



# SCHOOL OF ECONOMICS AND MANAGEMENT

## **Digital Transformation in the Fast Fashion Industry: How do Consumers Perceive Phygital Retail?**

By: Andi Nur Haeriah & Chiara Jutz

Supervisor: Ola Mattisson

Examiner: Magnus Larsson

**Master's Programme in Management  
MGTO59: Degree Project - Management Challenges**

# Table Of Contents

<b>Table Of Contents</b>	<b>2</b>
<b>Table of Figure</b>	<b>4</b>
<b>Abstract</b>	<b>5</b>
<b>1. Introduction</b>	<b>6</b>
1.1 Background	6
1.2 Problem Discussion	7
1.2.1 Digital Transformation in the Fashion Industry	7
1.2.2 Brand Management and Brand Equity	7
1.2.3 Problem Definition	8
1.3 Research Purpose and Question	9
<b>2. Literature Review</b>	<b>9</b>
2.1 Digital Transformation in Fast Fashion	9
2.1.1 Phygital Retail	9
2.1.2 Phygital Retail Application on Fast Fashion	11
2.2 Customers-Based Brand Equity (CBBE)	12
2.2.1 Brand Equity	12
2.2.2 Brand Equity and Organizations	13
2.2.3 Customer-Based Brand Equity Model Development	14
2.3 Research Framework	16
2.3.1 Rationale for Utilizing the Cifci et al. CBBE Model	16
2.3.2 Incorporating the Cifci et al. CBBE Model	17
2.3.3 Understanding the Interrelationships in Cifci CBBE Model	20
2.3.4 Benefits to Utilizing the Cifci et al. (2016) CBBE Model	21
<b>3. Research Methodology</b>	<b>21</b>
3.1 Research Design	22
3.2 Data Collection Method	23
3.2.1 Semi Structured Interviews	23
3.2.1.1 Sampling and Selection	23
3.2.1.2 Location	24
3.2.1.3 Overview of the Process	24
3.2.1.4 Challenges	25
3.2.2 Focus Group Discussion	25
3.2.2.1 Sampling and Selection	26
3.2.2.2 Location	26
3.2.2.3 Overview of the Process	27
3.2.2.4 Challenges	28
3.4 Data Analysis	29

3.4.1. Data Reduction	30
3.4.1.1 Challenges	30
3.4.2 Data Display	30
3.4.2.1 Challenges	30
3.4.3 Drawing Conclusion	31
3.4.3.1 Challenges	31
3.5 Data Handling and Ethical Considerations	32
3.6 Ensuring Trustworthiness	32
3.7 Limitations and Reflections of the Study	33
<b>4. Findings</b>	<b>33</b>
4.1 Brand Awareness	34
4.2 Service Quality: Physical Quality	37
4.3 Service Quality: Staff Behavior	40
4.4 Ideal Self-Congruence	43
4.5 Lifestyle-Congruence	45
4.6 Brand Identification	50
4.7 Brand Satisfaction	53
4.8 Brand Loyalty	56
4.9 Summary Of Findings	58
<b>5. Discussion &amp; Conclusion</b>	<b>62</b>
5.1 General Discussion	63
5.1.1 What is the impact of phygital retail application on customers based brand equity?	63
5.1.1.1 Brand Awareness	63
5.1.1.2 Service Quality: Physical Quality	63
5.1.1.3 Service Quality: Staff Behavior	64
5.1.1.4 Ideal Self-Congruence	65
5.1.1.5 Lifestyle-Congruence	65
5.1.1.6 Brand Identification	66
5.1.1.7 Brand Satisfaction	66
5.1.1.8 Brand Loyalty	67
5.1.1.9 Interrelationship Between Customer-Based Brand Equity Dimensions	67
5.1.2 Applicability of Cifci et al. (2016) Model	69
5.1.3 What factors drive and hinder customers' perception of the application of phygital retail in fast fashion retail stores?	70
5.1.3.1 Drivers	70
5.1.3.1.1 Desire for Personalized Experiences	70
5.1.3.1.2 Desire for Improved Convenience	70
5.1.3.1.3 Desire for Comfort and Personal Space	71
5.1.3.1.4 Brand Value Alignment	71
5.1.3.1.5 Omnipresence of Technology	71

5.1.3.2 Barriers	72
5.1.3.2.1 Lack of Experience with Technology	72
5.1.3.2.2 Desire for Human Interaction	72
5.1.3.2.3 Implementation	73
5.1.3.2.4 Ethical Concerns	73
5.2 General Conclusion	73
5.6 Contribution	75
5.6.1 Practical Contribution	75
5.6.2 Theoretical Contribution	75
5.5 Suggestions for Future Research	76
<b>References</b>	<b>78</b>
<b>Appendix</b>	<b>89</b>
Appendix A: Interview Questions	89
Appendix B: Interview Participants	91
Appendix C: Focus Group Participants	92
Appendix D: Focus Group Topic Guide	93
Appendix E: Data Reduction and Data Display of Semi-Structured Interviews	96
Appendix F: Data Reduction and Data Display of Focus Group Discussion	98

## Table of Figure

Figure 1. Aaker CBBE model (1991)	14
Figure 2. Keller CBBE model (1993)	14
Figure 3: CBBE model comparison & development by Cifci et al. (2016)	15
Figure 4: Cifci et.al CBBE model (2016)	16

## Abstract

The fashion industry has witnessed significant digital transformation, leading to the emergence of phygital retail that seamlessly integrates physical and digital experiences. This study explores the impact of phygital store design on customer-based brand equity in the fast fashion sector, focusing on the drivers and barriers that shape customer perceptions of phygital retail. By employing Cifci et al. (2016) customer-based brand equity model, the study evaluates the model's applicability in the context of phygital retail. An abductive research approach combines deductive hypothesis testing with the inductive exploration of novel topics. The research findings reveal that the application of phygital retail positively influences brand satisfaction and brand loyalty, improving customer-based brand equity. Specific dimensions of brand equity, such as brand awareness, service quality, and lifestyle-congruence, are significantly influenced by phygital retail. Factors driving positive perceptions include convenience, personalized experiences, and a seamless blend of physical and digital interactions. However, a lack of experience with technology, desire for human interaction, bad implementation, and concerns about sustainability can hinder positive perceptions. This research contributes to understanding the impact of phygital retail on brand equity in the fast fashion industry. It provides valuable insights for fashion brands to enhance their value proposition to customers.

Keywords: Digital Transformation, Fast Fashion Brand, Phygital Retail, Customer-Based Brand Equity.

# 1. Introduction

## 1.1 Background

The fashion industry has always been driven by creativity and innovation, but with the rise of digital transformation, it has become a space for technological advancement and disruption (Ünay & Zehir, 2012). This phenomenon affects consumer habits in fashion consumption (Nannini, 2020). According to a survey conducted by Forbes Insights, nearly 50% of retailers stated that their customers conduct online research before making in-store purchases, indicating a preference for an omnichannel shopping experience (Forbes, 2016). However, customers still desire a physical experience with products, including seeing, touching, and testing them out, following thorough online research before purchasing the products (Kim & Krishnan, 2015). In addition, according to the 2021 Forbes State of Consumer Behavior report, even during the covid 19 pandemic, customers want to visit physical stores to get an in-store shopping experience (Marhamat, 2021). Online options are incapable of replicating the sensory and interpersonal experiences that in-store shopping provides (Marhamat, 2021)

With the proliferation of digital technologies such as smartphones and shopping apps, customers have become more accustomed to seamless and integrated experiences across physical and digital channels (Le & Nguyen-Le, 2020). Traditional brick-and-mortar stores face the challenge of adapting to this changing landscape and retaining customers that are increasingly turning to the digital landscape (Agnihotri, 2015; Caboni, 2019). A notable development in this realm is the emergence of the phygital store, which seamlessly integrates the physical and digital realms to create a unified shopping experience for customers. In recent times, brick-and-mortar retailers have integrated digital devices and information and communication technology (ICT) like digital kiosks, virtual mirrors, self-checkout, and augmented reality into their operations (Kim, Lee, Cho & Jung, 2020). This retail transformation has significantly changed how customers interact with brands (Pantano, 2014). As a result, it has impacted customer experiences and led to new ways of value creation from the customer's perspective (Aaker, 1991; Vaska, Massaro, Bagarotto & Mas, 2021).

For these digital transformation strategies and investments to be beneficial, fashion brands must measure the value they bring to the company (Kim & Ma, 2019; Hughes, Erickson & Rothberg, 2019). One way to do this is by identifying the impact of digital transformation on customer perception of brand value (Aaker, 1991; Kim & Ma, 2019; Hughes et al., 2019). Customer's perception shapes their purchasing

decisions and loyalty toward a brand (Aaker, 1991; Vogel, Evanschitzky, Ramaseshan, 2008; Miao, Go, Ikeda & Numata 2021). Therefore, understanding how customers perceive digital transformation in the fashion industry can provide insights into the effectiveness of these strategies and the overall value they bring to the brand (Aaker, 1991; Hughes et al., 2019). Brand equity provides a method to describe this value perception and quantify the benefits it may bring to brands and consumers alike.

## 1.2 Problem Discussion

### 1.2.1 Digital Transformation in the Fashion Industry

Digital transformation has revolutionized the fashion industry, impacting various aspects such as design, production, supply chain management, marketing, and sales (Kim & Ma, 2019; Bertola & Teunissen, 2018). Technological advancements like 3D printing and computer-aided design have streamlined product creation and customization (Wang & Chen, 2014; Yu, Ritchie, Mao, Dunn, & Qi, 2015). Real-time inventory tracking and logistics have improved coordination and delivery times (Fatorachian & Kazemi, 2020; Guo, Sun & Lam, 2023). Social media advertising and influencer marketing have become vital for brand awareness and customer engagement (Nawaz, Salman, & Ashiq, 2015; Gautam & Sharma, 2017). Online shopping and e-commerce have expanded fashion brands global reach (Macchion, Moretto, Caniato, Caridi, Danese, & Vinelli, 2017). Data collection and analysis can provide valuable insights into customer behavior, preferences, and trends; enhancing product development, marketing strategies, and supply chain management (Baier, Rese, Nonenmacher, Treybig, & Bressemer, 2019). In addition, Kim and Ma (2019) conducted a study on the digital transformation strategy of Burberry, a fashion brand, and found that it can boost brand value and sales. The study suggests that digital transformation will become a crucial business strategy for fashion brands.

### 1.2.2 Brand Management and Brand Equity

Brand equity can be considered as being at the heart of brand management (Low & Fullerton, 1994). The two concepts are inherently intertwined as brand equity results from successful brand management (Aimé, Berger-Remy, & Laporte, 2018; Balmer & Thomson, 2009; Buil, Chernatony & Martínez, 2013). While brand management refers to developing and maintaining a brand's identity, personality, and promise (Aaker, 1991; Balmer & Thomson, 2009), brand equity, according to Aaker (1991), is the value a brand adds to a product or service. Brand equity can benefit brands by increasing brand loyalty, greater customer satisfaction, and profits (Aaker, 1991; Keller, 1993). Hence, consumers are more likely to choose a brand with high brand equity over competitors, even if it means paying a higher price (Aaker,

1991; Keller, 1993). Brand equity can thus serve as an indication of the effect of digital transformation in the fashion industry on consumer perception.

### 1.2.3 Problem Definition

Since the first studies conducted by Aaker (1991) and Keller (1993), numerous studies have identified the use of brand equity in managerial and business applications. The existing studies can be categorized into two fields. One set of researchers have analyzed the value of brands as an asset in creating company competitiveness (Kim & Ma 2019; Hughes et al., 2019), while others examined the effect of brand equity on financial performance (Miao, Go, Ikeda & Numata 2021; Rust, Zeithaml, and Lemon, 2004). While the studies acknowledge the significance of brand equity and its influence on financial performance and competitiveness, they do not sufficiently delve into the specific marketing strategies that contribute to brand equity and resulting profits or competitiveness. In addition, these studies do not explore how customer perception contributes to the value creation process. Therefore, further research is needed to address these gaps and provide insights into the practical actions that brands can take to leverage brand equity while also considering the role of customer perception in value creation.

Existing research that considers the intersection of digital transformation and brand equity centers on social media platforms, websites, and networking sites. Focusing on the uses of digital transformation in furthering brand equity and allowing consumers to interact with brands closely (Kananukul, Jung & Watchravesringkan, 2015; Chae, Ko & Han, 2015; Zubair, Baharun & Kiran, 2020; Minh, Huong, & Ha, 2022). However, with the changing behavior of customers in the digital age that requires seamless physical and digital experiences, fashion brands have been investing in digital transformation strategies. These not only involve digital marketing but also transform the store by integrating digital technologies into their operations (Kim et al., 2020). Leaving a research gap regarding the application of phygital retail and brand equity.

Furthermore, while there is existing research on the impact of digital transformation on brand equity in the luxury fashion industry, with a focus on social media platforms and networking sites (Cantone, Peretti & Testa, 2016; Spackman & Larsen, 2017), there is a scarcity of studies specifically focusing on the fast fashion segment. Fast fashion is a unique subsector of the fashion industry with distinct characteristics, such as rapid product turnover, low prices, and high reliance on digital channels. Therefore, conducting research in this specific context can fill the gap in the literature and provide valuable insights for both academia and industry.

This study will address the research gap by examining the impact of digital transformation in retail stores on brand equity in the fast fashion industry. By investigating customers' perceptions of phygital retail applications and identifying the factors that drive and hinder these perceptions, this research will provide valuable insights and recommendations for fashion brands to enhance their value proposition to customers. Additionally, by focusing on the fast fashion segment, this study will compliment the literature by providing context-specific findings that can benefit academia and industry. Ultimately, the research seeks to shed light on the effectiveness of phygital store design in creating value for customers and fashion brands in the digital age.

### 1.3 Research Purpose and Question

This thesis aims to analyze the impact of phygital store design application on customer-based brand equity in fast fashion retail and identify the factors that drive and hinder customers' positive perceptions of applying phygital retail. By employing the customer-based brand equity model by Cifci, Ekinici, Whyatt, Japutra, Molinillo, Siala (2016), the applicability of the model will be evaluated in a new context of phygital retail. Thus, the research questions of this thesis are;

- *What is the impact of phygital retail application on customer-based brand equity?*
- *What factors drive and hinder a positive customer perception of phygital retail in fast fashion stores?*

## 2. Literature Review

### 2.1 Digital Transformation in Fast Fashion

As this research study will examine consumers of fast fashion brands that adopt omnichannel strategies by using in-store technology in their retail spaces, a closer examination of phygital retail and fast fashion is conducted.

#### 2.1.1 Phygital Retail

Digital transformation can be described as a profound change in firms' business models, processes, products, and relationships due to the growing adoption of digital technologies (Cennamo, Dagnino, Di

Minin, & Lanzolla, 2020; Verhoef, Broekhuizen, Bart, Bhattacharya, Qi Dong, Fabian, & Haenlein, 2021). The fashion industry has witnessed a significant transformation in recent years, with many brands embracing digital technology in their retail stores to improve their customer experience, operational efficiency, and overall competitiveness (Kim & Ma, 2019; Bertola & Teunissen, 2018; Le & Nguyen-Le, 2020).

One of the most significant digital transformations in retail is the adaptation of in-store technology or ICT (information and communication technology) devices that transforms retail space into a phygital store (Kim et al., 2020; Pusceddu, Moi & Cabiddu, 2023). ICT encompasses technologies that allow individuals to access information via telecommunications and can be implemented through various mediums that facilitate communication with others, such as the internet, digital devices, and mobile phones (Zhang, Aikman & Sun, 2008). Phygital refers to the adoption of ICT to facilitate front-end innovations in physical retail stores, such as augmented reality, virtual fitting rooms, tablets, digital signals, QR codes, mobile apps, and automatic checkouts, allowing consumers to become active users during their buying experience (El-Seoud & Taj-Eddin, 2019; Pusceddu et al., 2023). According to Belghiti, Ochs, Lemoine and Badot (2017), phygital stores are the most complete form of omnichannel experience; defined as a hybrid of physical and digital in one context, the point of sale. Phygital Customer Experience is transforming the function of physical stores in tandem with the growing expectations of 'hyper connected' consumers (Pusceddu et al., 2023).

The importance of combining physical and digital elements to meet the preferences of 'hyper connected' consumers is highlighted in a study by Jhamb (2012). This study identifies enhanced quality, various brands, and a diverse merchandise assortment as driving consumer's preference for phygital retail. Consumers are thus associating phygital retail with accessibility to greater variety. However, physical store attributes such as trained sales personnel and complete security additionally influenced consumers' preference for these formats (Jhamb, 2012). Suggesting that ICTs themselves do not drive consumer satisfaction but rather is complemented by physical elements. Smith, Rippé, and Dubinsky (2018) support the notion that phygital retail requires elements of traditional physical retail. Their study examining consumer's in-store social experience highlights the importance of salespeople in attracting and retaining shoppers, even within the phygital landscape (Smith et al., 2018). Indicating that personalized customer engagement and social interactions within the physical store environment can enhance customer satisfaction and loyalty. Connecting to staff and ICTs service, Chen Yang & Jing Hu's (2022) research reveals that consumers prefer AI-enabled services when the brand personality is competence and human-staffed services when the brand personality is sincerity, leading to positive brand attitudes and

higher purchase intentions. This highlights that the brand's image shapes customers' expectations regarding service. Although consumers may favor ICTs services, it is crucial to recognize that staff behavior remains pivotal in delivering quality service, particularly for brands that prioritize sincerity and human interaction. In addition, UX design is crucial for the success of the omnichannel strategy. A study by Lohse and Spiller (2006) was an early indicator on how the user interface of an online store influences website traffic and sales. Their results emphasized the importance of a user-friendly interface as a crucial link between the customer and the online store. Thus, a well-designed and intuitive user interface can positively impact the customer's browsing experience, increasing traffic and potentially increasing sales.

The growing use of digital technologies enhances the organization's capacity to be agile, adapting to the continuous changes in consumer tastes, needs, and preferences (Gautam & Sharma, 2017; Pusceddu et al., 2023). A study examining the influence of multi-channel retailing on online store choices indicates that consumers tend to choose online stores that belong to the same chain as their preferred offline store (Melis, Campo, Breugelmans, and Lamey 2015). Highlighting the importance of creating a seamless omnichannel experience where customers can easily transition between physical and digital channels while maintaining a consistent brand experience. Hence, delving into the consumer's brand equity is beneficial, gaining insights into how organizations can implement phygital elements into their retail spaces (Kim & Ma, 2019; Pusceddu et al., 2023).

### 2.1.2 Phygital Retail Application on Fast Fashion

Fashion brands are attempting to improve customer's brand experience in physical stores by incorporating digital technologies (Kim et al., 2020). This trend is exemplified by various innovations, such as the 'Magic' Mirrors at Rebecca Minkoff, interactive displays in Gucci flagship stores, virtual reality at Loewe, and Nike's 'Kicks It in Gear'. While luxury houses have led the way in including digital experiences in stores, fast fashion is quickly adopting similar practices (Polat, 2021; Takada, 2017).

Fast fashion brands are retail companies that specialize in producing and selling trendy and affordable clothing collections that are quickly designed, manufactured, and distributed to meet the demand of fast-changing fashion trends (Cachon & Swinney, 2011; Arrigo, 2016). These brands are known for their ability to quickly bring new styles to market, often within a few weeks, and at prices that are accessible to the mass market (Cachon & Swinney, 2011). Some examples of fast fashion brands include Zara, H&M, Forever 21, Primark, and Uniqlo.

Fast-fashion is quickly tapping into phygital retail to address the growing demand in digital experiences (Kim et al., 2020; Takada, 2017). One example is Zara, which has taken various steps to improve operational efficiency and enhance customer engagement. It has developed its own software called Inditex Open Platform and introduced the 'Store Mode' feature in their app (Zara, n.d). This feature offers a real-time 360° view of its inventory, allowing consumers to interact more effectively with fashion products both online and in-store bringing down all walls that used to separate online and offline, resulting in a seamless omnichannel experience (Hunter, 2021).

## 2.2 Customers-Based Brand Equity (CBBE)

This research will utilize a customer-based brand equity (CBBE) model to examine the impact of phygital store phenomena from a customers' perspective. In order to better understand the dimensions involved in CBBE, a review of brand equity and its relevance to organizations is required.

### 2.2.1 Brand Equity

Brand equity emerged after the information and attribute eras of branding and was first researched and identified by Farquhar (1989), Aaker (1991), and Keller (1993) (Oh, Keller, Neslin, Reibstein, & Lehmann, 2023). According to Kapferer (1994), as brands gained significant value to organizations in the 20th century, learning and understanding how to build, measure and manage brand equity has become vital. Farquhar coined the term brand equity, describing the added value a brand provides to a product (1989). Expanding upon this to address services, Aaker (1991) asserts that brand equity is a set of assets linked to a brand's name and symbol that adds to the value provided by a product or service to a firm. Placing this notion into the context of marketing mix, Keller explains that it is the differential effect of brand knowledge on consumer response to the marketing of the brand (1993). This progression illustrates a recognition of the value of consumer's perception of brands and the benefits of considering this perception which Keller would later define as the customer-based brand equity theory (Kim, Kim, & An, 2003; Battistoni, Colladon, & Mercorelli, 2013). Studies have identified the effect of customer-based brand equity as creating brand commitment (Yoo & Donthu, 2001), brand extension, and business performance (Kim et al., 2003). In order to gain a better understanding of positive brand equity and its effect, the relationship between brand equity and organizations is highly beneficial (Cifci et al., 2016).

### 2.2.2 Brand Equity and Organizations

When considering an organization's brand equity, other elements of the organization cannot be ignored. Barwise (1993) argues that brand equity cannot be separated from the value of the product or the rest of the organization. Implying that the value of a brand is intertwined with the value of the entire offering and the company behind it. Thus, when considering establishing brand equity, it cannot be considered in itself. Instead, building and managing brand equity requires a holistic approach that considers the brand equity dimensions as well as the product quality, company reputation, and other factors that contribute to the overall value proposition.

Research indicates that the type of product a brand sells can affect brand equity (Troiville, Hair & Cliquet, 2019). Troiville et al. (2019) identified that the quality and value of the products offer the greatest potential for marketing activities besides the store atmosphere. Consumers have high expectations in regard to these dimensions. In contrast, access was rated as the least important aspect of a retail experience (Troiville et al., 2019). Overall indicating that consumers value a pleasant store with quality products above saving time. Additionally, Oliveira-Castro, Foxall, James, Pohl, Dias, and Chang (2008) stress the value placed on products in furthering brand equity as they assert that the relationship between consumer-based brand equity and brand performance varies across product categories. Suggesting that certain products are more conducive to building a better brand perception than others. Hence, understanding the level of 'brand-ability' for different products can help marketers tailor their branding strategies accordingly and identify the most effective ways to measure brand equity in specific contexts (Oliveira-Castro et al., 2008).

Abdolvand and Charsetad (2013) suggest that corporate social responsibility can have positive associations with a brand among consumers. Indicating that social responsibility is becoming a significant element in considering brand equity. This is also mirrored in a study by Baalbaki and Guzmán (2016) which proposes a consumer-perceived brand equity scale that includes quality, preference, social influence, and sustainability. Baalbaki and Guzmán (2016) suggest that a consumer's loyalty to a brand increases as sustainability is associated with higher quality. Organizations such as Toms Shoes, Ben and Jerry's and Warby Parker are excellent examples of how integrating CSR can greatly benefit brand equity. Thus, brand equity can not be separated entirely from the organization and its products. Considering the development of the brand equity, a focus on the product in retail brand equity can be recognised.

### 2.2.3 Customer-Based Brand Equity Model Development

The dimensions that are involved in measuring brand equity have evolved over time and have been discussed extensively. However, Aaker's (1991) and Keller's (1993) models are most commonly employed and expanded upon. The Aaker brand equity model focuses on identifying brand equity as a set of brand assets and liabilities that are built over time (Aaker, 1991). It emphasizes the creation and management of brand elements such as brand awareness, brand associations, perceived quality, brand loyalty, and other proprietary brand assets (Aaker, 1991). Recognising that this does not place a focus on the involvement of consumers, Keller's brand equity model takes a customer-centric approach, emphasizing the role of customer knowledge and perception in building brand equity usually known as customers-based brand equity (CBBE) (Keller, 1993). This model involves how customers identify, gain meaning, respond and create relationships with a brand.

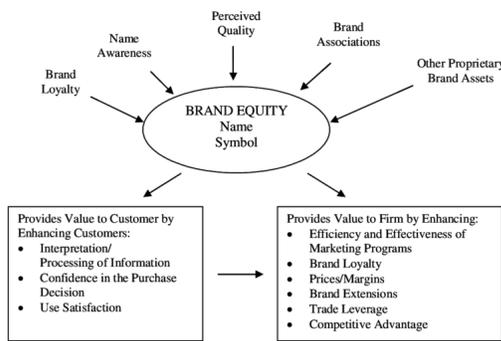


Figure 1: Aaker CBBE model (1991)

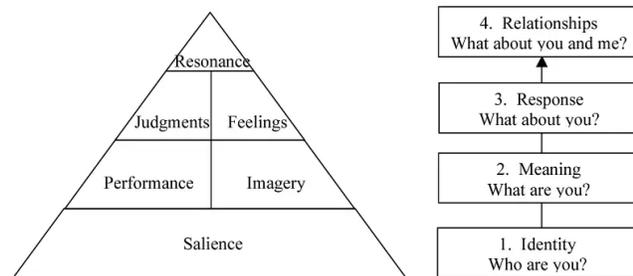


Figure 2: Keller CBBE model (1993)

Moving towards a retailer brand equity, Keller and Ailawadi (2004) asserted that the brand equity models proposed by Keller in 1993 did not sufficiently capture elements involved in retail. Agreeing with this assertion, Troiville et al. (2019) has developed a model to consider retail brand equity as a combination of products, services and experiences that are delivered through retail. Focusing on the value of each aspect of a store experience in furthering brand equity such as access, assortment, atmosphere, convenience, employees, product quality, product value and private brands. However, in considering the phygital retail experience from a consumer's perspective, these factors become less significant and thus a focus should be placed on how they are perceived by customers.

