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## Unravelling the Influence of Phygital Factors on Purchase Behaviour in Food Retailing

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#### Abstract

Phygital Retailing an integrated concept of bringing both physical and digital retail factors is becoming extremely important in today's changing retail environment. However, despite its eminent importance, their role in enhancing attitude towards phygital and customers' purchase behavior remains tenuous in Malaysian phygital retail. Addressing these gaps, this study aims to investigate the role phygital retail factors enhancing attitude towards phygital which subsequently enhances customers' purchase behavior in phygital retail in Malaysia. By using quantitative methods, deductive approach, and purposive sampling this study has collected the data from phygital retail users of Malaysia. The findings of this study have provided interesting insights into where digital factors significantly contribute to developing favorable attitude towards phygital retail. Whereas physical factors such as merchandise assortment play a significant role while aesthetics was found to have insignificant relationship towards attitude towards phygital retail. This study concludes by providing valuable implications for both theory and practice.

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#### 1. INTRODUCTION

Due to the quick development of digital technology, the retail sector has seen a substantial transformation in recent years. As a result, the idea of "phygital" retail has developed, fusing the real and digital worlds in new and exciting ways to provide immersive shopping experiences (Bonfanti et al., 2023). The term "phygital," a combination of the words "physical" and "digital," describes a method

that smoothly combines both digital and physical components to produce a cohesive and immersive experience (Singh et al., 2019). The phrase is frequently used to characterise tactics that mix in-person and online contacts to improve consumer experiences in the retail and marketing industries. According to Johnson & Barlow (2021), the concept of "phygital" retail has emerged in Malaysia as a result of the adoption of digital technology and the rising popularity of e-commerce, in which physical businesses use digital components to improve consumer experiences.

The goals of this study are broad-based. To understand how physical elements like Merchandise Assortment (Variety & Value), and Aesthetics, we first need to look whether it effect on attitude towards phygital retails. The second goal is to investigate how Trust on Phygital and Digital Enabled Service Quality. We also want to investigate how customer involvement in digital stores and trust in phygital stores are related, as well as how attitude towards phygital affects customers' purchase behaviours. The value of "phygital" retail resides in its capacity to offer clients personalised, interactive shopping experiences that fuse the practicality of internet purchasing with the sensory stimulation of physical locations. Physical retail provides customers with a fresh and engaging way to connect with brands and products by incorporating digital advancements like augmented reality, interactive touch displays, and contactless payment systems.

Despite increased interest in this sector, there is still a dearth of thorough study on how physical retail characteristics affect consumer behaviours, particularly in the context of buying behaviour in Malaysia's phygital retail environment. The success of a business is greatly influenced by consumer purchasing behaviour, so it is essential to understand the factors that influence it. Investigating the factors that affect consumers' purchase decisions is crucial in the world of phygital retail. Purchase behaviour shown that attitudes, settings, and emotions are just as likely to impact consumers' purchasing decisions as are friends, family, and endorsers (Ofosu-Boateng, 2020) where it is closely related to consumer pleasure, brand perceptions, and the capacity to recall a retail experience. Therefore, for retailers trying to build effective strategies and improve their bottom line, understanding how physical and digital components interact in the phygital retail environment and their impact on consumer buying behaviour is essential.

Physical Elements include things like the variety and value of the goods and the aesthetics of the shop itself. product variety according to Donovan and Rossiter (1982), if customers are happy with the variety of items, they would exhibit positive customer behaviour such as spending more money and time than they had anticipated at a store. Sirohi et al. (1998) also discovered that customer satisfaction has an impact on the link between products value and repurchase intentions. The total shopping experience can be improved by the aesthetics according to published research, products having a diversity of visual elements help build a brand's reputation and win over customers (Cheah et al., 2022).

In the context of the "phygital" retail environment, "Trust on Phygital" and "Digital Enabled Service Quality" stand as crucial digital factors. Customers' overall buying experiences can be considerably influenced by how much trust they have in these services. Customers' willingness to actively interact with digital elements throughout their purchasing experience is greatly influenced by their trust in "phygital" services, particularly those that place a high priority on data protection and privacy. Additionally, according to Park et al. (2012), one of the constant reasons why customers decline to purchase from online platforms is a lack of trust. This trust might encourage a stronger emotional bond with the company.

increasing the possibility of repeat business. Furthermore, the effectiveness of digital services, such as prompt responses and customised experiences, can have a big impact on how satisfied customers are Digital technology-driven exceptional service quality not only improves the whole shopping experience but also raises consumer satisfaction levels, which in turn encourages brand loyalty and long-term business success. The increasing usage of digital-enabled services has significantly changed how customers connect with brands by profoundly altering their experiential paradigm (Pantano & Vannucci, 2019).

In the context of "phygital" retail, the study approach intends to investigate the interactions between physical components, digital variables, attitude towards phygital, and purchase behaviour. Despite being well-known intelligent systems, digital assistants, no research have examined how users view this intelligence. Developers are always creating new algorithms to enhance the intelligence of digital assistants, but marketers and developers must also be aware of how this fosters user acceptance (Balakrishnan & Dwivedi, 2021). The study will pinpoint important features that support the purchase behaviour by looking at how the physical and digital components affect attitude towards phygital.

Moreover, examining customer views towards "phygital" shopping will shed light on how these sentiments affect consumers' purchasing decisions. Numerous studies conducted in the brick-and-mortar retail environment revealed a strong correlation between shoppers' purchase intentions, impulse buys, and monetary expenditures and the length of time spent shopping in a pleasant retail atmosphere (Kim & Lee, 2008). Retailers looking to optimise their strategies in this area must first understand how customers view and engage with the physical retail landscape. Retailers may create more engaging and memorable shopping experiences by drawing a clear connection between consumer sentiments towards both the physical and digital components of physical retail and their buying behaviour. These customised interactions not only raise consumer satisfaction levels but also encourage trust which is a crucial element in fostering brand loyalty and long-term commercial success.

### 1.1 Operational Definition Table 1: Operational Definition

Construct	Definition	Reference
Phygital	Combination of personal consumer communications (Physical) and digital technologies (Digital), resulting in bridging the gap between the two.	(Singh et al., 2019)
Merchandise Assortment (Variety & Value)	This factor refers to the merchandise value (price and quality) and merchandise variety offered by the store. It is an integration of the elements of the initial "merchandise value and merchandise variety" elements.	(Terblanché, 2018).

Aesthetics	The formal, symbolic, and expressive aspects of a thing, appearance, or environment are all included in the definition of aesthetics. The formal quality of a product refers to its sensory elements, including texture, colour, line, rhythm, shape, proportion, and balance.	(Fiore, 1996)
Trust on Phygital	Trust is defined as "a set of ideas that a person formed on his or her opinions about certain characteristics; in marketing, this includes the goods and services as well as the location where they are purchased and sold."	(Rubio et al., 2014)
Digital Enabled Service Quality	Digital enabled services are made up of a variety of technologies that give machines the ability to think, feel, act, and learn in a way consistent with human intelligence.	(Shank et al., 2019)
Attitude Towards Phygital	The behaviour intention (BI) of the individual to utilise the technology.	(Hsu & Lin, 2008)
Purchase Behaviour	Comprises the mental processes that customers go through as they determine what they need, what they desire, how to meet those requirements, assess information, make plans, and follow through on those plans.	(Anderson & L. Golden, 1984)

