DESIGN DYNAMICS

Navigating the new Complex Landscape of Omnichannel Fashion Retail

edited by Valeria M. Iannilli, Alessandra Spagnoli

D.I. FrancoAngeli
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Introduction

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The fashion industry is venturing into the emerging global competitive market by enhancing various stages that prioritise design, creativity, sustainability, and technological advancement as key factors while simultaneously reimagining its business models. The rise of pervasive connectivity, intuitive interfaces, and novel interaction channels have spurred innovation in fashion retail, influencing customer behaviour and expectations.

The conventional retail system has transformed into an interconnected omnichannel system, characterised by the proliferation of physical and virtual channels and touchpoints, ultimately adopting a more fluid and integrated approach. The optimisation of operations, seamless integration, and alignment with customer expectations are strategic objectives driving the sector's evolution, with technology serving as a valuable and indispensable facilitator of improvement measures within the retail system.

In this context, design plays a crucial role as it has the ability to give meaning to the production and distribution system, which comprises mainly intangible elements. Design-driven innovation represents an incremental form of innovation, which introduces an intricate network of meanings into the market, not limited to tangible objects alone but also encompassing discourses, expressions, narratives, visual imagery, symbols, metaphors, and spaces. The design interprets and embraces the representations of a society and its cultural imagery and generates new ones through tangible and intangible innovation processes.

This book is positioned within this context and aims to investigate the multiple facets of the retail experience in fashion read from the perspective of the design discipline. The main objective is to frame the retail evolution in a context of increasing complexification of processes, networks, and interconnections both from a theoretical and applied point of view and to focus on the role of retail design, the new skills required and the valuable tools to apply them in contexts that are highly multidisciplinary by nature.

The volume is divided into two parts. The first part theoretically frames the context within which omnichannel retail is grafted, its roots and evolution trajectories, focusing on the impacts of technological transformation and analysing some exemplary cases. The second part focuses on the discipline of retail design in the omnichannel context, its interdisciplinary and rapidly changing nature, the conceptualisation of design processes in a contemporary omnichannel context, and the tools useful to promote innovation.

Within the first part, the theoretical overview is framed.

The first chapter aims to trace the retail system's evolution within the transformation of the consumption system and define the main milestones of this evolution from retail space as a point of permanence to omnichannel. This evolution is framed within contemporary change's main milestones: from technology pervasiveness to dematerialisation, from apparent antinomy deterritorialisation/new local rootedness, and responsible-driven innovation.

The second chapter explores the fashion industry's omnichannel system, emphasising the customer experience's centrality. The concept of customer experience is systematised, and its evolution is read through the lens of different disciplinary domains. The interaction between the different channels and touchpoints that shape the retail ecosystem are explored and interpreted in light of emerging omnichannel retail models in fashion, such as technology-enhanced and augmented spaces, retail platforms supporting multiple interactions between consumer communities, and the integration of artificial intelligence-based systems.

The third chapter, adopting a technical and performative perspective, focuses on the role and impact of new technologies in omnichannel retail and how they redefine the relationships between

customers, sales assistants, and retail management. Starting from categorising technologies according to the responses they can provide – practical and utilitarian or idealistic and entertaining – an operational and experiential reading is proposed to show how a proper data strategy now influences all these experiences.

The fourth chapter discusses a selection of cases of omnichannel retail in the fashion industry to identify and explore some of the most significant and promising contemporary trajectories. In particular, it will present cases demonstrating the opportunities offered by the hybrid experience, between physical and digital, for digital-born consumption models; the impacts of hyperconnection and the integration of multiple touchpoints within the consumer experience; the role of social platforms and virtual communities in the new customer journey.

Within the second part, the omnichannel retail design process is analysed.

The fifth chapter focuses on the transformation of retail design, highlighting its connection with the other disciplines converging in the sector. The different disciplinary domains have multiplied and hybridised, revealing a necessary demand for the sharing and harmonising of objectives, processes, and tools.

In the sixth chapter, a reflection on the gaps that, in the context of retail design, leave room for constructing a new interdisciplinary omnichannel retail design process is undertaken. In this regard, a map is presented that relates the different phases of the retail design process with the tools and actors involved, specifically highlighting how and when tools are used to favour interdisciplinary work.

Finally, the last chapter presents a Design-led Operational Model for Retail Design within multidisciplinary environments integrating creative, strategic, and technical skills. The chapter also presents the experimentation undertaken within three pilot cases applying the model in educational contexts and the results obtained.

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1. Fashion Retail (R)evolution in a Solid and Liquid Experience

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1.1 Introduction

The retail industry is an interpreter of the epochal transformations that characterise the landscape of late modernity (or liquid modernity), where the intensification of the transits of people, objects, images, and narratives feed the new cultural (Tomlinson, 2001), meaning (Krippendorff, 2011, 1997, 1989; Kleinaltenkamp et al., 2012) and business contexts (Holbrook & Hirschman, 1982). A landscape that is embodied in a complex system characterised by planetary processes of interdependence and defined by now indissoluble links between knowledge and technology, culture and economy, geo-politics and geo-economics (Luttwak, 1999).

The various paradigms of fluidity (Bauman, 1998, 2000, 2005; Appadurai et al. 1996; Appadurai, 2013) as well as the "liquefaction" of traditional instances ("frontier", "nation" or "foreigner"), as well as their resemantisation ("identity", "community", "society") (Simonigh, 2019) lead back to hybridisations and syncretism belonging to plural and fragmented cultural systems. Culture becomes *mediaculture*, a field of «experimentation with media languages, where economy and culture, art and consumption, communication and marketing, fashion and design meet» (Fiorani, 2006, p. 43).

The socio-anthropological perspective observes that globalisation has resulted in a state of "complex connectivity" (Tomlinson, 2001). This state is characterised by the constant and rapid growth in interconnections and interdependencies of social life, the simultaneous

reduction of physical and virtual distances, and the tendency towards the creation of a unified global reference system.

Concurrently, the darker aspects of globalisation and the risk of "*La pensée unique*" (Ramonet, 2000) are emerging: the intertwining of power and forms of dominion, new forms of poverty, exploitation, and homogenisation (Beck, 1999, 2001) as well as the emergence of dominant international economic-technological hierarchies. Globalisation manifests in various aspects that do not proceed at the same pace. The economic, financial, and technological aspects of globalisation surpass that of environmental rights and responsibilities (Gonçal Mayos, 2022).