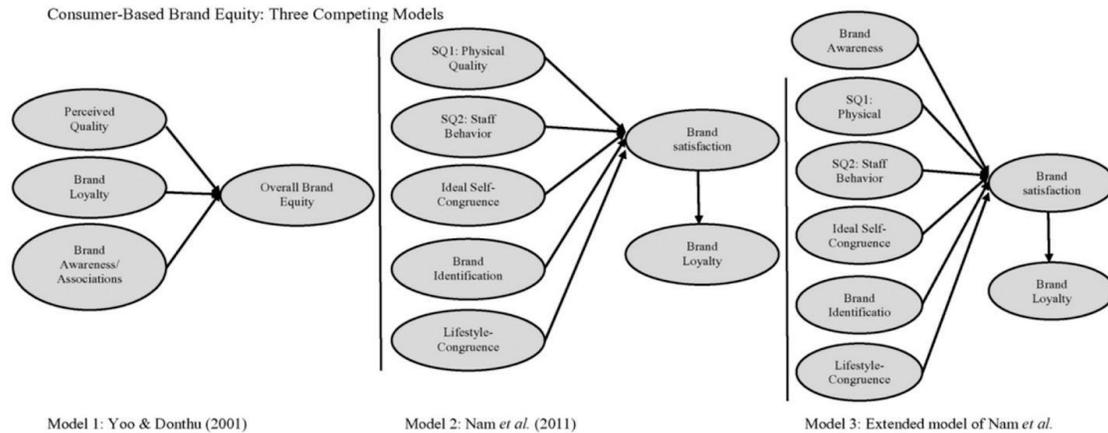


Figure 3: CBBE model comparison & development by Cifci et al. (2016)

Yoo and Donthu (2001) developed a multi-dimensional scale to measure CBBE utilizing Aaker's (1991) and Keller's (1993) model of brand equity. This model involved perceived quality, brand loyalty and brand associations. However, Washburn, Till and Priluck (2000) and Yoo and Donthu (2001) illustrate that this model is not suitable for service dominant brands as service dominant brands are different from goods dominant brands. According to Kim et al. (2003) the difference is significant due to the intangible, perishable, heterogeneous and inseparable nature of services. Illustrating that previous models lack a consideration of service dominant brands and require a focus on service and experiences (2003). Hence, Nam, Ekinci, and Whyatt (2011) introduced a model that assesses service dominant brands on seven dimensions: physical quality, staff behavior, ideal self-congruence, brand identification and lifestyle-congruence, brand satisfaction and brand loyalty. However, this model excludes the brand awareness that Aaker and Keller consider a vital cornerstone to brand equity. To Keller, brand awareness is the consumer's ability to recognise brands under different conditions linked to brand name, logo, symbol (1993). This makes brand awareness a cognitive and knowledge based brand equity dimension. Thus, Cifci et al. (2016) asserts brand awareness should be considered in CBBE models alongside Nam et al.'s model (2011). Cifci et al., proposes a model focussing on the dimensions of brand awareness, service quality physical, service quality staff behavior, ideal self-congruence, brand identification, lifestyle-congruence (2016). This model encompasses relevant aspects from previous research on what defines customer-based brand equity and retailer brand equity.

## 2.3 Research Framework

### 2.3.1 Rationale for Utilizing the Cifci et al. CBBE Model

The Cifci et al. (2016) CBBE model is highly suitable for this research study for several reasons. Firstly, as illustrated by the development of the CBBE model, it is a comprehensive and customer-centric framework encompassing various dimensions of brand equity, including brand awareness, service quality (physical and staff behavior), ideal self-congruence, brand identification, and lifestyle-congruence. These dimensions align closely with the research objectives of analyzing the impact of phygital store design applications on customers' brand equity. Secondly, the Cifci et al. (2016) CBBE model provides a structured and systematic approach to analyzing brand equity. It allows for a rigorous examination of the specific dimensions and their relationship to phygital store applications. Offering a clear framework for gaining understanding on how these dimensions interact and contribute to the overall value creation for customers and the firm through brand satisfaction and loyalty.

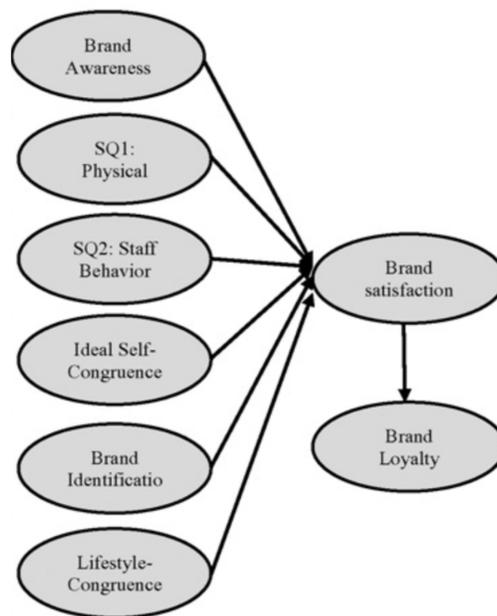


Figure 4: Cifci et.al CBBE model (2016)

### 2.3.2 Incorporating the Cifci et al. CBBE Model

Utilizing the Cifci et al. (2016) model, the aim of this study is to identify the effect of digital transformation in fashion retail on customer-based brand equity and answer the research question:

***“What is the impact of phygital store design application on customer-based brand equity? And what factors drive and hinder a positive customer perception of phygital retail in fast fashion stores?”***

This will be achieved by gathering customer’s input on their perceptions and experiences related to digital transformation in retail, specifically focusing on dimensions based on Cifci et al. (2016) CBBE model; brand awareness, service quality (physical and staff behavior), ideal self-congruence, brand identification, and lifestyle-congruence and how it influence value creation to customers and fashion brands through satisfaction and loyalty.

#### Brand Awareness

According to Cifci et al. (2016), brand awareness is described as a knowledge-based concept rather than mere brand recognition. While recognition holds significance for new or niche brands, well-established brands place greater emphasis on brand knowledge and brand opinion. To assess the effect of digital transformation strategies on brand awareness the following questions will be asked:

*Recall: "Can you recall any brands that have virtual fitting rooms, tablets, digital signals, QR codes, mobile apps and automatic checkouts in their store?"*

*Or Which retail store brands come to mind when you think of virtual fitting rooms, tablets, digital signals, QR codes, mobile apps and automatic checkouts?*

*Unaided Recall: "When you think of virtual fitting rooms, tablets, digital signals, QR codes, mobile apps and automatic checkouts, which retail store brands come to mind?"*

#### Service Quality: Physical Quality

Cifci et al. (2016) adopt the definition of physical quality given by Nam et al. (2011): physical quality refers to the perception created by the design, equipment, facilities, and materials connected to the retail shop. According to a study conducted by Merrilees and Miller (2001), a store's physical layout and arrangement can facilitate self-service interactions, enhance convenience, and improve the overall

customer experience. Highlighting the importance of considering the layout of phygital retail. To assess the effect of digital transformation strategies on physical quality, customers will be asked about perceived physical quality in retail that employs in-store technology.

*Do you find clothing brands that utilize technology (e.g., mobile apps, digital signage, QR code and interactive displays) in their retail store are visually appealing? Why do you think that way?*

#### Service Quality: Staff Behavior

Cifci et al. (2016) adopt the definition of staff quality from Ekinci, Dawes, and Massey (2008), which states that staff behavior encompasses the perception formed by the competence, helpfulness, friendliness, and responsiveness of retail employees. To assess the impact of digital transformation strategies on service staff behavior, customers will be asked questions about staff attitude, professionalism, and responsiveness in relation to in-store technology.

*Do you think that digital tools (eg. mobile apps, digital signage, QR code and interactive displays) have improved the staff's ability to help you with any queries you had? Why do you think that way?*

#### Ideal Self-Congruence

Cifci et al. (2016) adopt the definition of ideal self-congruence from Ekinci et al. (2008), which describes it as the extent to which the brand image aligns with the consumer's ideal self-concept. To assess the impact of digital transformation strategies on ideal self-congruence, customers will be asked questions about how well a brand that employs in-store technology aligns with their ideal self-image.

*Is the image of the brand employing technology consistent with how I like to see myself?*

*Example: Zara using online apps where you can check the product availability in stores, Nike creating a store based on shopping habits in the neighborhood.*

#### Brand Identification

Cifci et al. (2016) adopt the definition of brand identification from Del Rio, Vazquez, and Iglesias (2001), which states that brand identification occurs when consumers express their social identity through brand association or brand consumption. Cifci et al. (2016) argue that consumers tend to align themselves with brands that possess positive reputations. As a result, brand identification allows consumers to either integrate or disassociate themselves from specific social groups. To assess the impact of digital

transformation strategies on brand identification, questions about their level of brand identification or connection with a brand that employs in-store technology will be asked.

*When someone criticizes clothing brands that utilize technology, such as mobile apps, digital signage, QR code and interactive displays in their retail store, would you feel insulted?*

*Example: A friend is criticizing the use of mobile apps of a brand that you recently used.*

### Lifestyle-Congruence

Cifci et al. (2016) adopt the definition of lifestyle-congruence from Nam et al. (2011), which states that it pertains to the extent to which brand consumption aligns with the consumer's distinctive way of living, as reflected in their activities, interests, and opinions. If applied successfully, brands will become an extension of personality; an expression of uniqueness and desired lifestyle. To assess the impact of digital transformation strategies on lifestyle-congruence, customers will be asked questions about how well a brand employs in-store technology that aligns with their lifestyle.

*Did the clothing brand that utilized technology, such as mobile apps, digital signage, QR code and interactive displays in their retail store, align with your personal lifestyle?*

*Example: I consider myself as ahead of the trend and nike's use of technology reflects that.*

*Follow up: How do you describe your lifestyle?*

### Brand Satisfaction

Cifci et al. (2016) adopt the definition of brand satisfaction from Nam et al. (2011) and Koo & Kang (2004). Brand satisfaction encompasses the consumer's experience with brands after purchase and serves as a mediator in the relationships between the five dimensions of brand equity and brand loyalty. If consumers lack purchase experience with brands, brand satisfaction can be excluded from the model. As per the Cifci et al. model (2016), it is essential to acknowledge that satisfaction serves as a mediator between customer-based brand equity dimensions and brand loyalty. Therefore, in order to gain a comprehensive understanding of the impact of phygital retail applications on customer-based brand equity, customers will be questioned about their satisfaction levels regarding a brand that utilizes in-store technology. Applying the Cifci model approach, scaling measurements will be utilized to assess customers' satisfaction towards brands that embrace phygital retail.

*From a scale of 1-5 how much does the clothing brand that utilized in-store technology align with your lifestyle?*

*How well does a brand that employs in-store technology meet your expectations in terms of product quality, customer service, and overall brand experience? Why?*

*On a scale of 1 to 5, how satisfied are you with a brand that employs in-store technology? Why?*

### Brand Loyalty

Cifci et al. (2016) adopt the definition of brand loyalty from Nam et al. (2011), which states that consumer brand loyalty pertains to the behavioral intentions of consumers regarding their purchase decisions and recommendations. In order to gain a comprehensive understanding of how phygital retail influences customers' brand equity, it is crucial to acknowledge the significance of brand loyalty as an outcome of brand satisfaction across multiple dimensions. To further explore the impact of in-store technology on customer perceptions and loyalty behaviors, a set of specific inquiries will be employed to examine consumers' attitudes and behaviors toward brands that integrate technology into their physical retail experience. Applying the Cifci model approach, scaling measurements will be utilized to assess customers' loyalty towards brands that embrace phygital retail, followed by open ended questions regarding reasoning.

*From a scale of 1-5, how much would you recommend clothing brands that utilize in-store technology, such as mobile apps, digital kiosks, and interactive displays, in their retail store? Why?*

*From a scale of 1-5, how likely are you to purchase a clothing item from brands that utilized in-store technology in their retail store? Why?*

### 2.3.3 Understanding the Interrelationships in Cifci CBBE Model

An understanding of the interrelationships between dimensions of the CBBE model can illustrate how brand loyalty and brand satisfaction is generated. Buil, Martínez, and Chernatony (2013) highlight the importance of understanding the relationship between the different dimensions of brand equity as they suggest that brand awareness, brand loyalty, and brand associations are interconnected and influence each other. Suggesting that optimizing the brand equity management process involves understanding the relationships between different dimensions of brand equity. The Cifci et al. (2016) model indicates that brand awareness has an impact on both brand satisfaction and brand loyalty. Consequently, brand knowledge is not only crucial in evaluating brand equity but also serves as a valuable asset in building strong brands. Brand satisfaction and brand loyalty in the retail industry are significantly influenced by

the physical quality and the behavior of the staff, making them crucial factors. While brand identification and lifestyle-congruence, two dimensions related to symbolic consumption and brand equity, have an impact on brand loyalty, the influence of ideal self-congruence on brand loyalty is not statistically significant within the retail industry. Therefore, the influence of ideal self-congruence on brand satisfaction and brand loyalty may have been overshadowed by brand identification, lifestyle-congruence, and physical quality.

#### 2.3.4 Benefits to Utilizing the Cifci et al. (2016) CBBE Model

By adopting the established Cifci et al. (2016) CBBE model in a novel setting, this research not only aims to examine the impact of phygital store design applications on customer-based brand equity but also provides an evaluation of the effectiveness and applicability of the model itself in this context. By evaluating the Cifci et al. (2016) CBBE model in the context of phygital store design applications, this research will shed light on the model's ability to encompass and measure the dimensions that drive value creation for customers and the firm in this specific setting. It will assess whether the model adequately captures the nuances and complexities of the phygital environment and provides meaningful insights into the impact on customers' perception and experience. Moreover, by examining the use of the Cifci et al. (2016) CBBE model in analyzing the effects of phygital store design applications, this research contributes to the broader field of brand equity research.

### 3. Research Methodology

This chapter will delve into the intricate details of the research process, including the chosen research design, data collection methods, and data analysis techniques. Furthermore, this section will also address the trustworthiness of the chosen approach, highlighting its strengths and discussing any limitations inherent in the study.

This thesis aims to analyze the impact of phygital store design application on customer-based brand equity in fast fashion retail and identify the factors that drive and hinder customers' positive perceptions of applying phygital retail. By employing the customer-based brand equity model by Cifci et al. (2016), the applicability of the model will also be evaluated in a new context of phygital retail. Thus, the research questions of this thesis are:

- *What is the impact of phygital store design application on customer-based brand equity?*

- *What factors drive and hinder a positive customer perception of phygital retail in fast fashion stores?*

Following the purpose and the research question, this thesis adopts an abductive approach. The deductive allows for hypothesis testing and evaluating existing theoretical frameworks (Sekaran & Bougie, 2016) such as the customer-based brand equity model by Cifci et al. (2016), in the context of phygital retail. By employing an established model, existing knowledge and insights can be leveraged to better understand the impact of phygital store design applications on customers' perception and experience. This approach ensures a structured investigation, grounding the findings in empirical evidence and contributing to the existing knowledge in the field. The inductive approach, enables the collection of insights on which factors contribute to a positive perception of phygital retail stores. Opening up for topics relevant to the phygital retail that were not portrayed in the existing phygital retail literature.

### 3.1 Research Design

To achieve the research objective, a qualitative research method was chosen. Bazeley (2020) emphasizes the value of qualitative research in exploring complex phenomena, understanding social interactions, and capturing rich, contextualized data. Thus, making it suitable for analyzing how phygital stores created value and examining the factors influencing the application of phygital retail in fast fashion retail stores based on customer-based brand equity. Furthermore, the qualitative approach was well-suited for understanding customer-based brand equity dimensions that Cifci et al. (2016) proposed. Qualitative research enabled delving into the various dimensions of brand awareness, service quality (physical and staff behavior), ideal self-congruence, brand identification, and lifestyle-congruence. Through open-ended questioning and probing, insights into how these dimensions contributed in creating brand satisfaction and brand loyalty were gained. The data collection process involved two main methods: semi-structured interview and focus group discussions. semi-structured interviews were conducted with individual customers to collect primary data, while focus group discussions were used to triangulate and deepen the understanding of the findings from the interviews.

## 3.2 Data Collection Method

### 3.2.1 Semi Structured Interviews

Sekaran and Bougie (2016) highlights the advantages of semi structured interviews. They characterize semi structured interviews as having a flexible structure, incorporating some predetermined questions and prompts while also allowing for open-ended questioning and follow-up inquiries. Since the factors influencing a positive or negative perception of phygital retail have not been identified yet, semi structured interviews were selected to collect primary data to allow for unexpected topics to emerge. The flexible and engaging approach to data collection of semi structured interviews furthermore enabled capturing participants' experiences and perspectives comprehensively and nuancedly. Thus, while the selected questions primarily address the purpose of determining the impact of phygital retail on brand equity, the nature of the study allows for a depth of factors to be explored.

#### 3.2.1.1 Sampling and Selection

The study targets customers in purposeful sampling techniques, which were employed to deliberately select participants based on their relevance and potential to provide valuable insights, rather than relying on random selection (Sekaran & Bougie, 2016). The number of participants was determined by the concept of saturation, which meant that data collection continued until no new information or insights emerged from the interviews. The list of participants can be seen in appendix B.

The selected participants for the semi-structured interview were fast fashion customers who resided in Sweden and Denmark, as these countries have a strong presence of fast fashion brands, and their customers have diverse experiences with digital transformation in the industry (Stanković, Marjanović, Drezgic, & Popovic, 2021). In addition, these countries were chosen as the study setting because they are located in the same geographical region, which makes it easier to conduct the study within a feasible budget and timeframe.

To capture diverse perspectives, participants varied in gender, socioeconomic background, and engagement levels with fast fashion brands. This thesis focused on younger consumers, particularly those aged 20-32 as they are traditionally associated with being the primary target market for fast fashion brands, according to Aktan and Burnaz (2010). This demographic is often more receptive to fashion trends, sought affordability, and valued a high turnover of clothing styles (Aktan & Burnaz, 2010). They

were more likely to be influenced by social media, celebrities, and peer groups, contributing to their engagement with fast fashion.

### 3.2.1.2 Location

The interviews were conducted using a mix of Zoom and in-person formats, allowing for a comprehensive understanding of participants' perspectives. Zoom interviews offered convenience and a broader reach, while in-person interviews enabled the observation of participants' reactions and non-verbal cues, providing richer data (Krouwel, Jolly, Greenfield, 2019).

### 3.2.1.3 Overview of the Process

Pilot interviews were conducted to reveal the limitations of the interview questions. Six people were interviewed with initial questions directly taken from Cifci et al. (2016), with slight alterations to consider phygital retail. However, respondents lacked an understanding for what some questions intended to address. Hence, some questions were reworded until the pilot interviewees did not require significant explanations. Furthermore, from the pilot interviews, the importance of visual aids was recognised. As Sekaran and Bougie (2016) assert, visual aids are particularly useful in eliciting specific ideas and concepts that might be challenging to articulate verbally or express clearly or comfortably. Thus, a presentation was prepared that included pictures of different forms of ICT and fast fashion brands to facilitate participants' understanding of the question's purpose and context (Sekaran & Bougie, 2016). During the interview process, interviewees were shown the presentation at the beginning of the interview.

The interviews were structured around open-ended questions to facilitate a free flow of conversation. Audio recordings were made during the interviews, and notes were taken simultaneously. In the initial stages, broad questions were asked to familiarize the participants with the topic, such as; *are you a fast fashion customer? Have you seen or used digital tools such as QR codes, digital signage, interactive display, or virtual fitting rooms in fast fashion retail stores?* These questions aimed to prompt participants to begin thinking about the topic and express their initial thoughts and opinions (Sekaran & Bougie, 2016).

Once the participants became comfortable with the interview process, specific and targeted questions were asked regarding the impact of digital transformation on brand equity from a customer perception standpoint (see appendix A). The objective was to gather more profound insights into the influence of digital transformation on brand equity as perceived by customers. Open-ended questions were used to encourage participants to provide detailed and nuanced responses (Sekaran & Bougie, 2016).

Additionally, follow-up questions were utilized to clarify and explore participants' responses, often delving into the reasoning behind their thoughts or opinions, such as asking '*Why do you think that way?*' This approach allowed for a more comprehensive and detailed understanding of participants' perspectives and experiences (Sekaran & Bougie, 2016).

#### 3.2.1.4 Challenges

During the semi-structured interview process, several challenges arose. Coordinating interview times with participants proved challenging, especially when dealing with busy schedules. Effective communication and flexibility were crucial in addressing these challenges (Sekaran & Bougie, 2016). In addition, receiving sufficient data from participants proved challenging. Some participants provided detailed and rich responses while others struggled to express themselves. In order to tackle those challenges Sekaran & Bougie (2016) indicates interviewers need to establish a comfortable and trusting environment and encourage participants to provide in-depth insights. By allowing interviewees to select between in person or zoom interviews and having a brief introductory conversation, attempts were made in creating comfort for interviewees. Managing interviewer bias was another challenge, as unintentional biases introduced through tone, body language, or question formulation could have influenced participants' responses. Listening attentively, exercising tact in questioning, and maintaining a consistent questioning mode reduced bias during the interviews (Sekaran & Bougie, 2016). Balancing structure and flexibility in the interviews was also challenging, as interviewers needed to maintain a coherent structure while allowing for organic and meaningful discussions. Preparing a flexible interview guide, active listening and adaptability were the key to tackling these challenges (Sekaran & Bougie, 2016).

#### 3.2.2 Focus Group Discussion

According to Jenny Kitzinger (1994), focus groups provide the opportunity to cross examine 'private views' emerging from interviews in a public discourse. Hence, in order to determine whether the findings from the interviews are reliable and valid, focus groups were selected. The advantage of conducting focus groups is the ability for members to reflect genuine opinions, ideas and feelings about phygital retail. Participants are able to expand in depth about the insights gained from the interviews.

Besides the triangulation of insights, the focus group additionally served the intention of deepening the understanding of the factors driving a positive or negative perception of phygital retail identified during the interviews (Morgan, 1993). David L. Morgan (1993) illustrates that if differences between the results from individual and group interviews occur, then the differences should be explored. Due to the

free-flowing, flexible format of the focus group unforeseen topics emerged, furthering the depth of the research scope on phygital retail and brand equity.

### 3.2.2.1 Sampling and Selection

Stewart, Shamdasani, and Rook (2007) suggest that focus groups consist of 6-12 participants to achieve an equilibrium between an animated conversation and lack of engagement. It was decided that 8 participants would be an ideal median as it would allow an inexperienced mediator to lead the discussion and still provide enough insights to triangulate the findings. The participants were recruited through telephone, with more than 8 participants asked as Stewart et al. (2007) advises to over recruit in case of cancellations.

The focus group participants asked to participate were chosen based on certain prerequisites. Participants had to fulfill at least one of the following criteria: be a frequent fast fashion shopper, have a work background in technology, have a work background in fashion retail or have a background in brand marketing and management. These specific criteria were chosen due to the ability of these participants to provide knowledgeable and theoretical reasoning and explanations on phygital retail and fast fashion as they are familiar with the explored phenomena. In order to ensure accurate triangulation, those asked were additionally between the ages of 20-32 to match the age range of the interviewees. Due to time and location restraints, the participants only included residents of Lund but all participants were screened as having experience shopping in Copenhagen and Sweden. The list of participants can be seen in appendix C.

### 3.2.2.2 Location

According to Rosalin Barbour (2007), the setting of a focus group may influence the members comfort and should thus be considered thoroughly. Hence, the focus group was held in a seminar room at the Lund University campus. This room was specifically chosen above a private setting or shopping environment to avoid any direct associations with the moderators or the retail phenomena. The university campus provided an academic yet welcoming environment as snacks were served to relax participants. Prior to starting the focus group, it was noted that there were no materials such as posters that could influence the content of the discussion.

### 3.2.2.3 Overview of the Process

Prior to conducting the focus group, the main insights from the interviews were gathered in order to create a topic guide (Barbour, 2007). Following the coding and conclusions from the findings of the interviews, the findings were presented in a quantitative method to better present the findings from the interviews in a concise manner (see appendix D). Thus, the percentage of positive and negative perceptions of phygital retail and some example phrases were gathered that concisely presented the findings. A topic guide was formulated to test these findings and generate insights into barriers to the application of phygital retail (see appendix D). In order to do so, each dimension of the Cifci et al. (2016) model; brand awareness, service quality, physical quality, self-congruence, lifestyle-congruence, brand loyalty and brand satisfaction were considered in the focus group. Similarly to the interviews, the topic guide questions were divided according to the dimensions. Stewart et al. (2007) suggest two methods to formulate and structure questions for a focus group topic guide. The first method involves ordering the questions from the general to the specific, assuming deductive reasoning. In this instance, general questions would be asked first, followed by more specific questions, which may warrant more specific responses. The second method involves inductive reasoning, ordering the questions from greatest importance to lesser significance near the end. A deductive approach was assumed in order to avoid leading the responses and involving biases. Thus, the topic guide was structured with an opening question that relates to the interview findings of each dimension in Cifci et al. (2016) model without directly referencing the findings. For example, following insights gained that customers' identification with a brand is not driven by phygital retail but rather sustainability and ethics, the first question asked was open ended: "Is the sustainability and ethics of a brand important to you?". Later, the focus group was presented with the insights and asked if they agree or disagree with the insights. This provided two rounds of discussions for each dimension and was determined to avoid leading participants. The first question was intended to gain further insights into factors relating to the application of phygital retail. The second questions related to asking the opinion on the findings were specifically intended to verify findings.

Stewart et al. (2007), suggest that less than 12 questions be asked during a focus group. However, due to the number of dimensions and the assumed deductive method, 16 questions were required. In order to ensure that the focus group ran smoothly and the questions were not biased or leading, the topic guide was presented to uninvolved friends during discussions of the thesis. During these discussions, the diversity in responses and understanding of the questions illustrated that there was no leading and that no necessity to make alterations. The questions were ultimately considered conducive and deemed unbiased. To avoid moderator-induced bias and issues related to the personality and voice of the moderator, the questions were also practiced (Sekaran & Bougie, 2016).

The focus group conversation was audio-recorded. Video recordings were not pursued due to the risk of participants's discomfort or self-consciousness around being recorded. Additionally, while video recordings may assist in identifying individual speakers and observing non-verbal communication, it provides logistical challenges with regard to the positioning of cameras, the capacity to capture all participants on film, and limitations on the number of participants that can be accommodated (Barbour, 2007).

