful for inferential data analysis and hypothesis testing (Loon,

2008). Among business and social science scholars, partial least squares structural equation modelling (PLS-SEM), a subset of SEM, is one of the most used techniques for multivariate data analysis. The popularity of PLS-SEM can be attributed to its user-friendly visual interface, which allows researchers to evaluate abstract concepts while accounting for measurement error. This allows researchers to perform multiple robustness assessments and analyse relationships between observed and latent variables in a complex model simultaneously (Memon et al., 2021). Because SmartPLS has a suitable built-in graphical user interface, it was chosen for this study's data analysis of PLS-SEM data. Measurement model assessment and structural model assessment are two PLS-SEM procedures for analysis (Hair et al., 2018).

#### **3.8.2.1 Measurement Model Assessment**

Analysing PLS-SEM data begins with looking at the measurement models. The structural model must next be evaluated by researchers if the measurement models satisfy all necessary requirements. Using Cronbach's Alpha, measurement models are assessed for internal consistency and reliability. According to Hair et al. (2018), reliability values for Cronbach's Alpha should ideally be 0.70 or greater.

#### **3.8.2.2 Structural Model Assessment**

Collinearity, relationship significance, and model explanatory power are all factors to consider while evaluating structural model. In order to identify the important collinearity issues, collinearity is quantified using the Variance Inflation Factor (VIF), and VIF values should be 5 or above. The p-value is a statistical tool used to assess the significance of the relationship between exogenous and endogenous variables. A significant relationship is seen when the p-value is less than 0.05. To determine the variance as stated in each of the endogenous constructs, the explanatory power of the model is

quantified using coefficients of determination, the R-square. R-square values of 0.75, 0.50 and 0.25 are considered substantial, moderate and weak. Overfit is generally indicated by R-square values of 0.90 and above (Hair et al., 2018).

### **3.9 Conclusion**

In conclusion, the data was prepared for data analysis. In the following chapter, interpretation and analysis of data will take place.

## **CHAPTER 4: DATA ANALYSIS**

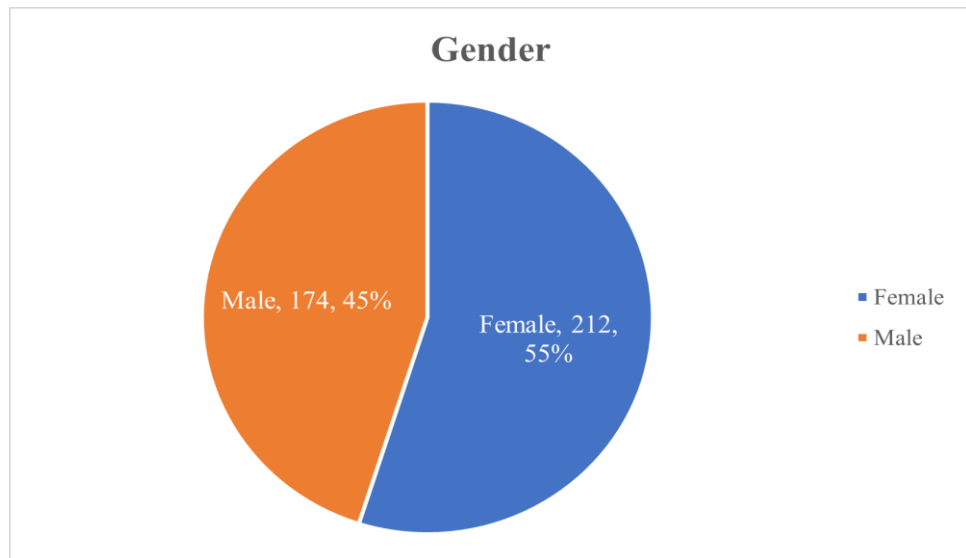
### **4.0 Introduction**

This chapter is to present the patterns of the data analysis and results which relevant to the research questions and hypotheses proposed. There is a 410-sample size has been collected, while only 386 samples suitable to be analysis after the data cleaning.

### **4.1 Descriptive Analysis**

#### **4.1.1 Demographic Characteristics of Respondents**

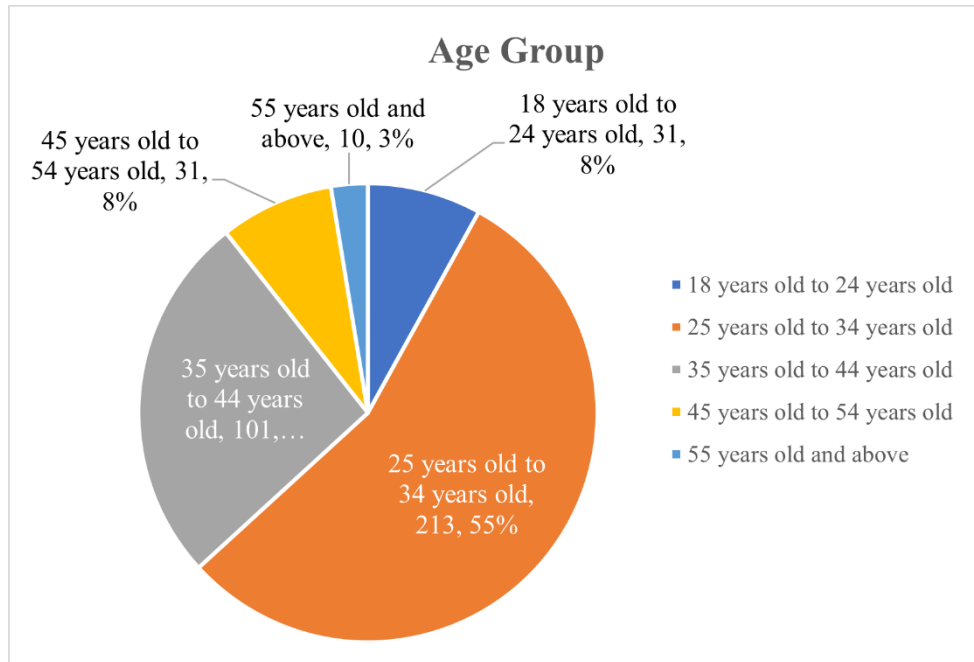
Figure 4.1: Gender



Source: Developed for the research.