With the identification of the end of the legitimising capacities of the great ideologies and the loss of effectiveness of the homogenising values of the "commodity", we begin to witness a proliferation of consumer attitudes, also favoured by the development of the internet in the early 1990s and, of digital media thereafter, which rather than deriving from the degeneration of modernity, result from the acquisition of some of its achievements.

In the new knowledge economy (Rullani, 1992, 2004a, 2004b), of flows (Appadurai, 1996) and sharing (Nielsen, 2018; Netter et al., 2019; Perren & Kozinets, 2018), social changes are considered as prominent features (Badot & Cova, 1992; Brown, 1993; Cova & Svanfeldt, 1992; Firat & Venkatesh, 1993; Firat et al., 1995; Hirschman & Holbrook, 1992). Furthermore, in postmodern communities (Maffesoli, 1993), complex and apparently contradictory attitudes emerge. On the one hand, new forms of individualism and fragmentation (Lipovetsky, 1983, 1987, 1990), and on the other, forms of social recomposition in the constant search for social connections, which are more fluid and more related to social micro groups (Bauman, 1992; Maffesoli, 1988, 1990, 1992, 1993) and tribes (Cova, 1997).

The development of Web 2.0 enables and fosters a dense tangle of relationships, between people, between people and things and, again, between people and companies. Tribal marketing (Cova, 2003), which presents itself as a Mediterranean alternative to classical Anglo-Saxon marketing, focuses on the consumption behaviour of the new *tribes.* The new *tribes* are a collection of individuals with very different socio-demographic characteristics, but linked by the same subjectivity,

passion, and experience; they are capable of intensely experienced through ephemeral collective actions, all in a strongly ritualised context. They often coincide with the emerging virtual communities, which meet on the new digital platforms. They are not groups united by commercial or business interests, but a community of experts who manifest an interpretation of consumption as an actual *productive* and *creative* activity (Parmiggiani, 2008). Through a symbolic re-appropriation of objects (Miller, 1995) and with the attitude of the "silent producer" (De Certeau, 1980) they are ready to experiment and contribute to the "invention of the everyday" (*ibidem*).

In tribal marketing, intimacy with the customer comes through the company's involvement in the tribe: by supporting and participating in its rituals, the company becomes a full member. Consumption choices become a sharing of values and range across various scenarios, offering not only goods and services but also involvement in functions, activities, responsibilities, and experiences anchored to a more ethical dimension of consumption. The role of consumers changes, so do the role of companies and, consequently, the scenarios that inform retail design. Beginning with the construction of the brand experience – which remains as a strong element of continuity with the recent past – fashion retail companies seem to implement continuous innovation processes driven predominantly by technology and the need to define systems of offering meaning (Norman & Verganti, 2014; Verganti, 2008; Krippendorff, 1989), also investigating the research domain of design and services (MacInnis, 2011).

This changed contemporary condition poses new challenges and, while recognising a central role in design, calls for a profound reflection on an intra-, inter-, and multidisciplinary level. The new paradigm of digital transformation leads to the need to re-invent products and processes, but above all, to find adequate tools for dialogue and sharing with the other knowledge domains involved.

1.2 Retail as an Evolving Organism

Retail companies are the result of an evolutionary process linked to the combination of social, economic and cultural changes and new

technological scenarios and their potential. In the same way, the retail project revolves around the relationship between the consumer and the meaning of goods (Celaschi & Deserti, 2007). This interaction is further solidified by the emergence of the new digital paradigms.

The retail system exhibits an asymmetrical influence from technological, managerial, cultural and consumer sub-systems, with each acting as an exclusive element for the others. A certain dynamic equilibrium is acknowledged amidst this imperfect systemic integration. According to Bateson (1979), this *relational redundancy* enables the natural tautologies of the system to surface, which overcomes "crisis" moments by adopting a new organisation with an increased level of complexity. *Tension* and *inadequacy* thus trigger change. In the new project, permanence and continuity re-establish a certain equilibrium in which «innovation lies in the ability to decontextualise and recontextualise, that is, to transfer concepts, objects, formal details, attributing to them new functions, new meanings, or, simply, it's already the shift of context that produces semantic leaps» (Penati, 2018, p.80). The new is nourished by numerous references to the existing, which it clings to transcend.

The scope of contemporary changes is returning to a retail context characterised by spaces, times and relationships that were previously unimaginable. New business models are penetrating physical spaces, complemented by technology and digital and virtual spaces. These are the new e-commerce spaces, the phygital spaces, the emerging virtual spaces and, once again, the new ephemeral stores.

The design perspective of Late modernity is to overcome hierarchies in favour of networks and then flows. In an omnichannel context, where the explosion of business-to-consumer touchpoints is held together by narrative processes in which the brand acts as a collector of meanings, values, and experiences (Aaker, 2003), purchasing activities take place along networks leading from physical to virtual and vice versa. Designers are called upon to define projects where technology is key to creating an integrated and holistic experience across channels (Blazquez, 2014; Piotrowicz & Cuthbertson, 2014).

Classical industrial culture envisaged a transparent and uniform technological world. However, the reality of today's world is that it is

complex and no longer follows a linear and deterministic order. Instead, it prioritises managing complexity as a qualitative parameter. The study of emerging physical, virtual, and phygital forms that facilitate movement from fixed and absolute spatiotemporal arrangements to adaptable, reversible, and indefinite systems necessitates interdisciplinary expertise as an operational tool for creating viable scenarios that validate multiple pathways. Non-linear paths, singular, specific, particular, local adventures, in short, accepting a multidimensional way of thinking characterised by dialogical rationality, by *that play between clarity and obscurity that is complexity* (Morin, 1985).

At the level of design, we are witnessing the convergence of fields of knowledge that, for a long time, have been independent of each other due to the barriers of their respective disciplines. An expansive and boundless new world is evolving, encompassing physical, virtual, and human elements. It cannot be constrained to a single perspective where each discipline contributes their part. It is a context in which the increase in complexity of design calls for a knowledge model that is increasingly the result of a collective and cumulative collaborative enterprise (Bocchi & Ceruti, 2006).