Following the suggested outline by Stewart et al. (2007), the focus group began with an ice breaker round of introducing the moderators and notetaker. The participants were then asked to introduce themselves in order to firstly establish a friendly environment and secondly to aid with voice recognition during the transcription (Barbour, 2007). Through these introductions, the moderator was able to directly address participants and facilitate the discussion. Following this, a schedule was presented in order to allow participants to feel involved in the discussion.

According to Sekran and Bougie (2016), to obtain unbiased information, researchers should establish rapport and trust with the respondent, assure complete confidentiality, and explain the purpose of the interview. Thus, the purpose, research question as well as phenomena of phygital retail, fast fashion and customer-based brand equity were introduced and explained to allow participants to understand the scope of the questions asked. Understanding the scope, as asserts, allows participants to answer the questions more thoroughly and assists the moderator in leading the discussion.

During the introduction of both fast fashion and phygital retail examples, the familiarity and past experiences with these two phenomena were inquired. This established a basis for the discussion and allowed the notetaker to observe the initial standpoints on the phenomena of each participant. The introduction was also intended to motivate respondents to offer honest and truthful answers by explaining how their contribution can help and how they may benefit from the survey (Sekaran & Bougie, 2016). Following the introduction, each question was posed. The notetaker took notes of the discussion and initial thematic observations.

#### 3.2.2.4 Challenges

Three significant challenges can emerge during the focus group discussion that can risk the data collection content, quality and relevance. Each challenge was considered thoroughly. Firstly, the moderators and note-takers can impact the content of data elicited during focus groups. Hence, it is important to consider

the impact of the moderator and the match between the moderator's characteristics and the group. It is difficult to anticipate the roles that participants may assign to researchers but there are some ways to minimize potential damage or how to benefit from certain advantages (Barbour, 2007). The moderator was picked based on the age similarity with the participants and the ability to engage people in discussion. The age and disposition of the moderator allowed her to create a rapport with participants which engaged them in an informal flow of continuous discussion. The notetaker was selected to take notes due to their observational skills. Ensuring that notes were taken on the basis of emerging themes.

Secondly, the discussion may lose focus or arguments may emerge, which can affect the relevance of the data collected. With the intention to verify the findings from the interviews and yet gather new insights, the moderator had to be aware of when topics were harbored on for too long. In this instance, the moderator was prepared to divert the conversation or take a brief break. Additionally, the presentation involved several intermittent slides to use when the conversation needed to be intervened. It was decided that a certain level of back and forth was welcomed to be able to receive opposing viewpoints. However if the discussion was no longer deemed constructive, the discussion would be redirected (Barbour, 2007).

Lastly, it was important to garner as many opinions as possible, derived from a balanced discussion. Meaning every participant should have the opportunity to share their thinking (Barbour, 2007). The moderator was thus prepared to distribute equal times to participants by directly addressing participants that struggled to talk. Directing questions at different participants additionally redirected the conversation when there was a domineering participant. However, to create a balance from the outset and a natural flow of discussion, the moderator directly asked every participant to share their opinions in the beginning of the focus group to ensure they felt able to speak up. As the focus group progressed, this was no longer required as participants felt comfortable and the conversation turned into an open discussion.

### 3.4 Data Analysis

Analyzing qualitative data collected through interviews and focus group discussions can be complex and time-consuming. To ensure the accuracy and reliability of the findings, the three-step approach proposed by Miles and Huberman was adopted (1994). This approach involves data reduction, data display, and conclusion. These steps enable efficient categorization and organization of the data, meaningful presentation, and the drawing of accurate and reliable conclusions. This chapter will outline the specific procedures used for data analysis and how this applied to the data collected from the interviews and focus group discussions.

### 3.4.1. Data Reduction

The initial phase of qualitative data analysis involves data reduction, which encompasses selecting, categorizing, and coding the data collected from interviews and focus groups (Miles & Huberman 1994). In this study Miro was used as a tool to coding which entailed identifying and assigning labels or codes to text units with a common theme or topic. The adoption of Miro as a tool in data reduction helps in organizing the data effectively and ensures no pertinent information is overlooked or omitted. Responses were examined and categorized in the reduction process based on emerging themes. Thus, the data was organized into defined characteristics, factors and effects. Filtering was also applied to remove pauses and filler words such as ‘umm’, ensuring focus on relevant information. This decision aimed to streamline the analysis and provide valuable insights aligned with the research objectives. Results of data reduction can be seen in Appendix E and F.

#### 3.4.1.1 Challenges

Various challenges were encountered during the data reduction phase of qualitative data analysis. One challenge was ensuring accuracy and consistency in the coding process, as different researchers might have interpreted and categorized the data differently. Clear documentation and regular discussions among the research team were maintained to address this as suggested by Miles & Huberman (1994). In addition, managing researcher biases and preconceptions during data reduction was also a challenge that could influence the analysis and interpretation of the data. To ensure the validity and reliability of the findings, as suggested by Miles & Huberman (1994), objectivity and transparency throughout the process was strived for by cross examining work and regular meetings during the data reduction phase.

### 3.4.2 Data Display

The data display involved organizing and presenting data comprehensively and meaningfully (Miles & Huberman, 1994). Miro tables and figures were created to illustrate the relationships between codes, themes, and categories identified during the data reduction. This facilitated a deeper understanding of the data and allowed for identifying patterns, trends, and relationships within the data set. Additionally, the data display enabled the creation of a comprehensive focus group topic guide, providing visualization of findings for participants.

#### 3.4.2.1 Challenges

A significant challenge of data display is to effectively represent the complexity and richness of the data concisely and understandably. During the process, it was important to decide which data to include and

how to present it to convey the key findings visually. Besides that, simplifying and condensing the data while maintaining its integrity and ensuring that important insights were presented was a challenge. To tackle these challenges during the process data segments that capture the essence of the findings and reflect the diversity of participants' perspectives were chosen. Additionally in line with suggestions by Miles & Huberman (1994) data that aligns with the research objectives and sheds light on key themes or patterns was prioritized.

### 3.4.3 Drawing Conclusion

The concluding qualitative data analysis process involved interpreting the data and making sense of the findings (Miles & Huberman, 1994). One crucial aspect of this step was verifying the conclusions to ensure their reliability. In this study, category and interjudge reliability were employed as verification methods. Category reliability was created by the consistent categorisation of data. Interjudge reliability involves multiple researchers reviewing and analyzing the data to ensure agreement on the conclusions drawn (Miles & Huberman, 1994). To further enhance the validity of the conclusions, this study adopted triangulation, which involved using multiple methods of data collection and analysis and gathering data from various sources. In this case, semi-structured interview and focus group discussions were conducted to ensure a comprehensive and valid conclusion. By employing these verification techniques and adopting triangulation, the study aimed to enhance the credibility and reliability of the drawn conclusions.

#### 3.4.3.1 Challenges

During the process of concluding qualitative data analysis, several challenges were tackled. One challenge was the potential for researcher bias or subjectivity, which could have influenced the interpretation of the data and subsequent conclusions. Miles & Huberman (1994) explain that being vigilant and striving for objectivity throughout the analysis mitigates this challenge. Another challenge was the complexity and richness of the qualitative data, which required careful consideration and analysis to identify meaningful patterns and themes. Ensuring the accuracy and validity of the conclusions was challenging, and that became the main reason for triangulation method adaptation. Triangulation enhances the credibility and reliability of the findings by providing a more comprehensive and robust understanding of the data (Miles & Huberman, 1994).

### 3.5 Data Handling and Ethical Considerations

Data handling practices in this study were meticulous to ensure data integrity and confidentiality. Audio recordings and detailed notes were securely stored and labeled with participants' unique identifiers for the semi-structured interview. Transcriptions underwent careful review, removing any identifying information. Likewise, audio recordings were transcribed for focus group discussions, and anonymity measures were implemented. All data files were securely stored and backed up to prevent unauthorized access or loss. In addition, ethical considerations were prioritized in both the semi-structured interview and focus group discussions. Participants provided informed consent, including a clear understanding of the study's purpose, procedures, and potential risks and benefits. Their right to withdraw without consequences was ensured. Confidentiality and anonymity were maintained using unique identifiers or pseudonyms during reporting and analysis. Furthermore, it is essential to note that once the research objectives were fulfilled, the data was promptly and permanently deleted to ensure participant privacy and protection further.

### 3.6 Ensuring Trustworthiness

This research ensures trustworthiness, transparency, and replicability. An important aspect, as highlighted by Aguinis and Solarino (2019), is that the research design is thoroughly justified, aligning with the research objectives and allowing for hypothesis testing and rich data collection. This was conducted in this study as the methodology was carefully considered. Additionally, the purposeful sampling techniques employed, target specific participants in the fast fashion industry, ensuring diverse perspectives are captured. The chosen data collection methods, such as interviews and focus group discussions, are carefully selected for their ability to gather comprehensive data. Challenges encountered during the research process are acknowledged, and strategies are implemented to address them, promoting transparency. Triangulation is employed by utilizing multiple data sources, such as semi-structured interview and focus group discussions, which enhances the credibility and validity of the results. Peer debriefing involving a third-party reviewer, such as peers and supervisor, further strengthens the research by providing an external perspective and ensuring its robustness and validity. By incorporating these measures, the study aims to uphold trustworthiness, transparency, and replicability in its findings.

### 3.7 Limitations and Reflections of the Study

There are several limitations to this research. The sample composition is limited, consisting of a few participants with specific demographic characteristics. Including a more diverse range of customers would provide a more comprehensive understanding of the impact of phygital store applications across different demographics. Secondly, there is a potential for bias, as participants may have expressed socially desirable views, or their responses may have been influenced by personal preferences or prior knowledge. Furthermore, the reliance on qualitative data from interviews and focus group discussions limits the ability to make statistical inferences and determine the strength of relationships between variables. Lastly, the findings may be time-sensitive, as the research may need to capture the latest technological advancements or evolving consumer behaviors. Future studies should consider longitudinal approaches to assess the long-term impact of phygital store applications on customer-based brand equity.

As discussed previously, the Cifci et al. (2016) model was selected as it is the most appropriate model that is in line with the research objective. However the model is developed for traditional retail service and may not fully capture the complexities and unique characteristics of phygital retail environments as it lacks specific dimensions for technology integration, which is crucial in phygital retail and can significantly impact customers' perceptions of brand equity. In addition, the model's reliance on qualitative insights and the absence of quantitative measurement tools limit the ability to obtain precise and statistically significant results, hindering the overall robustness of the analysis.

Acknowledging these limitations is crucial for understanding the scope and applicability of the research findings and guiding future studies to address these gaps, further validate the results, and provide a more comprehensive understanding of the impact of phygital store applications on customer-based brand equity.

## 4. Findings

This chapter will depict the findings of our study, acquired from the analysis of qualitative data collected from interviews and a focus group. The findings were structured according to the six dimensions of the Cifci et al. (2016) CBBE model of brand awareness, service quality: physical quality, service quality: staff behavior, ideal self-congruence, lifestyle-congruence, and brand identification. The mediators of

brand satisfaction and brand loyalty were also considered to describe the value brought to consumers and fast fashion brands. This structure enabled the analysis of the impact of phygital store design application on customer-based brand equity in fast fashion retail and the identification of factors that drive and hinder customers' positive perceptions of applying phygital retail.

## 4.1 Brand Awareness

### 4.1.1 Interviews

Based on the interviews, phygital retail has the potential to positively impact brand awareness. However, the adoption and success of phygital retail in fast fashion retail stores may vary depending on brand perception, resource allocation, and customer expectations.

Overall, participants preferred online stores with personalized features, mobile apps, efficient self-checkout systems, and innovative technological integration. These factors created a sense of attachment and loyalty and improved shopping experiences for the participants. One participant (P2) expressed that online stores with preference features and tailored recommendations based on their preferences create a sense of attachment and loyalty towards the brand: *"I get more attached to that particular brand because I know where I can find some stuff that I like and they tailor things to my taste."* Participants (P3, P4, P11, P12, P13) mentioned they preferred brands that have mobile apps as they provide membership benefits and an efficient online shopping experience. Hence P4 mentioned, *"I remember, downloading this app you got like a discount off, so that is why I have and used it"*. Furthermore, participants (P3, P4, P14, P15, P17, P18) highlighted an efficient self-checkout system as a positive experience that improved physical shopping experience and queue management compared to other brands that do not have it. P4 mentioned *"The most impressive one for me is that they have the highest level of digital things like this (self-checkout machine), and when I shop offline, I always go to the machines like this, not the cashier."* This was complimented by P17 also expressing *"It worked pretty well like the queues were moving a lot faster than they normally are."* One participant (P8) discussed a Belgian clothing store that integrated tablets into their stores, allowing customers to check availability and order items in different sizes. This example indicates that some brands are exploring innovative ways to incorporate technology into the shopping experience.

Participants associated technology integration with a more modern, innovative, larger/luxurious, and efficient shopping experience (P3, P4, P8, P9, P14, P15, P17, P18). Multiple participants highlighted

features like self-checkout machines and mobile apps, contributing to their perception of the brand as modern, innovative, and efficient. P8 mentioned, *"I guess I would consider them more innovative because they integrate the technology more."* P9 mentioned that larger or luxury brands are more likely to adopt technological features. In contrast, P14 and P15 mentioned brands that do not have that are perceived as more traditional.

Contrasting statements made above, one participant (P1) mentioned a lack of experience with technology in physical retail stores, indicating that not all fast fashion stores have implemented technological features. In addition, there is also skepticism regarding the use of technology in creating a store atmosphere; P5 mentioned, *"I guess it makes me feel like the store is more modern, which I would like, but there are many different ways to make a store feel modern, and it does not necessarily involve technology."* P9 also mentioned, *"It makes the store atmosphere feel sterile which I don't really like."* Another skepticism regarding the effectiveness of using technology emerged, specifically the value added by technology in retail spaces on the product that the brands sold. Hence, P10 mentioned, *"[...] but whenever I see that (in-store technology), I always wonder what is added to the actual clothes."*

#### 4.1.2 Focus Group Discussion

In the focus group the majority of participants had neutral opinions about the findings of the interview. Regardless of the presence of technology, the focus group discussion suggests that factors such as product quality, design & creativity, value, ethical practices, and accessibility play significant roles in shaping brand awareness and customer perceptions in fast fashion retail. However, the focus group discussion still reflects a range of opinions regarding the impact of phygital stores on brand awareness.

Some participants believe that technology, such as self-checkout and mobile apps, contributes to a positive perception of brands. They associate technology with efficiency, convenience, and innovation. Participants (P2, P7, P6) associated using technology, such as self-checkout and mobile apps, with a sense of modernism and freshness. They perceived brands that leverage technology as being up-to-date and progressive. P2 mentioned, *"I would feel a sense of modernism, and it is very up to date and feel everything is very fresh, whereas you can feel the vibe of some stores, very antique. So technology is a bonus."* In line with this, P6 mentioned, *"I feel like the stores with those kinds of things are very modern, and I think it pumps up my impression of the brand."* Participants (P2, P4) appreciated technology's ability to save time, particularly regarding online ordering and self-checkout. P4 mentioned, *"It is also very good for me because it saves a lot of time."*

Some participants (P3, P5) have a more balanced view, acknowledging the benefits of technology in terms of efficiency but expressing skepticism towards certain technological advancements. Thus, like virtual reality still requires the assistance of staff during shopping experience. P5 explained, *"Sometimes you need someone else's help, even though they have augmented reality and everything, I will not trust that augmented reality software that much to help me."* Other participants (P7, P8) have a more balanced view, acknowledging the benefits of technology in terms of efficiency enhancing the shopping process. However, they still think the ultimate focus remains on the product and the brand's creativity. P7 mentioned, *"For me, it is good to have, but it is not necessarily beneficial because I focus on the product and the creativity rather than the technology process."*

Some (P1, P7, P8) participants mentioned that if a brand's product quality does not meet customers' expectations, technology alone cannot compensate for it. P1 mentioned, *"So the main thing is whether or not the product meets my expectations, everything else is not so much."* Similarly, some participants (P7, P8) highlighted that while technology can enhance the shopping process, the ultimate focus remains on the product and the brand's creativity. P7 mentioned, *"For me, it is good to have, but it is not necessarily beneficial because I focus on the product and the creativity rather than the technology process."*

Lastly, some participants mentioned technology's negative impact on their perception of brands. Participants (P8, P3) mentioned that the effectiveness and reliability of technology, such as apps or self-checkout systems, influence their perception. Technical issues or confusion can negatively impact brand impressions. P8 mentioned, *"I think if it is effective then it helps to streamline the process. However, if I am using an app that's always crashing or self-checkout that is confusing, it will negatively impact my perception."* Additionally, some participants (P1, P3, P4, P5) argued that technology will have a negative impact if the use of technology influences the quality and price of the product. P5 mentioned, *"If the product quality is not good and they are charging a premium for their technology as well, it will not make me loyal to that brand or give me any good impact."* Expanding on this P3 asserted *"My first reaction was that I thought it was really expensive and it was like I did not want to try it so I was hoping that it would not go to the product price."*

## 4.2 Service Quality: Physical Quality

### 4.2.1 Interviews

Based on the interview analysis, phygital store design has several impacts on customers' perception of store quality.

The majority of participants (P3, P4, P5, P6, P11, P12, P14, P18) perceive that phygital store design positively impacts store quality as it enhances convenience, efficiency, and modernity in the shopping experience. Some participants (P3, P4, P6, P14, P18) like the convenience of phygital store design, such as apps, self-checkout, and easy payment systems. P3 mentioned, "*[...] you can order it online, pay online and get the stuff right at the offline shop. It is convenient.*". Equally, P4 said, "*It is like, for example, the QR code, the checkout system, it is very easy. You can do it on your own [...]*". Phygital store design can also improve the shopping experience's efficiency by reducing waiting times and queues; P15 mentioned, "*It kind of fastens your whole shopping experience because you do not have to wait in the queue.*". In addition, some participants (P11, P12) appreciate the ability to research and gather information through websites and apps. P12 explained, "*The websites are also important because I would need to research what the stores have available and what I want to buy so [...]*". Phygital store design is perceived as creating a modern and attractive shopping experience. P13 mentioned, "*If the brand has a virtual model or can give me a kind of in-store experience. I think it will be more convenient and attractive.*". P4 & P5 also explained that big screens and interactive displays could catch attention and create a more modern store atmosphere. Lastly, some participants see brands with phygital store designs as more attractive as they value the independence and comfort it provides, avoiding interactions with store staff and maintaining personal space. P6 mentioned, "*Yeah. I do not like interacting with people, so if there is a self-checkout counter or somewhere I can do my own thing, I would prefer to go there.*".

Some participants (P16, P17, P9) feel that phygital store design does not impact the store's service quality or even negatively impacts their perception of the physical quality as they prefer a simpler or less technology-driven store environment. P16 & P17 asserted that technology seems less relevant for smaller brands and second-hand shops. Factors like window dressing play a bigger role in shaping their perception of store quality. The phygital store design could also give a negative perception since technology application can make the store feel sterile. P9 mentioned, "*I think when they implement*

*technology, it feels quite modern and sterile, which is not my style. So it does not necessarily make me feel better about the interior."*

#### 4.1.2 Focus Group Discussion

Most of the participants agree with the findings from the interviews. However, the focus group discussion reveals several key points regarding the effect of phygital store design application on customer-based brand equity, specifically in service quality: physical quality.

All participants appreciate the use of technology to improve their shopping experience, as it offers convenience and personal space during transactions, but most still regarded clothing as the primary attraction to shop. Some participants (P2, P3, P4, P7) mentioned that using online searches and social media recommendations are beneficial to check products and guide their choices. P3 mentioned, *"For some online websites you can try to see how big the sunglasses are or how big the bags are, I think that's convenient."* While P8 asserted:

*"The clothes are still the main attraction, and if you are looking for convenience shopping, some people want it to be quick and you know quickly for me, that is not the most important thing. When shopping, I usually take my time and think about what I am buying."*

In addition, participants (P1, P3, P6) emphasized the importance of the opportunity to interact with products in a store physically. They preferred seeing and feeling the products in person rather than relying solely on online shopping. They believe technology can not replace the feeling of touching and testing the clothes. P6 mentioned, *"I prefer to go to a store than to shop online because I am impatient. I do not want to wait. Like I want to see the products in real life."* In line with this, P3 also explained, *"Going to the store is also like feeling it, to see how it looks on me and I don't think technology can replace the physical feeling, you know, like maybe it shows you what it looks like, but not how it feels."* Based on that discussion, participants (P2, P4, P7) argued that a phygital store is an effective strategy as it combines the need for gathering information from an online platform but still provides a physical store to inspect the product.

The store's design contributed to store quality in customers' perception. However, personal preference for the layout and design influences the perception of several participants (P2, P4, P5, P6). P6 mentioned, *"I like a nice store. I like when there are many things."* While P5 asserted, *"Design of the store does not matter much, it must be spacious and not too crowded."* P2 noted that the store's appearance from the

outside could indicate taste or style of the customers, influencing their decision to enter. However, this only applies to new stores that have never been visited while the product was perceived as the main attraction for familiar stores. Participants (P2, P3, P8) expressed that the attractiveness of a store's front window display and presentation plays a role in attracting customers. In regard to store design the visual appeal of the clothes and whether they align with the individual's style were important factors. However, loud music and a crowded store with many people waiting were seen as deterrents to entering the store. P8 mentioned, *"What would attract me would be what is in the storefront and how it is presented and if there is really loud music playing, I am less likely to go inside."*

Participants had mixed opinions regarding staff interaction. While some valued assistance (P1, P3, P4, P5), especially in unfamiliar stores, others preferred a more independent shopping experience without constant staff contact (P2, P6, P8). The second category sees the phygital store as more attractive as it provides personal space and less interaction. This preference for personal space during shopping was highlighted. P2 mentioned, *"I feel like sometimes it feels good for me to be antisocial without, you know, contacting the staff there, so a store with those kinds of things is more attractive."* P5 highlighted when social interactions are welcomed: *"I agree with that, but sometimes you do need staff's help, especially if you are not used to the store, if you are new to the store, you do not know where things are."*

Participants (P1, P2, P6) noted that the impact of technology could vary depending on the type of clothing and the price range. Luxury brands were mentioned as places where personal interaction and consultancy were expected, while fast fashion stores were considered more suitable for self-service. P2 asserted:

*"Since we talk about fast fashion brands, technology's effect on personal space is still relevant here, but if I think about luxury brands. The technology would have a backfire effect on me. I would feel disrespected when I am in a more expensive place without anyone to be there and give me consultancy or feel like something is wrong. Something is off."*

P1 also mentioned, *"It is interesting to see why some people say it has a negative impact, that could be because some people want to feel special or do not trust AI and technology."*

## 4.3 Service Quality: Staff Behavior

### 4.3.1 Interviews

Most participants (P2, P3, P4, P10, P11, P12, P13, P15, P16, P17, P18) believed integrating technology in physical stores allows staff to quickly look up product information, check stock availability, and assist more efficiently. Participants highlighted the benefits of staff having access to tools like tablets or internal systems to look up product information or check stock availability quickly. The ability of staff to access information about customers' previous purchases and preferences improves the overall experience, simplifies the purchasing process, and improves service quality and customer satisfaction. P2 mentioned, *"they can very efficiently look up something that I want if they have the technology at hand"*; P15 also highlighted :

*"I hate when sometimes you're asking about another size of the same clothing, and then they go into the basement, and they spend like 20 minutes in there just to look through literal closets and boxes and stuff. So, yeah. I think it improves the experience".*

In addition, participants appreciated the convenience of searching for products, checking stock, and making purchases without excessive staff interaction. This was seen as particularly helpful for introverted individuals and reducing waiting times. P4 mentioned:

*"[...]also because for me, like, when I'm shopping, I don't like the staff to be around me and say "Hey what can I help you with [...]" I just needed it when I asked them. If they have this technology, you can search for, for example, at home, ok, I like these clothes, then I will go to the physical store to see this. So it's become more efficient".*

While most participants had positive experiences with technology-enabled stores, others shared negative experiences. Issues such as non-functional technology, staff unavailability, or excessive reliance on customers using apps created frustration and disappointment. Some participants (P1, P8) expressed concerns about staff needing more knowledge about the products they sell. They attributed this to staff becoming reliant on technology and frequent staff turnover, which can hinder the quality of service. P1 mentioned:

*"[...] the staff today have less knowledge about what they have in their stores than they used to because they are getting lazy. If the system doesn't work, or if they don't have the iPad right by them, they're not any good sometimes."*

P8 equally explained, *"It's more in a bad way that I think of this that they were less capable somehow."*. Some participants felt that staff members were slow or struggled with technology, negatively influencing their perceived service quality. Technology malfunctions or staff encountering difficulties using the technology can lead to customer frustration and disappointment. P14 mentioned:

*"I had one negative experience where you can buy things without the staff, but then the technology didn't work. And when I needed help, the staff was occupied with the things and then I also had to wait. So that was a negative experience."*

In addition, requiring customers to download an app for basic information, such as stock availability, can deter some customers who prefer to avoid creating accounts or going through additional steps. P5 explained:

*"I went to the store, showed on my phone the clothing on the website, and told them where I could find it? And she said you had to download the app. And I was like, but I don't want to create my accounts and everything to know where in this store the shirt is. So I didn't buy anything because I was annoyed at them."*

#### 4.3.2 Focus Group Discussion

Based on the focus group discussion, the analysis reveals several insights regarding the effect of phygital store design application on customer-based brand equity, specifically related to staff service quality.