#### 2. LITERATURE REVIEW

#### 2.1 "Phygital" Retail in Malaysia

The idea of "phygital" consumer experiences is a relatively new one, which is in line with the novelty of the enabling emergent digital technologies. To create experiences that are only feasible because of the development of new digital technologies, physical and digital encounters must be seamlessly integrated into the consumer journey in phygital marketing. Popular digital strategies, for instance, include integrating augmented reality, touch displays, seamless digital payment systems, and contactless payment methods into the client experience (Johnson & Barlow, 2021). The study by Klaus (2021), which defines phygitality as a novel and practical construct for the practise of omnichannel marketing and the management of customer experience, offers another theoretical addition to the progress of the discussion. The possibility of integrating several channels by reshaping virtual and actual. The research by Mele and Spena (2021), which focuses on Millennials and maps the four phases of the digital customer journey connect, explore, buy, and use also highlights the world. The customer experience is acted out in every

moment as a fusion of emotional, behavioural, and social reactions. The distinction between the physical and digital worlds (or "phygital") is blurred through online and offline interactions: For instance, Lawry (2021) investigates the use of phygital commerce in the luxury market and discovers that it increases demand overall and status-seeking reasons more than purely digital means. Other studies have discovered that the fashion business is well positioned to increase happiness and consumer well-being thanks to the multi-sensory capabilities built into phygital consumption. According to Johnson and Barlow (2021), more interactive digital contacts boost consumer demand and the activation of neurological systems involved in product appraisal. Additionally, many "phygital" product experiences include a digital choice architecture, enabling customers to customise their purchases or browse a much larger selection of options than would be possible with a strictly physical interface constrained by factors like shelf space. Because there are more options available to consumers, they may feel more in control of the good, which may strengthen their attachment to it. Marketers have the chance to integrate and utilise the advantages of in-person shopping with digital payment in ways that are already changing the contemporary retail buying environment through "phygital" consumer experiences (Johnson & Barlow, 2021).

#### 2.2 Customers Purchase Behaviour

According to Sheehan (2011), consumer behaviour is a branch of study that focuses on consumer actions, such as consumption analysis on why and how individuals use items in addition to why and how they buy them. Cultural, societal, personal, and psychological aspects all have an impact on how consumers behave while making purchases. Recent studies have shown that attitudes, settings, and emotions are just as likely to impact consumers' purchasing decisions as are friends, family, and endorsers. A consumer's recognition of a need, pre-purchase search for information, and evaluation of alternatives are all influenced by psychological aspects such as motivation, perception, learning, personality, and attitudes that are built into each individual (Ofosu-Boateng, 2020).

The best way to change consumers' buying habits is through technology. E-commerce and social networking are both part of the technology. Social media is an online marketplace that links buyers and sellers through a shared brand identity (Kumar et al., 2020). Social media should constantly be resourceful and proactive in influencing consumers' perceptions of choosing a company, according to O'Donohoe (2008). Consequently, social media marketing is a practical and easy-to-use marketing strategy that enables providers to connect with customers as they make purchasing decisions. The process of customers' decision-making requires awareness. It enables customers to assess the discrepancy between their needs and the kind of information received. In addition, consumers must be familiar with the goods and services to gauge their buying patterns. Currently, social media and digital marketing play a crucial part in the path of consumer purchase behaviour. According to Saura et al. (2017), investigated digital marketing tactics based on Black Friday 2018 promotions in Spain.

According to Stigler's (1961) economics of information theory, a consumer will make a better choice if they have more information at their disposal. Ratchford et al. (2003) discovered that the number of online product information searches enhanced the likelihood of online purchases. For instance, Rowley (2000) proposed that frequent Internet shopping inevitably follows frequent Internet surfing for information search. According to Patwardhan and Yang (2003), consumers'

Internet dependence defined as their propensity to frequently utilize the Internet for communication and information search was a significant predictor of their likelihood to make actual online purchases. For clothing products, a positive correlation was also observed between the desire to seek for information online and the intention to make a purchase from an online retailer. Numerous studies conducted in the brick-and-mortar retail environment revealed a strong correlation between shoppers' purchase intentions, impulse buys, and monetary expenditures and the length of time spent shopping in a pleasant retail atmosphere. It is reasonable to assume, based on the literature, that individuals who regularly look for product information through a particular retail channel—such as the Internet, catalogue, television, local or non-local retailer—will make more purchases through that channel than individuals who look for product information less frequently or never look for it (Kim & Lee, 2008).

#### 2.3 Attitude Towards Phygital

Few research has been done to describe how consumers perceive phygital from a technological standpoint. You can ask many different questions of phygital using a variety of gadgets. Despite being a developing technology, phygital's main purpose which sophisticatedly underpins their success is built on digital related characteristics and data tools empowered within it. In the same vein, it's crucial to comprehend how consumers view these phygital traits. It is impossible to disregard phygital since they have inevitably become a necessary component of daily life (Wang et al., 2018). As of late, the same has been extended to clients looking for a chance to buy using phygital services (McLean & Osei-Frimpong, 2019).

According to earlier studies Purnawirawan et al. (2012), perceived utility can play a significant role in determining how one feels about technology. In the context of phygital, perceived usefulness refers to the added utility that a technology can offer over pre-existing technology. According to studies, people are increasingly using technology in relation to wearables, virtual reality, electronic health records, m-commerce, and other topics. The utility obtained from phygital can be much higher given that they can be used for multiple functions, like booking tickets, location guidance, shopping, health checking, etc. With embedded intelligence, phygital provides superior experiences within a virtual environment. Despite being well-known intelligent technology, phygital, no research has examined how users view this intelligence. Developers are always creating new algorithms to enhance the intelligence of phygital services, but marketers and developers must also be aware of how this fosters user acceptance. Voice and speech cues with human characteristics are provided by phygital services to add human-like traits. In a theoretical and practical context, it will be interesting and useful to examine how these animacy traits improve purchase intention using phygital services (Balakrishnan & Dwivedi, 2021).

#### 2.4 Physical Factors

#### 2.4.1 Merchandise Assortment (Variety & Value)

According to the research, customer experience is most significantly influenced by store ambiance, followed by loyalty programmes and merchandise. Merchandise Assortment refers to the merchandise value (price and quality) and merchandise variety offered by the store. It is an integration of the elements of the initial "merchandise value and merchandise variety" elements (Terblanché, 2018). According to previous research and an empirical investigation, there is a

considerable correlation between the ambiance of the business and the merchandise and how well customers are treated (Ramly & Omar, 2017).

#### i. Product Variety

A product variation is a distinct unit that can be recognised within a brand or product line based on size, cost, appearance, or other factors. Products produced by a corporation that have different types or designs are referred to as product variations. Size, price, display, and availability are all markers of product variation. The buying choice will be affected if product variants are appropriately applied and implemented in accordance with the following indicators: 1) Size; 2) Prices; 3) Displays; and 4) Product Availability. This indicates that consumers will have many options or choices while purchasing the various products that are presented. According to Sweeney and Soutar (2001), there are two primary streams in the operations management literature. The first looks at how techniques for increasing product variety (both breadth and depth) are utilised to boost sales, market share, and therefore financial performance. Long-standing theories hold that businesses can boost sales by broadening their product offerings. It is claimed that businesses can increase the likelihood that customers will find and buy a replacement product when their favourite item is out of stock by implementing a product variety strategy.

Offering products that match customer expectations for variety, quality, and level of service can be difficult for supermarkets. According to Donovan and Rossiter (1982), if customers are happy with the variety of items, they would exhibit positive customer behaviour such as spending more money and time than they had anticipated at a store. According to Mantrala et al. (2009), retailers should make sure they have complete knowledge of both customer preferences and their own capacity to meet demands to maximize customer satisfaction and "provide a large enough assortment to ensure they carry the consumer's first choice.". When customers had to choose a specific shop, Pan and Zinkhan (2006) found that assortment was the factor they valued most highly out of 10. According to Morales et al. (2005), current research indicates that "consumer attitudes toward and their probability of shopping" at a specific retailer are positively correlated with their perceptions of the range of goods the retailer offers. Bauer et al. (2012) refer to a substantial corpus of empirical research confirming that the diversity of items offered by the shop is a significant factor in determining future store patronage. According to Marques et al. (2013), a shop's selection of goods is what has the most impact on how satisfied customers is. In turn, a favourable in-store buying experience depends on customer happiness (Terblanché, 2018).