Figure 4.1 show the gender of the respondents. There is a total of 386 respondents, with 174 of male respondents (45%) and 212 of female respondents (55%) respectively.

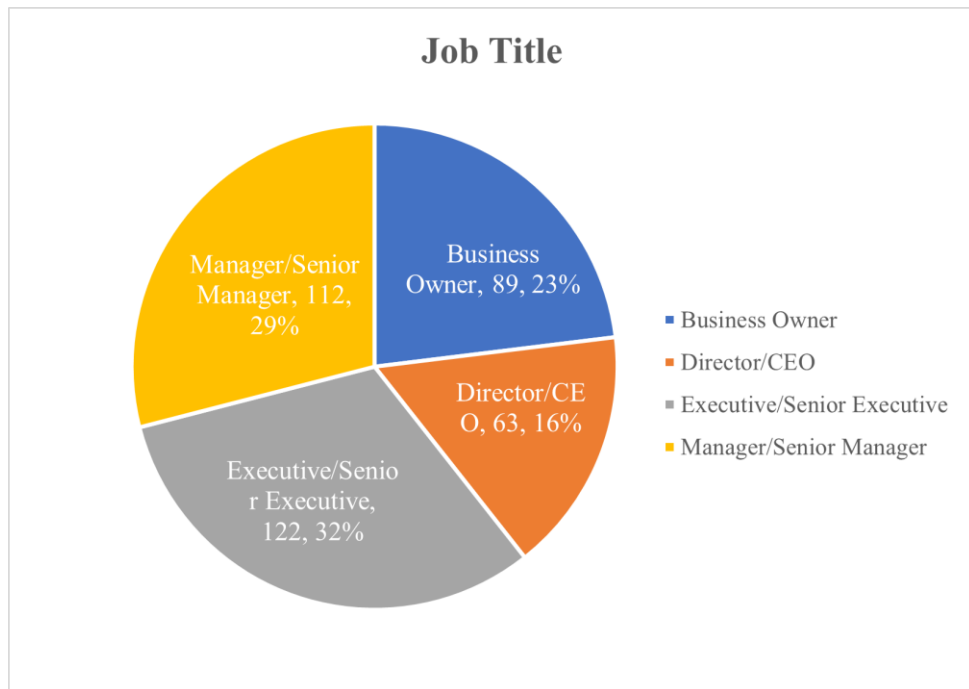
Figure 4.2: Age



Source: Developed for the research.

Figure 4.2 demonstrate that the largest age group is 25 years old to 34 years old, accounting for 213 respondents (55%) out of 386 respondents. Subsequently, 101 respondents (26%) between the age of 35 years old to 44 years old. The number of respondents for 18-24 age group and 45-54 age group are same, with 31 respondents (8%) respectively. The remaining 10 respondents (3%) were 55 years old and above.

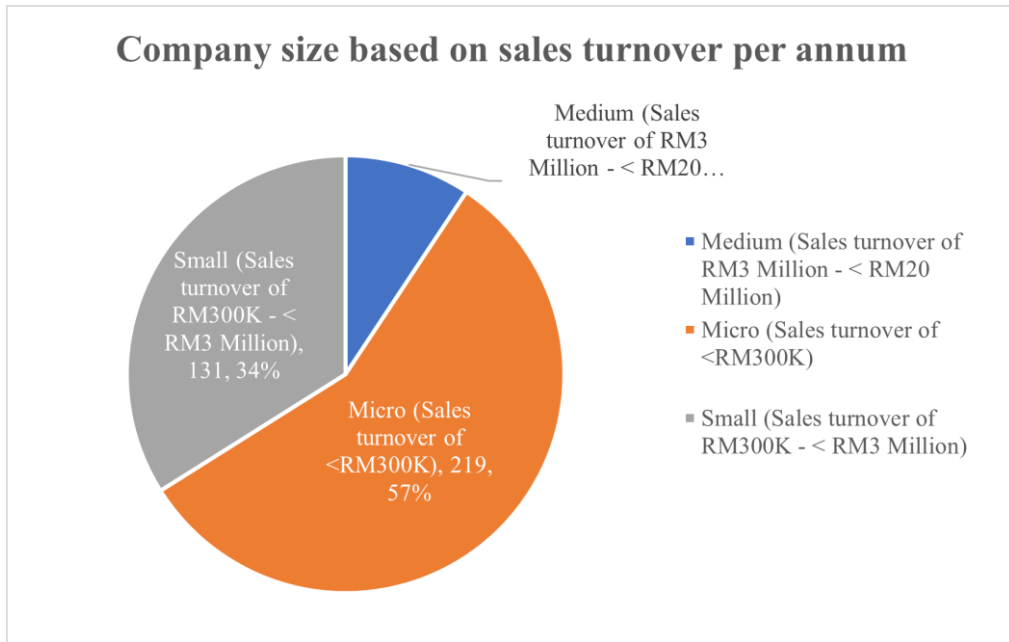
Figure 4.3: Job Title



Source: Developed for the research.

Figure 4.3 indicate the job title of the respondents. Majority of the respondents held an executive or senior executive position in their company, accounting for 122 respondents (32%). There were 112 respondents (29%) are manager or senior manager of their company, and 89 respondents (23%) are the business owner of their own company. In addition, there were 63 respondents (16%) are director or chief executive officer (CEO) in their company.