Regarding staff attitude and ability, participants (P6, P3, P7) expressed that staff attitude significantly influences their shopping experience rather than technology or staff ability. Negative attitudes, such as being pushy or rude, can leave a lasting negative impression and even lead to avoiding the store or specific staff members. P6 mentioned, *"I feel like if they are way too pushy then I can go faster than I would like."* P7 asserted, *"It will leave a very long and ugly impression for me if the staff is kind of rude, but for the ability, for me, it doesn't matter as long as you have a helping hand trying to do things."* . On

the other hand, positive attitudes, where staff members demonstrate care, understanding, and personalized service, can significantly enhance the shopping experience and foster loyalty. P5 stated:

*"[...] she was thinking from my perspective, instead of trying to sell me everything they have, she was thinking of my style and providing recommendations, and I like that. So I was like, wow, you are fantastic."*

Participants also highlighted the importance of technology in furthering the staff's ability to provide a satisfactory experience. According to participants, technology can assist staff in improving their ability to help customers by providing quick access to product information and facilitating problem-solving. P5 mentioned: *"The technology could help staff figure out how to help the customer more because a person can't remember everything so that technology could improve staff ability in that sense."*

There were differing opinions on whether technology could improve staff attitudes. Some participants (P2, P4, P8) believed technology could indirectly affect staff attitude by reducing stress and frustration related to specific tasks, such as checking stock availability, allowing staff to focus more on customer service. However, others (P1, P5) felt that attitude is a personal characteristic that technology cannot directly impact. P5 mentioned, *"Attitude, I think it's your own thing. Technology has nothing to do with your attitude"*; while P4 said, *"If clients always ask and I do not remember what has been stocked, in that case, I can check on a device that would also affect my attitude, meaning I don't get so stressed or annoyed by all those things."*

Regarding service quality, all participants acknowledged that technology could enhance staff ability by enabling easy access to information and quick responses to customer queries. However, they also mentioned that technical issues or challenges with using technology could negatively affect staff attitude and engagement with customers. P8 said, *"My first reaction was to think it might negatively impact their attitude and ability as It could be frustrating and confusing, especially if you are unfamiliar with it, and make things more complicated."*

In addition, participants (P1 & P5) argue with semi-structured interview findings regarding the lazy attitude of the staff as a negative impact of technology. They agree that as long as customers get what they want, lazy staff do not matter. P5 explaining *"As long as it's helping both parties, then what's the problem with technology or being lazy? The customer needs help, and the staff can help with technology"*.

## 4.4 Ideal Self-Congruence

### 4.4.1 Interviews

The responses illustrate that for the majority of consumers, the use of technology in stores does not help them align their ideal self with a brand. Especially, the fast fashion element of this study and privacy in technology were concerns that decreased the desire of consumers to align themselves with brands.

Some interviewees were not averse to the use of technology in retail but argued that this was not their driving force in wanting to be associated with a brand. P15 stated *“I like when companies are getting more technologies in their system. It's a bonus point. But that's not the main reason.”*. The responses of other interviewees provide further insights into what are drivers for a better brand equity. P3 stated *“ [...] that's why I also choose those two brands (Zara and H&M), even though they're not fancy technology things, so I think about quality and design.”*. This sentiment was shared by P13 in stating that the ideal self-congruence is closely tied with the preference with a certain brand. P5, P6 and P16 identified sustainability and ethical practices as their driving factor for wanting to align themselves with a brand. P5 even stated that this was more important than technology: *“I would rather... see myself as a customer at a store that's less technology but is more ethical.”*. In contrast with these notions of technology not being important, P19 highlighted the value of technology in changing the brand awareness and the desire to be associated with a brand, stating that the use of technology in retail is associated with innovation and that they would want to be associated with this.

The convenience that phygital retail provides was at the forefront of responses in terms of mentions. The convenience was considered in terms of accessibility and usability. P10 asserted that they have felt a greater self-congruence with a brand because they have seen and interacted with the store more frequently. Being exposed to the store because of popularity in their town. However, when probed about the use of technology, they commented, *“So they are obviously online where they have some kind of virtual reality campaign, which is like high tech that allows you to try on clothes or something virtually but I don't think I identify with that and the clothing line is like associated with that campaign.”*. Indicating that the accessibility and exposure to the brand, rather than the utility allows consumers to idealize themselves through a brand. In contrast, P7 and P2 identified the technology use and utility, stating that it allows them to save time and fits into their lifestyle. P2 particularly identified the use of technology as being part of their everyday life, helping them fulfill their ideal self. P13 felt even more positively towards the convenience, extending how the convenience allows them to associate and identify

with the brand: *“I would, I would say so. Yeah, but I mean. Well, because I think it's cool, attractive and convenient.”*. However, the importance of convenience in associating oneself with the brand is extended by P9: *“If it made my life easier. It would, if it didn't, or didn't work, even that would negatively impact like if it was badly implemented, that would negatively. Impact my perception of them.”*.

Some participants felt that rather than increasing self-congruence, phygital retail prevents them from becoming their ideal self. These comments strongly related to the personalisation of the shopping experience through technology and an example of stores optimizing their offering based on the shopping habits of people living in surrounding areas. Rather than perceiving this use of phygital retail to be a unique experience, P8 explained *“I would hate that because I don't want to wear the same as everybody around me and I have my own style and it's not because my neighbor buys something that I want to buy.”*. The ability to find self-congruence with a brand thus being taken away and the ability to form a self association is thus removed. Similarly, P1 brought up an issue with privacy in regards to sharing their own shopping experiences or habits. P1 mentioned:

*“ [...] I don't really mind that my data is being used and they can sell that to different companies. So I really don't want to know what other people in my neighborhood are buying and I don't want people to know what I'm buying and wearing.”*

#### 4.4.2 Focus Group Discussion

Participants revealed that technology itself does not constitute self-congruence with a brand but can increase a positive association with a brand.

The focus group mirrored statements on self-congruence being supported by clothing sold rather than phygital retail. Thus, P5 explained:

*“Yeah, it seems like it's (phygital retail) not a must have. It's good to have. Yeah, I mean if you give me the options of like there's two stores, digital and physical, and I like the physical products more, I won't care if the physical store doesn't have any technology, but I like the products here.”*

P1 shared this opinion but complimented it with the assertion that technology in retail does make the experience more convenient. Indicating that technology does make consumers associate themselves with a brand: *“They have digital direction, but if I if I know that I want to buy something somewhere and they also have something that makes experience better, easier, and more comfortable, of course, and I assume*

*the technology you decide to implement in your store is intended to do so.”* This acknowledgment of the influence of technology in helping consumers associate with a brand was further expressed by P7, *“Like I said, it's part of the trend now and it shows a great commitment for the brand to invest in this kind of thing to help with the customer service”*. The application of phygital retail being associated with a commitment to better customer service. However, P8 agreed with this notion, they stressed that other elements of a brand are still more important: *“I agree that if it's really to improve the customer experience, that's good commitment from the store, but it's not the most important aspect.”*

The opinions expressed in the interviews regarding decreasing self-congruence due to data privacy were discussed extensively in the focus group. P1 had no understanding of the negative impacts of phygital retail. Similarly, P6 acknowledged that the use of phones and sharing data is omnipresent, *“I'm so connected with my phone and my computer. Like all day, every day so I haven't even thought about privacy concerns.”* The use of technology in everyday life is so ingrained that concerns with it did not emerge. P5 brought up that phygital retail provides the option to share data *“So it's not entirely digital, so it's up to you then. So you have an option to go for the digital part of the store or the physical part of the store. So it gives you. More flexibility.”* Phygital retail provides an excellent opportunity to experience the advantages of technology and the physical store displays. However, one participant did empathize with concerns regarding data collection and engaging in technology. P3 explained that their data and the use of technology should match their needs. P3 mentioned:

*“I think it's a little scary [...] Why are you showing that? You know, I would rather see changing things or new products that I can move on the screen and see rather than things that are related to other customers because I could be one of them.”*

## 4.5 Lifestyle-Congruence

### 4.5.1 Interviews

The responses illustrate the importance of convenience and the interplay involved in omnichannel strategies. Additionally, responses provided some insight into how consumers perceive phygital retail as a way to establish competitive advantage.

The ability of phygital retail to allow consumers to shop more efficiently and save time was a recurring theme during the interviews. There was a clear pattern of interviewees describing that they are busy and

phygital retail allows them to save time. Hence, P2 explained, *“Yes because that particular retail brand fits into my lifestyle by allowing me to view items when I'm on the go and not necessarily setting time aside to look for things.”*. P14, added to this notion, asserting that phygital retail is cost effective and time efficient for those living in more remote areas. By being able to search for item availability online and trying the items in store, the price and time to travel to a larger city is optimized. Furthermore, P13 illustrates the ability of technology to convince consumers to buy above brands not utilizing phygital retail: *“Actually, I don't really like to spend a lot of time shopping, so if there is technology that can save my time I will go there.”*. Indicating that phygital retail can assist those preferring a quick shopping experience by providing the ability to avoid browsing unnecessarily.

The ability to avoid social interactions also plays an important role in the shopping experience using phygital retail. However this intention to avoid social interactions was expressed in two different experiences. The first is to avoid standing in lines, wanting a singular, isolated shopping experience that is more efficient. P17, explained that living in Copenhagen there are many tourists and that *“ [...] if you're local you just want to have a quick in and out and then like the technology would help a lot.”*. The self-checkout or easy pickup options of stores make it significantly easier to avoid having to talk to staff or standing in line, saving time. The importance lies within the convenience. The other experience relates to not wanting to interact with others. P18 and P10 clearly identified that talking to minimal employees or avoiding other people is part of their lifestyle or personality. P10 succinctly captures their lifestyle as *“So if they have self-checkout then that fits into my lifestyle. Talking to a minimal employee.”*. Not all interviewees agreed with this desire to avoid staff in stores. P9 highlights the value consumers place on staff despite phygital retail. *“But just because they're implementing digital development doesn't mean that it's automatically going to fit better into my lifestyle. Personally, I would prefer human interaction rather than shopping through a tool.”*. Illustrating the importance of matching phygital retail with good service.

The ways that phygital retail influences the experiences of consumers was illustrated by the responses from P3, P4, P6, P7 and P16. The various functions and uses of different technologies have varying degrees of influence on lifestyle. P3 explained how the omnichannel strategy that phygital retail enables is perceived. P3 said:

*“You can shop online and get the products at their offline store quickly [...] like you order online and you get the stuff. So it's really convenient and aligns with my lifestyle. Yes, and sometimes when you look for a specific size of the clothes. This store is out of stock, but the other store might have it and you can search that online, also really convenient.”*

Thus, the interplay between online and offline allows P3 to align a brand with their lifestyle. P4 explained that the omnipresence of phones and online shopping in their lifestyle aligns with phygital retail, *“Like we use our phone pretty much for every activity, daily activity. You pay with your phone. So I think it's pretty much in line with my lifestyle.”*. This notion of using phones to alter shopping habits was also expressed by P16, *“I think yes especially [...] If we talk about mobile apps where you can order things, I think, yeah.”*. The use of mobile apps in phygital retail being identified as allowing for a constant connection to a brand.

It is noticeable that some interviewees (P5, P1) are not aware of what their lifestyle constitutes. Upon further probing, P5 explained, *“I don't think I have that sort of idea of what my lifestyle is. I don't think I. I don't have an idea about my lifestyle in this sort of way that I care whether I shop at digital stores or not I guess.”*. The interviewees still studying appeared to be equally focused as those working on finding a more effective way of shopping and saving time. However, there was a difference in shopping frequency amongst students and workers when expressing how it ties into their lifestyle. Thus, P1 mentioned, *“Of course I'm a student, and of course I don't earn a lot of money, so maybe then I don't shop a lot because I don't have a lot to shop.”*. In contrast, the frequency at which interviewees that work was significantly higher and in describing how technology fits into this was in regards to being able to acquire items quickly.

The influence of phygital retail on the brand was conceived from two different perspectives. Both interviewees (P1, P4) assessing the effect of phygital retail on the brand considered phygital retail as providing financial gains to companies. However, P4 highlighted how phygital retail provides a competitive advantage while P1 criticizes the application of phygital functions and its influence on lifestyle. P1 explained that phygital retail is a must:

*“If they don't have that, they're going to lose their place in the market competition, yeah. In order to be competitive, they have to have it. And as a customer, we used to use that like an online shopping app. And yeah, if they don't have it, I would just switch to another brand, yes.”*

In contrast, P1 questioned the need for competitiveness, disagreeing with the overconsumption currently occurring and how phygital retail enhances this: *“So I think in that way the online shopping is just to make the brands able to earn even more money and for the wheel to keep on turning and the planet going to suffer.”*

#### 4.5.2 Focus Group Discussion

The responses revealed further insights into the ways that phygital retail can accommodate the lifestyle of consumers and how consumers perceive their shopping experiences. Revealing varying perceptions of the benefits of phygital retail in fulfilling lifestyles.

Participants overall indicated that convenient shopping experiences fit into their lifestyle. The ability to have a quick experience was at the forefront of shopping experiences for many focus group participants. Hence, P5 who expressed that they do not appreciate shopping, explained, “ *I wanna be as quick as possible. And don't waste much time, I just go there. If I know what I want and I know where it is, I'll just go there and buy it as quickly as possible.*”. For those with a specific need or product, phygital retail thus allows them the desired shopping experience, by saving time. This notion was also expressed by P6 and P3. P6’s response specifically indicates that phygital shopping allows them to avoid stressful situations. P6 said:

*“Yeah, I think it's like if I have a planned shopping day, then I want to do it as a whole thing, but I think most of the time I go for efficiency. Yeah, because I also get stressed by shopping environments sometimes.”.*

However, this also indicates that given more time, browsing would be welcomed. P1 indicated that the choice of shopping experience depends on whether they are looking for something in particular and the type of product they are shopping for. P1 mentioned:

*“Yeah, I would say it depends. If the question is either or, I would go to the convenience side. But if it's both, well, it depends on the product time to buy some products. I might need the time for more comparisons and for some products you don't really need.”.*

This indicates that convenience is valued when specific items are desired but experiences are preferred with more valuable items.

Some respondents (P6, P1, P4) explained that they appreciate a merging of an inspiring experience and efficiency in phygital retail. P4 specifically asserted “*I don't think they're excluding, as P6 said, it's a little bit of both and maybe with the use of technology it can be improved in a way that you are both created kind of like. Display as well as an efficient way of shopping.*”. Thus, phygital retail is perceived as an

opportunity to merge convenience and unique, interesting experiences. Allowing consumers the opportunity to pick between the two options.

Time appeared as the driver for a desire for a more or less convenient shopping experience. It appeared that consumers prefer a convenient shopping experience when busy but will set aside time for shopping experiences if necessary. In instances when they have more time, several respondents replied that they will prefer relaxing, experiential shopping experiences. Thus, P7 expressed;

*“For me it is about if I have time, then I want it to be like an experience, like a relaxing thing. But if I know what I want to buy, for example, the pharmacy or, like, even clothes that I know which model I want, I just. And I don't have time. Just quickly go there. Very convenient and efficient.”.*

Thus, consumers require different shopping experiences depending on their available time. One focus group member, P8, was the only one making time for shopping experiences and shaping their lifestyle around the shopping experience rather than looking for convenience. P8 said:

*“I don't know if it needs to be inspiring per se, but I am indecisive by nature, so it's usually not convenient or efficient if I go shopping. I purposefully do it when I have time to do it so I guess it will be an inspiring experience.”.*

The shopping experience does not require convenience as the respondent doesn't necessarily know what they want. Instead browsing in stores is still valuable when given more time.

There was an active discussion on the downside to the use of technology in daily life and its effect on lifestyle beyond shopping experiences. Participants (P6, P4, P8, P5, P1) all acknowledged the omnipresence of technology in their lifestyle. However, the value of this technology was perceived differently. P4 explained that while they themselves are not concerned with the use of technology, they recognise arguments on how technology changes the store experience: *“I've seen interviews of creatives that consider this algorithmic oriented consumerism kind of like sterile after a while, because you're just driven precisely to that product and you are completely guided in that.”.* P5, with a background in technology, considered the way that technology affects lifestyles, explaining *“It's also in a way that we are so much dependent on technology these days and we sort of waste our time so much with technology, so maybe in that sense the people feel like they're they have a negative impact.”.* Thus, the implementation of technology in retail is facing some criticism by consumers despite consumers

considering technology being part of their daily lifestyle. P1 highlights that there is a weighing of options. The convenience of shopping at a phygital store is worth sharing data. P1 mentioned:

*“You are never private anymore. So if you just open your Google Maps it can show you where you spent last month in every place and. So it's not that much about privacy, but yeah, for the convenience it makes sense.”.*

## 4.6 Brand Identification

### 4.6.1 Interviews

When asked about how likely they are to defend a brand applying phygital retail, the interviewees highlighted that brand identification is not a prominent dimension amongst consumers aged 20-32. Furthermore, responses indicate the importance of brands aligning their ethical practices with their use of technology and the high influence of social surroundings in shaping brand identification.

Two interviewees (P1, P18) expressed an understanding with possible insults to brands, depicting a lack of association with brands or possibly even a dislike for being identified with a brand. Thus P1 explains *“Maybe I'm one of those who insults.”*. P18 took a more understanding perspective to criticism focused on the use of technology. P18 said:

*“Everything can go wrong when you do it yourself. So like I understand, I'm not gonna be upset if someone criticizes me I'm gonna sympathize. Like yeah, it could. It can't be difficult for people to use technology that they're not used to.”.*

Highlighting the importance of phygital retail in not purely relying on technology. Furthermore, P11 explained the downside to utilizing technology in stores in terms of employees being replaced. *“Like, it's understandable, for people to criticize just because you know like the thing going on with automation and that kind of stuff. Staff get replaced by technology and stuff like that.”*. Thus, consumers are acutely aware of the consequences of phygital retail.

Many (P14, P15, P16, P12, P6, P8, P2) interviewees did not show any specific identification with a brand. They were not offended when someone would criticize a brand utilizing technology in retail. Some follow up questions with P2 revealed that they also don't feel offended if their favorite brand would be

criticized: *“Not really, I don’t care”*. Others, like P15 and P16 said they do believe that technology improves their experience but that this opinion would not get swayed or be influenced by criticism from others. Hence, P15 explained, *“I think. I like apps actually, and I like that the shops go digitally. I think it's an improvement, so I don't think anyone else's opinion really affects my opinion.”*. P12 also explained that their convictions on phygital retail does not get affected by others, arguing that everyone is entitled to their own opinion.

Some interviewees (P4, P3, P4, P9, P17) however, appeared to base their level of brand identification on who would criticize the brand. Depending on who criticizes the brand utilizing phygital retail, they would be more or less offended. Indicating that brand identification is also associated with social environments. Hence, P4 clearly explains, they would be offended, *“But that's because I like my friend, not because I like the websites.”*. P3 identified criticism as being in a fixed mindset, making them reflect more on their friends than the brand: *“I only buy it because I want to use it. I'm just like if a friend just criticized that would be like, you're, like, resistant to change, like a fixed mindset. Yeah, a little bit. Yeah, maybe I would just maybe share some of my experience with my friends.”*.

P9 and P17 had a strong sense of brand identification, stating that they would actively defend a brand. P9 illustrated that to them, criticizing the use of technology is not understandable, *“I feel insulted, I think it might be a bit strange if someone critiques, I would be a little bit curious if someone critiqued the store just because they were using technology and no other reason.”*. In contrast, P17, would be offended, stating *“No I would disagree with them.”*. Upon further questioning on if they would defend a brand, they responded *“The main thing that I would defend would be trying to be ecological and sustainable, with the change we have now, I think I would defend any brand that may go in that direction.”*. This indicates that the technology itself may not be a reason for brand identification.

Amongst P10, P11, and P17, sustainability and ethical practices seemed to be a greater influence of identification with a brand than technology. Hence, P10 asserted:

*“Like if you say something like ‘ooh they are not like trying to make their clothes better’, but they're trying to give this technology that has nothing to do with their product. Then I'll actually agree because I would care more about how they can do better.”*

## 4.6.2 Focus Group Discussion

The focus group discussion regarding brand identification evolved into a discussion on the importance of sustainability and ethics of a brand in influencing brand identification. However, the focus group members agreed that there is a discrepancy in their shopping habits and their morals.

The majority of respondents (P3, P8, P7, P6, P5, P4,) explained that sustainability was more important to them than the use of technology in shaping their brand identification. P3 for example, explained *“I think sustainability and ethics are more important than like, I don't know, augmented reality viewers [...] And I would rather they use technology on this than on the mirror.”*. Thus the use of technology would better be used on sustainability as, *“I would feel more comfortable shopping than seeing the mirror because I probably won't try the mirror myself.”*. P8 asserted that sustainability is the most important motivator for shopping while P7 explained they would even be willing to spend more on sustainable items rather than high quality items. Thus, sustainability was considered a *“ [...] very unique selling point of the brand.”*. Brand identification and thus brand equity can hence benefit greatly from sustainability.

Despite the revelations regarding the importance of sustainability, participants also asserted that sadly, their shopping habits do not always align with their sustainability conscious statements. Indicating that, despite their statements other factors do still play a more significant role in actual purchasing decisions rather than brand identification. P6 and P7 expressed feeling like hypocrites, expressing that price still matters more. P7 mentioned:

*“Yeah, I am so broke, I cannot afford those kinds of things. I would rather see just like, yes, in paper I am advocate for all of those things but. In real life, I think if it really looks good, something that I will buy from Zara.”*

P5 explained that the hypocrisy is present in all aspects of shopping, *“For example, we have so many scandals like for example Apple, they've been using child labor and everything and then you're still using their products, we are so dependent on those products.”*. The dependency on products prevents consumers from acting on their sustainability concerns. Fast fashion as P7 and P8 argued however, does not need to be unsustainable. They stressed the intention behind buying items being important when considering sustainability and fast fashion. P7 argues that there is an awareness to be a responsible consumer *“They have good things. It's just like you have to use them more. You have to be. Responsible when you're using it.”*. P8 highlights the importance of using items over a longer period of time, *“Fashion is only fast if you're using it that way, if you use it for many years then it's not fast anymore.”*. Hence, consumers are

also aware of ways to justify their purchases and turn their dependency on items into sustainable practices. P4 illustrated another facet of the reason why they struggle to shop sustainably: social pressures. *“Well, nowadays you feel the need to wear something different as you have gatherings or meetings because people are kind of like changing their work and everything like that.”*. Indicating that in the period of moving jobs or professions, the expectancy to have appropriate clothing forces some to resort to fast fashion and thus less sustainable shopping habits.

P1 was an outlier in the discussion. They argued that they do not regard sustainability as a vital element in brand identification. Instead, the products were the drivers for both brand identification and purchases:

*“If I see something, I don't really question whether or not it was made sustainable or intended because yeah, if I like something, I want it. And as a desire to buy something, if you like. In my case, it's much stronger than thinking about their sustainability”.*

Overall, participants did not identify with technology but P3 specifically expressed why;

*“ [...] because what is technology? You know, it doesn't really make them different or new because pretty much they have the same kind of digital experience, but it doesn't really matter [...] So I. It's easier for me to identify with some other things.”.*

The technology of a brand thus doesn't necessarily differentiate it from other brands. Making it difficult for consumers to identify with a brand based on the use of technology.

## 4.7 Brand Satisfaction

### 4.7.1 Interviews

In order to gain insight into the satisfaction with phygital retail, interviewees were asked to reflect on whether stores employing technology satisfy their expectations in terms of product quality, customer service, and overall brand experience. Respondents were asked to quantify their satisfaction on a scale of 1-5 and reason their answers. The results reveal some vital factors that influence the perception of phygital retail amongst consumers: the type of technology, visual appeal, the brand, and implementation of technology.

The types of technology involved in phygital retail elicits different levels of satisfaction. Self-checkout and the website order, self pick up functions of phygital retail had been encountered and commented on the most however, these received different levels of satisfaction. Two respondents in particular, had varying degrees of satisfaction with different technologies, changing their rating depending on the familiarity with and purpose of the phygital functions. P10 gave self-checkout a high satisfaction level but asserted that this is due to their experience with this function and that the satisfaction depends on the technology used. Thus, if phygital retail functions are unfamiliar and don't fit into existing retail habits “ [...] then it's more of a two or one. And that that one point is only for, like online shopping”. P16 and P18 were all satisfied with self-checkout, not finding any obstacles with the use and perceiving it as supporting their shopping experience. In contrast to P10, P7 asserts that the satisfaction with different types of technology depends on the purpose of the shopping experience:

*“Like, just as in general, I feel like those apps or the checkout services, they work very well [...] But from the idea where it should help me shop faster I would give [...] I don't know two, maybe 3”.*

P12 was the only one commenting on the notification and discount feature of apps, stating that their satisfaction with technology relies solemnly on this feature.

There were contrasting perceptions of the importance of visuals and utility amongst interviewees. To one interviewee, the visual appeal of apps and websites utilized in the phygital application affects their satisfaction rather than the utility. P5 asserted that their satisfaction with the Zara website was affected by the display of items “*I don't think I've ever done it because it's too much about looking like Pinterest or something*”. However, contradicting themselves, they also stressed that they “*want it (technology) to be helpful*.”. Aligning with the notions of utility being the main focus, P16, specifies that the phygital retail allows them to skip queues, avoiding crowds and making their life easier. This in turn makes them more satisfied with the brand. Additionally, P7 highlights an important limitation to the functionality of phygital retail in saving time and illustrates a necessary function: “*You don't know the texture. You don't know anything. And they have so many options. So you still. Spend quite a lot of time.*”.

Satisfaction of interviewees depended on the implementation of the technology, with satisfaction increasing when they had not encountered any technological issues while using phygital retail functions.

P2 asserted that phygital retail increases their satisfaction with a brand as it allows for a faster shopping experience that fits into their busy schedule. The responses from P11, P12, P13, P14, P15, and P17 indicate what is required to have this fast shopping experience. The interviewees specified that they had never encountered obstacles so that they were satisfied. P6's responses illustrate the importance of the technology functioning, *"Like if I'm trying to use an app or a website it crashes quite a bit sometimes, especially if you're looking at a Swedish page and you're translating it anyway."* P10 indicates that even smaller obstacles such as having to implement a new step in the shopping experience, decreases their satisfaction with a brand.

Despite the question being focused on the use of technology, several respondents implied that the brand plays a more significant role in their brand satisfaction than technology. P8, P7, P4 and P15 related their satisfaction with specific brands, explaining that their satisfaction was high but that this satisfaction is still significantly influenced by the brand products. P8 specifically explained their reasoning with *"I think it's more because of the type of clothes they have."* Other interviewees had differing satisfaction levels based on the brand, P4 explaining, *"I will give Uniqlo the highest score (5), but then if it involves Zara and other things I probably gonna reduce it a little bit."* Similarly, P15 changed their satisfaction rating depending on the brands of Uniqlo and Zara. When probed, both P15 and P4 illustrated that this was due to their association with uniqlo of sustainability while Zara is associated with unethical practices. Lastly, brand satisfaction can also affect the perception of the brand. P3 associated the use of phygital retail with convenience but also allowed them to associate the brand as "fancy" and "not that boring".