#### ii. Product Value

According to Sirohi et al. (1998), the definition of merchandise value is "what you get for what you pay," implying that it is a compromise between the cost of an item and the advantages it provides. Sirohi et al. (1998) also discovered that customer satisfaction has an impact on the link between goods value and repurchase intentions. According to Cronin et al. (2000), the value and quality of a service determine how satisfied a customer is. Prior research discovered that consumers' opinions of a retailer's goods had an impact on their pleasure and loyalty to the retailer (Walsh). According to Poncin and Mimoun (2014), earlier studies have discovered that the value of the product has a favourable impact on satisfaction. Recently, Sivadas and Jindal (2017) also agreed that the value of the goods sold has a significant impact on consumer happiness.

#### 2.4.2 Aesthetics.

Aesthetics is crucial to improving consumer experiences and competing in the market (Postrel, 2003). According to Fiore (1996), the expressive, formal, and symbolic elements of a product, look, or environment are included in the concept of aesthetics. The formal quality of the product includes sensory stimuli including texture, colour, line, rhythm, shape, proportion, and balance. The term "expressive quality" refers to a particular human emotional experience, such feeling warm or chilled. The cognitive experience is primarily represented by the symbolic quality. In physical shopping, for instance, customers may carefully examine products' designs, dazzling appearances, and settings in terms of hardware and interior design, which create sentiments of prestige and superiority among them (i.e., aesthetic value). Perceived utility is influenced by aesthetic factors like design, colour, style, and images. According to Orth & Malkewitz (2008), products having a diversity of visual elements help build a brand's reputation and win over customers. Additionally, aesthetics raises consumer loyalty, which influences their behaviour and brand equity (Cheah et al., 2022).

#### 2.5 Digital Factors

Nowadays, consumers may use their smartphones to compare prices, research products online, and scan QR codes to find out prices. Retailers are increasingly creating their own smartphone applications as part of a digital assistant strategy to offer consumers immediate support. Apps, for instance, can be used to send targeted promotions to reward devoted clients.

#### 2.5.1 Trust on Phygital

One of the theories that is most frequently used to explain why customers behave the way they do is the concept of trust. According to Rubio et al. (2014), Trust is defined as "a set of ideas that a person formed on his or her opinions about certain characteristics; in marketing, this includes the goods and services as well as the location where they are purchased and sold. "Existing when one party has confidence in an exchange partner's reliability and integrity" is another definition of trust (Morgan & Hunt, 1994). Numerous business interactions are known to revolve around trust. A survey of the marketing literature revealed that trust is a crucial experience-related factor that contributes to the establishment of the link with customers. This is essential to any online transaction, particularly when there isn't any face-to-face interaction or physical contact between customers and sellers. According to Bugshan and Attar (2020), building trust is an essential step in every application related to commerce. Trust has been determined to be one of the key cues that customers use to lessen the perceived complexity of online purchasing activities. Retailers may be able to influence consumers' purchasing decisions by giving them trustworthy and reliable information that reduces information asymmetry and uncertainty (Zhang et al., 2019). Additionally, according to Park et al. (2012), one of the constant reasons why customers decline to purchase from online platforms is a lack of trust. As per the findings of empirical research, trust plays a crucial role in determining the desire to pay (Aksoy & Özsönmez, 2019; Guo et al., 2018) and the intention to repurchase (Cheah et al., 2020b, 2020a; Lim et al., 2019; Sullivan & Kim, 2018). Customers may be more ready to spend money and stick with retailers when they have their trust. Therefore, in the context of omnichannel commerce, it is expected that the level of trust will affect the intention to purchase (Cheah et al., 2022b).

#### 2.5.2 Digital Enabled Service Quality

Digital enabled services are made up of a variety of technologies that let machines think, act, feel, and learn similarly to humans (Shank et al., 2019). The term " Digital-enabled services" is frequently used to refer to a variety of cognitive technologies, ranging from self-service kiosks and other lower-order digital application interfaces to higher-order fully embedded anthropomorphic interfaces like service robots and virtual assistants that can recognise human-like, interactive, and intuitive emotions (Fernandes & Oliveira, 2021). It is impossible to ignore the current discussion about how digital-enabled services affect customer experience and the online shopping environment. For instance, it has given considerable thought to the intricate emotional mechanisms in the context of fashion apparel because it is a crucial marketing tool. The increasing usage of digital-enabled services has significantly changed how customers connect with brands by profoundly altering their experiential paradigm (Pantano & Vannucci, 2019). Modern life is constantly changing because of the expanding computer-psychology interface (Aoki, 2021). Therefore, employing technology (such as digital-enabled services) to virtually experience the navigation of fashion portals can be fun. It provides customers with a novel approach to feel the first-ever online buying experience. Artificial intelligence, human-computer interaction, and computers' effects on human identity were discovered to be important thrust areas in earlier research on computer-related dimensions (Gillath et al., 2021). However, digitalenabled services have not yet been fully utilised as a possible marketing tactic for the virtual world experience of consumers. Nevertheless, it is already evident that the introduction of digital-enabled services will soon change how customers interact with brands (Gonçalves et al., 2020).

#### 3. Hypotheses Development

#### 3.1 Merchandise Assortment (Variety & Value) and Attitude Towards Phygital

The decision to choose merchandise assortment, with a particular emphasis on product value and variety, is supported by the wealth of research highlighting these factors' critical roles in influencing consumer purchase behaviour. The body of research continually emphasises the strong correlation between a wide choice of products including variations in sizes, costs, availability, and displays and higher consumer happiness, favourable purchasing patterns, and more loyalty (Ramly & Omar, 2017). Furthermore, it has been discovered that the value proposition which strikes a balance between an item's price and its benefits has a big influence on consumer happiness, repurchase intentions, and loyalty in general (Sirohi et al., 1998). Retailers looking to maximise client happiness and foster loyalty must comprehend how consumers perceive the merchandise assortment and respond to it. Furthermore, given how digital technologies are integrated into the modern retail scene, consumers' attitudes towards physical encounters become crucial variables (Wang et al., 2018). Research suggests that customers' opinions about social media, digital assistants, and internet shopping have a big impact on what they decide to buy. It's critical to investigate consumer sentiments regarding the physical space as technology becomes more and more integrated into the shopping experience. Because of this, this study focuses on merchandise assortment (product variety & value) and attitude towards digital to offer deeper insights into the elements that influence contemporary customer buying decisions in the changing retail environment where physical and internet

retail collide. Thus, based on the previously mentioned factors, it is possible to make hypotheses that:

H1: Merchandise Assortment (Variety & Value) significantly impacts on Attitude Towards Phygital Stores

#### 3.2 Aesthetics and Attitude Towards Phygital Stores

The thorough insights offered by the body of current literature serve as justification for the inclusion of aesthetics and attitude towards "phygital" stores as major variables in this study. According to Fiore (1996), the expressive, formal, and symbolic components of goods and surroundings are all part of aesthetics, which is recognised as essential to improving customer experiences and establishing a competitive edge in the marketplace. Empirical evidence repeatedly indicates that a product's aesthetic value, design, and visual appeal have an impact on consumers' perceived utility, brand reputation, and ultimately, brand loyalty (Orth & Malkewitz, 2008). Retailers looking to create memorable brand experiences and build customer loyalty must understand how consumers react to the aesthetic aspects of both physical and digital shopping environments. Investigating Consumers' Attitude Towards "Phygital" Stores is crucial as they interact with digital platforms more and more. According to readily accessible information, customers' opinions, and impressions of digitally enabled services, such as online platforms and virtual assistants, have a big impact on what they decide to buy. The merging of digital and physical retail experiences is becoming increasingly noticeable, and how customers feel about this integration greatly influences how they behave (Johnson & Barlow, 2021). Examining how customers interact with and navigate the "Phygital" landscape can provide retailers looking to improve their omnichannel strategy with useful information. To clarify their combined influence on the changing dynamics of consumer behaviour in the modern retail environment, the study intends to shed light on the interaction between aesthetics and attitude towards "phygital" stores. Thus, based on the previously mentioned factors, it is possible to make hypotheses that:

H2: Aesthetics significantly impacts on Attitude Towards Phygital Stores.