Figure 4.4: Company Size based on Sales Turnover per annum

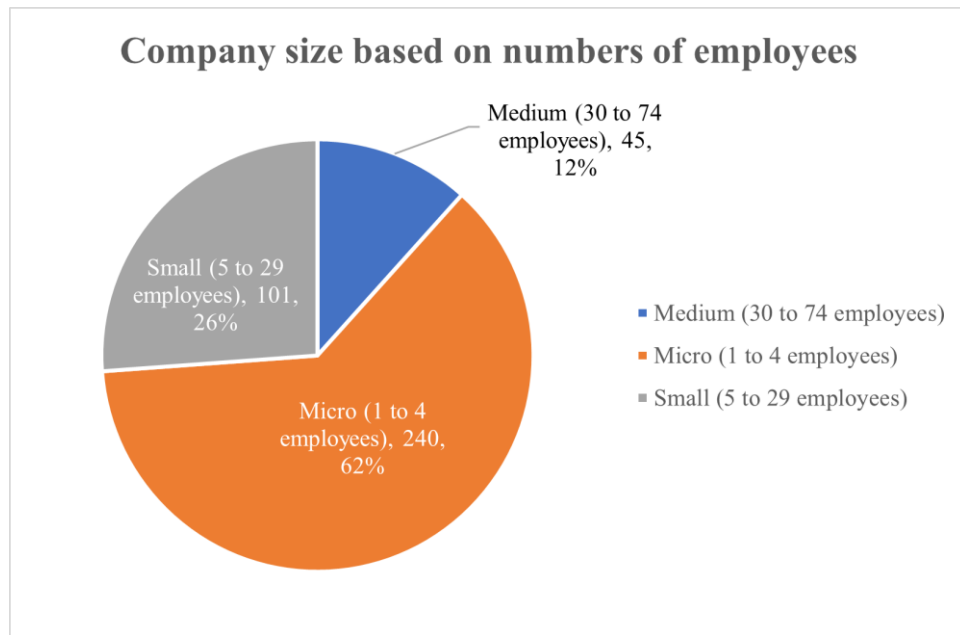


Source: Developed for the research.

According to Figure 4.4, majority of the company's size (57%) is micro company size with a sales turnover of less than RM300,000. 131 companies (34%) are a small company size with a sales turnover of RM300,000 to less than RM3 million. 36 of the companies (9%) are medium sized with a sales turnover of RM3 million to less than RM20 million.



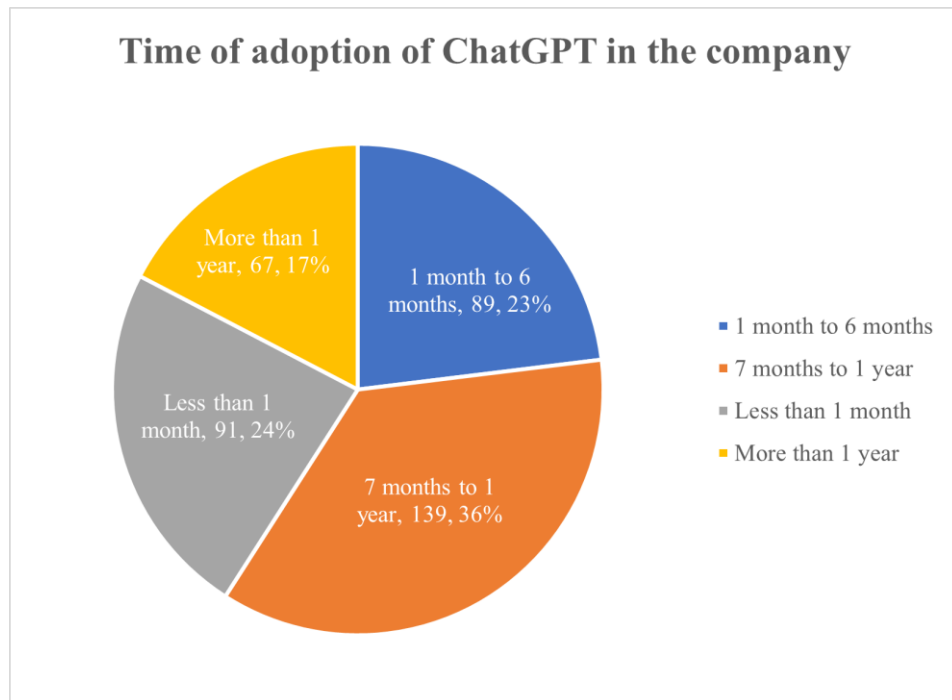
Figure 4 5: Company Size based on Numbers of Employees



Source: Developed for the research.

Figure 4.5 illustrate the company size based on the number of employees in the responded company. 45 companies (12%) have 30 to 74 employees, and they were categorised as medium company size according to the SME definition set by Malaysian SME Corp's. In addition, 101 companies (26%) have 5 to 29 employees, indicating they are small company. 240 companies (62%) have less than 5 employees, meaning they are micro-sized company.

Figure 4.6: Time of adoption of ChatGPT in the company



Source: Developed for the research.

Based on Figure 4.6, the majority of the companies (26%) have adopted ChatGPT in their company for 7 months to 1 year. Notably, there are almost same number of companies have adopted ChatGPT in their company for less than 1 month and 1 month to 6 months, which having 91 companies (24%) and 89 companies (23%) respectively. Lastly, 67 companies (17%) adopted ChatGPT in their company for more than 1 year.

## 4.2 Inferential Analyses

### 4.2.1 Measurement Model Assessment

#### 4.2.1.1 Internal Consistency Reliability (Reliability Analysis)

To measure the internal consistency of the dataset, reliability analysis by using Cronbach's alpha has been deployed. For the value of which more than 0.7 indicates that the constructs are consistent within the variables.

Of all the variables, information quality has a value of 0.763, service quality is 0.765, system quality is 0.813, perceived usefulness is 0.827, user satisfaction is 0.856, and organizational performance is 0.872. The following table portrayed the output generated from the SMARTPLS.

Table 4.1: Cronbach's Alpha for 386 sample size

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Information Quality	0.763	0.764	0.763	0.518
Organizational Performance	0.872	0.879	0.871	0.631
Perceived Usefulness	0.827	0.829	0.825	0.543
Service Quality	0.765	0.769	0.766	0.522
System Quality	0.813	0.842	0.802	0.517

Sources: Developed for the research.