#### 4.7.2 Focus Group Discussion

The focus group revealed that technology in retail is not the key driver for brand satisfaction overall and that consumers are not aware of how technology can change their perception of a brand. The focus group participants were provided with a general question regarding what creates their brand satisfaction. They were then presented with the findings from the interview regarding interviewee satisfaction with phygital retail due to the ability to save time. The responses illustrated the importance of accessibility and exposure to phygital retail as well as the value of staff behavior.

None of the main factors influencing satisfaction were identified as phygital retail or utility. Instead, participants asserted that aesthetics, design, material, staff behavior and location or accessibility of the store influenced their satisfaction with a brand. Here, P1 mentioned the value of staff: *"If I have, like, a few bad experiences with the staff at the store, I might stop going to that store."* In comparison, P2 and

P3 highlighted the importance of a quick experience, explaining that the location of the store and the convenience of quickly passing through a store affects their brand's satisfaction. The clothes' features appear to also be important to consumers as P3 states, *“How well they fit, because sometimes I can't really find my size, which is a turn off”*.

Regarding the findings from the interviews, the participants agreed with satisfaction with a brand's use of phygital retail being driven by the utility. Furthermore, in their reasoning the use of self-checkout was again illustrated as being one of the most mentioned functions of phygital retail. Thus, P1 stated *“I mean if I can. Use self-checkout, I'm satisfied.”*. Despite this, the concerns mentioned in the interviews with the implementation of technology were not shared in the focus group. Instead P2 mentioned that if they would have difficulties using the checkout, the staff will still be available to help. However they also stated *“ [...] if the app crashes, I can still come to the person then I'm still satisfied, right. But if I turn to the person and they tell me to come back to the app, then I'll. Be like what? So then I will be unsatisfied again.”*. Illustrating that staff behavior is a vital element to the utility factor of brand satisfaction.

## 4.8 Brand Loyalty

### 4.8.1 Interviews

To understand the impact of phygital retail on customer loyalty, participants were interviewed regarding their loyalty levels with stores that utilize technology. They were asked to rate their loyalty regarding how much they would recommend or buy the clothes from brands that utilize phygital store on a scale of 1-5 and provide reasoning for their answers. The analysis of the interview responses reveals mixed opinions regarding the effect of phygital store design application on customer loyalty.

Most participants (P2, P11, P12, P13, P14, P16, P17, P18) expressed positive views, emphasizing the convenience, efficiency, and improved experience in-store technology provides. They considered technology an added value and were likely to recommend brands that utilize it. P11 mentioned, *“I really like the way they use technology to show what products they have and what they like also to help with transactions and stuff like that, and I want to share the convenience with other people.”*. —however, the ability of the person to use technology influences the participant's recommendation. P2 said:

*"I think it depends on who I'd be trying to recommend it to. I don't think my mother is very good with technology. A friend who always knew how to use apps, I would be like, oh, that's probably very convenient for them and recommend them to do it."*

Others (P3, P4, P6, P7, P9) had a more neutral stance, indicating that store technology did not significantly influence their likelihood of purchasing from a brand. They emphasized factors such as clothing quality, design, and price as more important considerations. P6 mentioned, *"I'd probably recommend something based on the quality of the clothes rather than the technology, so just based on the technology, I wouldn't really recommend it to anybody, yeah."*; P7 mentioned, *"They have good prices for students and everything. I am super happy about that. I would like to buy from them, but I mean, yeah, price is number one."*

Some participants (P5, P15) even stated that the technology factor did not matter to them at all. P5 mentioned, *"It doesn't really matter. I would instead say if the clothing is good quality, it is easy to find things, and I guess technology could help with that, but it's not a necessity or doesn't mean anything."*

#### 4.8.2 Focus Group Discussion

The focus group discussion revealed several insights regarding the effect of phygital store design application on customer loyalty:

P8 and P3 expressed that an efficient shopping experience only partially drives their loyalty to a brand. They prioritize factors such as the appearance of clothes, sustainability, and the overall experience of browsing, trying on, and taking time to make decisions. For them, the process and tactile engagement are crucial aspects that influence their loyalty. P8 mentioned, *"It's more about the clothes, how they look on me and maybe also sustainability."*

P3 highlighted that loyalty could be subjective and may not always align with statistical measures. Even if individuals have positive attitudes towards a brand, their shopping frequency may be sporadic, with purchases occurring only once a year or every few years. This suggests that loyalty goes beyond frequent shopping and encompasses other dimensions of brand affinity.

Most participants acknowledged that technology in stores, by saving time, positively influences their loyalty. They appreciate the convenience of quickly finding desired items without excessive searching.

However, their loyalty reasoning is mainly based on factors such as clothing prices and quality rather than the presence of technology alone.

P3 mentioned conducting online research before visiting the store to narrow their options. They have specific goals in mind when shopping, allowing them to navigate the store and focus on relevant items efficiently. While this approach may feel time-efficient, they emphasized that it still involves browsing the entire store, thinking about the brand, and potentially revisiting things seen online. P3 mentioning:

*"It takes time, but it's just a little bit right because I end up walking around anyway and I pass like literally everything. So it might feel more time efficient, but actually it's not really."*

The discussion highlighted the importance of balancing efficiency and providing an engaging shopping experience. While some participants appreciate time-saving benefits, others value the process of exploration and interaction with products. They prefer a human touch and being able to think without feeling pressured by technology, P8 mentioned:

*"I like the process of touching everything and trying it on and taking the time and thinking about it. You like to have the time to think. Umm, so I don't want to be pressured by robots telling me to leave."*

## 4.9 Summary Of Findings

### 4.9.1 Brand Awareness

The interviews revealed that participants had a positive perception of phygital stores. They felt a strong sense of attachment, loyalty, and preference for brands that embraced technology in their stores. Features like personalized recommendations, mobile apps, and efficient self-checkout systems were mentioned as contributing to a positive customer experience and brand perception. These technological advancements were associated with a modern and luxurious shopping experience, influencing customers' brand value perception. However, some skeptics raised concerns about the impact of phygital stores on store design and product perceived value. The focus group discussions considered a broader range of factors influencing brand awareness and customer perceptions in fast fashion retail. These factors included product quality, design, value, ethics, and accessibility. The opinions regarding the impact of phygital

stores on brand awareness varied among the participants. Some believed technology positively influenced their perception and loyalty by improving convenience and efficiency. Others emphasized product quality and price, viewing technology as a secondary aspect affecting brand perception. Some participants expressed concerns that phygital stores could negatively impact customers' perception of brands. In summary, while the interviews highlighted a positive perception of phygital stores and their technological features, the focus group discussions provided a more diverse opinion. The focus group discussions emphasized the importance of various factors beyond technology in shaping brand awareness. Skepticism, specifically regarding store design and product-added value, was mentioned in the semi-structured interview but not in the focus group discussions.

#### 4.9.2 Service Quality: Physical Quality

The interviews found that phygital store design positively impacts physical quality of the store by enhancing convenience, efficiency, and modernity. The discussions emphasized the need to consider individual preferences and find a balance between technology and physical aspects of the store. Focus group discussions revealed that technology and digital presence enhance the shopping experience by providing convenience and online information. However, the physical attributes of the store, such as clothes, design, and atmosphere, still play a significant role in attracting customers. Preferences for personal space, staff assistance, and the presence of physical and digital platforms vary among individuals. People's expectations and the nature of the brand also influence opinions on the impact of technology. In comparison, both approaches explore the impact of phygital store design on physical quality of the store. The interview highlights convenience, efficiency, and modernity as positive influences, while the focus group discussions emphasize the importance of physical attributes and individual preferences. Both approaches recognize the significance of technology, but the focus group discussions acknowledge the continued importance of physical aspects. The interviews emphasize finding a balance, while the discussions consider the influence of expectations and brand nature on perceptions of technology's impact.

#### 4.9.3 Service Quality: Staff Behavior

The interviews found that phygital store design positively affects customer-based brand equity and improves staff quality by enhancing efficiency, convenience, and the overall customer experience. However, addressing staff knowledge and technical issues is necessary for a seamless phygital store experience. In the focus group discussions, staff ability and attitude were identified as essential factors in providing quality service. Negative attitudes had a lasting impact, while positive attitudes, care, and

personalized service enhanced the shopping experience and fostered loyalty. Participants had varying opinions on whether technology directly influenced staff attitude but agreed it could enhance staff ability. Technical issues or challenges could negatively affect staff attitude and engagement. Some participants questioned the idea of lazy staff as a negative impact of technology as long as customer needs were met. Both approaches recognized the significance of staff attitude and ability in shaping customer satisfaction and loyalty to the brand, with technology playing a supporting role. The interviews focused more on staff knowledge and technical issues, while the discussions delved into the influence of staff attitude and the role of technology in supporting staff effectiveness.

#### 4.9.4 Ideal Self-Congruence

The interviews reveal that most consumers do not perceive technology as significantly shaping their identity, although ethical concerns arise regarding privacy and control over self-identification. Personalization features can sometimes have negative effects, leaving consumers feeling violated or manipulated. The constant presence of technology in consumers' lives may contribute to a diminished perception of the connection between technology in retail and identity. In contrast, the focus group participants view technology as neutral in its impact on identity and self-congruence, disagreeing with the negative associations mentioned in the interviews. They emphasize the benefits of having the choice to engage with technology. Both approaches recognize the omnipresence of technology but differ in their perspectives on its effects. Nonetheless, ethical considerations and consumer autonomy remain important considerations for brands when implementing technology in the retail sector.

#### 4.9.5 Lifestyle-Congruence

In the interviews, convenience, and efficiency are highly valued, with technology-enabled features like online availability and self-checkout saving time and minimizing interactions. Some participants prioritize good service and human interaction, while the interplay between online and offline channels offers flexibility and product access. Views on the impact of phygital retail on brands vary, with some seeing it as beneficial and others expressing concerns about overconsumption and the environment. The focus group discussions also highlight the importance of convenience and time-saving. Preferences for shopping experiences depend on available time, with convenience being prioritized when busy and more relaxed experiences are desired when time allows. Participants express differing opinions on the broader impact of technology, with some criticizing algorithmic-driven consumerism and excessive reliance on technology, while others acknowledge its convenience despite privacy concerns. Overall, both approaches

underscore the significance of convenience, time-saving, and the need to address concerns about overconsumption and environmental implications in phygital retail.

#### 4.9.6 Brand Identification

The interviews revealed that brand identification is influenced by sustainability and ethics rather than technology. The lack of sustainability in fast fashion hampers brand identification through technology, and consumers strongly identify with brands that prioritize sustainability while criticizing those that prioritize technology and fast fashion. The use of technology in retail has mixed effects on satisfaction and loyalty in terms of brand identification. In the focus group discussion, sustainability was considered a crucial factor in brand identification, and participants recognized a disconnect between their sustainability-conscious values and actual shopping habits. Factors like price and social pressures often override sustainability considerations, although fast fashion was seen as an opportunity for achieving sustainability through responsible consumption. Some participants prioritize personal desire and product appeal over sustainability in brand identification. Overall, both the interviews and focus group discussions highlight the influence of sustainability and technology on brand identification, with the interviews focusing more on the negative impact of technology and fast fashion and the discussions emphasizing the importance of sustainability. Both approaches acknowledge the challenges of aligning shopping habits with sustainability values. While the interviews touch on criticism and loyalty, the discussions delve deeper into the complexities and conflicts participants face in practicing sustainability.

#### 4.9.7 Brand Satisfaction

The interviews found that technology type, visual appeal, utility, absence of technological issues, and brand perception all influenced satisfaction levels. Phygital retail was seen as a way to enhance brand image. In the focus group discussions, factors such as aesthetics, design, material, staff behavior, and store location/accessibility were identified as necessary for brand satisfaction. Negative experiences with staff could deter customers from returning, while quick and convenient experiences contributed to satisfaction. The interviews emphasized the role of technology, while the focus group discussions emphasized aesthetics and staff interactions. The interviews focused more on the impact of technology, including specific types and technological issues, on satisfaction levels. In contrast, the focus group discussions prioritized aesthetics, design, staff behavior, and convenience as significant drivers of brand satisfaction. Brand perception and associations and the role of technology in enhancing brand image were discussed in the interviews rather than in the focus group discussions. Concerns about technology implementation were absent in the focus group discussions, while staff availability and helpfulness were highlighted.

#### 4.9.8 Brand Loyalty

The interviews found mixed results regarding the effect of phygital store design on customer loyalty. It was determined that matching brand values with technology is crucial for loyalty. The quality of clothes and designs also significantly influenced repeated shopping. Technology created efficiency and convenience, saving time and increasing satisfaction. Personalized shopping experiences through online shopping and intelligent mirrors enhanced brand loyalty. However, the role of technology in maintaining brand equity was considered minimal compared to the influence of clothing and brand associations. In the focus group discussions, the effect of phygital store design on customer loyalty was subjective and dependent on individual preferences and priorities. Brand loyalty was seen to be created through association and identification with the clothes or products rather than an efficient experience. Participants preferred taking time to think about the clothes and appreciated the phygital retail that allowed them to touch and feel items. They considered the time spent in stores more efficient than using apps and researching before buying things. Phygital retail still held value in allowing consumers to browse and experience products physically. Both approaches recognized the impact of phygital store design on customer loyalty. Interviews emphasized matching brand values with technology for enhanced loyalty while focusing on efficiency and convenience. Focus group discussions prioritized emotional connection and physical browsing, highlighting the significance of association and product identification. Opinions on technology's efficiency varied, with the physical store experience preferred over online research.

### 5. Discussion & Conclusion

To contextualize the findings, this section will relate the findings to existing literature with the aim of expanding knowledge on the phenomena of phygital retail and CBBE. The discussion will address the research questions and reflect on the application of the CBBE model utilized to answer the research questions. Based on the discussion, a conclusion is drawn that summarizes the insights and analysis from this study.

## 5.1 General Discussion

### 5.1.1 What is the impact of phygital retail application on customers based brand equity?

Investigating the impact of phygital store applications on customer-based brand equity, the findings reveal how value is created through brand satisfaction and brand loyalty.

#### 5.1.1.1 Brand Awareness

The application of phygital retail enhances brand awareness. Customers become more aware of a brand due to their ability to associate it with modernity, innovation, convenience, and effectiveness. This aligns with Jhamb's study (2012), highlighting that consumers prefer modern retail formats due to significant product and store attribute improvements, enhancing their shopping experience. Suggesting that phygital retail in stores can improve a brand's image and reputation. Customers appreciate using tablets and self-checkout machines in stores, making the shopping experience more convenient and efficient. Phygital retail enables fast fashion brands to be easily recalled by consumers, increasing brand awareness and leaving a lasting impression. This is aligned with Cifci et al. (2016), stating brands that offer unique and differentiated shopping experiences are more likely to be recognized and remembered by customers. Furthermore, brands that effectively accommodate shopping preferences through digital transformation generate higher satisfaction levels, fostering brand loyalty and strengthening consumers' awareness and affinity towards the brand. However, it is essential to note that while technology in retail contributes to brand awareness; product quality, and price factors remain influential, indicating that these core elements must also be considered to drive brand awareness effectively.

#### 5.1.1.2 Service Quality: Physical Quality

Phygital retail applications enhance the physical store quality by providing convenience, improving efficiency and creating a modern atmosphere. Incorporating digital elements like self-checkout options and interactive displays streamlines the shopping process, making it easier and more pleasant for customers. Thus, improving customer experience by considering individual preferences. This is aligned with Kim & Krishnan (2015) study, stating customers still desire a physical experience with products, including seeing, touching, and testing them out, following thorough online research before purchasing the products. Technology integration also improves operational efficiency through automated inventory management and online information platforms, reducing waiting times and ensuring a smooth customer shopping experience. This is in line with Merrilees and Miller's (2001) study, revealing that superstores have revolutionized retail service by effectively configuring self-service in the store design. In addition,

digital elements like augmented reality experiences and interactive displays also create a modern and innovative atmosphere, adding excitement and novelty to the shopping experience. However, while technology is necessary, the physical attributes of the store still play a significant role in attracting customers. Combining technology with appealing physical elements can create a visually appealing atmosphere that attracts customers to visit the store, increasing the physical quality dimension. However, it is essential to note this attraction is influenced by customers preference. For customers who prefer a more “homey” or less technology-driven environment, phygital store application may negatively impact their perception of the store's ambiance.

#### 5.1.1.3 Service Quality: Staff Behavior

Within staff behavior, consumers perceive that staff ability and attitude in fulfilling customers needs is improved through phygital retail. Operational efficiency is considered as improving by integrating technology, enabling staff to work more efficiently and focus on providing quality service to customers. Consumers assume that staff are able to allocate their time and efforts more effectively to provide personalized service. Furthermore, by creating a more engaging and enjoyable shopping environment through technology, staff members are more likely to interact with customers positively and enthusiastically, contributing to higher service quality. This is in line with Smith, Rippe & Dubinsky's (2018) study mentioning that brick-and-mortar retailers can attract and retain customers through in-store interactions with salespeople. However, to ensure a seamless phygital store experience, staff members must be well-trained and knowledgeable about the technology and systems. This supports the findings of Jhamb (2012) that one of the significant factors that influence customers preference of modern retail format is trained sales personnel. Technical issues or challenges can hinder staff performance and service quality if not adequately addressed or resolved. The attitudes of staff members play a crucial role in providing quality service. Negative attitudes can have a lasting impact on customers, while positive attitudes, care, and personalized service enhance the shopping experience and foster customer loyalty. Although opinions differ on whether technology directly influences staff attitudes, it can play a supporting role in enhancing staff's ability to provide memorable service. Lastly, technical issues or challenges within the phygital store environment can negatively affect staff attitudes and engagement. If staff members constantly need help with technical difficulties or cannot resolve them promptly, it can lead to frustration, decreased motivation, and a decline in service quality which ultimately negatively impacts customer satisfaction. In severe cases, the loyalty of a customer can be significantly disrupted if such instances persist, thus, it is important that despite technical difficulties, staff remain polite. In addition phygital retail also influences customer's perception of staff quality if the brands have an innovative image. This is aligned with Chen and Jing's study (2022), which reveals that consumers prefer AI-enabled services when

the brand personality is competence and human-staffed services when the brand personality is sincerity. It shows that consumers prefer phygital retail services when brands utilize technology to increase competence by accurately identifying their needs and provide a higher personalization level while staff service is preferred when customers seek caring attitude during customer interactions.

#### 5.1.1.4 Ideal Self-Congruence

The impact of phygital retail on ideal self-congruence is varied depending on what customers desire to be associated with. Customers tend to describe their ideal self image as resulting from the combination of the product and the brand value. This aligns with Barwise's (1993) study, which emphasizes that a brand's value is inseparable from the value of its products and the company vision and mission. Thus phygital store application could create a positive impact on ideal self-congruence when the customers value modernism and innovation. On the other hand, for customers who value sustainability or other factors, phygital store application did not have a significant impact on their ideal self-congruence.

#### 5.1.1.5 Lifestyle-Congruence

Phygital retail has a significant impact on customers' lifestyle-congruence. Integrating digital technology into the retail experience aligns with the preferences and lifestyles of customers, resulting in a higher level of congruence. Customers appreciate the seamless blending of online and physical elements of phygital stores as it allows them to integrate their ideal shopping experience according to their lifestyle. This aligns with the study conducted by Melis et al. (2015), stating customers who engage in multi-channel shopping, tend to choose an online store that is part of the same chain as their preferred physical store, particularly when the online store offers strong integration with the offline store in terms of product assortment. This integration allows them to access information, compare products, and make purchases that align with their lifestyle choices and maintain their brand loyalty. By providing a combination of online convenience and in-store experiences, phygital stores cater to the needs and preferences of customers who lead busy and digitally connected lives. The availability of technology in phygital stores enables customers to quickly find what they are looking for, conduct quick research, and make informed decisions. Customers particularly value this aspect with busy schedules and seek efficient and time-saving shopping experiences. The ability to check up on stores or products while working or on the go further enhances the convenience and congruence with customers' lifestyles. Furthermore, the personalized and customized features offered by phygital stores contribute to lifestyle-congruence. By tailoring the shopping experience to individual preferences, customers perceive a brand as being in line with their lifestyle choices. Through targeted recommendations or customized offers, personalization enhances the overall congruence between customers' lifestyles and the brand. Overall, the impact of phygital stores on

customers' lifestyle-congruence is positive. By integrating technology, providing convenience, and offering personalized experiences, phygital stores effectively align with customers' lifestyles and enhance their overall shopping experience and improve brand satisfaction.

#### 5.1.1.6 Brand Identification

The impact of phygital retail on customers' brand identification is not significant. This is because the technology itself does not directly influence brand identification. Instead, customers tend to be more fond and have a deeper connection with brands that support sustainability rather than innovation. This indicates that sustainability-related values and practices significantly influence brand identification rather than technology application. This is aligned with Baalbaki and Guzman's (2016) study stating that consumer's perception of retail is primarily driven by quality, preference, social influence and sustainability. Although technology in retail could improve the customer shopping experience, brands that prioritize technology applications rather than product's price and quality will negatively influence brand satisfaction and brand loyalty, reducing the intention of customers to connect with brands. It shows that technology is perceived as minor compared to product quality and price in regards to brand identification. Overall, the impact of phygital stores on customers' brand identification is influenced by sustainability, ethical considerations, and social performance rather than the technology itself. Brands prioritizing sustainability and aligning with consumers' values will likely foster more robust brand identification, leading to high customer satisfaction and loyalty.

#### 5.1.1.7 Brand Satisfaction

The impact of phygital retail on customers' brand satisfaction is generally favorable. By incorporating technology into the retail experience, brands can enhance convenience, personalization, and engagement, critical customer satisfaction drivers. Phygital retail enables seamless integration between online and offline channels, allowing customers to access information, make purchases, and interact with the brand conveniently and efficiently. Technology can also enable personalized recommendations and tailored experiences, catering to individual preferences and needs. Additionally, phygital retail can create a sense of novelty and excitement, enhancing the overall shopping experience and contributing to customer satisfaction. However, brands must ensure that the technology is user-friendly, reliable, and aligned with the brand's value proposition. Other factors, such as product quality, pricing, and customer service, also significantly shape brand satisfaction. Therefore, while phygital retail brings value to consumers, it should be considered part of a holistic approach that combines technology with other essential elements of the customer experience.

#### 5.1.1.8 Brand Loyalty

The study reveals that phygital retail benefits fast fashion brands as brand loyalty is strengthened. Phygital retail allows brands to offer seamless omnichannel experiences, combining the advantages of physical stores and digital platforms. Customers appreciate the convenience of online information access, easy transactions, and personalized recommendations, which can foster a stronger connection with the brand equity dimensions. Moreover, technology can create a sense of novelty and engagement, keeping customers interested and invested in the brand. However, it is essential to note that various factors, including product quality, pricing, customer service, and brand reputation influence brand loyalty. As Barwise (1993), says that the value of a brand is not separable from the value of the product and the rest of the firm. While technology plays a significant role, it is just one aspect contributing to brand loyalty.

Overall, integrating technology in physical retail spaces through phygital store applications has brought positive, negative and neutral impacts on customer-based brand equity. The positive effects include improved brand perception, enhanced physical store quality, improved staff behavior and customer experience, convenience and time-saving benefits, and brand image enhancement. These aspects contribute to increased brand satisfaction and loyalty among customers. On the other hand, there are adverse effects to consider that may reduce brand satisfaction and brand loyalty. The impact on brand awareness varies among customers, with some valuing technology while others prioritize other factors such as product quality and price. Concerns about technology and sustainability also arise as customers question the impact of phygital stores on store design, product perceived value, and sustainability practices. The effects on brand identification and satisfaction are mixed, as technology interacts with other factors such as aesthetics, design, staff behavior, and convenience. Loyalty is subjective and influenced by personal preferences, with technology enhancing loyalty for some through personalized experiences while others value the emotional connection and physical browsing experience in stores.

#### 5.1.1.9 Interrelationship Between Customer-Based Brand Equity Dimensions

Buil, Chernatony, and Martínez (2013); mention the importance of considering the relationships between different dimensions of brand equity for effective brand equity management. This study demonstrates the relationship and the influence of various dimensions on brand satisfaction and loyalty following a phygital store experience.

Brand awareness, physical quality, staff behavior, and lifestyle-congruence significantly influence brand satisfaction and customer loyalty. Particularly, physical quality and staff behavior are interconnected and contribute to shaping customers' perceptions of the brand after experiencing a phygital store. This can be

attributed to store quality, including technological applications, impacting staff performance in meeting customers' needs. These findings align with Cifci et al.'s (2016) research, which also indicates that brand awareness impacts both brand satisfaction and brand loyalty, while physical quality and staff behavior are crucial factors for building brand satisfaction and loyalty in the retail industry.

Furthermore, the study suggests that ideal self-congruence and brand identification influence brand loyalty, but the phygital store experience does not significantly affect this dimension. These dimensions are more closely related to product and sustainability factors than technological advancements. This finding is consistent with Cifci et al.'s (2016) statement that the influence of ideal self-congruence on brand loyalty is not statistically significant in the retail industry.

However, this study highlights the strong influence of lifestyle-congruence on shaping customers' satisfaction and loyalty after a phygital retail experience. With this lifestyle-congruence also slightly influencing ideal self-congruence. Customers appreciate the convenience and modern lifestyle provided by phygital stores, and some wish to be perceived as customers with a modern and innovative lifestyle; in contrast, others prefer to align themselves with a sustainable lifestyle, showing how lifestyle-congruence affects customers' ideal self-congruence. Cifci et al. (2016) do not explicitly mention the influence of lifestyle-congruence but suggest that it might overshadow brand satisfaction and loyalty based on ideal self-congruence.

Lastly, all dimensions have an impact on brand awareness. This is because brand awareness is shaped by customers' experiences with store quality, staff interactions, and personal values, influencing their lifestyle-congruence, ideal self-congruence, and brand identification. Customers with positive experiences with phygital stores and value innovation will develop positive brand awareness towards brands that employ phygital store design. Conversely, customers with negative shopping experiences with phygital stores and values not aligned with modern and innovative concepts will develop negative brand awareness towards brands that utilize phygital store design.