Design for Retail today «faces the problem of learning to learn: a change in the way we learn; a change in the nature of our questions» (Ceruti & Bocchi, 2006, p. 24). It is no longer enough to find the best design answer to a specific question but to search for the constellation of admissible ways to create new and different meanings to questions that may not yet be expressed but which are the expression of new values, identities, and meanings. The reading of complexity signals the need to carry out continuous reconstructions of what appear to be the grounds for the identification of values and new methodologies for the analysis of needs. These are forms of hybridisation and contamination between the old and the new that are used to describe innovative processes as a skillful operation of dismantling and reassembling of components, functions, principles, and formal details dispersed in multiple artefacts: it is the idea of bricolage (Ceruti, 1995, in Penati, 2018). The immediate result is the recognition of a more flexible project form, which unequivocally indicates the necessity to depart from rigid and predetermined routes. This environment

promotes experimentation and error as qualitative measurements when implementing the innovations in formats and distribution concepts inherent in the processes of new media convergence, value co-creation, and dematerialisation of products, services, and spaces.

In recent years, there has been an increase in temporary retail forms, with pop-up stores being the most advanced. These are ephemeral spaces (Boustani, 2019) in which the short stay allows for highly experimental and disruptive solutions. Here, the designer takes a transversal view, capable of giving a framework of meaning to the company's offer system for the consumer (responding to specific behaviours, needs and desires), for the retail system (regarding functional, communicative, technological, sensory and relational characteristics) and the company (strategic, value and positioning). The designer's role in the current landscape encompasses more than just constructing an aesthetic-formal plan; it also involves designing the relationships and meanings between retail companies and consumers who are increasingly navigating digital, sustainable, and service-oriented transformation.

1.3 Retail (R)evolution: The Solid Experience

Over the past two decades, the transformation of retail environments has been the outward manifestation of the significant shifts that underpin emerging economic policies. The current global competitive environment presents several factors, such as the opening up of new markets, advancements in technology (particularly the Internet), socio-demographic and socio-economic shifts, and the interchangeability of goods and services. These factors have significantly impacted the structural development of the retail sector.

In addition, the centrality assumed by consumption over the past two decades and its recognition as a relevant variable in the definition of identities and the construction of social and gender relations has given retail a privileged vantage point for understanding phenomena related to the transformation of contemporary society.

In the late 1990s, the point of sale definitively transformed its original logistical function (Donovan & Rossiter, 1982; Babin et al.,

1994; Schmitt, 1999; Codeluppi, 2001, 2000) to transform itself into a *relational platform* (Pellegrini, 2001). Starting from the pioneering article by Holbrook & Hirschman (1982), the experiential view is contrasted with the information processing view, highlighting how consumption processes are now more oriented towards the symbolic, hedonistic, and aesthetic nature of economic exchange (Resciniti, 2004). The industry's strategic policies are profoundly influenced by the evolving dynamics of retailing policies (Cuomo & Cecconi, 2005). The point of sale, more and more an emotional and experiential space (Csikszentmihalyi & Csikszentmihalyi, 1988; Schmitt, 1999; Pine e Gilmore,1999; Norman, 2004), increasingly assumes a central role in enhancing the supply system, not only as an emerging channel for communication and relations with the end customer, but also as the only channel in which economic exchange actually takes place.

These facts lead industrial companies to rethink the way they manage their relations with commercial intermediaries by seeking collaboration with them and investing in trade marketing or through downstream integration processes (vertical branding). These actions translate into heavy investments for the opening of mono-brand shops and franchising chains (De Cosmo, 2010).

The various contributions developed in recent years on the subject of retailing are all in agreement in recognising the *experiential dimension* as the phenomenon which has led most towards significant and disruptive transformations. A dimension, which as far as we are concerned, has returned a considerable number of disruptive retail spaces, and harbingers of the advent of a new, more experimental, strategic, and anticipatory design context.

The new fashion stores move in national and international markets, being the new best practices investigated by the different domains of knowledge, which in a certain way are interested in the phenomena of consumption, from marketing to branding, from sociology to anthropology, as well as from interior design to communication and service design. These are spaces that have been characterised by a strong aesthetic value, but above all by that ability to bring together culture, sensoriality, emotions and service, and that still today, form the backdrop, by continuity or emulation, to the most contemporary retail solutions.

The new *concept stores*, which began to appear in the late 1990s, represent what Codeluppi (2007) has defined as "the spatial dimension of the brand"; the place in which the brand finds full expression, but above all the space in which to create those emotional, narrative and experiential relationships (Holbrook & Hirschman, 1982; Schmitt, 1989). The construction of experiences that lead back to "possible worlds" (Eco, 1979); cultural and narrative constructs (Semprini, 1996) which can only be realised in interaction with the final recipients «The brand does not build its possible world alone. It is the consumers who, subscribing to the imaginary construction erected by the brand, attribute "a real" existence to the world» (ivi, p. 141). The concept of "relational brand" (Degon 1998; Manaresi 1999b) oriented to the definition of a "social imaginary" (Maffesoli, 1996) is born. The brand is no longer a "simulacrum" (Baudrillard, 1994) but something extremely concrete which «seems to transform itself into an object, taking on certain characteristics of the elements of the world» (Colombo, 1990 in Codeluppi, 2000, p. 3).

In this direction, Prada inaugurated, over twenty years ago, a completely new trend commissioned by Studio OMA, under the direction of architect Rem Koolhaas, a study on the evolution of the shopping world for the elaboration of a new shop concept. The work materialised in the strategy of so-called "Epicentres" and the opening of the first one in SoHo New York in 2001, in the former site of the Guggenheim Museum. The SoHo shop is conceived as a changing theatre that captures the experimental spirit of the place and puts fashion in the spotlight as one of the most authentic forms of expression of our time (Iannilli, 2014). «The Epicentre functions as a conceptual window: a means of disseminating future directions, positively charging as many typical shops as possible» (Rock, 2009, p. 421).

For scholars of consumption behaviour, experiences are personal events with an important emotional significance capable of inducing significant transformations in individuals (Arnould et al., 2002). But, again, they are contexts in which the rational/functional and emotional/hedonistic components coexist and influence each other (ibidem). Similarly, the concept of experience has become a key

element in reading the evolution of consumer behaviour (Addis & Holbrook, 2001).