4.2.1.2 Correlation Analysis

Table 4.2: Correlation Analysis

	Information Quality	Organizational Performance	Perceived Usefulness	Service Quality	System Quality	User Satisfaction
Information Quality	1.000					
Organizational Performance	0.065	1.000				
Perceived Usefulness	0.499	0.144	1.000			
Service Quality	0.454	0.062	0.618	1.000		
System Quality	0.279	0.529	0.302	0.259	1.000	
User Satisfaction	0.229	0.603	0.245	0.134	0.655	1.000

Sources: Developed for the research.

To examine the strength of relationship between two variables, the correlation analysis has been executed.

The coefficients of correlation below than 0.5 considered as weak correlation whereas the coefficient more than 0.5 considered as strong correlation (Hair et al., 2018).

The correlation between organizational performance and information quality, perceived usefulness and information quality, service quality and information quality, system quality and information quality, user satisfaction and information quality, perceived usefulness and organizational performance, service quality and organizational performance, system quality and perceived usefulness, user satisfaction and perceived usefulness, system quality and service quality, user satisfaction and service quality are weak.

## 4.2.2 Structural Model Assessment – Model 1

### 4.2.2.1 Structural Equation Modeling

Table 4.3: Path coefficients (Model 1)

Model 1	Path coefficients
Information Quality -> Perceived Usefulness	0.253
System Quality -> Perceived Usefulness	0.108
Service Quality -> Perceived Usefulness	0.475

Sources: Developed for the research.

By the path coefficients value, a model of perceived usefulness has been developed:

#### Model 1

**Perceived Usefulness** = 0.253 Information quality + 0.108 System quality + 0.475 Service quality

0.253 tells us that for every one unit increase in the information quality will increase the perceived usefulness by 0.253 where the other variables remain unchanged. 0.108 of the perceived usefulness will increase if the system quality is increase by one unit. The service quality will give us 0.475 increment in the perceived usefulness of one unit increase.

**4.2.2.2 Significance of Relationship**

Table 4.4: Model 1 Estimate

<b>Model 1</b>	<b>Original sample (O)</b>	<b>Sample mean (M)</b>	<b>Standard deviation (STDEV)</b>	<b>T statistics ( O/STDEV )</b>	<b>P values</b>
Information Quality -> Perceived Usefulness	0.236	0.236	0.047	4.973	0.000
System Quality -> Perceived Usefulness	0.119	0.124	0.041	2.937	0.003
Service Quality -> Perceived Usefulness	0.387	0.387	0.043	9.046	0.000

Sources: Developed for the research

From the above table, it is found that information quality, service quality, and system quality only significant at 0.05 where the p-value = 0.000, 0.000, and 0.003 respectively.

Thus, the final model 1 of the perceived usefulness is:

$$\text{Perceived Usefulness} = 0.253 \text{ Information quality} + 0.108 \text{ System quality} + 0.475 \text{ Service quality}$$

Table 4.5: Hypothesis Testing Results (Model 1)

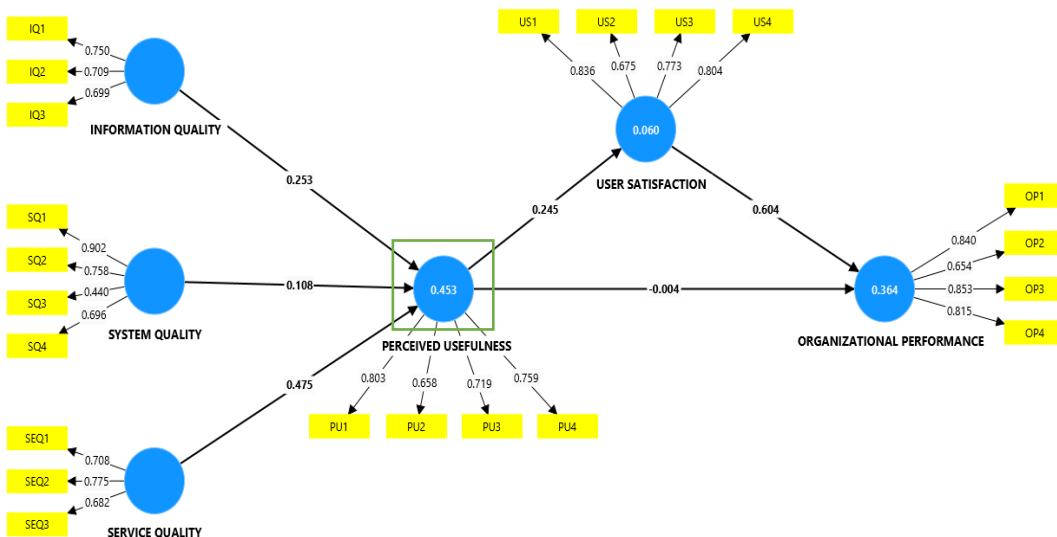
	Hypothesis	Decision
<b>H1</b>	There is a significant relationship between information quality and perceived usefulness in ChatGPT.	Hypothesis supported
<b>H2</b>	There is a significant relationship between system quality and perceived usefulness in ChatGPT.	Hypothesis supported
<b>H3</b>	There is a significant relationship between service quality and perceived usefulness in ChatGPT.	Hypothesis supported

Sources: Developed for the research

More than 0.05 H-null is rejected, less than 0.05 H-null is not rejected. Table 4.5 above summaries the findings of the significance variables and the decision of the hypothesis for model 1.

#### 4.2.2.3 Model Explanatory Power

Figure 4.7: Result Output Generated by SMARTPLS 4 (Model 1)



Sources: Developed for the research.

**Model 1**

R-square = 0.453 indicates that 45.3% of the variation in the Perceived usefulness is explained by the Information quality, System quality, and Service quality. 54.7% is explained by the external factor which not within the study.

**4.2.2.4 Collinearity (VIF)**

Table 4.6: VIF (Model 1)

<b>Model 1</b>	<b>VIF</b>
Information Quality -> Perceived Usefulness	1.306
Service Quality -> Perceived Usefulness	1.291
System Quality -> Perceived Usefulness	1.111

Sources: Developed for the research.