#### 3.3 Trust on Phygital and Attitude Towards Phygital Stores

After a careful review of the literature, the central variables of trust on "phygital" stores and attitude towards "phygital" stores were chosen. Consumer interactions are fundamentally influenced by trust, especially when it comes to online transactions and "Phygital" experiences when in-person contacts are not possible (Bugshan and Attar, 2020). The importance of trust in reducing perceived complexity and uncertainty in online purchase activities is frequently highlighted in the literature. Establishing trust is a crucial measure for merchants to guarantee favourable client attitudes and intents. Concurrently, the way that customers view "phygital" stores becomes crucial to comprehending how the retail industry is changing. Customers' opinions regarding the combination of physical and digital components have an impact on their purchase decisions as "Phygital" encounters become more essential to their consumer journeys. Studies reveal that customers' preferences and acceptance of digitally connected services have a big influence on their desire to buy (Balakrishnan and Dwivedi, 2021). Thus, studying the relationship between Attitude Towards "Phygital" Stores and Trust on "Phygital" Stores provides a more comprehensive view of the variables influencing consumer behaviour in an omnichannel retail setting. This study aims to investigate how attitudes towards "Phygital" experiences and trust, a fundamental component,

interact to shape customer choices in the dynamic world of modern retail. Thus, based on the previously mentioned factors, it is possible to make hypotheses that:

H3: Trust on Phygital significantly impacts on Attitude Towards Phygital Stores.

#### 3.4 Digital Enabled Service Quality and Attitude Towards Phygital Stores

The selection of Digital Enabled Service Quality and Attitude Towards "Phygital" Stores as primary variables is based on a thorough literature analysis. The rise in the popularity of digitally enabled services, which is indicative of the digital transformation in retail, has completely changed the way customers interact with brands (Pantano & Vannucci, 2019). Technologies ranging from self-service kiosks to anthropomorphic interfaces like service robots and virtual assistants are included in the category of digitally enabled services (Fernandes & Oliveira, 2021). It's important to comprehend how customers see the quality of digitally enabled services because these technologies have an impact on how they interact with brands and how they shop online. Simultaneously, Attitude Towards "Phygital" Stores is a crucial factor in determining how consumers feel about and accept the combination of digital and physical components in the retail environment. Sheehan (2011) suggests that consumers' perceptions of "Phygital" experiences have a big influence on what they decide to buy. Examining how customers view the calibre of digitally enabled services and their perception of "Phygital" stores in general might provide important information into how the retail industry is changing. The purpose of this research is to clarify the complex link that exists between customer attitudes and the quality of digital services, as well as the ways in which these elements interact to shape consumer behaviour in contemporary, technologically advanced retail settings. Thus, based on the previously mentioned factors, it is possible to make hypotheses that:

H4: Digital Enabled Service Quality significantly impacts on Attitude Towards Phygital Stores.

#### 3.5 Attitude Towards Phygital Store and Consumers' Purchase Behaviour

The deliberate decision to investigate the relationship between Consumers' Purchase Behaviour and Attitude Towards "Phygital" Stores is based on the understanding that consumer perceptions regarding the integration of digital and physical components in retail environments significantly influence their buying decisions. Sheehan (2011) indicates that consumers' perceptions of "Phygital" experiences have a big impact on their choices and actions when they purchase. Considering the continuous digital revolution in the retail industry, it is necessary to understand these sentiments. This study aims to shed light on how consumers' perceptions of "Phygital" stores connect to their purchasing habits to provide important new information about how technology integration affects consumers' ability to make decisions. Furthermore, as the research has shown, several factors such as merchandise assortment (product variety and value), have an impact on consumers' purchasing decisions. As a result, examining the relationship between consumers' purchase behaviour and attitudes towards "phygital" stores will offer a more complex understanding of how the digitization of retail spaces interacts with and may alter established factors that influence consumer choice, such as product variety and perceived value. Businesses bargaining the changing landscape of consumer tastes and expectations in an increasingly "Phygital" retail environment stand to benefit a lot from these observations. Thus, based on the previously mentioned factors, it is possible to make hypotheses that:

H5: Attitude Towards Phygital Stores significantly impacts on Consumers' Purchase Behaviour.

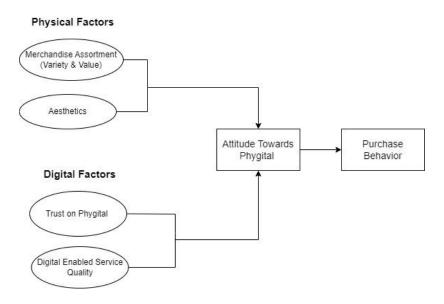


Fig 1: Research Framework

The research framework for this consists of two elements of "phygital" retail which are Physical Factors and Digital Factors. The Physical Factors consist of Merchandise Assortment (Variety & Value), and Aesthetics and Digital Factors consist of Trust on Phygital and Digital Enabled Service Quality. These two elements (Physical & Digital) enhance Attitude Towards Phygital retails. Thus, all these factors enhance the Attitude Towards Phygital which effect on Customers' Purchase Behaviour.

#### 4. RESEARCH METHODOLOGY

#### 4.1 Study Design

The research employs a quantitative research approach and is grounded in positivist research philosophy. The study's goal of establishing empirical relationships between physical and digital variables, attitudes towards "Phygital," and consumers' buying behaviour in Malaysia's "phygital" retail environment is aligned with the positivist approach chosen for the analysis. The study methodology is deductive, with a focus on testing hypotheses and generating conclusions from previous theories and concepts. This study has a cross-sectional time frame horizon. Information is gathered from several respondents all at once. Individual consumers who have used "Phygital" retail services in Malaysia serve as the study's unit of analysis. Online platforms are utilised for data collection, quaranteeing efficiency and broad accessibility for participants. Customers who have used "Phygital" retail services in Malaysia are the emphasis, and thus gives the study's objectives a relevant and targeted sample. To summarise, the research design of this study is based on positivist philosophy, employs a quantitative technique with deductive reasoning, employs a cross-sectional time-horizon, and has as its unit of analysis Malaysian consumers who have used "Phygital" retail services.

#### 4.2 Population and Sampling

This study's overall population includes persons over the age of 18 who have used "Phygital" retail services in Malaysia. The concentration on adults guarantees a sophisticated and thorough comprehension of consumer behaviour in the "Phygital" retail environment. The study employs purposive sampling, a non-probability sampling technique, for sampling purposes. The purpose of this method is to deliberately target people who have personal experience with Phygital retail services. The purpose of the first set of exclusion criteria is to limit the sample to participants who have used Phygital retail services. This purposeful decision is meant to guarantee that the research gathers perspectives from people who have firsthand experience integrating digital and physical components in their shopping encounters.

Data is collected using online platforms (Google Form), which take advantage of the simplicity and accessibility of digital channels. Using Google form is easier to access people from various location in Malaysia and it provides an option to those who do not have google account to answer the survey. It makes it easier to connect with a wide range of respondents who have used "Phygital" retail services, which adds to a rich dataset that supports the goals of the study. A statistical method called G\*power is used to find the lowest sample size. This methodical technique contributes to ensuring that the study has sufficient power to identify significant links and patterns in the data. The overall goal of this sampling method is to offer a focused and perceptive investigation of the relationship between consumers' purchase behaviour and their attitude towards "phygital" stores in the context of Malaysian customers who have used these types of retail services.

140 respondents were obtained from the online survey questionnaire. After the final data was first screened. The data was screened to access whether there are missing values in the data collection. From the screening process, there is 0 missing values observed from the data which indicates that the data is good to proceed with data analysis using Smart PLS. With the G\*power analysis input, the minimum sample size needed was 129 (refer figure 4) demonstrating the suitability of the sample we were able to get. An overview of the demographic profiles of the respondents is provided in Table 2.