In this sense, consumption activities have been defined as: "Construction of meanings" (McCracken, 1990), "Symbolic reappropriation of objects" (Wilk, 1995), "Form of production and creative appropriation", which transforms consumers into "bricoleurs" (De Certeau, 1980; Paltrinieri & Parmiggiani, 2008).

The new retail spaces are diffused in the new urban platforms of postmodernity and oriented to privilege the dynamics of relationships and the logic of flow. Retail policies guide fashion through new relational and meaning processes and, at the same time, introduce new design languages capable of innovating not only the form-function but above all the form-meaning.

1.4 Retail (R)evolution: The Liquid Experience

If the experiential dimension is the thread capable of framing the evolution of retail since the 1990s, the emergence of liquid consumption (Bardhi & Eckhardt, 2017), which manifests itself in the growing supply of ephemeral forms of consumption based on access (Rifkin, 2000) and dematerialisation of products and services (Fabris, 2003; Pena & Brito, 2020), challenges traditional forms of consumption and simultaneously returns a new landscape in which liquid and solid forms alternate in new daily routines. From streaming services such as Spotify, HBO, and Netflix to fashion rental services (Battle et al., 2018; Pedersen & Netter, 2015), we observe how consumption and related retail offerings become increasingly fluctuating, nomadic, and prone to change; new retail systems increasingly respond to post-commercial (Qualizza, 2006), servitisation-oriented dynamics (Sansone et al., 2018).

The space for consumers, a place for selling but also a field of knowledge for other meanings, shifts its designing phase (and before that even its conceptualisation) towards the simultaneity of denser values which, however, are also more inconsistent, towards new contexts of rational (but also sensitive) realisations, towards material (but also immaterial) forms. This shift in focus to qualitative aspects,

opening up to a multiplicity of potential directions and the radical indeterminism that characterises the fashion product and the way its meanings are channelled, gives rise to different retail concepts and formats, which today move between the solid and the liquid, spaces driven by technology that enhances experiential and relational processes.

The liquid experience is thus favoured by the rapid diffusion of new technologies such as smartphones, apps, social networks and the growing importance of in-store technological solutions create new opportunities and challenges for retailers and a new field of design experimentation. The customer experience is optimised through the synergic management of channels and technologies, favouring design processes capable of organising, narrating, and objectifying the offer system.

Fashion retail innovation is driven by the emergence of ubiquitous connectivity, more user-friendly interfaces, and new channels for interaction (Alexander & Blazquez Cano, 2020; Alexander & Kent, 2020; Grewal et al., 2017; Lemon & Verhoef, 2016); at the same time, these developments have an impact on consumer behaviour and expectations (Hagberg et al., 2016; Mende & Noble, 2019). In order to provide a smooth consumer experience, new channels and linkages between them develop into complex omnichannel networks (Piotrowicz & Cuthbertson, 2014; Savastiano et al., 2019). These networks are assisted by the influence of mobile and the function of social media. Customers move quickly across all the various touchpoints (online, mobile, and physical) within a single transactional process and a unified narrative experience (Rosenblum & Kilcourse, 2013).

The new omnichannel architecture encourages design experimentation with new formats and retail concepts (Alexander & Kent, 2020; Alexander & Blazquez Cano, 2020), which undermines the integrity of traditional channels (Cakir et al., 2021; Grewal et al., 2017; Verhoef et al., 2015). A new multidimensional ecosystem where the connections and interactions between many knowledge fields are the building blocks for creating novel and unheard-of client experiences.

Digitisation has strategic solid and meaningful spillovers on the physical shop. The new physical store augmented by technology becomes "phygital" (Mikheev et al., 2023; Iannilli & Spagnoli, 2021): a store capable of integrating technology with the in-store experience and generating and managing information, relationships, desires, and aspirations and transforming them in real-time into Big Data (Silva et al., 2020; Pantano et al., 2019). Analysing consumer shopping behavioural data can help improve shop management and design to improve consumer engagement and experience.

In this context, the fashion sector has tended to be more engaged with consumer-facing technologies (Bonetti et al., 2018; Souiden & Ladhari, 2019), favouring the proliferation of channels and touchpoints in which users can actively participate in processes of "co-creation of value" (Prahalad & Ramaswamy 2004a, 2004b) and promoting "cooperative investment" (Che & Hausch, 1999) with consumers (Lusch & Vargo, 2006; Vargo & Lusch, 2004) to a scenario informed by "consumer agencies" (Arnould & Thompson, 2005).

The digital transformation is closely related to many other transformations that have affected the broader social, cultural, and technological context in the last twenty years. Nowadays, «people work at home, live in offices, trade-in homes, study in factories, make museums in gasometers» (Branzi, 2004, p. 7). Digital technologies, social media, and the expansion of the Internet of Things (IoT) dominate daily routines and generate new forms of sociality.

This is a panorama in which technology allows new contaminations, hybridisations, and negotiations. Fashion retail and the digital ecosystem find common ground to create disruptive scenarios between physical and virtual realities. New media, increasingly integrated with sales activities, have transformed the way brands interact with consumers and vice versa.

The new communities, both virtual and physical, assume the creative act as a tool that enables them to co-participation the actions of the enterprise. The new smart consumers demand quality; this means transparency, traceability, and accountability throughout the value chain (Dawid et al., 2017). From the flagship store to the pop-up store and through e-commerce and new social media, the element of cohesion is increasingly entrusted to the construction of an

experiential and narrative capable of conveying, within the social context, an extensive network of meanings and stories that feed the everyday life of new atmospheres and rituals.

Digital technologies, social media, and the expansion of the IoT dominate daily routines and return new forms of complexity (Rosa, 2013).

Local and global integrate into the network and initiate critical processes of hybridisation and contamination through new and more complex forms of industrial, socio-cultural and media integration. Good-Dominant Logic gives way to Service-Dominant Logic (Merz & Vargo, 2009); services are recognised as success factors in production and consumption processes and become the basis for the development of experience design.

In this system of quasi-equilibrium, between local and global, where there is no opposition but coexistence (Serres, 1980), the cultural and economic scenario activated by the new digital networks enables small businesses, individuals, and micro-productions to enter a market that was previously inaccessible to them.