The VIF explained the collinearity on the dataset. From the above table, it found that, all the values are less than 5, indicates that, the variables are normal.



## 4.2.3 Structural Model Assessment – Model 2

### 4.2.3.1 Structural Equation Modeling

Table 4.7: Path Coefficients (Model 2)

<b>Model 2</b>	<b>Path coefficients</b>
Perceived Usefulness -> User Satisfaction	0.245

Sources: Developed for the research.

By the path coefficients value, a model of user satisfaction has been developed as follows:

### Model 2

**User Satisfaction** = 0.245 Perceived usefulness

0.245 tells us that for every one unit increase in the perceived usefulness will increase the perceived usefulness by 0.245 where the other variables remain unchanged.

**4.2.3.2 Significance of Relationship**

Table 4.8: Model 2 Estimate

<b>Model 2</b>	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Perceived Usefulness -> User Satisfaction	0.207	0.207	0.057	3.597	0.000

Sources: Developed for the research

From the above table, it is found that perceived usefulness only significant at 0.05 where the p-value = 0.000.

Thus, the final model 2 of the user satisfaction is:

$$\text{User Satisfaction} = 0.245 \text{ Perceived usefulness}$$

Table 4.9: Hypothesis Testing Results (Model 2)

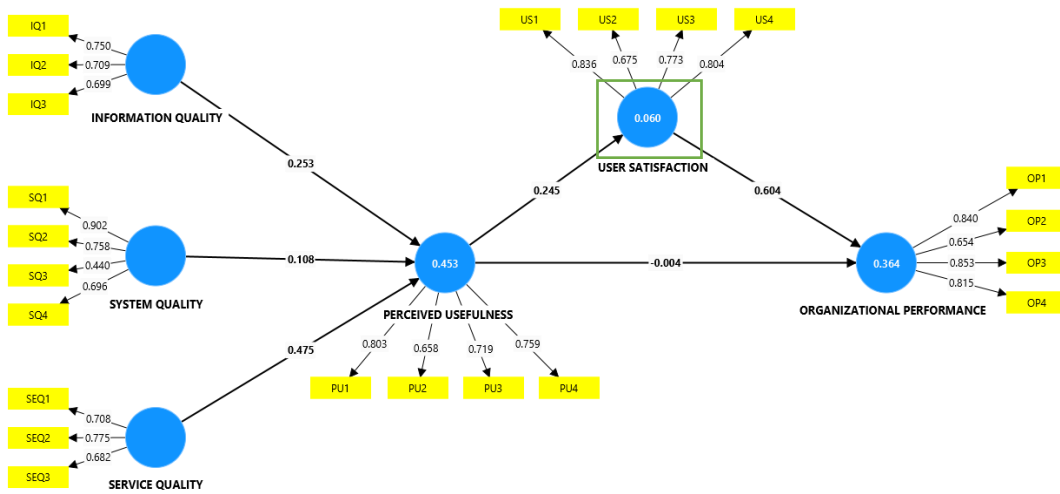
	<b>Hypothesis</b>	<b>Decision</b>
<b>H4</b>	There is a significant relationship between perceived usefulness and user satisfaction in ChatGPT.	Hypothesis supported

Sources: Developed for the research

More than 0.05 H-null is rejected, less than 0.05 H-null is not rejected. Table 4.9 above summaries the findings of the significance variables and the decision of the hypothesis for model 2.

### 4.2.3.3 Model Explanatory Power

Figure 4.8: Result Output Generated by SMARTPLS 4 (Model 2)



Sources: Developed for the research.

### Model 2

R-square = 0.060 indicate that 6% of the variation in the user satisfaction is explained by the perceived usefulness. 94% is explained by the external factor which not within the study.

### 4.2.3.4 Collinearity (VIF)

Table 4.10: VIF (Model 2)

Model 2	VIF
Perceived Usefulness -> User Satisfaction	1.000

Sources: Developed for the research.

The VIF explain the collinearity on the dataset. From the above table, it found that, all the values are less than 5, indicates that, the variables are normal.

## 4.2.4 Structural Model Assessment – Model 3

### 4.2.4.1 Structural Equation Modeling

Table 4.11: Path Coefficients (Model 3)

Model 3	Path coefficients
Perceived Usefulness -> Organizational Performance	-0.004
User Satisfaction -> Organizational Performance	0.604

Sources: Developed for the research.

By the path coefficients value, a model of organizational performance has been developed as follow:

### Model 3

**Organizational Performance** = 0.604 User satisfaction – 0.004 Perceived Usefulness

0.604 tells us that for every one unit increase in the user satisfaction will increase the organizational performance by 0.604 where the other variables remain unchanged. -0.004 tells us that for every one unit increase in perceived usefulness, the organizational performance will increase by -0.074.

**4.2.4.2 Significance of Relationship**

Table 4.12: Model 3 Estimate

<b>Model 3</b>	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
Perceived Usefulness -> Organizational Performance	0.015	0.014	0.048	0.310	0.756
User Satisfaction -> Organizational Performance	0.522	0.527	0.036	14.324	0.000

Sources: Developed for the research

From the above table, it is found that user satisfaction only significant at 0.05 where the p-value = 0.000. The remaining variable is not significant which p-value is more than 0.05. Perceived usefulness is non-significant variable.