#### 4.3 Data Collection Procedure

This study's data gathering process was thoroughly planned to ensure reliability and relevancy to the research aims. Due to the nature of the research, which entails comprehending the subtleties of consumer behaviour in Malaysia's "phygital" retail environment, a combination of online and survey data collection approaches was used. This study was using Google Form as a platform on survey collection from respondents. Using Google form is easier to access people from various location in Malaysia and it provides an option to those who do not have google account to answer the survey. A detailed survey was created to start the data collection process. The variables found in the literature review, including merchandise assortment (product variety & value), aesthetics, trust in phygital, digitally enabled service quality, attitude towards phygital stores, and, in the end, consumer purchase behaviour, were taken into consideration when designing this questionnaire. To make sure it was relevant and clear, a small sample was used for pre-testing the questionnaire.

The research made use of online platforms to reach a representative and diverse sample. Email lists, forums, and social media platforms pertaining to retail experiences and consumer behaviour were found. To contact people who have

used "phygital" retail services in Malaysia, purposive sampling was used. This guaranteed that those who responded had firsthand knowledge of the topic being studied. The establishment of exclusion criteria was a critical stage in the data collection process. Legal consent for participation was ensured by approaching only persons who were older than eighteen. The study's unique focus also necessitated that respondent had used "phygital" retail services in Malaysia.

Clear instructions and consent details were included with the online survey distribution. Subjects were made aware of the aim of the research, the fact that their participation was voluntary, and the guarantee of data privacy. It was requested of respondents to give meaningful and sincere answers. Data was gathered over a specific amount of time to enable a quick assessment of how customers' attitudes and actions are currently playing out in the "phygital" retail setting. The survey replies were gathered and safely kept for later examination. In summary, a well-structured questionnaire served as the first step in a methodical data collection process that included the use of online distribution platforms, purposive sampling, exclusion criteria, ethical considerations, and estimation of the minimum sample size required for statistical rigour.

#### 4.4 Measures

The study uses a wide range of metrics to measure many facets of the "phygital" (Johnson & Barlow, 2021) shopping experience. Seven items measuring Merchandise Assortment were adapted from Terblanche (2018) and four items of aesthetics were adapted from Banik and Gao (2023) which are physical aspects. Meanwhile, five items of Digital enabled service quality were adapted from Kautish & Khare (2022) and five items of Trust on Phygital extracted from Cheah et al. (2022) are used as the metrics for measuring digital aspects. The attitude and reaction of consumers toward phygital stores is used to measure three items of Attitude towards Phygital adapted from Balakrishnan & Dwivedi (2021). Lastly, Four items of Purchase behaviour extracted from Kumar et al. (2020) in phygital is analysed by examining consumers' observable purchasing behaviours and transactional activities during their interactions in the phygital retail environment. By these metrics, the study can systematically examine how physical and digital variables affect attitude towards phygital, and purchase behaviour in the setting of "phygital" retail.

#### 4.5 Data Analysis

Following data collection, the study uses advanced statistical tools such as SMART-PLS to analyse the complex correlations between the factors described above in detail. This method is used to clarify how attitude towards phygital, purchase behaviour, and physical and digital components interact in the context of "phygital" retail in Malaysia.

#### 5. Analysis

# **5.1 Demographics Information Table 2: Demographic Result**

Measures	Items	Frequency	Percentage
Gender	Female	56	40.0
	Male	84	60.0
	Other	0	0
Age	18-25	120	85.7
	26-33	5	3.6
	34-41	9	6.4
	42-49	5	3.6
	50 and above	1	0.7
Ethnicity	Malay	117	83.6
	Chinese	9	6.4
	Indian	5	3.6
	OTHERS	9	6.4
Qualification	Secondary School	12	8.6
<u> </u>	Bachelors' Degree	99	70.7
	Masters' Degree	7	5.0
	PhD	1	0.7
	Others	14	10.0
	Work	7	5.0
Income Level	No Income		62.9
income Lever	<2,000	22	15.7
	2001-4000	 16	11.4
	4001-6000	9	6.4
	6001-8000	2	1.4
	8001-10000	1	0.7
	>10000	2	1.4
Experience of Using Phygital Services	YES	120	85.7
	NO	8	5.7
	MAYBE	12	8.6
Type of Phygital Food Retail	McDonalds	89	63.6
	Zus Coffee	21	15.0
	Kentucky Fried Chicken (KFC)	18	12.9
	Starbucks	6	4.3
	Other	6	4.3
Frequency Using Phygital	Once in a month	45	32.1
	Twice in a month	56	40.0
	Once in a week	29	20.7
	Twice in a week	10	7.1
"I like visiting food phygital retail"	YES	132	94.3
<del>-</del>	NO	8	5.7
****			

<sup>\*</sup>N=140

The respondents' demographic profile shows the distribution of genders and ages, with 40% female and 60% male. The age range of the respondents is 18-24 (85.7%) to 26-33 (3.6%) to 34-41 (6.4%) to 42-49(3.6%), and 50 and above (0/7%). 83.6% of the respondents were Malay, 6.4% Chinese, 3.6% Indian, and 8.6% Others. The demographic table also shown that the respondents consist of 8.6% of Secondary School, 70.7% Bachelors' Degree, 5% Masters' Degree, 0.7% PhD (Doctor of Philosophy), 10% others, and 5% working. The income level of respondents' range is No Income (62.9%) to <RM2000 (15.7%) to RM2001-RM4000 (11.4%) to RM4001- RM6000(6.4%) to RM6001- RM8000(1.4%) to RM8001- RM10000(0.7%), and > RM10000 (1.4%). This study also analysed on general opinion questions such as their experience, type of phygital food retail they are visiting, their frequency, and their opinions on the food phygital retail. From the table 2, 85.7% answered YES, 5.7% NO, and 8.6% MAYBE for experience of using phygital services. For the type of phygital food retail, the respondents' mentioned that these are the food phygital retail that they have visited before which results in McDonalds (63.6%), Zus Coffee (15%), Kentucky Fried Chicken (KFC) (12.9%), Starbucks (4.3%), and Other (4.3%). Additionally, the frequency of using phygital retail is once in a month (32.1%), twice in a month (40%), once in a week (20.7%), and twice in a week (7.1%). Finally, the respondents have been assessed on their likings on visiting food phygital retail ("I like visiting food phygital retail) with resulting on 94.3% answered YES and 5.7% NO. The specifics are displayed in Table 2.

#### 5.2 Measurement Model Results

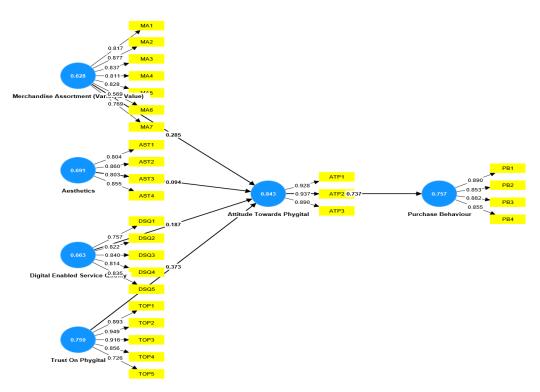


Fig 2: Smart PLS Graphic Output of Measurement Model (AVE)

### 5.2.1 Reliability, factor loadings, composite reliability and average variance extracted.

To evaluate the measurement model, this study examined each construct's discriminant validity, average variance extracted (AVE), composite reliability (CR), and outer loading. To assess the reliability of each measurement item, factor loading was the primary method employed. It evaluates the connection between certain items and the associated construct. For factor loading, a threshold of 0.70 is considered appropriate (Abid et al., 2022). Hair et al. (2014) stated that even if an object has a low factor loading value, it can still be retained because of its significance. All factors found to have higher than the threshold except for MA6. These components were retained because of their utmost significance, even with their low factor loading. To make sure the data was not multicollinear, the outer VIF was evaluated first, though, before proceeding with the structural model evaluation (Hair et al., 2014). Variance Inflation Factor (VIF) is another extensively used approach for detecting multicollinearity in a regression model. It quantifies the extent to which collinearity has inflated the variance (or standard error) of the calculated regression coefficient. VIF is useful in determining how much the correlation between the predictors raises the variance of an estimated regression coefficient. Multicollinearity may be problematic when VIF values are high. High correlation (VIF >5) raises possible concerns. From the table 3, it shows that all factors result with <5 value except for TOP2 (7.395). It is commonly accepted that there is a moderate level of correlation among the predictors if the Variance Inflation Factor (VIF) is less than 5. It shows that Internal consistency reliability (CR) was also tested using Cronbach's alpha and composite reliability. Hair et al. (2014) stated that the threshold for both values must be more than 0.7. Table 3 shows that every structure satisfies the internal consistency reliability threshold requirement.