Technology is intertwined with the elements of tradition and objects lose their symbolic function in favour of a more experiential and sensorial interpretation. They are sensitive and relational connections where emerging technologies are not merely a tool, but semiotic-technical devices (Foucault, 1976): that is, encoded sets of ideas, ideologies and representations, which influence and transform social behaviours and identity construction processes; «Technologies in this sense are experiential mediators: they co-create routines and daily actions, they modify the relationships between individuals, with objects, space, time and bodies, helping to produce new subjectivities» (Barone & Barbati, 2020, p. 104).

Network technology allows traceability, transparency, and authenticity (Reinartz et al., 2019). The concrete, measurable and tangible space of the built city welcomes and integrates the new scenarios in the city augmented by digital technologies and global processes; virtual relationships take place between existing surfaces and, at the same time, create new ones.

The contemporary city «feeds and lives in two spatial spaces, different and in some respects contradictory, that physical-territorial

person of life and proximity interactions and the supra-local, virtual or topological one of the paths and networks» (Fiorani, 2005, p. 46). The contemporary trend towards "nomadic identity" (Bardhi et al., 2012; Appadurai, 1990; M. Maffesoli, 1999) and the emergence of "portable borders" (Romano, 2004) feed the dimension of transnational and interregional mobility. This hypermobility (Urry, 2000) does not exclusively concern the physical "displacement" of people, but the active role that these assume within the social processes of functioning and change in the territorial contexts they pass through. Thus, the rituals of daily life, of the social communities (physical and virtual), of the territories and processes connected to consumption practices.

We are witnessing the dematerialisation of physical and concrete places, tools, and methodologies traditionally correlated to retail processes. The new technology expands the space, favours, and triggers complex relational processes. The canonical places in charge of shopping explode outwards, overcoming the boundaries of measurable space to face the system of a-spatial and a-temporal networks, not "located". Shopping activity a widespread activity, which moves from the virtual world to the physical one in an increasingly infinitesimal time-space.

Postmodernity gives us back what Eleonora Fiorani defines as the realm of "*dappertuttità*" / "to be everywhere" (Fiorani, 2006); the centre is everywhere and nowhere. Linear time, characterised by a first and an after is replaced by a multidimensional conception, as a real duration, not of a mathematical type, but as a continuous flow (Bergson, 1900). Collaboration, sharing, and self-organisation of consumption communities through forums, social media, blogs, workshops or co-creation activities, but, again, the new accessible networks bring they bring tacit, contextual and daily practice knowledge closer to entrepreneurial knowledge.

An open system that looks at the open-source of the instrument knowledge necessary for open innovation (Chesbrough, 2003, 2012).

If the previous evolution of retail had been characterised by a complex of phenomena, which referred to the discovery of the experiential, sensorial and emotional dimension, but always strongly connected to the physical, real space and to predominantly "solid" forms of consumption, today we observe a clear shift towards the more

virtual forms of relationship and transformation of the retail experience.

A new context in which forms of liquid consumption emerge, not in contradiction to the previous solid consumption, but in consistency; «Liquid consumption represents a novel concept in consumer behaviour necessary to understand the types of consumption-related phenomena surrounding the digital, access-based practices, and global mobility» (Bardhi & Eckhardt, 2017, p. 582).

In conclusion, we observe how the transformation of contemporary retail is connected to at least five variables.

PERVASIVE TECHNOLOGY. The emergence of pervasive connectivity, more intuitive interfaces and new interaction channels are changing the fashion retail landscape. The proliferation of channels and touchpoints (Halvorsrud et al., 2016) affects the customers' behaviour and companies' business models. Many retailers have started to develop omnichannel strategies by adding new channels to interact with customers. The focus now is understanding how shoppers are influenced by new technologies and how they switch across channels during their research and buying process. At the same time, we observe a convergence between traditional and digital platforms that enables media consumers to interact quickly and efficiently (Jenkins, 2006; Jensen, 2010). People can view the same multimedia content from different devices. After oral and written culture, new cultural artefacts are emerging with new communication technologies. The digital visual culture is changing, and the new visual culture is emphasised in new social media. New cultural practices spread and create further negotiations between real and artificial experiences, relationships, and value systems in a context where «Instagram is a window into people's thoughts and imagination» (Manovich, 2015) and artificial intelligence (AI) reshaping the retail industry (Shankar et al., 2021).

DE-TERRITORIALISATION. According to Appadurai (1996), globalisation involves increasing deterritorialisation of global flows; globalisation creates hybrid and trans-local cultural forms. Deterritorialisation takes place when flows of people, technologies, information, money, and ideas cross geographical territories: people today live temporarily, work in a different place from their origin, and

probably stay there for a short time; they work during the day, but also at night, and can cross multiple time zones on the same day. The time of their "private life" is mixed with the one most public and often shared. The virtual, the smart and the immaterial transformation find their place in the existing territories and, at the same time, create new ones. It is the new tech landscape where startups hubs dominate the scene (sin) and help reshape the economy. Consequently, "portable boundaries" are emerging (Geerling & Lundeberg, 2014). Multiple identities are allowed; people are now free to express and consume various identities according to the different touchpoints. Companies using brands provide a frame of meaning through a seamless brand experience.

DE-MATERIALISATION. The process of digitalisation is resulting in dematerialisation (Magaudda, 2011), which is accompanied by a shift in attitudes towards tangible items, experiences, and activities. From a sociocultural point of view, the emergence of greater awareness and commitment to more sustainable practices make consumers more reflective and critical of their own consumption habits. The growing interest in the metaverse, non-fungible tokens, the rapid development of augmented reality (AR) and virtual reality (VR) technology, and the increasing presence of major fashion brands in the gaming field (Schauman et al., 2023), show new contexts in which fashion creates value.