Thus, the final model 3 of the organizational performance is:

**Organizational Performance = 0.604 User satisfaction**

Table 4.13: Hypothesis Testing Results (Model 3)

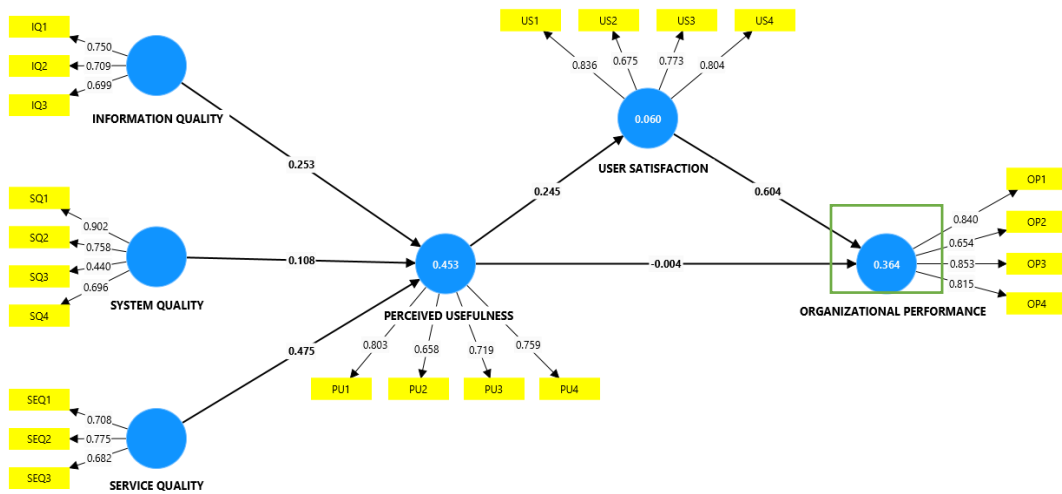
	<b>Hypothesis</b>	<b>Decision</b>
<b>H5</b>	There is a significant relationship between perceived usefulness and organizational performance in ChatGPT.	Hypothesis is not supported
<b>H6</b>	There is a significant relationship between user satisfaction and organizational performance in ChatGPT.	Hypothesis supported

Sources: Developed for the research

More than 0.05 H-null is rejected, less than 0.05 H-null is not rejected. Table 4.13 above summaries the findings of the significance variables and the decision of the hypothesis for model 3. All hypotheses are supported, except for H5, there is not a significant relationship between perceived usefulness and organizational performance. This probably because that even if users perceive ChatGPT as useful, it does not mean that it is implemented effectively within the organization, due to various reasons such as lack of awareness, resistance to change, or preference for traditional methods. The actual usage patterns may not align with perceived usefulness, resulting in a lack of significant relationship with organizational performance.

#### 4.2.4.3 Model Explanatory Power

Figure 4.9: Result Output Generated by SMARTPLS 4 (Model 3)



Sources: Developed for the research.

#### Model 3

R-square = 0.364 indicate that 36.4% of the variation in the organizational performance is explained by the perceived usefulness and user satisfaction. 63.6% is explained by the external factor which not within the study.

#### 4.2.4.4 Collinearity (VIF)

Table 4.14: VIF (Model 3)

Model 3	VIF
Perceived Usefulness -> Organizational Performance	1.064
User Satisfaction -> Organizational Performance	1.064

Sources: Developed for the research.

The VIF explain the collinearity on the dataset. From the above table, it found that, all the values are less than 5, indicates that, the variables are normal.

### **4.3 Conclusion**

This chapter showed the data analysis results of the survey. It includes the descriptive analysis for the respondents of the surveys, and inferential analysis for the variables in this study. The hypotheses have been tested.



## **CHAPTER 5: DISCUSSION, CONCLUSION, AND IMPLICATIONS**

### **5.0 Introduction**

This chapter summarises the discussion and findings from this research effort, and covered the study's implications, limitations, and recommendations for future research.

### **5.1 Summary of Major Findings**

More than 0.05 H-null is rejected, and less than 0.05 H-null is not rejected. Table 5.1 summarizes the findings of the significance variables and the decision of the hypothesis. The results show that information quality, system quality and services quality have a significant relationship with perceived usefulness. Moreover, perceived usefulness has a significant relationship with user satisfaction. User satisfaction also has a significant relationship with organizational performance of the companies. Since the perceived usefulness has a p-value that is larger than 0.5, there is no significant relationship between perceived usefulness and organizational performance of the companies.

As a result, only five hypotheses are supported, while one is rejected. This can be attributed to the fact that the mere perception of ChatGPT's usefulness by users does not guarantee that the system is being used efficiently within the company. Several reasons for this, such as a lack of awareness, resistance to change, or a preference for traditional approaches. Therefore, there may be a lack of significant relationship between perceived usefulness and actual usage patterns, which could affect organizational performance.

Table 5.1: Hypothesis Testing Results

No.	Hypothesis	Result	Decision
H1	There is a significant relationship between information quality and perceived usefulness in ChatGPT.	P-value = 0.000	Hypothesis supported
H2	There is a significant relationship between system quality and perceived usefulness in ChatGPT.	P-value = 0.003	Hypothesis supported
H3	There is a significant relationship between service quality and perceived usefulness in ChatGPT.	P-value = 0.000	Hypothesis supported
H4	There is a significant relationship between perceived usefulness and user satisfaction in ChatGPT.	P-value = 0.000	Hypothesis supported
H5	There is a significant relationship between perceived usefulness and organizational performance in ChatGPT.	P-value = 0.756	Hypothesis is not supported
H6	There is a significant relationship between user satisfaction and organizational performance in ChatGPT.	P-value = 0.000	Hypothesis supported

Sources: Developed for the research

## 5.2 Implications of the Study

The findings of this study contribute to filling a research gap by offering insights into the effects of ChatGPT on platform-based businesses. While previous research has examined ChatGPT's potential advantages in many industries, its implications on e-commerce platforms have received noticeably less attention. This study provides a thorough understanding of how ChatGPT affects user experiences and business operations in the e-commerce industry. This advances academic research while offering useful data to other researchers.

Platform-based businesses that want to incorporate ChatGPT into their operations should take note of the study's conclusions. The study highlights the importance of giving priority to information quality, system quality, and service quality in ChatGPT implementations by establishing their significant relationship with perceived usefulness. Making sure ChatGPT systems perform well in these domains can improve user experiences while also boosting platform-based businesses' overall performance and competitiveness. Moreover, the noteworthy relationship found between perceived usefulness and user satisfaction emphasises how important it is for companies to give user-centric design and functionality first priority when using ChatGPT.