### 5.1.2 Applicability of Cifci et al. (2016) Model

Having applied the Cifci et al. (2016) model in a novel way, this study was able to reflect on the applicability of the model for the unique marketing tool of phygital retail. The comprehensiveness of insights gathered regarding dimensions of the Cifci et al. CBBE model in analyzing the impact of phygital stores on customers' brand equity illustrates the effectiveness and applicability of the model (2016). The

Cifci et al. (2016) CBBE model offers a structured model for analyzing customers' brand equity in phygital stores. By considering multiple dimensions of the customer-brand relationship, it enables a holistic assessment of the impact of technology on brand equity, examining and revealing specific relationships between dimensions. Moreover, the model's customer-centric perspective ensures that the evaluation reflects customers' perceptions and experiences. Additionally, its applicability to various industries makes it a versatile tool for analyzing brand equity in different retail segments, enhancing its usefulness in evaluating phygital stores.

However, the Cifci et al. (2016) model was developed for traditional retail settings and may need to fully capture the complexities and unique characteristics of phygital retail environments as it does not explicitly include dimensions related to technology integration, such as the influence of digital displays, self-checkout systems, or personalized recommendations. These technical aspects are crucial in phygital retail and can significantly impact customers' perceptions of brand equity. The model's limitations in accounting for technology-related factors may limit its effectiveness in evaluating brand equity in phygital contexts. In addition, the findings highlight the ethical concerns and privacy issues associated with technology usage in phygital retail. However, the Cifci et al. (2016) model does not explicitly address these dimensions. In the context of phygital stores, customers' perceptions of privacy infringement and manipulation can significantly affect their brand identification, satisfaction, and loyalty. Furthermore, the focus placed on product in influencing ideal self-congruence and brand identification, indicates that when considering CBBE for a retail context, the dimensions of product from Troiville et al. (2019) could compliment Cifci's et al. (2016) model. Therefore, the model may need to fully capture the influence of these ethical considerations and product on brand equity in phygital retail.

### 5.1.3 What factors drive and hinder customers' perception of the application of phygital retail in fast fashion retail stores?

The interviews and focus group depict factors that influence the positive and negative perception of phygital stores. These factors indicate that besides the brand equity, there are aspects that should be considered when considering the interplay of fast fashion and phygital retail.

#### 5.1.3.1 Drivers

The interviews and focus group revealed that consumers have a desire for personalized experiences, improved convenience, comfort and personal space. Most importantly these desires need to be fulfilled in

a way that still aligns with brand values. The omnipresence of technology in consumers' lives provides an environment in which phygital retail is welcomed and appreciated.

#### 5.1.3.1.1 Desire for Personalized Experiences

Expanding on the assumptions made by Jhamb (2012) that consumer satisfaction is furthered by the unique combination of phygital retail, the findings reveal that consumers not only appreciate the merging but what they appreciate. Consumers value phygital retail as they can have both a convenient and inspiring shopping experience. Phygital retail allows them to merge their preferences for physical and virtual experiences. Hence, consumers asserted that they prefer touching items but also want a fast shopping experience and modify their shopping experience according to the time available. This is aligned with Kim and Krishnan's (2015) study, stating despite the increasing prominence of digital channels, customers continue to seek physical interaction with products, desiring to see, touch, and test them after conducting thorough online research before purchasing. By applying phygital retail, brands are able to offer consumers a personalized experience as they are able to pick and choose when they want to engage with technology and when to utilize it.

#### 5.1.3.1.2 Desire for Improved Convenience

The utility that phygital retail provides is the biggest motivator of consumers for utilizing phygital retail. The ability to save time and find the exact items that are desired is a highly appreciated and recognized attribute of functions of phygital retail such as self-checkout, virtual try-ons, postage pick up and the ability to check availability online. These findings contradict statements by Troiville et al (2019) in regards to the importance of convenience in traditional, purely physical retail. Troiville et al. (2019) explains that convenience, created by store layout and access, does not differentiate a retailer. Instead, if customers deem it to be poorly achieved, it can have a detrimental effect on brand equity. These differences between the perceived value of convenience in physical and phygital retail indicate that due to its combination of physical and digital retail, the value expectations for stores applying phygital retail are different.

#### 5.1.3.1.3 Desire for Comfort and Personal Space

Respondents to the interviews and focus group illustrate that they appreciate the ability to avoid human interaction. This ability to avoid queues and staff through phygital retail functions like self-checkout or automated postage pickups in stores allow customers to avoid social interactions. The reasoning behind this desire for comfort and personal space was based on a shy personality, becoming overwhelmed by crowds or the desire to not have to stand in lines so as to save time. This desire to have an isolated

shopping experience, to design the experience to save time or avoid staff and other shoppers, allows consumers to welcome phygital retail.

#### 5.1.3.1.4 Brand Value Alignment

The importance of aligning brand values with the use of phygital retail was repeatedly highlighted. As consumers perceive sustainability and ethical concerns as driving their shopping habits rather than convenience. Illustrating that the commitment for good quality items and sustainability are still highly valued by consumers. Thus, above all, the brand values motivate consumers to align themselves with a brand rather than the use of phygital retail. This perpetuates the findings of Abdolvand and Charsetad (2013) in asserting the value of CSR and that brand equity is associated with CSR. Thus, while the use of digital transformation makes being able to shop at brands that align with the brand values of organization more convenient, it does not necessarily heighten the ability to identify with brands.

#### 5.1.3.1.5 Omnipresence of Technology

The omnipresence of technology in consumer's lifestyles creates an environment in which phygital retail is a prerequisite for fast fashion consumers. Several consumers mentioned that technology plays a significant aspect in their life. The use of technology in retail is no longer simply perceived as an advantage but has become a prerequisite in order to fit into consumer's lifestyles. The use of an omnichannel strategy, which is facilitated by phygital retail now provides a competitive advantage above smaller stores not utilizing physical designs but, soon, new functions of phygital retail will be required to maintain this advantage. Push notifications and offers communicated through brand apps also allow consumers the ability to benefit from the engagement with phygital retail. Their engagement, and their data being collected benefitting both the consumers and brands. This reinforces the statement by Gautam and Sharma (2017) that it is highly valuable for organizations to be agile and adapt to consumer's evolving needs. As technology advances, this agility will become vital as consumer's needs will evolve. Additionally, the omnipresence of technology reduces consumers' opposition to the collection of their data. Which, as Baier et al. (2019) state, can be utilized to better understand consumers' needs. Thus, the omnipresence of technology is a significant advantage as well as a driver for a positive perception of phygital retail.

### 5.1.3.2 Barriers

Barriers were identified during the interviews and focus group which make consumers weary of utilizing phygital retail. Amongst these barriers are lack of experience with technology, desire for human interaction, implementation, accessibility and ethical concerns.

#### 5.1.3.2.1 Lack of Experience with Technology

Consumers asserted that if the technology is not easily maneuverable to them or involves additional steps, it prevents them from utilizing phygital retail. Research by Pusceddu et al. (2023) illustrates that phygital retail can elicit ordinary and extraordinary consumer responses. These different consumer responses have been identified as relying on technological knowledge of the consumer. Thus, consumer's with a neutral perception of phygital retail showed a lack of experience with technology. Lohse and Spiller (2006) illustrate that UX design is an essential link between the customer and retail stores and how a lack of experience with technology may be bridged. Thus, when applying phygital functions, it is important to consider the usability on behalf of consumers, which is influenced by their exposure to phygital retail. This illustrates that brands utilizing phygital retail have to carefully consider the UX design during the application of phygital retail.

#### 5.1.3.2.2 Desire for Human Interaction

The interviews and focus group revealed that consumers appreciate receiving assistance from staff, despite phygital retail. Consumers feel that phygital retail can create a sterile environment but by adding a positive attitude from staff, this can be minimized. Most importantly, when there are issues with the implementation of technology, consumers stress that they require the assistance of staff and appreciate the human interaction. Similarly Smith et al. (2018) explains that social interaction is a vital element for retailers in retaining consumers. Lonely and isolated consumers value adaptive selling as a personalized retail feature with positive implications for their trust, purchase intention and patronage (Smith et al., 2018).

#### 5.1.3.2.3 Implementation

The interviews revealed that it is important that the implementation of technology is considered carefully. Crashing of sites and the relevance of technology in certain touchpoints was an emerging worry of consumers. The respondents involved in this study repeatedly mentioned that they question the relevance of technology in the shopping experience. While technology appears to make shopping experiences more convenient, if there are situations where this utility is not offered through phygital retail, the consumers loyalty and satisfaction is affected. Hence phygital retail such as self-checkout are required to run

smoothly. Pantano and Timmermas (2014) mirror this insight. Identifying the challenges of implementation further by explaining that phygital retail requires knowledge of new devices and effective usage by staff and that phygital retail adds critical factors that might influence the shopping experience, such as the controllability of the system, the trust in the technology, the quality of graphics.

#### 5.1.3.2.4 Ethical Concerns

There were ethical concerns raised regarding the application of phygital retail. These primarily regarded the funds used on the development of technology which could be used on more ethical endeavors and the replacement of staff through digital transformation. Specifically in regards to fast fashion, consumers were very concerned with the sustainability or lack of sustainability with the clothes they are buying and the unethical production. Consumers would prefer the money spent on technology to be used on sustainability. Employees and workers being replaced by phygital retail is an additional concern for consumers and drives them to avoid phygital retail. Hence, as the study by Baalbaki and Guzman (2016) highlighted, consumer's perception of retail is primarily driven by quality, preference, social influence and sustainability.

## 5.2 General Conclusion

With an increase of brands applying phygital retail practices, it is highly beneficial for fast fashion brands to gain insights into the effect of phygital retail on the perception of consumers (Kim & Ma, 2019; Hughes, Erickson, Rothberg, 2019). Our results provide insights into which dimensions of Cifci et al's customer-based brand equity model are positively influenced by the use of phygital retail design and identify if phygital retail application increases CBBE (2016). The applicability of the Cifci et al. customer-based brand equity model has additionally been discussed (2016). Factors driving and hindering a positive customer perception of phygital retail in fast fashion have additionally been identified.

Phygital retail application needs to be carefully examined as it can have varying impacts on customer-based brand equity. Overall, brand satisfaction and brand loyalty are positively influenced by the application of phygital retail. Thus, the application of phygital retail can improve the customer-based brand equity. Due to the use of Cifci et al. (2016) model, the findings of the study not only reveal the impact of phygital retail on the customer-based brand equity but allows for the exact identification of dimensions that are influenced. Dimensions of brand equity that are most significantly influenced by the application of phygital retail are brand awareness, service quality: staff behavior, service quality: physical

quality and lifestyle-congruence. Thus, phygital retail can facilitate an association of modernity in consumers as staff are perceived as bettering their capabilities in helping. The convenience of ICTs allows consumers to personalize their shopping experience to be congruent with their lifestyle. Ideal Self-Congruence and brand identification are more nuanced and are not affected by the application of phygital retail. This is due to these dimensions being influenced by factors such as design, product and sustainability. Indicating that brands should consider these findings to optimize the positive impact on customer perceptions and brand equity while addressing concerns like store design, product value, privacy, sustainability, and staff engagement.

The drivers and barriers for consumer's positive perception of phygital retail reveal insights to applying phygital retail. Above all, consumers appreciate the merging of phygital and digital in providing a convenient, personalized shopping experience. The nature of phygital retail in being able to select between a mix of physical and digital experiences allows consumers to personalize their experience and browse stores as well as finding specific items. The main driver for a positive perception of phygital retail, based on thematic mentions, is thus convenience provided to consumers. The ability to accommodate shopping into their lifestyle without having to compromise significantly on time is highly valued by consumers. A desire to avoid human interaction makes consumers highly appreciate phygital retail. The omnipresence of technology allows for the application of technology to further integrate into the lifestyle. In contrast, barriers to a positive perception of phygital retail are badly implemented technology, the consumer's inexperience with technology, ethical concerns, and desire for human interaction. These insights suggest that when applying phygital retail, brands should be advised to provide and focus on a balance between creating a good digital and physical experience. Elements of this are friendly and helpful staff, aligning the phygital retail with brand values, still providing the expected clothing and prices.

The applicability of the Cifci et al. (2016) to regard phygital retail is assessed and based on the findings regarding phygital retail and brand equity, suggestions for additional dimensions to be added to the Cifci et al. (2016) CBBE model are made for the future considerations of CBBE in retail. Sustainability and product are identified as important aspects to consumers when regarding phygital retail. The brand identification and self-congruence and resulting brand loyalty and brand satisfaction are significantly influenced by these aspects and are thus suggested as additions to the Cifci et al. (2016) model. Additionally, technology is not accounted for in Cifci et al's model (2016), creating limitations when applying it for phygital retail. Hence, it is proposed that the dimensions of brand awareness, service quality: physical quality, service quality: staff behavior, ideal self-congruence, lifestyle-congruence and

brand identification be complemented by the retail dimension included in Troiville et al. (2019) retail model as well as technology experience to consider phygital retail and CBBE.

## 5.6 Contribution

### 5.6.1 Practical Contribution

The findings will have practical implications for fast fashion brands helping them understand customer perceptions, behaviors, and expectations in the context of phygital retail. Enabling informed decisions in developing and applying digital transformation strategies involving ICTs like digital kiosks, virtual mirrors, self-checkout, and augmented reality. Furthermore, by providing factors to consider when applying phygital retail, the study will have managerial implications for fashion industry practitioners such as store planners, marketing managers and visual merchandisers by guiding them in developing strategies aligned with customer expectations and preferences to improve business performance. Additionally, the study has societal implications, shedding light on changing dynamics of fashion consumption and contributing to the development of more sustainable and customer-centric practices in the fashion industry as consumer's repeatedly stated the value they place on sustainability and their consent to sharing data. This can ultimately have positive impacts on both business sustainability and environmental sustainability (Hashim, Tajuddin, & Zainol, 2020).

### 5.6.2 Theoretical Contribution

Providing insights at the intersection of brand equity, fast fashion and digital transformation, this study contributes to the existing literature of customer-based brand equity, phygital retail and customer equity. By applying Cifci et al. 's (2016) model the usability of the model in considering phygital retail has been exemplified and the usability of the model is tested. Furthering research on the customer-based brand equity for retail. By identifying the effects of phygital retail on specific dimensions of consumer-based brand equity, the study also reveals the value of sustainability and thus contributes to Troiville et al. (2019) retail brand equity model. The identification of factors that influence the application of phygital retail from a consumer perspective, provides a new understanding of the dynamics between physical and digital design elements, expanding on the studies by Kim et al. (2020) regarding the digital atmosphere of fashion retail stores.

## 5.5 Suggestions for Future Research

Based on the findings and limitations (see section 3.7), three future research topics emerge that could complement and or further this study.

The first suggestion is to explore the long-term environmental application of technology implementation in phygital retail and its effects on customers' perception of brand sustainability: The findings suggest that technology in phygital stores positively influences brand awareness and perception. However, concerns regarding overconsumption and environmental implications were expressed. Future research can delve deeper into the long-term effects of technology implementation in phygital retail, particularly regarding sustainability. This research can investigate the environmental impact of technology-enabled features in phygital stores and their influence on customers' perception of brand sustainability. Understanding how technology can promote responsible consumption and reduce overconsumption in phygital stores is crucial for brands to align their strategies with environmental goals and meet the expectations of sustainability-conscious consumers.

Studying how different customer segments perceive and interact with phygital store design is the second suggestion. The findings highlight the importance of considering customer segments, such as age groups, socioeconomic backgrounds, and shopping preferences, when designing phygital stores. Future research could thus explore how customer segments perceive and interact with phygital store design. This research can investigate the drivers and barriers to technology adoption among customer segments and their implications for brand equity. Understanding different customer segments' specific needs, preferences, and challenges can help brands tailor their phygital store experiences to engage and satisfy diverse customer groups effectively. This research can provide valuable insights into the design elements and strategies that resonate with different segments and contribute to enhanced brand equity.

The third suggestion consists of implementing a mixed-methods approach and explore the long-term effects of phygital store applications: Future research should consider implementing a mixed-methods approach that combines qualitative and quantitative data collection and analysis to validate the findings and gain a more comprehensive understanding of the relationships between phygital store applications and customer-based brand equity. Additionally, conducting longitudinal studies would allow for exploring the long-term effects of phygital store applications by tracking customers' perceptions, behaviors, and

brand loyalty over an extended period, enabling observation of changes influenced by evolving technologies, market trends, and customer preferences.

By pursuing these future research suggestions, scholars can expand the knowledge base regarding the impact of phygital store applications on customer-based brand equity, address the limitations of the previous research, and provide valuable insights for practitioners aiming to optimize their retail strategies in an increasingly digital world.

## References

Aaker, D. A. (1991). *Managing Brand Equity*, The Free Press

Abdolvand, M., & Charsetad, P. (2013). Corporate social responsibility and brand equity in industrial marketing. *International Journal of Academic Research in Business and Social Sciences*, [e-journal] vol.3, no.9, pp.273-284. Available online: <https://hrmars.com/index.php/IJARBSS/article/view/208/Corporate-Social-Responsibility-and-Brand-Equity-in-Industrial-Marketing> [Accessed 28 April 2023]

Agnihotri, A. (2015). Can Brick-and-Mortar Retailers Successfully Become Multichannel Retailers? *Journal of Marketing Channels*, [e-journal] vol.22, pp. 62 - 73. Available online: <https://doi.org/10.1080/1046669X.2015.978702> [Accessed 4 April 2023]

Aguinis, H., & Solarino, A. M. (2019). Transparency and Replicability in Qualitative Research: The Case of Interviews with Elite Informants, *Strategic Management Journal*, [e-journal] vol. 40, no. 8, pp.1291–1315, Available online: <https://onlinelibrary.wiley.com/doi/abs/10.1002/smj.3015> [Accessed 27 May 2023]

Ailawadi, K. L., & Keller, K. L. (2004). Understanding Retail Branding: Conceptual Insights and Research Priorities, *Journal of Retailing*, [e-journal] vol. 80, no. 4, pp.331–342, Available online: <https://www.sciencedirect.com/science/article/pii/S0022435904000648> [Accessed 7 April 2023]

Aimé, I., Berger-Remy, F., & Laporte, M.-E. (2018). Lessons from Nearly a Century of the Brand Management System, *Journal of Historical Research in Marketing*, [e-journal] vol. 10, no. 4, pp.420–450, Available online: <https://doi.org/10.1108/JHRM-06-2017-0026> [Accessed 7 April 2023]

Aktan, C., & Burnaz, S. (2010). Perceived Shopping Values of Young Consumers in Fast Fashion Retailing. *International Journal of Management Cases*, [e-journal] vol.12, no.2, pp.484-498, Available online: [https://www.researchgate.net/publication/263058199\\_PERCEIVED\\_SHOPPING\\_VALUES\\_OF\\_YOUNG\\_CONSUMERS\\_IN\\_FAST\\_FASHION\\_RETAILING](https://www.researchgate.net/publication/263058199_PERCEIVED_SHOPPING_VALUES_OF_YOUNG_CONSUMERS_IN_FAST_FASHION_RETAILING) [Accessed 27 April 2023]

Arrigo, E. (2016). Fast Fashion Business Model: An Overview. In A. Vecchi & C. Buckley (Eds.), *Handbook of Research on Global Fashion Management and Merchandising* (pp. 186-209). IGI Global, Available online: <https://doi.org/10.4018/978-1-5225-0110-7.ch008> [Accessed 7 April 2023]

Baier, D., Rese, A., Nonenmacher, N., Treybig, S., & Bressem, B. (2019). Digital Technologies for Ordering and Delivering Fashion: How Baur Integrates the Customer's Point of View. *Digitalization Cases*, pp. 59–77, Available online: [https://doi.org/10.1007/978-3-319-95273-4\\_4](https://doi.org/10.1007/978-3-319-95273-4_4) [Accessed 4 April 2023]

Baalbaki, S., & Guzmán, F. (2016). A consumer-perceived consumer-based brand equity scale. *Journal of Brand Management*, [e-journal] vol.23, pp. 229-25, Available online: <https://doi.org/10.1057/bm.2016.11> [Accessed 4 April 2023]

Balmer, J.M., & Thomson, I.T. (2009). The Shared Management and Ownership of Corporate Brands: The Case of Hilton. *Journal of General Management*, vol.34, no.4 15 - 37. Available online: <https://journals.sagepub.com/doi/10.1177/030630700903400402> [Accessed 8 April 2023]

Barbour, R. (2007). *Doing Focus Groups*, [e-book] SAGE Publications Ltd, Available online: <https://methods-sagepub-com.ludwig.lub.lu.se/book/doing-focus-groups> [Accessed 24 April 2023]

Barwise, P. (1993). Brand equity: snark or boojum?. *International Journal of research in Marketing*, vol.10, no.1, pp.93-104. Available online: [https://doi.org/10.1016/0167-8116\(93\)90036-X](https://doi.org/10.1016/0167-8116(93)90036-X) [Accessed 28 April 2023]

Battistoni, E., Colladon, A. F., & Mercorelli, G. (2013). Prominent Determinants of Consumer-Based Brand Equity, *International Journal of Engineering Business Management*, [e-journal] vol. 5, p.25, Available online: <https://doi.org/10.5772/56835> [Accessed 4 April 2023]

Bazeley, P. (2020). Qualitative data analysis: Practical strategies. *Qualitative Data Analysis*, 1-584.

Belghiti, S., Ochs, A., Lemoine, J.F., & Badot, O. (2017). The Phygital Shopping Experience: An Attempt at Conceptualization and Empirical Investigation, *Developments in Marketing Science: Proceedings of the Academy of Marketing Science* Available online: [https://link.springer.com/chapter/10.1007/978-3-319-68750-6\\_18](https://link.springer.com/chapter/10.1007/978-3-319-68750-6_18) [Accessed 4 April 2023]

Bertola, P., & Teunissen, J. (2018). Fashion 4.0. Innovating fashion industry through digital transformation, *Research Journal of Textile and Apparel*, [e-journal] vol. 22. no.4 Available online: <https://www.emerald.com/insight/content/doi/10.1108/RJTA-03-2018-0023/full/html> [Accessed 4 April 2023]

Buil, I., Chernatony, L.D., & Martínez, E. (2013). Examining the role of advertising and sales promotions in brand equity creation. *Journal of Business Research*, vol.66, no.1, pp.115-122. Available online: <https://www.sciencedirect.com/science/article/abs/pii/S0148296311002669?via%3Dihub> [Accessed 8 April 2023]

Caboni, F. (2019). The Use of Digital Technology to Reshape the Retail Store. *International Journal of Biometrics*, [e-journal] vol.15, no.149. Available online: <https://www.ccsenet.org/journal/index.php/ijbm/article/view/0/41598> [Accessed 4 April 2023]

Cachon, G.P., & Swinney, R. (2011). The Value of Fast Fashion: Quick Response, Enhanced Design, and Strategic Consumer Behavior. *Manag. Sci.*, [e-journal] vol.57, pp. 778-795. Available online: <https://pubsonline.informs.org/doi/10.1287/mnsc.1100.1303> [Accessed 4 April 2023]

Cantone, L., Peretti, P., & Testa, P. (2016). Consumer Online Brand Engagement and Brand Equity Creation: An Empirical Research on the Italian Luxury Fashion Brands. In: Obal, M., Krey, N., Bushardt, C. (eds) Let's Get Engaged! Crossing the Threshold of Marketing's Engagement Era pp.559. *Developments in Marketing Science: Proceedings of the Academy of Marketing Science*. Available online: [https://doi.org/10.1007/978-3-319-11815-4\\_168](https://doi.org/10.1007/978-3-319-11815-4_168) [Accessed 9 April 2023]

Cennamo, C., Dagnino, G.B., Di Minin, A., & Lanzolla, G. (2020). Managing Digital Transformation: Scope of Transformation and Modalities of Value Co-Generation and Delivery. *California Management Review*, [e-journal] vol.62, pp.16 - 5. Available online: <https://journals.sagepub.com/doi/10.1177/0008125620942136> [Accessed 4 April 2023]

Chae, H., Ko, E., & Han, J. (2015). How do customers' SNS participation activities impact on customer equity drivers and customer loyalty? Focus on the SNS services of a global SPA brand. *Journal of Global Scholars of Marketing Science*, [e-journal] Vol.25, no.2, pp.122 - 141, Available online: <https://www.tandfonline.com/doi/abs/10.1080/21639159.2015.1012809> [Accessed 9 April 2023]

Cifci, S., Ekinici, Y., Whyatt, G., Japutra, A., Molinillo, S. & Siala, H. (2016). A Cross Validation of Consumer-Based Brand Equity Models: Driving Customer Equity in Retail Brands, *Journal of Business Research*, [e-journal] vol. 69, no. 9, pp.3740–3747, Available online: <https://www.sciencedirect.com/science/article/pii/S0148296316300947> [Accessed 4 April 2023]

Del Rio, A. B., Vázquez, R. & Iglesias, V. (2001). The Effects of Brand Associations on Consumer Response, *Journal of Consumer Marketing*, vol. 18, pp.410–425

Ekinici, Y., Dawes, P. L., & Massey, G. R. (2008). An Extended Model of the Antecedents and Consequences of Consumer Satisfaction for Hospitality Services, *European Journal of Marketing*, [e-journal] vol. 42, no. 1/2, pp.35–68, Available online: <https://doi.org/10.1108/03090560810840907> [Accessed 7 April 2023]

El-Seoud, S.A., & Taj-Eddin, I. (2019). An Android Augmented Reality Application for Retail Fashion Shopping. *Int. J. Interact. Mob. Technol.*, [e-journal] vol.13, no.1, pp. 4-19. Available online: <https://online-journals.org/index.php/i-jim/article/view/9898> [Accessed 7 April 2023]

Fatorachian, H., & Kazemi, H. (2020). Impact of Industry 4.0 on supply chain performance. *Production Planning & Control*, [e-journal] vol.32 no.1, pp.63 - 81. Available online: <https://www.tandfonline.com/doi/abs/10.1080/09537287.2020.1712487?journalCode=tppe20> [Accessed 7 April 2023]

Farquhar, P. (1989). Managing Brand Equity, *Marketing Research*, vol. 1, no. 9, pp.24–33

Forbes (2016). Forbes Press Release, Customers Like to Research Online but Make Big Purchases in Stores, Says New Retailer Study, May 25, Available online: <https://www.forbes.com/sites/forbespr/2016/05/25/customers-like-to-research-online-but-make-big-purchases-in-stores-says-new-retailer-study/> [Accessed 1 April 2023]