If, in modernity, the centrality of product performance is centred on concepts of use-value and sign-products (Baudrillard, 1968; 1970), in late modernity, sign-products become a recognised form of language, an autonomous system with its own rules and conventions. Goods are part of the narrative: «Goods cannot escape the domination of meaning» (Codeluppi, 1989, p. 91); they are a crucial mediator between the individual, their behaviour, and their relationships with others. If, as Fabris observes, postmodernity is «the least materialistic society that has ever existed» (2003, p. 67), the dematerialisation of products, services, and experiences highlights how the exchange in the marketplace now involves not only «images, signs, messages» (ibid, p. 68) but also relations, cooperations and stories. A new context in which the possession of things is less and less of a necessary variable. In a context of dematerialised and ephemeral consumption that is

based on access (Bardhi & Eckhardt, 2017), technology has transformed consumption and the consumer experience; products are being transformed into digital information (Lehdonvirta, 2012; Magaudda, 2011). A new scenario is emerging where experiences, products, and even individuals are dematerialising. The concept of the "experience" that people encounter in their everyday lives implies a process of dematerialisation, as interactions are increasingly occurring on social networks, smartphones, and in mobile applications.

Humans are also disappearing, being replaced by efficient chatbots and robots. Smart machines can increase our cognitive strengths, interact with customers and colleagues to free us up for higher-level tasks, and embody human skills to expand our physical capabilities (Wilson & Daugherty, 2018). Starbucks employs cutting edge solutions using robotics and artificial intelligence, placing some robots at the point of sale and embarking on innovative experiments in the relationship between product, service and user.

CONSCIOUSNESS. Since the 1990s, the elaboration of an alternative development concept has given rise to significant phenomena. Among these, *green consumerism* stands out, acknowledging the intricate interplay between physical and social structures as essential and interdependent elements for the attainment of a novel production project. In recent years, the principles of *critical consumption* and similar forms have led to the notion of a world where a more equitable distribution of global wealth can be guaranteed. Consumption becomes critical, supportive, smart, ethical, and ultimately sustainable. The younger generations make more careful choices, guided by a commitment to sustainability.

Retailing is analysed from social, environmental, political and economic sustainability, starting from its physical impact on the territory, the sources of energy used, and the materials used in fixtures and packaging. With the circular economy at the forefront, the retail industry is now tasked to illustrate its role. In recent times, new business models have started to emerge to rethink retail, with some recent studies highlighting the potential of servitisation in the fashion retail sector (Sansone et al., 2018), exploring a new system that can offer benefits by enhancing the clothing offer with services such as customisation, repairs and alterations (Larsson et al., 2019).

DESIGN-DRIVEN INNOVATION. Design is given a strategic role for its ability to bring meaning to the production system, which today shows its most immaterial side. The theme of "sense construction", in the design-driven innovation perspective, captures relevant aspects concerning the continued innovation that design faces today, particularly concerning the discursive practices in which the designer engages with final consumers. The retail space becomes a suitable place to capture the diversity and complexity of the discursive practices that the company is able to activate through advanced-design-driven. The design is the relational connector with the plurality of communicative surfaces with which the company faces the market, defining the identity and the strategy forms. Consumer choices are increasingly dependent on understanding and sharing values not necessarily as material products but as sign-products (Hesmondhalgh, 2008). Design-driven innovation leads to a level of meaning, as perceived by the public, which is comparable to or greater than the level of functionality/performance. Design, therefore, shows an exciting development in the interpretation that considers knowledge and practice within a context, thus turning the technical design solution into a problem of industrial production (Celaschi & Deserti, 2007) and is part of a broader cultural project. Retail design is the discipline which has mostly reinterpreted the boundaries of its practice, transforming the lines of separation in the specifications of the interaction platforms. Within these areas, we can define the design of coordination and integration of different disciplinary outcomes as a "space-zip", which identifies a cultural field conducive to innovation. In these scenarios, designers have indeed always tried to learn and understand using mainly the technical language of their disciplines and probably, by their cultural and historical preparation based on doing projects, have taken on the role of interpreters of the uneven contributions of the different expert knowledge by peers in their working group. In this sense, the designer can be considered as a kind of synthesizer of the design group. Therefore, the digital revolution is rapidly redesigning competitive standards and increasing opportunities. The new approach is based on the interconnection of the components involved in producing companies' competitive value and a strong integration between production activities and services.

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2. Framing Fashion Omnichannel Retail: Theoretical Concepts and Emerging Integrated Models

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2.1 Introduction

Nowadays, in a context of accelerated digitalisation and consumer mindset transformation, omnichannel retailing represents the theoretical and applicative grounding within which the whole system of relationships and co-creation of value between brand and consumer, between consumer and products/services and among consumers themselves is grafted (Hajdas et al., 2022; Verhoef et al., 2015).

On the one hand, new digital channels (social media and web platforms, from traditional online channels to the metaverse) empowered by advanced technologies that impact both digital channels and physical spaces (AR/VR, advanced 3D modelling technologies, AI, etc.) have rapidly entered the distribution system profoundly affecting processes and operations and multiplying the touchpoints that connect consumers with products/services in an experiential and relational continuum (Shankar et al., 2021). On the other hand, consumers themselves – so-called "omnichannel consumers" (Aiolfi & Sabbadin, 2019) – show an approach to consumption strongly influenced by phenomena of continuous connection, rapidity of fruition and synchronous use of multiple channels and devices with related impacts on the ways through which they encounter goods, services, and experiences.

The purchasing path, traditionally conceptualised in the three phases of pre-purchase, purchase, and post-purchase (Lemon &

Verhoef, 2016), is today far from being a linear and uniform path that, from the recognition of a need, passing through research and consideration, arrives at the actual purchase' choice and finally to a post-purchase involvement. Instead, it is configured as a path that, in its processuality, involves multiple channels and touchpoints that pass from the physical dimension of the store to the online or mobile dimension without interruption: the journey is fragmented into multiple moments – distributed in space and time – thanks to which the consumer comes into contact not only with the product itself but also, and above all, with the value and symbolic system of the good, with the system of services connected to it, with a network of consumers, more or less extensive, able to provide information, suggestions, and further content. Consumers today – significantly younger generations such as Millennials and Gen Z (Cattapan & Pongsakornrungsilp, 2022; Chaudhary et al., 2021; Popa et al., 2019) – use multiple devices at the same time, mix the stages of the purchase journey by creating unexpected combinations, make purchase experiences without hierarchies between channels. If, for example, a customer can start the search for a product on a social media platform, at the same time, he/she can search for information and compare it with other products on aggregation platforms to conclude the purchase process on the e-commerce directly operated by the brand. Similarly, in a physical store, the same customer can pick up goods previously ordered online, access a personalised selection of products based on his/her purchasing preferences, and simultaneously access information on new product launches accessible to the community of loyal customers. This phenomenon is particularly relevant within the fashion industry (Lorenzo-Romero et al., 2020), an industry whose nature is brand-centric, within which the material value of the product is indivisible from the symbolic and cultural dimension, and in which the customer's decision course is strongly influenced by factors such as emotional attachment and personal values (Theng So et al., 2013). The fashion industry has also embraced technological and digital transformation at all levels – from design to manufacturing, from communication to distribution – and promoted new emerging business models that are driving new and more evolved consumption patterns

(Jin & Shin, 2020), confirming itself as one of the most promising, and complex, sectors within the omnichannel scenario.