Table 3: Reliability, Factor Loadings, Composite Reliability and Average Variance Extracted (AVE) Result

Constructs	Code	FL	VIF	Alpha	CR	AVE
Aesthetics	AST1	0.804	1.678	0.851	0.899	0.691
	AST2	0.860	2.276			
	AST3	0.803	2.163			
	AST4	0.855	2.255			
Attitude Towards Phygital	ATP1	0.928	3.716	0.907	0.942	0.843
	ATP2	0.937	3.825			
	ATP3	0.890	2.351			
Digital Enabled Service Quality	DSQ1	0.757	1.823	0.873	0.908	0.663
	DSQ2	0.822	2.148			
	DSQ3	0.840	2.385			
	DSQ4	0.814	2.261			
	DSQ5	0.835	2.236			
Merchandise Assortment	MA1	0.817	3.076	0.898	0.921	0.628

	MA2	0.877	4.438			
	MA3	0.837	2.934			
	MA4	0.811	2.314			
	MA5	0.828	2.554			
	MA6	0.569	1.648			
	MA7	0.769	2.267			
Purchase Behaviour	PB1	0.890	2.699	0.893	0.926	0.757
	PB2	0.853	2.484			
	PB3	0.882	2.779			
	PB4	0.855	2.440			
Trust On Phygital	TOP1	0.893	3.847	0.919	0.940	0.759
	TOP2	0.949	7.395			
	TOP3	0.916	4.640			
	TOP4	0.856	2.432			
	TOP5	0.726	1.768			
*11 1 10						

<sup>\*</sup>N=140

Convergent validity, or a measure's capacity to reliably measure what it is intended to measure, was tested using average variance explained (AVE). All constructs in this inquiry had acceptable convergent validity, as shown by the fact that every AVE value was determined to be greater than 0.50 (see Table 3) (Hair et al., 2014). Additionally, each latent construct's AVE is higher than the suggested value of 0.5, which indicates that more than 50% of the observed variance in the indicators is explained (Shiau et al., 2019).

5.2.2 Heterotrait-monotrait (HTMT) Ratio
Table 4: Heterotrait-monotrait (HTMT) Ratio Result

	Aesthetics	Attitude Towards Phygital	Digital Enabled Serviced Quality	Merchandise Assortment	Purchase Behaviour	Trust On Phygital
Aesthetics						
Attitude Towards Phygital	0.766					
Digital Enabled Serviced Quality	0.763	0.768				
Merchandise Assortment	0.860	0.83	0.774			
Purchase Behaviour	0.752	0.815	0.796	0.810		
Trust On Phygital	0.756	0.828	0.738	0.785	0.729	

<sup>\*</sup>N=140

Lastly, to determine whether the constructs being studied were unique from others, discriminant validity was evaluated. Hair et al. (2014) emphasised the significance of conforming to the HTMT ratio even if there are several criteria available in the literature, including the Fornell-Larcker criterion, cross-loading, and HTMT. Consequently, the HTMT ratio was determined. Henseler et al. (2014) stated that the cutoff ratio is 0.85. According to Roemer et al. (2021), the HTMT criteria are seen to be a more superior and conservative method for determining discriminant validity. The overall HTMT ratio values, as shown in Table 4, are far below the 0.85 conservative levels, demonstrating that discriminant validity is not a problem in our model and the construct we are using within the framework are not overlapping (does not have the same meaning).

#### **5.3 Structure Model Results**

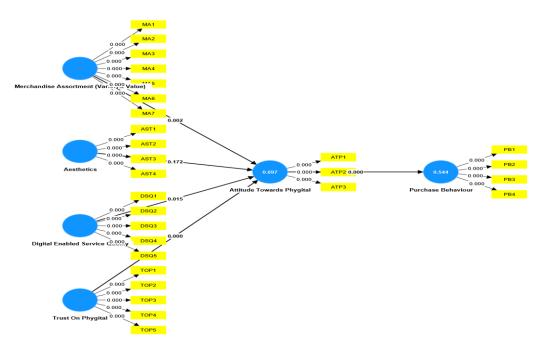


Fig 3: Smart PLS Graphic Output of P-Value

#### 5.3.1 Hypotheses Testing

The structural model was evaluated to ascertain the statistical significance of path coefficients, explanatory power, predictive relevance, and effect sizes after the measurement model was validated (Abid et al., 2022). A bootstrapping approach with 5000 iterations was used to test the data. As shown in Table 5, all seven of the proposed correlations are statistically significant.

**Table 5: Hypotheses Testing Result** 

Hypotheses	Relationship	Beta Value	Mean	S.D	T Value	P Value
H1	Merchandise Assortment -> Attitude Towards Phygital	0.285	0.279	0.099	2.877	0.002
H2	Aesthetics -> Attitude Towards Phygital	0.094	0.09	0.1	0.947	0.172
Н3	Trust On Phygital -> Attitude Towards Phygital	0.373	0.378	0.095	3.916	0.001
H4	Digital Enabled Serviced Quality -> Attitude Towards Phygital	0.187	0.195	0.086	2.172	0.015
Н5	Attitude Towards Phygital -> Purchase Behaviour	0.737	0.738	0.046	15.943	0.001

<sup>\*</sup>N=140

Following the achievement of good results for the measurement model's validity and reliability, the path coefficients, t-value, and effect sizes were examined to evaluate the structural model (Khalilzadeh & Tasci, 2017). The outcomes of the hypothesis testing, and structural model assessment are shown in Table 5. The findings indicate that the hypotheses relationships are statistically significant. Physical factors which is Merchandise Assortment has significant impacts on Attitude towards phygital (H1:=0.285,p=0.002). Aesthetics has no impacts on Attitude towards phygital (H2:=0.094,p=0.172). P-value for H2 shows that it exceeds 0.05 thresholds where we can assume that we reject the Hypotheses and Aesthetics has no impacts on Attitude towards phygital. Digital factors which are Trust on Phygital (H3:=0.373,p=0.001) and Digital enabled service quality (H4:=0.187,p=0.015) both have positive impacts on Attitude towards phygital. Next, Purchase behaviour is significantly impacted by Attitude towards phygital (H5:=0.737,p=0.001). Thus, all the hypothesised relationships (H1-H5) that are described in the current study (Table 5) are validated by the results.

5.3.2 Coefficient of Determination (R<sup>2</sup>) Results Table 6: Coefficient of Determination (R2) Results

Construct	R Square
Attitude Towards Phygital	0.697
purchase behaviour	0.544

<sup>\*</sup>N=140

Afterwards, the exploratory power of endogenous constructs by their external equivalents was estimated by calculating the coefficient of determination (R2). A statistic called the coefficient of determination is used to explain how much a factor's variability is influenced by its relationship to another factor. A value

ranging from 0.0 to 1.0 (0% to 100%) is used to denote this correlation (Nevil, 2023). From table 6, it indicates that R square for Attitude towards phygital is 0.697, or 69.7%, indicates that the independent variable(s) in the regression model can account for roughly 69.7% of the variability in the dependent variable. Meanwhile, R square value for purchase behaviour is 0.544 or around 54.4% brings changes to the model.