Gautam, V., & Sharma, V. (2017). The Mediating Role of Customer Relationship on the Social Media Marketing and Purchase Intention Relationship with Special Reference to Luxury Fashion Brands. *Journal of Promotion Management*, [e-journal] vol.23, no.6, pp.872 - 888. Available online:

<https://www.tandfonline.com/doi/abs/10.1080/10496491.2017.1323262?journalCode=wjpm20> [Accessed 5 April 2023]

Hashim, S.F., Mohd. Tajuddin, R.B., & Zainol, A.S. (2020). Consumer-based model for business sustainability of Malaysian fashion brands, *Journal of Critical Reviews*, [e-journal], vol.7, no.16, pp.533 - 549, Available online: <https://journal.ump.edu.my/ijim/article/view/5630> [Accessed 9 April 2023]

Hughes, S., Erickson, S., & Rothberg, H. (2019). Knowledge Assets and Competitiveness in Fashion Industries. *European Conference on Knowledge Management*, vol.11, no.55, pp.528-XIX. Academic Conferences International Limited, Available online: [https://www.google.se/books/edition/ECKM\\_2019\\_20th\\_European\\_Conference\\_on\\_Kn/G3-3DwAAQB\\_AJ?hl=en&gbpv=1&dq=ECKM+2019+20th+European+Conference+on+Knowledge+Management+2+VOLS&printsec=frontcover](https://www.google.se/books/edition/ECKM_2019_20th_European_Conference_on_Kn/G3-3DwAAQB_AJ?hl=en&gbpv=1&dq=ECKM+2019+20th+European+Conference+on+Knowledge+Management+2+VOLS&printsec=frontcover) [Accessed 9 April 2023]

Hunter, I. (2021). Zara's Store Mode, the ultimate omnichannel experience, Available online: <https://medium.com/@insightshunter/zaras-store-mode-the-ultimate-omnichannel-experience-3d3b7c4acfa> [Accessed 6 April 2023]

Jhamb, D.R. (2012). Emerging Retail Formats and its attributes: An insight to convenient shopping. *Global Journal of Management and Business Research*, [e-journal] vol.12, no.2, pp.99 - 117. Available online: <https://globaljournals.org/item/159-emerging-retail-formats-and-its-attributes-an-insight-to-convenient-shopping> [Accessed 5 April 2023]

Kananukul, C., Jung, S., & Watchravesringkan, K. (2015). Building Customer Equity through Trust in Social Networking Sites: A Perspective from Thai Consumers, *Journal of Research in Interactive Marketing*, vol. 9, pp.148–166

Kapferer, J.-N. (1994). *Strategic Brand Management: New Approaches to Creating and Evaluating Brand Equity*, Simon and Schuster

Keller, K. L. (1993). Conceptualizing, Measuring, and Managing Customer-Based Brand Equity, *Journal of Marketing*, [e-journal] vol. 57, no. 1, pp.1–22, Available online: <https://www.jstor.org/stable/1252054> [Accessed 27 May 2023]

Kim, H.Y., Lee, Y., Cho, E., & Jung, Y.J. (2020). Digital atmosphere of fashion retail stores. *Fashion and Textiles*, [e-journal] vol.7, no.30, Available online: <https://fashionandtextiles.springeropen.com/articles/10.1186/s40691-020-00217-6> [Accessed 5 April 2023]

Kim, H., Kim, W.G., & An, J.A. (2003). The effect of consumer-based brand equity on firms' financial performance. *Journal of Consumer Marketing*, [e-journal] vol.20, no.4, pp335-351, Available online: <https://www.emerald.com/insight/content/doi/10.1108/07363760310483694/full/html> [Accessed 4 April 2023]

Kim, S., & Ma, J.J. (2019). A study on the digital transformation strategy of a fashion brand, *The Research Journal of the Costume Culture*, [e-journal] vol.27, no.5, pp.449-460  
Available online: <http://www.rjcc.or.kr/journal/article.php?code=68948> [Accessed 5 April 2023]

Kim, Y., & Krishnan, R. (2015). On Product-Level Uncertainty and Online Purchase Behavior: An Empirical Analysis. *Manag. Sci.*, [e-journal] vol.61, no.10, pp.2449-2467. Available online: <https://doi.org/10.1287/mnsc.2014.2063> [Accessed 5 April 2023]

Kitzinger, J. (1994). The Methodology of Focus Groups: The Importance of Interaction between Research Participants, *Sociology of Health & Illness*, [e-journal] vol. 16, no. 1, pp.103–121, Available online: <https://onlinelibrary.wiley.com/doi/abs/10.1111/1467-9566.ep11347023> [Accessed 24 April 2023]

Koo, D. M., & Kang, M. J. (2012). Managing Store Images by Discount Retailers in Korea, *Journal of Global Academy of Marketing Science*, [e-journal] vol.14, no.1, pp.145–169. Available online: <https://www.tandfonline.com/doi/epdf/10.1080/12297119.2004.9707226?src=getfr> [Accessed 7 April 2023]

Krouwel, M., Jolly, K., & Greenfield, S.M. (2019). Comparing Skype (video calling) and in-person qualitative interview modes in a study of people with irritable bowel syndrome – an exploratory comparative analysis. *BMC Medical Research Methodology*, [e-journal] vol.19, no.219, Available online: <https://doi.org/10.1186/s12874-019-0867-9> [Accessed 28 April 2023]

Le, A.N.H., & Nguyen-Le, X.-D. (2020), A moderated mediating mechanism of omnichannel customer experiences. *International Journal of Retail & Distribution Management*, [e-journal] vol. 49 No. 5, pp. 595-615, Available online: <https://doi.org/10.1108/IJRDM-02-2020-0054> [Accessed 7 April 2023]

Lohse, G.L., & Spiller, P. (2006). Internet retail store design: How the user interface influences traffic and sales. *Journal of Computer-Mediated Communication*, [e-journal] vol.5, no.2, no.1, Available online: <https://doi.org/10.1111/j.1083-6101.1999.tb00339.x> [Accessed 24 April 2023]

Low, G. S., & Fullerton, R. A. (1994). Brands, Brand Management, and the Brand Manager System: A Critical-Historical Evaluation, *Journal of Marketing Research*, [e-journal] vol. 31, no. 2, pp.173–190, Available online: <https://ludwig.lub.lu.se/login?url=https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,uid&db=edsjrs&AN=edsjrs.10.2307.3152192&site=eds-live&scope=site> [Accessed 6 April 2023]

Macchion, L., Moretto, A.M., Caniato, F., Caridi, M., Danese, P. and Vinelli, A. (2017), "International e-commerce for fashion products: what is the relationship with performance?", *International Journal of Retail & Distribution Management*, [e-journal] Vol. 45 No. 9, pp. 1011-1031, Available online: <https://doi.org/10.1108/IJRDM-11-2015-0171> [Accessed 6 April 2023]

Marhamat, B. (2019). Forbes Business Development Council: Five Consumer Behavior Trends To Watch In 2021, Available online: <https://www.forbes.com/sites/forbesbusinessdevelopmentcouncil/2021/02/10/five-consumer-behavior-trends-to-watch-in-2021/> [Accessed 6 April 2023]

Merrilees, B. & Miller, D. (2001), "Superstore interactivity: a new self-service paradigm of retail service?", *International Journal of Retail & Distribution Management*, [e-journal] vol. 29 no. 8, pp. 379-389, Available online: <https://doi.org/10.1108/09590550110396953> [Accessed 28 April 2023]

Melis, K., Campo, K., Breugelmans, E., & Lamey, L. (2015). The impact of the multi-channel retail mix on online store choice: : Does online experience matter? *Journal of Retailing*, [e-journal] vol.91, no.2, pp. 272-288. Available online: <https://doi.org/10.1016/j.jretai.2014.12.004> [Accessed 28 April 2023]

Miao, M., Go, I., Ikeda, K., & Numata, H. (2021). Brand Equity Effects on Financial Performance in Japanese Fashion Market: Applying Complexity Theory via FsQCA, *Journal of Global Fashion*

*Marketing*, [e-journal] vol. 13, no. 1, pp.30–43, Available online: <https://doi.org/10.1080/20932685.2021.1960581> [Accessed 14 May 2023]

Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*, Sage Publications

Morgan, D. L. (1993). Qualitative Content Analysis: A Guide to Paths Not Taken, *Qualitative Health Research*, [e-journal] vol. 3, no. 1, pp.112–121, Available online: <https://doi.org/10.1177/104973239300300107> [Accessed 24 April 2023]

Nannini, V.L. (2020). Fashion consumption in digital media: Multiple practices and new identities, *Fashion, Style & Popular Culture*, Vol.7, no.4, pp.519 - 537 Available online: [https://doi.org/10.1386/fspc\\_00041\\_1](https://doi.org/10.1386/fspc_00041_1) [Accessed 4 April 2023]

Nam, J., Ekinci, Y., & Whyatt, G. (2011). Brand Equity, Brand Loyalty and Consumer Satisfaction, *Annals of Tourism Research*, [e-journal] vol. 38, no. 3, pp.1009–1030, Available online: <https://www.sciencedirect.com/science/article/pii/S0160738311000211> [Accessed 7 April 2023]

Nawaz, A., Salman, A., & Ashiq, R. (2015). The Impact of Social Media on Fashion Industry: Empirical Investigation from Karachiites. *Journal of Resources Development and Management*, vol.7, pp.1-7

Oh, T. T., Keller, K. L., Neslin, S. A., Reibstein, D. J., & Lehmann, D. R. (2023). The Past, Present, and Future of Brand Research: Lund University Libraries, Available online: <https://eds.s.ebscohost.com/eds/detail/detail?vid=5&sid=16be160e-52a9-49a6-b37a-e5d5386bdf45%40redis&bdata=JkF1dGhUeXBIPWlwLHVpZCZzaXRIPWVkcylsaXZlJnNjb3BIPXNpdGU%3d#AN=145078481&db=bth> [Accessed 7 April 2023]

Oliveira-Castro, J. M., Foxall, G. R., James, V. K., Pohl, R. H., Dias, M. B., & Chang, S. W. (2008). Consumer-based brand equity and brand performance. *The Service Industries Journal*, [e-journal] vol.28, no.4, pp.445-46. Available online: <https://doi.org/10.1080/02642060801917554> [Accessed 7 April 2023]

Pantano, E., & Timmermans, H. (2014). What Is Smart for Retailing?, *Procedia Environmental Sciences*, [e-journal] vol. 22, pp.101–107, Available online: <https://www.sciencedirect.com/science/article/pii/S1878029614001571> [Accessed 27 May 2023]

Polat, V. (2021). Digital Transformation of Luxury Brands: Omnichannel Strategies and Implementations. *Handbook of Research on IoT, Digital Transformation, and the Future of Global Marketing* (pp. 77-96). IGI Global, Available online: <https://doi.org/10.4018/978-1-7998-7192-7.ch005> [Accessed 3 April 2023]

Pusceddu, G., Moi, L., & Cabiddu, F. (2023). Do They See Eye to Eye? Managing Customer Experience in Phygital High-Tech Retail, *Management Decision*, [e-journal] vol. ahead-of-print, no. ahead-of-print, Available online: <https://doi.org/10.1108/MD-05-2022-0673> [Accessed 29 March 2023]

Rust, R. T., Lemon, K. N., & Zeithaml, V. A. (2004). Return on Marketing: Using Customer Equity To Focus Marketing Strategy, *Journal of Marketing*, [e-journal] vol.68, no.1, pp.109-127 Available online: [https://www.researchgate.net/publication/248764523\\_Return\\_on\\_Marketing\\_Using\\_Customer\\_Equity\\_To\\_Focus\\_Marketing\\_Strategy](https://www.researchgate.net/publication/248764523_Return_on_Marketing_Using_Customer_Equity_To_Focus_Marketing_Strategy)

S. Guo, X. Sun & H. K. S. Lam. (2023). Applications of Blockchain Technology in Sustainable Fashion Supply Chains: Operational Transparency and Environmental Efforts, *IEEE Transactions on Engineering Management*, vol. 70, no. 4, pp. 1312-1328, Available online: <https://ieeexplore.ieee.org/document/9279323> [Accessed 3 April 2023]

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill-building approach* (7th ed.). Wiley.

Smith, B., Rippé, C.B. and Dubinsky, A.J. (2018), "India's lonely and isolated consumers shopping for an in-store social experience", *Marketing Intelligence & Planning*, [e-journal] vol. 36 no. 7, pp. 722-736. Available online: <https://doi.org/10.1108/MIP-12-2017-0338> [Accessed 28 April 2023]

Spackman, J.S., & Larsen, R. (2017). Evaluating the Impact of Social Media Marketing on Online Course Registration. *The Journal of Continuing Higher Education*, [e-journal] vol.65, no.3, pp.151 - 165. Available online: <https://www.tandfonline.com/doi/abs/10.1080/07377363.2017.1368774?journalCode=ujch20> [Accessed 9 April 2023]

Stanković, J., Marjanović, I., Drezgic, S., & Popovic, Z. (2021). The Digital Competitiveness of European Countries: A Multiple-Criteria Approach. *Journal of Competitiveness*.

Stewart, D. W., Shamdasani, P. N., & Rook, D. W. (2007). *Focus Groups*, [e-book] SAGE Publications, Ltd., Available online: <https://methods.sagepub.com/book/focus-groups> [Accessed 27 May 2023]

Takada, M. (2017). UNIQLO: Transformation to a Digital Consumer Retail Company. Available online: <https://d3.harvard.edu/platform-rctom/submission/uniqlo-transformation-to-a-digital-consumer-retail-company/> [Accessed 9 April 2023]

Troiville, J., Hair, J. F., & Cliquet, G. (2019). Definition, Conceptualization and Measurement of Consumer-Based Retailer Brand Equity, *Journal of Retailing and Consumer Services*, [e-journal] vol. 50, pp.73–84, Available online: <https://www.sciencedirect.com/science/article/pii/S096969891831186X> [Accessed 5 April 2023]

Ünay, F.G., & Zehir, C. (2012). Innovation intelligence and entrepreneurship in the fashion industry. *Procedia - Social and Behavioral Sciences*, vol.41, pp.315-321. Available online: <https://doi.org/10.1016/j.sbspro.2012.04.036> [Accessed 5 April 2023]

Vaska, S., Massaro, M., Bagarotto, E.M., & Dal Mas, F. (2021). The Digital Transformation of Business Model Innovation: A Structured Literature Review. *Frontiers in Psychology*, vol.11. Available online: <https://doi.org/10.3389/fpsyg.2020.539363> [Accessed 5 April 2023]

Verhoef, P.C., Broekhuizen, T.L., Bart, Y., Bhattacharya, A., Qi Dong, J., Fabian, N.E., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, vol.122, pp.889-901, Available online: <https://linkinghub.elsevier.com/retrieve/pii/S0148296319305478> [Accessed 5 April 2023]

Minh, S. Vo, Nguyen Huong, G., & Dang Nguyen Ha, G. (2022). The role of social brand engagement on brand equity and purchase intention for fashion brands. *Cogent Business & Management*, [e-journal] vol.9, no.1, Available online: <https://www.tandfonline.com/doi/full/10.1080/23311975.2022.2143308> [Accessed 9 April 2023]

Vogel, V., Evanschitzky, H., & Ramaseshan, B. (2008). Customer Equity Drivers and Future Sales, *Journal of Marketing*, [e-journal] vol. 72, no. 6, pp.98–108, Available online: <https://doi.org/10.1509/jmkg.72.6.098> [Accessed 27 May 2023]

Wang, B., & Chen, Y.Y. (2014). The Effect of 3D Printing Technology on the Future Fashion Design and Manufacturing. *Applied Mechanics and Materials*, 496-500, 2687 - 2691. Available online: <https://www.scientific.net/AMM.496-500.2687> [Accessed 5 April 2023]

Washburn, J. H., Till, B. D., & Priluck, R. (2000). Co-branding: Brand Equity and Trial Effects, *Journal of Consumer Marketing*, [e-journal] vol. 17, no. 7, pp.591–604, Available online: <https://doi.org/10.1108/07363760010357796> [Accessed 7 April 2023]

Yang, C., & Hu, J. (2023). When Do Consumers Prefer AI-Enabled Customer Service? The Interaction Effect of Brand Personality and Service Provision Type on Brand Attitudes and Purchase Intentions | SpringerLink, Available online: <https://link-springer-com.ludwig.lub.lu.se/article/10.1057/s41262-021-00261-7> [Accessed 29 January 2023]

Yoo, B., & Donthu, N. (2001). Developing and Validating a Multidimensional Consumer-Based Brand Equity Scale, *Journal of Business Research*, [e-journal] vol. 52, no. 1, pp.1–14, Available online: <https://www.sciencedirect.com/science/article/pii/S0148296399000983> [Accessed 7 April 2023]

Yu, K., Ritchie, A., Mao, Y., Dunn, M.L., & Qi, H.J. (2015). Controlled Sequential Shape Changing Components by 3D Printing of Shape Memory Polymer Multi Materials. *Procedia IUTAM*, vol.12, pp.193-203. Available online: <https://linkinghub.elsevier.com/retrieve/pii/S2210983814000947> [Accessed 7 April 2023]

Zara (n.d). ZARA EXPERIENCES / STORE MODE IN THE APP, Available online: <https://www.zara.com/in/en/help-center/StoreMode> [Accessed 6 April 2023]

Zhang, P., Aikman, S., & Sun, H. (2008). Two types of attitudes in ICT acceptance and use. *International Journal of Human Interaction*, vol.24, no.7, pp.628–648. Available online: <https://www.tandfonline.com/doi/abs/10.1080/10447310802335482> [Accessed 7 April 2023]

Zubair, A., Baharun, R.B., & Kiran, F. (2020). Role of traditional and social media in developing consumer-based brand equity. *Journal of Public Affairs*, [e-journal] Vol.22, no.2. Available online: <https://onlinelibrary.wiley.com/doi/10.1002/pa.2469> [Accessed 9 April 2023]

# Appendix

## Appendix A: Interview Questions

### *Brand Awareness*

Can you recall any brands that have virtual fitting rooms, tablets, digital signals, QR codes, mobile apps and automatic checkouts in their store?"

Or Which retail store brands come to mind when you think of virtual fitting rooms, tablets, digital signals, QR codes, mobile apps and automatic checkouts?

Unaided Recall: "When you think of virtual fitting rooms, tablets, digital signals, QR codes, mobile apps and automatic checkouts, which retail store brands come to mind?"

### *Service Quality: Physical Quality*

Do you find clothing brands that utilize technology (e.g., mobile apps, digital signage, QR code and interactive displays) in their retail store are visually appealing? Why do you think that way?

### *Service Quality: Staff Behavior*

Do you think that digital tools (eg. mobile apps, digital signage, QR code and interactive displays) have improved the staff's ability to help you with any queries you had? Why do you think that way?

### *Ideal Self-Congruence*

Is the image of the brand employing technology consistent with how I like to see myself?

Example: Zara using online apps where you can check the product availability in stores, Nike creating a store based on shopping habits in the neighborhood.

### *Brand Identification*

When someone criticizes clothing brands that utilize technology, such as mobile apps, digital signage, QR code and interactive displays in their retail store, would you feel insulted?

Example: A friend is criticizing the use of mobile apps of a brand that you recently used.

### *Lifestyle-Congruence*

Did the clothing brand that utilized technology, such as mobile apps, digital signage, QR code and interactive displays in their retail store, align with your personal lifestyle?

Example: I consider myself as ahead of the trend and Nike's use of technology reflects that.

Follow up: How do you describe your lifestyle?

### *Brand Satisfaction*

How well does a brand that employs in-store technology meet your expectations in terms of product quality, customer service, and overall brand experience?

On a scale of 1 to 5, how satisfied are you with a brand that employs in-store technology?

### *Brand Loyalty*

From a scale of 1-5, how much would you recommend clothing brands that utilize in-store technology, such as mobile apps, digital kiosks, and interactive displays, in their retail store?

From a scale of 1-5, how likely are you to purchase a clothing item from brands that utilized in-store technology in their retail store?

## Appendix B: Interview Participants

No	Date	Duration	Code	Gender	Occupation	Live	Phygital Store Experienced Location	Brands Customers
1	26/04/23	11.54	P1	Male	Office Worker	Lund, Sweden	None	Gant, CK
2	27/04/23	9:10	P2	Female	Student	Lund, Sweden	None	H&M
3	26/04/23	23.39	P3	Female	Student	Lund, Sweden	China, Sweden	Uniqlo, Zara, H&M
4	26/04/23		P4	Female	Student	Lund, Sweden	China, Canada, Sweden	Uniqlo, Zara, H&M
5	27/04/23	13.38	P5	Female	Student	Lund, Sweden	Sweden	H&M, Zara
6	27/04/23	7.23	P6	Female	Office Worker	Lund, Sweden	India, Sweden	Zara, H&M
7	28/04/23	7.17	P7	Female	Student	Copenhagen, Denmark	Denmark, Lithuania	Uniqlo, Zara, H&M
8	28/04/23	11.6	P8	Female	Student	Lund, Sweden	Belgium, Sweden	Belgium's Brand
9	28/04/23	18.44	P9	Female	Student	Lund, Sweden	None	H&M, Zara
10	28/04/23		P10	Male	Student	Lund, Sweden	Sweden	Weekday
11	29/04/23	9.13	P11	Male	Student	Lund, Sweden	Canada, Sweden	Uniqlo, Zara, H&M
12	29/04/23	8.23	P12	Female	Student	Lund, Sweden	Indonesia, Sweden	Uniqlo, Zara, H&M

13	29/04/23	6.2	P13	Female	Student	Lund, Sweden	Indonesia, Sweden	Uniqlo, Zara, H&M
14	01/05/23	10.15	P14	Female	Office Worker	Copenhagen, Denmark	Denmark, Lithuania	H&M, Zara, Uniqlo. Forever 21.
15	01/05/23	10.12	P15	Female	Office Worker	Copenhagen, Denmark	Denmark, Lithuania	Uniqlo, H&M, Zara
16	02/05/23	9.1	P16	Female	Office Worker	Copenhagen, Denmark	Denmark, Lithuania	Uniqlo, H&M, Zara
17	03/05/23	14:45	P17	Female	Office Worker	Copenhagen, Denmark	Denmark	Uniqlo, H&M, Zara
18	04/05/23	15.2	P18	Female	Student	Lund, Sweden	Sweden, Denmark, Japan, San Francisco	Uniqlo, H&M, Zara, Forever 21

### Appendix C: Focus Group Participants

No	Code	Gender	Occupation	Background	Residence
1	P1	Male	Student	Work Experience in Tech Company	Lund, Sweden
2	P2	Female	Student	Fashion Enthusiast	Lund, Sweden
3	P3	Male	Student	Fashion Enthusiast	Lund, Sweden
4	P4	Male	Student	Tech Enthusiast	Lund, Sweden
5	P5	Male	Student	Work Experience in Tech Company	Lund, Sweden
6	P6	Female	Student	Work Experience in Fashion Retail	Lund, Sweden

7	P7	Female	Student	Work Experience in Fashion Brands-Marketing	Lund, Sweden
8	P8	Female	Student	Fashion Enthusiast	Lund, Sweden

## Appendix D: Focus Group Topic Guide

### *Brand Awareness*

Question: *In your opinion, what factors influence the reputation of brands? Do you think experiences of using technology could influence your impression of brands?*

Follow Up: The majority of respondents (60%) believe that their experience with technology such as self-checkout and mobile apps has a positive impact on their perception of brands. They associate these brands with modernity, innovation, convenience, and effectiveness, suggesting that technology in physical stores can improve a brand's image and reputation. *What do you think about these findings? Are there statements you agree or disagree with?*

### *Service Quality: Physical Quality*

Question: *What attracted you to visit a retail store? Do you think technology could improve your shopping experience?*

Follow Up: Most respondents (+40%) find fashion brands that use apps and technology devices in their retail stores more attractive as they combine the convenience of online shopping for gathering information with the sensory experience of physical retail for checking the product quality. These technologies also offer personal space, allowing customers to complete transactions without staff interaction, resulting in high satisfaction and loyalty towards brands that incorporate in-store technology. *What do you think about these findings? Are there statements you agree or disagree with?*

### *Service Quality: Staff Behavior*

Question: *Do you think staff attitude and ability could influence your shopping experience? Do you think technology could improve staff attitude and ability?*

Follow up: Generally (70%), respondents think that in-store technology could improve staff ability. As it

makes the staff easily access information about products and can quickly provide answers to their questions. Factors such as personal space that staff give also became an important factor of this positive perception. However, some respondents (20%) indicate in-store technology negatively affects staff attitude as they become more lazy and indifferent, especially when there is technical problem such as system error or when customers are facing challenges to use the technology. *What do you think about these findings? Are there statements you agree or disagree with?*

#### *Ideal Self-Congruence*

Question: *Do you think you would like to see yourself as a customer of brands that have phygital stores?*

Follow up 1: Only 25% of respondents felt that technology allowed them to associate themselves strongly with the brand. Instead the products seemed to be more significant in creating brand perception that allows self-congruence with a brand. Some concerns regarding privacy, and the use of data to create phygital store designs and personalized shopping experiences were also brought up. *What do you think about these findings? Are there statements you agree or disagree with?*

#### *Lifestyle-Congruence*

Question: *What do you value while shopping? Do you prefer an inspiring experience while shopping or are shopping trips intended to be convenient and efficient?*

Follow up: Some research into how technology is congruent with people's lifestyle were conducted. According to our research, consumers appreciate the efficiency that technology creates during their hectic lifestyle rather than enjoying the unique and innovative shopping experiences digital mirrors provide. They associate the use of technology as part of their life. Some think the use of technology has no impact on their lifestyle and consider product design or sustainability more impactful. Others think it negatively affects their lifestyle as they feel controlled. *What do you think about these findings? Are there statements you agree or disagree with?*

#### *Brand Identification*

Question: *Is the sustainability and ethics of a brand important to you?*

Follow up: Technology in retail itself does not seem to help consumers identify with a brand. *What factors help you identify with a brand? And how do you think technology could help you associate yourself with a brand?*

### *Brand Satisfaction*

Question: *What factors do you believe make you satisfied with a brand?*

Follow up: The majority of respondents are satisfied with the brand that have phygital store, citing the ability to avoid queues by using self-checkout, personalisation through discounts and notifications and apps. Digital developments result in time saved, convenience and thus satisfaction. Consumers would not recommend and are thus not satisfied with the brand, due to the crashing of sites or usability of the technology. *What do you think about these findings? Are there statements you agree or disagree with?*