Following a brief overview of the retail model transformation that has taken place over the last two decades – from multi- to omnichannel –, the chapter focuses on the peculiarities and dynamics of the omnichannel retail system, specifically in the fashion industry, highlighting the centrality of the customer experience and the relevance of the consumer-centric approach. Furthermore, evidence such as the consolidation of new spaces "augmented" by technology, the emergence of retail platforms capable of connecting services and content and strengthening the community, and the impacts of advanced technologies such as artificial intelligence in retail provide the background to frame the interrelations between channels, touchpoints, and experiences that today concur in shaping the retail ecosystem.

2.2 Channel Diverse Integration: From Multi- To Omnichannel Retail

Over the past two decades, the evolution of retail from multichannel to cross-channel and finally to omnichannel (Verhoef et al., 2015) has been driven by two main drivers of change – a combination of technological advances and changing consumer behaviour – and the ever-present need for retailers to remain competitive in a rapidly changing landscape (Brynjolfsson et al., 2013). This evolution has represented a profound transformation of the retail landscape, and each stage of this transformation has depicted a distinct approach characterised by unique features and the challenges it brings to both retailers and consumers. In this context, the evolution of retail channels in the fashion industry has followed a similar trajectory as retail in general, but with unique attributes and industry-specific challenges.

The advent of the Internet and the subsequent transition to the digital dimension has amplified the spread of multichannel retail (Levy & Weitz, 2009), with retailers acknowledging the need to adapt to changing consumer behaviour expanding their reach by establishing

an online presence alongside physical shops. Neslin et al. (2006) are among the first to address the topic of multichannel retailing, defining it as a strategic approach retailers use to distribute and sell their products through multiple distinct channels. Alongside physical stores, traditionally constituting the transactional and experiential backbone of the consumption process, the first e-commerce stores began to appear; mobile became a central element within each type of interaction established between and with consumers; and a multiplication of channels – not necessarily directly tied to the purchasing action, such as, for example, social media – consolidated, which increases and complexifies the opportunities for contact between the products' system and the end customer. However, at this stage, the lack of integration between channels, which, on the one hand, the retailer cannot control, and, on the other hand, the consumer cannot activate, is the main characteristic of multichannel retailing (Beck & Rygl, 2015; Levy & Weitz, 2009). Within this perspective of separate channel management, retailers face difficulties in managing a seamless purchase decision-making process due to organisational structure constraints and complexities related to the ability to understand, measure, and thus manage consumer behaviour (Zhang et al., 2010).

Recognising the need for a more seamless shopping experience, retailers first embarked on cross-channel and later more properly omnichannel approaches. The cross-channel approach is a first step towards creating a cohesive and interconnected retail ecosystem to bridge the gap between physical and digital channels, emphasising consistent branding and synchronisation of inventory, pricing, and promotional strategies. In contrast to multichannel retailing, cross-channel retailing allows for partial customer interactions or partial integration control between channels at any given time (Beck & Rygl, 2015), thus creating "bridges" that allow consumers new possibilities for movement, interaction, and connection.

Therefore, the gradual and rapid evolution sees the consolidation of omnichannel retail today. The model is characterised by a continuous, customer-centric approach that transcends single channels – both in its front-end aspects of interaction with the end customer and its back-end aspects of interconnection of processes and flows of data and

goods – and represents today the distribution framework within which retailers operate and consumers experience. Within this perspective, a more customer-focused approach, and hence the customer experience, becomes even more relevant the more complex, non-linear, and potentially fragmented the purchase path becomes (Verhoef et al., 2009; Zhang et al., 2010).

2.3 Omnichannel Retail: Integration, Interaction, and a Consumer-Centric Approach

In today's digital age, customers have unprecedented access to a wide range of channels – broadly understood as the entire range of media for communication and interaction between the company and its customers – distributed between so-called "traditional" channels (physical shops, online websites and catalogues), mobile channels (mobile devices, branded applications and connected objects), social media and various other customer touchpoints (such as, for example, the events system, customer service and, more recently, the metaverse). This fragmentation and breakdown of the places within which the encounter between the individuals and products potentially takes place represents the context within which fashion brands have progressively begun to convey new paths, occasions, and moments to amplify, enhance and distribute the shopping experience: new digital platforms on the one hand, social media on the other and finally specific technological integrations for mobile or integrated in-store are recognised as the elements of greatest vitality and experimentation within the retail environment. Many fashion brands, in recent years, have, for example, added mobile apps to their directly operated e-commerce. These apps are increasingly refined and complete, capable of offering their customers highly personalised, immersive content and simultaneously complementing the online and physical experience. Gucci, one of the early pioneers in the experimentation of digital commerce and communication, has enriched its mobile app with several innovative features, such as augmented reality for its virtual try-on customers and other initiatives more related to branding such as narrative mini-games and a themed podcast (Silva et al., 2020),

thus consolidating the app as a tool that allows the user to «enjoy an engaging and innovative shopping experience» (Vannucci & Pantano, 2021, p. 2126). Also, in the mobile commerce field, several apps have been developed to meet the demand for efficiency and speed through combining digital and physical shopping experiences and integrating back-end processes such as inventory and shop management. In this regard, Zara's app allows for streamlining in-store flows thanks to systems for booking fitting rooms, checking available stock, locating products, and managing the virtual queue for completing the purchase (Friend et al., 2021). Regarding the enhancement of the experience within a narrative dimension, more focused on the stories surrounding the products than on the finalisation of the purchase, Chanel has long been scaling up Farfetch's technology in selected stores: fitting rooms equipped with RFID sensors read the labels of the products selected by the customer allowing high-tech mirrors to display information about the items, videos and photographs of the fashion shows, and styling suggestions (Deeny, 2020). Similarly, the recently announced partnership between LVMH Japan and SoftBank is expected to extend the in-store VR experience by enabling its customers to connect and communicate virtually and in real-time with artisans in their laboratories, thus exploring production processes (Berg et al., 2022).