#### 6. Discussions on Findings

In view of the study's accomplishments, the five proposed hypotheses that were put out in response to the research questions were remarkable. To measure consumers' attitude towards phygital, physical factor which is Merchandise Assortment (Variety & Value) is analysed in this study. Earlier studies stated that current research indicates that "consumer attitudes toward and their probability of shopping" at a specific retailer are positively correlated with their perceptions of the range of goods the retailer offers (Morales et al., 2005). It is implied by this that consumers' perceptions and interactions with the physical environment are significantly influenced by the range and quality of products available. The results are consistent with previous research that highlights the significance of a varied and attractive product selection in shaping consumer behaviour. Extensive and carefully chosen inventory draws customers in and enhances their impression of the entire shopping experience. Next, as examined in this study, aesthetics does not have a statistically significant impact on customers' sentiments towards physical retail experiences, which is an intriguing finding that contradicts a widely held belief in the retail literature. Previous studies mentioned that aesthetics raises consumer loyalty, which influences their behaviour and brand equity (Cheah et al., 2022). This finding is notable because it deviates with the widely held belief that consumer beliefs are greatly influenced by a retail environment's general aesthetics, design, and visual appeal. Even though this result can seem surprising, it encourages further investigation into the aesthetic components considered in the study and how customers value them. It is possible that traditional aesthetic elements like physical store layout and ambiance would have less of an impact on customer attitudes in the setting of phygital retail, where digital interfaces and capabilities are common. On the other hand, it might highlight how customer preferences are increasingly being shaped by digital aesthetics, such as user interface design and the entirety of the digital experience.

To investigate whether consumers' attitude towards phygital, digital factors which are Trust on Phygital and Digital enabled service quality is analysed in this study. Based on the literature review, trust plays a crucial role in determining the desire to pay (Aksoy & Özsönmez, 2019; Guo et al., 2018) and the intention to repurchase (Cheah et al., 2020b, 2020a; Lim et al., 2019; Sullivan & Kim, 2018). This study indicates that Trust in Phygital experiences has a significant effect on customers' views towards these phygital retail environments, which highlights an important component of consumer attitude in the context of phygital retail. This finding is consistent with a larger body of research that highlights the critical role that trust plays in influencing the preferences and actions of consumers, particularly in contexts that involve digital and technical intervention. When it comes to the phygital sphere, which is the complex combination of digital and physical aspects, consumers seem to value trust as a fundamental factor that shapes their opinions. Customers may place their trust in physical retail experiences for several reasons, including data security, open communication, and the dependability of digital services. Building trust should be a top strategic goal, requiring open and honest communication regarding data processing, strong

cybersecurity protocols, and regular provision of dependable and flawless digital services. Additionally, from the earlier studies, it indicates that the increasing usage of digital-enabled services has significantly changed how customers connect with brands by profoundly altering their experiential paradigm (Pantano & Vannucci, 2019). One significant finding of this study is the effect of Digital Enabled Service Quality on consumers' attitude towards phygital retail environments. The implications of this discovery are significant for retailers who aim to maximise their visibility in the "phygital" market. Digitally enabled services, which comprise a range of technologies that imitate human thought processes, behaviour, and learning, are clearly influencing customer attitudes. The study's positive association highlights the importance of offering advanced and user-friendly digital services in shaping consumers' perceptions of "phygital" retail settings in general. When these digital services are of a high quality, which could include features like smooth navigation, customised interactions, and effective problem-solving mechanisms, consumers seem to react favourably. Retailers that make investments to increase the quality of their digital services stand to gain from improved perceptions among consumers, which may affect their decisions to buy. This is consistent with the larger body of research on the influence of digital service quality on customer behaviour. Therefore, paying attention to the quality of digital services becomes a strategic essential for retailers hoping to succeed in the "phygital" space.

Lastly, Attitude towards phygital in the earlier studies mentioned that given its extensive functionality and amount of user interaction, it is crucial to comprehend users' attitudes towards it, especially from a technological standpoint. The same has been extended to clients looking for a chance to buy using digital assistants (McLean & Osei-Frimpong, 2019). According to this study's findings, there is a strong correlation between consumers' attitudes towards "phygital" retail settings and their purchasing behaviour. This outcome is consistent with the study's conceptual framework, which proposed that consumers' perceptions of the combination of digital and physical shopping experiences would significantly influence their decision about future purchases. This study's strong association suggests that those who have more positive opinions about "phygital" retail are also more inclined to react positively when it comes to making purchases. This is consistent with the larger body of research on consumer purchase behaviour, which frequently highlights the crucial role that attitudes play as antecedents to behavioural outcomes. Recognising and influencing consumer perceptions become essential elements of a winning strategy for retailers operating in the "phygital" market.

#### 7. Theoretical Implications and Managerial Implications

This research's theoretical implications are noteworthy for expanding the current argumentation in the field of retail studies, especially in relation to phygital retailing. When examining customer behaviours in retail environments, previous studies has frequently attempted to emphasise either physical or digital variables separately (Singh et al., 2019). The present study introduces a novel theoretical approach to understanding the holistic consumer experience in Malaysian retail by explicitly integrating physical and digital aspects, a concept known as "phygital". This research highlights the interdependence of physical and digital aspects in influencing consumers' attitudes and behaviours by taking a holistic approach that considers the synergistic impacts of both. The study's theoretical approach acknowledges the interconnected nature of physical and digital elements in the phygital retail environment, moving beyond the simplistic distinction between them. This conceptual development advances the theoretical conversation by putting out

a more complex interpretation of consumer experiences that goes beyond the limitations of previous studies that concentrated on elements. Additionally, the research offers theoretical understandings of the distinct dynamics of the Malaysian retail atmosphere. The research adds to theoretical discussions by highlighting that, in contrast with global retail landscapes, the interaction between physical and digital components may have unique nuances, given the cultural and socioeconomic diversity of Malaysia (Johnson & Barlow, 2021). Through its illustration of the context-specific differences in the phygital shopping experience, this localised perspective enhances current theories. Essentially, the study's theoretical implications derive from its unique style of blending physical and digital elements, introducing the concept of "phygital," (Singh et al., 2019) and utilising this structure in the Malaysian retail domain. This broadens the existing theoretical conversation and provides the way for further studies that examine the complex interactions between these variables in various cultural and market-specific circumstances.

Based on the study and findings, the managerial implications are developed. The managerial implication is providing recommendation to the phygital retailers on how to raise consumer satisfaction levels, encourage trust which is a crucial element in fostering brand loyalty and long-term commercial success. Retailers may maximise Value & Variety in Merchandise Assortment. It is recommended that retailers deliberately choose a wide range of products that are visually appealing (Terblanché, 2018). This means making sure that items are reasonably priced in addition to providing a large selection. This study confirms that the variety and quality of products available influence consumers' perceptions towards phygital purchases (Bauer et al., 2012). Therefore, making an investment in a retail assortment that is both appealing and well-balanced can greatly improve the way customers see their overall shopping experiences. Next, phygital retailers may reevaluating the significance of Aesthetics. It is recommended that merchants reconsider the aesthetic components they took into consideration, even if the study's findings did not indicate that aesthetics had a statistically significant impact on attitudes regarding phygital retail experiences. It may have a stronger effect to pay attention to digital aesthetics, which include user interface design and the whole digital experience. The research indicates that traditional aesthetic components may not have as much of an effect in a phygital retails environment. Retailers should therefore consider how digital aesthetics are changing and how that may impact customer experiences and preferences. Retailer also may encourage initiatives to build trust. One of the key strategic objectives should be to establish and maintain trust in physical experiences. Retailers should prioritise strong cybersecurity protocols, open information about data processing, and guaranteeing the dependability of digital services. Customers' perceptions of phygital shop surroundings are significantly impacted by trust, as the study indicates (Zhang et al., 2019). Particularly in situations where technological and digital interventions are involved, trust becomes a critical component. Retailers can obtain a competitive advantage in the phygital retail industry by investing in measures that promote trust. Furthermore, retailers may improve the Quality of Digital Enabled Services. It is recommended that retailers give priority to investing in innovative and accessible digital offerings. Features like easy navigation, tailored interactions, and efficient problem-solving techniques may be included. This study highlights the favourable relationship between consumers' attitude towards phygital retail and the digital enabled services quality. Good digital services let consumers see things more clearly, which has a beneficial impact on their decision to buy (Pantano & Vannucci, 2019). Finally, phygital retailers may encouraging optimistic

views on Phygital capital. It is recommended that retailers take proactive measures to nurture favourable perceptions of phygital retail encounters. This could entail user education regarding the advantages of phygital retail, interactive promotions, and marketing initiatives. This study shows a significant relationship between consumers' attitudes towards phygital and their purchase behaviour with regard to phygital retail. In the phygital retail space, cultivating favourable opinions becomes an essential component of influencing consumer choices and producing favourable results for businesses (Johnson & Barlow, 2021). In conclusion, physical retail stores can take use of these management implications to establish a pleasant and satisfying customer experience, which will raise customer happiness, trust, and overall business success.