Perceived usefulness and organisational performance have no significant relationship raises important considerations for strategic planning in business. Even while users think ChatGPT is useful, it might not be easy to translate that into real organisational performance results. This emphasises how crucial it is for companies to thoroughly consider the wider effects of integrating ChatGPT into their organisation. To optimise ChatGPT's potential benefits while minimising risks or restrictions, factors like organisational culture, successful implementation strategies, and alignment with business objectives should be carefully evaluated.

### 5.3 Limitations of the Study & Recommendations for Future Research

While helpful in offering statistical insights into ChatGPT's effect on organisational performance in platform-based businesses, the study's **quantitative focus** has certain limitations. First of all, it's possible that this method falls short of accurately capturing the complex interactions, viewpoints, and qualitative effects of ChatGPT use in businesses. In order to overcome this constraint, future research may **integrate qualitative approaches**, such as in-depth interviews, focus groups, or case studies, to acquire a more thorough comprehension of the ways in which ChatGPT impacts employee interactions, organisational dynamics, and decision-making procedures beyond the boundaries of quantitative measurement.

The **limited number of variables** the study looked at is another significant limitation. Without taking into account a wider range of variables, the investigation concentrates on variables from the ISSM and TAM. Future study efforts may **expand the range of factors** under investigation, utilising a more comprehensive methodology to comprehend the diverse effects of ChatGPT. This can entail creating complex models that take into consideration other variables, thereby offering a better understanding of the ecosystem in which ChatGPT functions and its wider implications to businesses that rely on e-commerce platforms.

The **geographical limitation** of the study, focusing solely on platform-based MSMEs in Malaysia, particularly within the Lazada platform, restricts the generalizability of the findings across different geographic and cultural contexts. Geographical variations might be notable in terms of e-commerce structures, technological adoption rates, and the efficacy of ChatGPT. Future studies should attempt **explore a more varied range of geographical areas and e-commerce platforms** in order to mitigate this limitation. Comparative research across several nations or areas may show how cultural, economic, and legal variations affect ChatGPT acceptance and its effects on organisational performance. This would improve the research findings' external validity while also offering insightful

information to e-commerce platforms thinking about integrating ChatGPT and related AI technologies.

## **5.4 Conclusion**

This research examines variables affecting the organizational performance of platform-based businesses. Results found that information quality, system quality, and service quality of ChatGPT are significantly related to perceived usefulness. Perceived usefulness, in turn, significantly influences user satisfaction, which then affects organizational performance. However, there was no significant direct relationship found between perceived usefulness and organizational performance. In conclusion, e-commerce platforms should prioritize enhancing ChatGPT's information, system, and service quality to integrate it effectively, and enhance organizational performance. Lastly, it is hopefully that this study can serve as a reference for future researchers to address knowledge gaps.

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## **APPENDICES**

### **Appendix 3.1: Questionnaire**

## **The Impact of ChatGPT on E-commerce: The Case of Platform-Based Business**

Dear Respondents,

I am Lee Siu Ying, a final year undergraduate student of Bachelor of International Business (Hons) at Universiti Tunku Abdul Rahman (UTAR), who currently conducting my research project as a part of the requirement to complete my degree program. The aim of this research project is to study the impacts of ChatGPT on platform-based business in Malaysia.

You are one of the few randomly selected platform-based businesses in Malaysia to participate in this survey, which takes about 5 to 10 minutes. Your help is critical for understanding how the organizational performance of platform-based businesses in Malaysia affected by ChatGPT.

Should you have any further enquiries, kindly contact me through: lsy020831@utar.my. Your participation is much appreciated.

*\* Indicates required question*

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### **Section 1: Personal Data Protection Statement**

Please be informed that in accordance with Personal Data Protection Act 2010 ("PDPA") which came into force on 15 November 2013, Universiti Tunku Abdul Rahman ("UTAR") is hereby bound to make notice and require consent in relation to collection, recording, storage, usage and retention of personal information.

1. Personal data refers to any information which may directly or indirectly identify a person which could include sensitive personal data and expression of opinion. Among others it includes:

- a) Name
- b) Identity card
- c) Place of Birth
- d) Address
- e) Education History
- f) Employment History
- g) Medical History
- h) Blood type
- i) Race
- j) Religion
- k) Photo
- l) Personal Information and Associated Research Data

2. The purposes for which your personal data may be used are inclusive but not limited to:

- a) For assessment of any application to UTAR
- b) For processing any benefits and services
- c) For communication purposes
- d) For advertorial and news
- e) For general administration and record purposes
- f) For enhancing the value of education
- g) For educational and related purposes consequential to UTAR
- h) For replying any responds to complaints and enquiries
- i) For the purpose of our corporate governance
- j) For the purposes of conducting research/ collaboration

3. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

4. Any personal information retained by UTAR shall be destroyed and/or deleted in



accordance with our retention policy applicable for us in the event such information is no longer required.

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

1. Consent: \*

6. By submitting or providing your personal data to UTAR, you had consented and agreed for your personal data to be used in accordance to the terms and conditions in the Notice and our relevant policy.

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

*Mark only one oval.*

I have been notified and that I hereby understood, consented and agreed per UTAR above notice.