### *Brand Loyalty*

Question: *What makes you loyal to a brand? Would an efficient shopping experience make you more loyal to a brand?*

Follow up: The majority of respondents indicated that they had a high loyalty with brands employing technology. However, when respondents ranked their loyalty with a 3, 4 or 5, their reasoning relied on the prices and quality of clothes rather than the technology employed in stores. However, the use of technology creates efficiency, making shopping more convenient. The second most common characteristic described is hence the time saved. Convenience thus increasing the satisfaction with the brand and increasing shopping habits. *What do you think about these findings? Are there statements you agree or disagree with?*

# Appendix E: Data Reduction and Data Display of Semi-Structured Interviews

Brand Awareness				SQ:Physical Quality			SQ: Staff Behavior				
Partis ipant	Awareness of Brands That Have Physical- Store	Physical-Store Factors Influencing Brand Awareness	Physical-Store Characteristics Reflected in Brand Awareness	Physical-Store Factors Influencing SQ:Physical Quality	Physical-Store Characteristics Reflected in SQ:Physical Quality	Physical-Store Effect on SQ:Physical Quality CBSE	Partis ipant	Physical-Store Factors Influencing SQ: Staff Behavior	Physical-Store Characteristics Reflected in SQ: Staff Behavior	Physical-Store Effect on SQ: Staff Behavior	
P1	Gant	Online pickup (Utility: physical experience) POSITIVE	Wasteful/Not sustainable (Negative)	Dislike (bad perception)	Materials (Product factor) NEUTRAL	Unrelated (Neutral)	No Effect (No Impact Satisfaction & Loyalty)	P1	Attitude (Individual factor) NEGATIVE	Lazy, Incompetent (NEGATIVE)	Losing knowledge/Equip ment Negative impact on satisfaction and loyalty
P2	Zara	Personalization/P reference Features (Utility: Digital Experience) POSITIVE	Customer oriented (positive)	Attachment to the brand (increased loyalty)	Design (Product factor) NEUTRAL	Useful (Positive)	Quite interested (Medium impact Satisfaction & Loyalty)	P2	Access to information (Utility Factor) POSITIVE	Efficient (POSITIVE)	Improve Efficiency (Positive impact on satisfaction and loyalty)
P3	Uniqlo	Self-checkout (Utility: Physical Experience) POSITIVE	Efficient & Convenient (positive)	Impressed (good perception)	Design (Product factor) NEUTRAL	Attractive (Positive)	Interested (High Impact Satisfaction & Loyalty)	P3	Access to information (Utility Factor) POSITIVE	Quickly (POSITIVE)	Improve Efficiency (Positive impact on satisfaction and loyalty)
P4	Uniqlo	Information in the Physical Store POSITIVE	Modern (positive)	Membership (increased loyalty)	Big screen Store Design POSITIVE	Modern (positive)	Interested (High Impact Satisfaction & Loyalty)	P4	Attitude (Individual factor-staff) POSITIVE	Comfortable & Efficient (POSITIVE)	Provide Privacy & Improve Efficiency (Positive impact on satisfaction and loyalty)
P5	H&M	Self-checkout (Utility: Physical Experience) POSITIVE	Modern (neutral)	Dislike (bad perception)	Design (Product factor) NEUTRAL	Modern (Positive)	Quite interested (Medium impact Satisfaction & Loyalty)	P5	Attitude (Individual factor-staff) NEGATIVE	Annoyance (NEGATIVE)	Diverting Responsibility from Customer (Negative impact on satisfaction and loyalty)
P6	H&M	Self-checkout (Utility: Physical Experience) POSITIVE	Efficient & Convenient (positive)	Time Efficiency & Convenience (good perception)	Design (Product factor) NEUTRAL	Comfortable (Positive)	Interested (High impact Satisfaction & Loyalty)	P6	Attitude (Individual factor-staff) POSITIVE	Unrelated (NEUTRAL)	No impact (No impact on satisfaction and loyalty)
P7	Uniqlo	Self-checkout (Utility: Physical Experience) POSITIVE	Efficient & Convenient (positive)	Impressed (good perception)	Design (Product factor) NEUTRAL	Quicker (Positive)	Quite interested (Medium Satisfaction & Loyalty)	P7	Access to information (Utility Factor) POSITIVE	Quicker (Positive)	Improve Efficiency (Positive impact on satisfaction and loyalty)
P8	Belgium's Brand	Tables (Utility: Physical Experience) POSITIVE	Efficient & Convenient (positive)	Impressed (good perception)	(Shopping Experience) NEUTRAL	Unrelated (Neutral)	No Effect (No Impact Satisfaction & Loyalty)	P8	Attitude (Individual factor-staff) NEGATIVE	Lazy, Incompetent (NEGATIVE)	Losing knowledge/Equip ment Negative impact on satisfaction and loyalty
P9	H&M Zara	Store Design (Utility: Physical Experience) NEGATIVE	Modern & Sterile (negative)	Dislike (bad perception)	Style Preference (Store Design) NEGATIVE	Modern & Sterile (Negative)	Resist (Negative Impact on Satisfaction & Loyalty)	P9	Attitude (Individual factor-staff) POSITIVE/NEG ATIVE	Depend (NEUTRAL)	Dependent on Attitude (No impact on satisfaction and loyalty)
P10	Weekday	Store Design (Utility: Physical Experience) NEGATIVE	Forward Thinking/ Innovative (neutral)	Skeptical (bad perception)	Technologically challenged (Utility: Physical Experience) NEGATIVE	Confusing & Overwhelmed (NEGATIVE)	Resist (Negative Impact on Satisfaction & Loyalty)	P10	Access to information (Utility Factor) POSITIVE	Helpful (POSITIVE)	Improve Efficiency (Positive impact on satisfaction and loyalty)
P11	Uniqlo	Mobile App (Utility: Digital Experience) POSITIVE	Cool (positive)	Membership (increased loyalty)	Design (Product factor) NEUTRAL	Convenient (Positive)	Interested (High Impact Satisfaction & Loyalty)	P11	Attitude (Individual factor-staff) POSITIVE	Comfortable & Efficient (POSITIVE)	Provide Privacy & Improve Efficiency (Positive impact on satisfaction and loyalty)
P12	Uniqlo	Mobile App (Utility: Digital Experience) POSITIVE	Efficient & Convenient (positive)	Time Efficiency & Safety during pandemic (good perception)	Design (Product factor) NEUTRAL	Convenient & Safe (Positive)	Interested (High Impact Satisfaction & Loyalty)	P12	Attitude (Individual factor-staff) POSITIVE	Convenient & Safe (Positive)	Improve Efficiency (Positive impact on satisfaction and loyalty)
P13	Uniqlo Zara	Mobile App (Utility: Digital Experience) POSITIVE	Attractive (positive)	Interested (increased loyalty)	Convenience (Utility: Physical Experience)PO SITIVE	Attractive (positive)	Interested (High Impact Satisfaction & Loyalty)	P13	Purchasing process (Utility Factor) POSITIVE	Simple & Efficient (POSITIVE)	Time Efficiency & Improve Customer Experience (Positive impact on satisfaction and loyalty)
P14	Uniqlo	Digital Cashier (physical experience) POSITIVE	Efficient & Convenient (positive)	Time Efficiency & Convenience (good perception)	Time Efficiency (Utility: Physical Experience) POSITIVE	Efficient (positive)	Interested (High Impact Satisfaction & Loyalty)	P14	Attitude (Individual factor-staff) NEGATIVE	Complicated & Obstructive (NEGATIVE)	Diverting Responsibility from Customer (Negative impact on satisfaction and loyalty)
P15	Uniqlo	Self-checkout (physical experience) POSITIVE	Efficient & Convenient (positive)	Time Efficiency & Convenience (good perception)	Design (Product factor) NEUTRAL	Efficient (positive)	Quite interested (Medium impact Satisfaction & Loyalty)	P15	Attitude (Individual factor-staff) POSITIVE	Efficient (positive)	Time Efficiency & Improve Customer Experience (Positive impact on satisfaction and loyalty)
P16	Uniqlo	Information in the Physical Store POSITIVE	Efficient & Convenient (positive)	Non-ethical (negative)	Time Efficiency (Utility: Physical Experience) POSITIVE	Convenient & Faster (positive)	Quite interested (Medium impact Satisfaction & Loyalty)	P16	Access to information (Utility Factor) POSITIVE	Easy (POSITIVE)	Efficiency & Improve Customer Experience (Positive impact on satisfaction and loyalty)
P17	Uniqlo	Self-checkout (Utility: Physical Experience) POSITIVE	Efficient & Convenient (positive)	Time Efficiency & Convenience (good perception)	Window Display (Store Design) POSITIVE	Attractive (positive)	Quite interested (Medium impact Satisfaction & Loyalty)	P17	Attitude (Individual factor-staff) POSITIVE	Attractive (positive)	Quite interested (Medium impact Satisfaction & Loyalty)
P18	Uniqlo	Mobile App (Utility: Digital Experience) POSITIVE	Efficient & Convenient (positive)	Impressed (good perception)	Design (Product factor) NEUTRAL	Attractive & Efficient (positive)	Interested (High Impact Satisfaction & Loyalty)	P18	Access to information (Utility Factor) POSITIVE	Efficient (POSITIVE)	Quite interested (Medium impact Satisfaction & Loyalty)

### Ideal Self-Congruence

Participant	Physical-Store Factors Influencing Ideal Self-Congruence	Physical-Store Characteristics Reflected in Ideal Self-Congruence	Physical-Store Effect on Ideal Self-Congruence
P1	Convenience (Utility factor) Privacy & Individualism (Social factor)	Convenient, Efficient, Privacy (POSITIVE)	Positive Impact (High Conformity)
P2	Familiarity, Functionality & Usefulness (Utility factor)	Part of Life (POSITIVE)	Positive Impact (Medium Conformity)
P3	Design & Quality (Product factor) Loyalty (Individual factor)	Quality and Design (Not align)	No Impact (No Conformity)
P4	Design, Quality & Price (Product factor)	Good Quality (Not align)	No Impact (No Conformity)
P5	Personal Value (Individual factor)	Unethical (NEGATIVE)	No Impact (No Conformity)
P6	Ethics (Social factor) Personal Value (Individual factor)	Unnecessary (NEGATIVE)	No Impact (No Conformity)
P7	Time Efficiency (Utility factor)	Convenience & Efficient (POSITIVE)	Positive Impact (High Conformity)
P8	Personal Preference (Individual factor) Similarity (Social factor)	Hate/dislike (NEGATIVE)	Negative Impact (No Conformity)
P9	Usefulness, Functionality & Usefulness (Utility factor)	Responsibility (POSITIVE) Responsibility (NEGATIVE)	Dependent/ Neutral Impact (High Conformity)
P10	Personal Preference Value (Individual factor) Product Quality (Product factor)	Classic Styles for high-tech features (NEUTRAL)	No Impact (No Conformity)
P11	Convenience (Utility factor) Personal Preference (Individual factor)	Convenient & Attractive (POSITIVE)	Positive Impact (High Conformity)
P12	Personal Value (Individual factor)	No Association (Not align)	No Impact (No Conformity)
P13	Personal Preference & Loyalty (Individual factor)	Loyalty (Not align)	No Impact (No Conformity)
P14	Personal Value (Individual factor)	Doesn't Matter (Not align)	No Impact (No Conformity)
P15	Personal Preference & Loyalty (Individual factor)	Improvement & Bonus (POSITIVE)	Positive Impact (Medium Conformity)
P16	Personal Preference & Loyalty (Individual factor) Responsibility & Fairness (Image factor)	Indifferent (Not align)	No Impact (No Conformity)
P17	Ethics (Social factor) Personal Value (Individual factor)	No Association (Not align)	No Impact (No Conformity)
P18	Privacy & Individualism (Social factor) Convenience (Image factor)	Convenience, Privacy & Innovation (POSITIVE)	Positive Impact (High Conformity)

### Lifestyle Congruence

Participant	Physical-Store Factors Influencing Lifestyle Congruence	Physical-Store Characteristics Reflected in Lifestyle Congruence	Physical-Store Effect on Lifestyle Congruence
P1	Personal Preference & Shopping Habits (Individual factor)	No Association (Not align)	No Impact (No Conformity)
P2	Convenience & Flexibility (Utility factor)	Fits (POSITIVE)	Positive Impact (High Conformity)
P3	Convenience (Utility factor)	Convenient (POSITIVE)	Positive Impact (High Conformity)
P4	Loyalty (Individual factor)	Part of Life (POSITIVE)	Positive Impact (High Conformity)
P5	No factor identified	No characteristic identified	No Impact (No Conformity)
P6	Convenience (Utility factor)	Quickly (POSITIVE)	Positive Impact (Medium Conformity)
P7	Convenience (Utility factor)	Convenient (POSITIVE)	Positive Impact (Medium Conformity)
P8	Autonomy (Individual factor)	Controlled/ Limited (NEGATIVE)	Negative Impact (No Conformity)
P9	Personal Preference (Individual factor) Quality & Service (Product factor)	Practically & Quality (Not align)	Negative Impact (No Conformity)
P10	Privacy & Individualism (Social factor)	Minim Interaction (POSITIVE)	Positive Impact (High Conformity)
P11	Privacy & Individualism (Social factor)	Minim Interaction (POSITIVE)	Positive Impact (High Conformity)
P12	Efficiency & Convenience (Utility factor)	Efficient & Convenient (POSITIVE)	Positive Impact (High Conformity)
P13	Efficiency (Utility factor)	Efficient (POSITIVE)	Positive Impact (High Conformity)
P14	Efficiency & Convenience (Utility factor)	Comfortable (POSITIVE)	Positive Impact (High Conformity)
P15	Efficiency & Convenience (Utility factor)	Efficient & Convenient (POSITIVE)	Positive Impact (Medium Conformity)
P16	Efficiency & Convenience (Utility factor)	Love (POSITIVE)	Positive Impact (High Conformity)
P17	Efficiency (Utility factor)	Quick (POSITIVE)	Positive Impact (High Conformity)
P18	Convenience (Utility factor) Privacy & Individualism (Social factor)	Minim Interaction & Convenient (POSITIVE)	Positive Impact (High Conformity)

### Brand Identification

Participant	Physical-Store Factors Influencing Lifestyle Congruence	Physical-Store Characteristics Reflected in Lifestyle Congruence	Physical-Store Effect on Lifestyle Congruence
P1	Personal Preference (Individual factor)	No Association (OPPOSE)	Negative Impact (No Conformity)
P2	Ignorance (Individual factor)	Indifferent (NEUTRAL)	No Impact (No Conformity)
P3	Ignorance (Individual factor)	Indifferent (NEUTRAL)	No Impact (No Conformity)
P4	Loyalty (Individual factor) Usefulness (Utility factor) Judgment to other (Social factor)	Resistant (SUPPORT)	Positive Impact (Low Conformity)
P5	Ignorance (Individual factor) Social Bonds (Social factor)	Indifferent (NEUTRAL)	No Impact (No Conformity)
P6	Ignorance (Individual factor)	Indifferent (NEUTRAL)	No Impact (No Conformity)
P7	No factor identified	No characteristic identified	No Impact (No Conformity)
P8	Personal Preference (Individual factor)	Indifferent (NEUTRAL)	No Impact (No Conformity)
P9	Loyalty (Individual factor) Quality to other (Social factor)	Confused (SUPPORT)	Positive Impact (High Conformity)
P10	Loyalty (Individual factor) Improvement (Utility factor) Personal Preference (Individual factor) Perception Dependence (SUPPORT) Perception Dependence (OPPOSE)	Confused (SUPPORT)	Positive Impact (Low Conformity)
P11	Social Ethics & Judgment to other (Social Factor)	Understandable (NEUTRAL)	No Impact (No Conformity)
P12	Loyalty (Individual factor)	Indifferent (NEUTRAL)	No Impact (No Conformity)
P13	Curiosity to other (Social factor)	Indifferent (NEUTRAL)	No Impact (No Conformity)
P14	Personal Preference (Individual factor) Improvement (Utility factor)	Perception Dependence (SUPPORT)	Positive Impact (High Conformity)
P15	Efficiency & Convenience (Utility factor)	Efficient & Convenient (POSITIVE)	Positive Impact (High Conformity)
P16	Convenience (Utility factor)	Understandable (NEUTRAL)	No Impact (No Conformity)
P17	Efficiency (Utility factor)	Quick (POSITIVE)	Positive Impact (High Conformity)
P18	Functionality (Utility factor)	Understandable (NEUTRAL)	Positive Impact (Low Conformity)

# Appendix F: Data Reduction and Data Display of Focus Group Discussion

### Brand Awareness

Participants	General Factors Influence Brand Awareness	Physical Store Factors Influencing Brand Awareness	Physical Store Characteristics Reflected in Brand Awareness	Physical Store Effect on Brand Awareness	Opinion on Interview Findings	Important factor	Additional insight
P1	Product Quality	Product Quality	Comfortable (POSITIVE)	Positive Impact	Not agree completely	Product and expectation is the top priority	Product quality is the top priority
P2	Product Quality	Product Quality	Modern (POSITIVE)	Positive Impact: it's very important	Mix of both sides	Purpose of technology	Product quality is the top priority
P3	Product Quality	Product Quality	Modern (POSITIVE)	Positive Impact: it's very important	No opinion	No opinion	No opinion
P4	Product Quality	Product Quality	Modern (POSITIVE)	Positive Impact: it's very important	Comment to P5 opinion	Cost Production & Product Quality	Product quality is the top priority
P5	Product Quality	Product Quality	Modern (POSITIVE)	Negative Impact: Distrust to technology	Understandable	Product Quality is still priority	Product quality is the top priority
P6	Product Quality	Product Quality	Modern (POSITIVE)	Positive Impact: it's very important	No opinion	No opinion	No opinion
P7	Product Quality	Product Quality	Modern (POSITIVE)	Positive Impact: it's very important	Understandable	Product design & Creativity still priority	Product quality is the top priority
P8	Product Quality	Product Quality	Effective & Helpful (POSITIVE)	Dependent Impact: if the technology works well it will be good	No opinion	No opinion	No opinion

### SQ: Physical Quality

Participants	General Factors Influence SQ: Physical Quality	Physical Store Factors Influencing SQ: Physical Quality	Physical Store Characteristics Reflected in SQ: Physical Quality	Physical Store Effect on SQ: Physical Quality	Opinion on Interview Findings	Important factor	Additional insight
P1	No physical factor identified	No physical factor identified	No physical characteristics identified	No impact: No influence on attraction to the store	Agree	Individual desire	Individual desire
P2	No physical factor identified	No physical factor identified	No physical characteristics identified	No impact: No influence on attraction to the store	Agree	Individual desire	Individual desire
P3	No physical factor identified	No physical factor identified	No physical characteristics identified	Negative Impact: Distrust	No opinion	No opinion	No opinion
P4	Product Factor: Design	Product Factor: Design	Modern (POSITIVE)	Dependent impact: if the technology works well it will be good	Agree	Physical & digital presence is important	Physical & digital presence is important
P5	No physical factor identified	No physical factor identified	No physical characteristics identified	No impact: No influence on attraction to the store	Agree	Especially about personal space	Especially about personal space
P6	Product Factor: Design	Product Factor: Design	Modern (POSITIVE)	Positive Impact: it's very important	Agree	Especially about personal space	Especially about personal space
P7	Product Factor: Creativity (design)	Product Factor: Creativity (design)	No physical characteristics identified	No impact: No influence on attraction to the store	No opinion	No opinion	No opinion
P8	Product Factor: Design	Product Factor: Design	No physical characteristics identified	Dependent impact: if the technology works well it will be good	Agree	UI/UX design still the main attraction	UI/UX design still the main attraction

### SQ: Staff Behavior

Participants	General Factors Influence SQ: Staff Behavior	Physical Store Factors Influencing SQ: Staff Behavior	Physical Store Characteristics Reflected in SQ: Staff Behavior	Physical Store Effect on SQ: Staff Behavior	Opinion on Interview Findings	Important factor	Additional insight
P1	No general factor identified	No physical factor identified	Enhance Shopping experience (POSITIVE)	Positive Impact: it's very important	Make sense but not agree with the negative impact	Lazy attitude is not important	Lazy attitude is not important
P2	Individual Factor: Staff attitude High Impact	No physical factor identified	No physical characteristics identified	No impact: No influence on shopping experience	No opinion	No opinion	No opinion
P3	Individual Factor: Staff attitude High Impact	No physical factor identified	No physical characteristics identified	Low impact: Low influence on shopping experience	Understandable	The problem is the person not the technology	The problem is the person not the technology
P4	No general factor identified	No physical factor identified	Enhance Shopping experience (POSITIVE)	Positive Impact: it's very important	Understandable	The key is staff training	The key is staff training
P5	No general factor identified	No physical factor identified	Enhance Shopping experience (POSITIVE)	Positive Impact: it's very important	Agree with P1 opinion	Lazy attitude is not important	Lazy attitude is not important
P6	No general factor identified	No physical factor identified	Enhance Shopping experience (POSITIVE)	Positive Impact: it's very important	No opinion	No opinion	No opinion
P7	Individual Factor: Staff attitude High Impact	No physical factor identified	No physical characteristics identified	Low impact: Low influence on shopping experience	No opinion	No opinion	No opinion
P8	No general factor identified	Only Factor: Staff attitude High Impact	Enhance Shopping experience (POSITIVE)	Dependent impact: if the technology works well it will be good	Can see both side	Can see both side	Can see both side

### Ideal Self Congruence

Participants	General Factors Influence Ideal Self Congruence	Physical Store Factors Influencing Ideal Self Congruence	Physical Store Characteristics Reflected in Ideal Self Congruence	Physical Store Effect on Ideal Self Congruence	Opinion on Interview Findings	Important factor	Additional insight
P1	No general factor identified	No physical factor identified	Enhance Shopping experience (POSITIVE)	Low impact: Low influence on self congruence	Make sense but not agree with the negative impact	Other factors (products) are more important	No opinion
P2	No general factor identified	No physical factor identified	Enhance Shopping experience (POSITIVE)	Low impact: Low influence on self congruence	Understandable	Other factors (products) are more important	Other factors (products) are more important
P3	No general factor identified	No physical factor identified	No physical characteristics identified	No impact: No influence on self congruence	Make sense but not agree with the negative impact	Other factors (products) are more important	Tightly connected to personal priority in a person
P4	No general factor identified	No physical factor identified	No physical characteristics identified	No impact: No influence on self congruence	Make sense but not agree with the negative impact	No a must, Other factors (products) are more important	No a must, Other factors (products) are more important
P5	No general factor identified	No physical factor identified	Enhance Shopping experience (POSITIVE)	No impact: No influence on self congruence	No opinion	Other factors (products) are more important	Other factors (products) are more important
P6	No general factor identified	No physical factor identified	No physical characteristics identified	No impact: No influence on self congruence	No opinion	Other factors (products) are more important	Other factors (products) are more important
P7	No general factor identified	No physical factor identified	No physical characteristics identified	No impact: No influence on self congruence	No opinion	Other factors (products) are more important	Other factors (products) are more important

### Lifestyle Congruence

Participants	General Factors Influence Lifestyle Congruence	Physical Store Factors Influencing Lifestyle Congruence	Physical Store Characteristics Reflected in Lifestyle Congruence	Physical Store Effect on Lifestyle Congruence	Opinion on Interview Findings	Important factor	Additional insight
P1	Efficient shopping experience are valued	Efficient shopping experience are valued	Quick, no waiting time (POSITIVE)	Positive Impact: Fits into lifestyle	Understandable	Convenience is important in shopping	Convenience is important in shopping
P2	Efficient shopping experience are valued	Efficient shopping experience are valued	Quick, no waiting time (POSITIVE)	Positive Impact: Fits into lifestyle	No opinion	No opinion	No opinion
P3	Efficient shopping experience are valued	Efficient shopping experience are valued	Quick, no waiting time (POSITIVE)	No impact: it's not influenced by shopping staff	No opinion	No opinion	Mobile shopping is more convenient
P4	Efficient shopping experience are valued	Efficient shopping experience are valued	Quick, no waiting time (POSITIVE)	Positive Impact: Fits into lifestyle	Understandable	Convenience is important in shopping	Convenience is important in shopping
P5	Efficient shopping experience are valued	Efficient shopping experience are valued	Quick, no waiting time (POSITIVE)	Positive Impact: Fits into lifestyle	Understandable	Convenience is important in shopping	Convenience is important in shopping
P6	No general factor identified	No physical factor identified	No physical characteristics identified	Low impact: Low influence on shopping experience	Understandable	Convenience is important in shopping	Convenience is important in shopping
P7	Lifestyle congruence depends on the product	Lifestyle congruence depends on the product	Quick, no waiting time (POSITIVE)	Low Impact: Depends on product	Understandable	Convenience is important in shopping	Convenience is important in shopping

### Brand Identification

Participants	General Factors Influence Brand Identification	Physical Store Factors Influencing Brand Identification	Physical Store Characteristics Reflected in Brand Identification	Physical Store Effect on Brand Identification	Opinion on Interview Findings	Important factor	Additional insight
P1	Products	Products	Better Progression (POSITIVE)	Low impact: Low influence on brand identification with brand	Disagree	Price	Actors do not align with consumer insights
P2	Sustainability and Ethics	Sustainability and Ethics	Better Progression (POSITIVE)	Low impact: Low influence on brand identification with brand	Disagree	Price	No opinion
P3	Sustainability and Ethics	Sustainability and Ethics	No physical characteristics identified	No impact: Identification influenced by other factors	No opinion	No opinion	People do not necessarily align with shopping
P4	Price	Price	No physical characteristics identified	No impact: Identification influenced by other factors	Disagree	Social Pressure	People do not necessarily align with shopping
P5	Products	Products	No physical characteristics identified	No impact: Identification influenced by other factors	Disagree	Variety of technology	Technology is important in shopping
P6	Social Pressure	Social Pressure	No physical characteristics identified	No impact: Identification influenced by other factors	No opinion	No opinion	People do not necessarily align with shopping
P7	Sustainability and Ethics	Sustainability and Ethics	No physical characteristics identified	No impact: Identification influenced by other factors	Disagree	No opinion	Technology is important in shopping