#### 8. Conclusion

In summary, this study has made significant progress in comprehending the complex structure of consumer behaviour in the dynamic field of "phygital" retail revolution. The study carefully looked at five important criteria: merchandise assortment, aesthetics, trust in phygital, digital enabled service quality, and attitude towards phygital. The goal is to determine how these factors interacted and affected consumer attitudes and purchase behaviour. Phygital consumer experiences able to provide marketers an opportunity to combine and leverage the benefits of in-person shopping with digital payment in ways that are already transforming the modern retail shopping environment (Johnson & Barlow, 2021).

The results highlight how important physical elements in particular, merchandise assortment have always been in influencing consumers' perceptions of "phygital" shopping. The study is in line with earlier studies that highlight how important it is to have a wide and appealing product range to affect consumer behaviour. In order to improve consumers' perceptions of "phygital" retail, retailers are recommended to carefully consider and optimise the physical aspects of merchandise by strategically planning and optimising the physical features of merchandise, including variety and value. This could entail adding in-vogue items, offering competitive prices, and making sure that the entire shopping experience is lively and interesting. Essentially, in the changing landscape of "phygital" retail, the physical display of products continues to be a key factor in shaping attitudes, which emphasises the significance of an integrated and comprehensive strategy for retailers hoping to succeed in this fast-paced industry. Remarkably, the study disproves a popular theory by showing that aesthetics has no statistically significant effect on consumer perceptions during in-person retail interactions. This fascinating discovery calls for more research into the aesthetic element considered in the study and the ways in which customers value them. Retailers may need to reevaluate their strategies in considering the fact that the visual attractiveness of a "phygital" landscape beyond the actual physical area. More investigation and customer input may yield insightful information on how aesthetics is changing in "phygital" retail and help retailers adapt their design philosophies to the complex needs and tastes of modern shoppers in this hybrid retail environment.

The study also emphasises how important trust is in influencing customer sentiments in the "phygital" setting. Customers are more likely to be dedicated to the business operations and the relationship when they feel empowered and trusted by the retailers. Furthermore, it is imperative that privacy problems in omnichannel shopping are not overlooked, since they may have a negative impact on buyer confidence and intention to purchase (Cheah et al., 2022). Retailers must prioritise transparent communication, data security, and dependable digital

services because consumers' perceptions are greatly influenced by their trust in physical experiences. In a market where consumers are increasingly interacting in "phygital" environments, developing, and preserving trust becomes strategically vital. As more and more customers interact in "phygital" areas, trust plays a crucial role in differentiating products. Retailers that are effective in building trust will probably have a competitive advantage, which will influence consumers' sentiments and, in turn, their decisions to buy in the "phygital" environment. Therefore, the study offers insightful information to retailers trying to understand the complex dynamics of developing trust in the rapidly changing "phygital" retail market. Next, Digital Enabled Service Quality becomes a powerful digital factor in affecting consumer perceptions in "phygital" retail settings. This study indicates that Digital Enabled Service Quality has significant impact on Consumers' Attitude towards phygital. Thus, retailers that invest in improving the quality of their digital services will see an increase in customer perceptions, which will lead to better purchasing decisions. In addition to providing retailers eager to deliver a satisfying and enjoyable "phygital" experience with actionable insights, this study makes a valuable contribution by highlighting the specific role that digital enabled service quality plays in influencing consumer attitudes in the "phygital" environment.

The most significant finding of the study is the strong correlation between Purchase Behaviour and Attitude towards Phygital. Positive purchase behaviour is more likely to be displayed by customers who have favourable attitudes towards "phygital" shop environments. This is in line with the conceptual framework, which highlights the importance of customer attitudes as antecedents to behaviours. Retailers are advised to place a high priority on enhancing the entire "phygital" experience by improving the whole experience, making sure that the "phygital" environment is convenient, and cultivating favourable opinions of it can all lead to more favourable attitudes as well as higher purchase intent and actual behaviour. The present study offers significant insights for marketers seeking to optimise their strategies and services in the dynamic retail landscape by demonstrating a clear connection between behaviour and attitude within the "phygital" setting. It is important to recognise the study's limitations even though it offers insightful information. Future study opportunities are presented by the cross-sectional design, focus on specific variables, dependency on quantitative methods, geographic confinement of the sample to Malaysia, and these factors. To expand the understanding of customer behaviour in the constantly changing "phygital" retail landscape, recommendations include researching additional variables, incorporating qualitative approaches, adopting longitudinal designs, diversifying samples. Overall, this study contributes to our understanding of the complex relationships between digital and physical components in retail, providing businesses looking to succeed in the ever-changing "phygital" market with helpful recommendations.

#### **APPENDIX**

**Table 7: Survey Thesis Questionnaire** 

Constructs	Item	Statement	Sources
Merchandise Assortment (Variety & Value)	MA1	This phygital store offers a good selection of different products	(Terblanché, 2018)
	MA2	This phygital store offers a wide variety of products	•
	MA3	This phygital store offers a variety of brand names that are available in many different sizes/	•
	MA4	This phygital store products function the way they are supposed to	
	MA5	This phygital store offers a choice of different products with different names.	•
	MA6	This phygital store products are free from defects and flaws	•
	MA7	This phygital store product prices represent good value	
Aesthetics	AST1	This phygital retail store is visually appealing.	(Banik & Gao, 2023)
	AST2	This phygital retail store gives me a sense of superiority	
	AST3	This phygital retail store symbolizes my status.	-
	AST4	This phygital retail store represents my style.	
Digital Enabled Service Quality	DSQ1	This phygital retail store uses personalized voice-based digital enabled services to improve my overall shopping performance	(Kautish & Khare, 2022)
	DSQ2	This phygital retail store is simple and effortless to learn about digital enabled services such as digital menu, order via in-store kiosk, order via mobile app, etc.	
	DSQ3	Digital enabled services via digital intelligent agent assist in making seamless purchases on this phygital retail outlet.	
	DSQ4	On this phygital retail store, digital enabled services enable to see the merchandise from different dimensions, e.g., 3D and stereoscopic virtual reality etc.	
	DSQ5	Digital enabled voice-based services make shopping quite engaging, entertaining, and dynamic for customers on this phygital retail store.	

Trust On Phygital Stores	TOP1	This retailer is reliable.	(Cheah et al.,
Stores	TOP2	This retailer is trustworthy.	2022)
	TOP3	This retailer's products and service are dependable.	
	TOP4	This retailer offers secure Web transactions.	
	TOP5	It is unnecessary to be cautious with this retailer.	
Attitude Towards Phygital	ATP1	I like using phygital services at this phygital retail store	(Balakrishnan & Dwivedi, 2021)
	ATP2	I feel good about using phygital services at this retail store.	
	ATP3	Overall, my attitude towards this phygital store is favorable.	
Purchase Behavior	PB1	The interactive promotion of this restaurant through phygital platform influences my purchase decision.	(Kumar et al., 2020)
	PB2	Food promotion at this restaurant influences my purchase decision.	
	PB3	Advertising appeal of this restaurant promotions through the use of technology influences my purchase decision	
	PB4	This restaurant is using technology that gives a new dining experience to consumers	

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