I disagree, my personal data will not be processed.  
*Skip to section 10 (Thank you for your participation.)*

**Section 2: Demographic Information**

2. Gender \*

*Mark only one oval.*

Female

Male

3. Age \*

*Mark only one oval.*

- 18 years old to 24 years old
- 25 years old to 34 years old
- 35 years old to 44 years old
- 45 years old to 54 years old
- 55 years old and above

4. Job Title \*

*Mark only one oval.*

- Business Owner
- Director/CEO
- Manager/Senior Manager
- Executive/Senior Executive
- Other: \_\_\_\_\_

5. Company size based on sales turnover per annum \*

*Mark only one oval.*

- Micro (Sales turnover of <RM300K)
- Small (Sales turnover of RM300K - < RM3 Million)
- Medium (Sales turnover of RM3 Million - < RM20 Million)
- Sales turnover of >RM20 Million

6. Company size based on numbers of employees \*

*Mark only one oval.*

- Micro (1 to 4 employees)
- Small (5 to 29 employees)
- Medium (30 to 74 employees)
- More than 75 employees

7. Your company is one of the businesses in Lazada platform from Malaysia \*

*Mark only one oval.*

- Yes
- No

8. Does your company adopt the ChatGPT in the operations? \*

*Mark only one oval.*

- Yes
- No *Skip to section 10 (Thank you for your participation.)*

9. If Yes, how long has your company adopted the ChatGPT?

*Mark only one oval.*

- Less than 1 month
- 1 month to 6 months
- 7 months to 1 year
- More than 1 year

**Section 3: Information Quality (IQ)**

**INSTRUCTION:** Based on the statement, please choose the most suitable answer to indicate the important rating of the attribute with the statement by selecting the number 1 to 5. For each of the following statements, kindly circle **ONLY ONE** number that represents your opinion the most.

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

10. IQ1. ChatGPT provides enough information. \*

*Mark only one oval.*

1   2   3   4   5

---

Stro      Strongly Agree

11. IQ2. The information provided by ChatGPT is up-to-date. \*

*Mark only one oval.*

1   2   3   4   5

---

Stro      Strongly Agree

12. IQ3. The information provided by ChatGPT is reliable. \*

*Mark only one oval.*

1   2   3   4   5

---

Stro      Strongly Agree

**Section 4: System Quality (SQ)**

**INSTRUCTION:** Based on the statement, please choose the most suitable answer to indicate the important rating of the attribute with the statement by selecting the number 1 to 5. For each of the following statements, kindly circle **ONLY ONE** number that represents your opinion the most.

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

13. SQ1. I would find it easy to get access to the ChatGPT. \*

*Mark only one oval.*

1   2   3   4   5

---

Strongly Disagree      Strongly Agree

14. SQ2. The ChatGPT is accessible 24 hours a day, 7 days a week. \*

*Mark only one oval.*

1   2   3   4   5

---

Strongly Disagree      Strongly Agree

15. SQ3. The layout and system design of the ChatGPT is friendly. \*

*Mark only one oval.*

1   2   3   4   5

---

Strongly Disagree      Strongly Agree

16. SQ4. I feel comfortable using the functions and services that are provided by the ChatGPT. \*

Mark only one oval.

1 2 3 4 5

Stro      Strongly Agree

### Section 5: Service Quality (SEQ)

**INSTRUCTION:** Based on the statement, please choose the most suitable answer to indicate the important rating of the attribute with the statement by selecting the number 1 to 5. For each of the following statements, kindly circle **ONLY ONE** number that represents your opinion the most.

- 1 = Strongly Disagree  
2 = Disagree  
3 = Neutral  
4 = Agree  
5 = Strongly Agree

17. SEQ1. ChatGPT provides a solution that is accurate and suitable for our organization's needs. \*

Mark only one oval.

1 2 3 4 5

Stro      Strongly Agree

18. SEQ2. ChatGPT provides instant response \*

Mark only one oval.

1 2 3 4 5

Stro      Strongly Agree

19. SEQ3. ChatGPT has a great interface to convey our organization's needs. \*

Mark only one oval.

1 2 3 4 5

---

Stro      Strongly Agree

**Section 6: Perceived Usefulness (PU)**

**INSTRUCTION:** Based on the statement, please choose the most suitable answer to indicate the important rating of the attribute with the statement by selecting the number 1 to 5. For each of the following statements, kindly circle **ONLY ONE** number that represents your opinion the most.

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

20. PU1. ChatGPT improves our organization's work quality. \*

Mark only one oval.

1 2 3 4 5

---

Stro      Strongly Agree

21. PU2. ChatGPT increases our organization's productivity. \*

Mark only one oval.

1 2 3 4 5

---

Stro      Strongly Agree

22. PU3. ChatGPT enhances our organization's work effectiveness. \*

Mark only one oval.

1 2 3 4 5

Strongly Disagree      Strongly Agree

23. PU4. ChatGPT is useful in our organization's work. \*

Mark only one oval.

1 2 3 4 5

Strongly Disagree      Strongly Agree

### Section 7: User Satisfaction (US)

**INSTRUCTION:** Based on the statement, please choose the most suitable answer to indicate the important rating of the attribute with the statement by selecting the number 1 to 5. For each of the following statements, kindly circle **ONLY ONE** number that represents your opinion the most.

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

24. US1. I am satisfied with ChatGPT system quality. \*

Mark only one oval.

1 2 3 4 5

Strongly Disagree      Strongly Agree



25. US2. I am satisfied with ChatGPT information quality. \*

Mark only one oval.

1 2 3 4 5

---

Stro      Strongly Agree

26. US3. I am satisfied with ChatGPT service quality. \*

Mark only one oval.

1 2 3 4 5

---

Stro      Strongly Agree

27. US4. Overall, I am satisfied with ChatGPT. \*

Mark only one oval.

1 2 3 4 5

---

Stro      Strongly Agree

### Section 8: Organizational Performance (OP)

**INSTRUCTION:** Based on the statement, please choose the most suitable answer to indicate the important rating of the attribute with the statement by selecting the number 1 to 5. For each of the following statements, kindly circle **ONLY ONE** number that represents your opinion the most.

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

28. OP1. ChatGPT enhances our organization's competitive advantage. \*

*Mark only one oval.*

1 2 3 4 5

Strongly      Strongly Agree

29. OP2. ChatGPT increases our organization's overall productivity. \*

*Mark only one oval.*

1 2 3 4 5

Strongly      Strongly Agree

30. OP3. ChatGPT reduces our organization's organizational costs. \*

*Mark only one oval.*

1 2 3 4 5

Strongly      Strongly Agree

31. OP4. ChatGPT improves our organization's decision-making. \*

*Mark only one oval.*

1 2 3 4 5

Strongly      Strongly Agree

Thank you for your participation.

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