This limited number of examples illustrates in a partial but clarifying manner the vitality and some of the evolving trajectories of fashion retail in a context of progressive and still ongoing channel pluralisation. The range of potentialities offered in terms of greater possibilities for consumers to connect to goods, services, narratives and, more generally, to the brands themselves is the actual and applicative context within which the contemporary discourse on omnichannel is grafted. Indeed, a distinctive element of omnichannel is the ability of a company to offer a comprehensive range of distribution channels and fully control their seamless integration by dissolving the conventional boundaries between these channels (Beck & Rygl, 2015). This dissolution of channel boundaries – sought after and applied by companies despite encountering implementation difficulties (Hajdas et al., 2022) – has radically changed the retail landscape, allowing customers to switch effortlessly between various channels and touchpoints. Compared to the previous multichannel

approach, omnichannel retail introduces a significant change in the way channels interact: it is not just adding more channels but making them interchangeable and seamless, allowing consumers to move effortlessly between them (Verhoef et al., 2015) while maintaining a consistent, coherent and simultaneous experience (Grewal et al., 2017; Picot-Coupey et al., 2016; Stein & Ramaseshan, 2016).

Hickman et al. (2020) identify four factors influencing an omnichannel experience: *brand familiarity*, *customisation*, *perceived value*, and *technology readiness*. All four of these factors are read and interpreted from a consumer-centric perspective, as factors that belong either to the internal and personal dimension of the consumer (e.g., technology readiness) or to the relational dimension of the consumer with the brand or with the system of channels and touchpoints made available during the consumer experience (e.g., customisation and perceived value). Technology readiness and customisation are particularly relevant as they are closely linked to what are considered to be the dominant drivers, or key factors, that have stimulated brands and retailers to develop an omnichannel strategy in the fashion sector (Aiolfi & Sabbadin, 2019): the *demand for omnichannel consumption*, a dimension that involves the individual dimension of the consumer and his new ways of approaching the purchase path; and *technological development*, in turn connected to the growth of online channels and the power of mobile. The convergence of these concepts, which, on the one hand, are considered as drivers for the development of omnichannel strategies and, conversely, are recognised as factors positively influencing and impacting the omnichannel experience, demonstrates their close correlation within an evolutionary innovation process that today requires new skills, tools and approaches to be harnessed and steered.

The nature of these factors also helps to highlight the distinctive feature of the omnichannel approach, namely the adoption of an inherently customer-centric perspective (Yrjölä et al., 2018). The concept of customer-centricity is closely related to the acknowledged role of the consumer as an endogenous element in value creation (Prahalad & Ramaswamy, 2004; Ramaswamy, 2011) and thus linked to the process of value co-creation that emerges from the integration of customer and business resources (Vargo & Lusch, 2008). A

customer-centric approach prompts retailers to focus both on how customers can realise value (economic, functional, emotional, and symbolic) at various stages of their consumption journey and on the ways through which value can be assessed for customers within the whole complex and intersecting co-creation process (Yrjölä et al., 2018). Adopting a consumer-centric perspective thus means recognising the centrality of the customer experience (CX), now embedded in a mature omnichannel environment consisting of a complex and intertwined system of physical, digital, and mixed channels. Likewise, adopting this perspective requires not only to understand and orchestrate the interaction between channels and brands (Neslin et al., 2014) but also to adopt new approaches to design the connections between channels, touchpoints and new technologies considering their impact on both the customer journey and the experiential value that could be created (Hoyer et al., 2020).

2.4 Customer Experience Centrality within the Omnichannel Environment

Customer experience in retail is a complex and multifaceted concept that has progressively grown in interest in academic, business, and professional spheres. Early theorisations on the experience concept recognised the symbolic, hedonic, and aesthetic nature (Hirschman & Holbrook, 1982) of the act of consumption. Adopting a holistic approach allows us to consider the consumer experience as a result of processes involving the consumer at different levels, as a multidimensional response to stimuli that incorporates the customer's cognitive, affective, emotional, social and physical responses to their interactions with a retailer or brand (Verhoef et al., 2009). This holistic perspective highlights the deeply individual nature of the customer experience, emphasising that each customer's experience is unique and personal (Gentile et al., 2007).

Furthermore, customer experience is a subjective and internalised response that customers form during direct or indirect company engagement (Schwager & Meyer, 2007). These experiences are not shaped exclusively by elements under the retailer's control, such as

the service interface, shop atmosphere, product assortment and pricing strategy. They are also influenced by external factors, including other customers' presence and behaviour and the purchase path's underlying objective (Verhoef et al., 2009).

A key aspect of customer experience is its processual nature, which encompasses the entire customer journey, from the initial information search and product selection to the purchase, consumption, and post-sales stages (Lemon & Verhoef, 2016). This aspect is particularly relevant in the contemporary context where the consumption experience occurs on multiple and highly distributed spatial and temporal levels. On the one hand, individuals today have at their disposal a plurality of opportunities to meet brands and companies, fragmented within the canonical physical places of consumption and a myriad of digital touchpoints that compose the infrastructure of virtual and connected identities. On the other hand, the temporality of these contacts is far from being channelled into independent silos – the time of work, entertainment, consumption, etc. – but intersects all the different moments of people's lives.

The customer experience concept has been widely addressed in the scientific literature (Becker & Jaakkola, 2020; Homburg et al., 2017; Jain et al., 2017). However, it is fragmented across various disciplinary frameworks and theoretical foundations, and this complexity and fragmentation increases as customer experience is considered within a context of complete convergence of physical and digital dimensions.

Two main research traditions emerge from customer experience studies that start from different theoretical assumptions and look at customer experience as a process responding to different stimuli (Becker & Jaakkola, 2020). On the one hand, experience is a *response to stimuli that brands can control* and deploy to guide consumer behaviour. In this sense, the approach is positivist and managerial and envisages an almost direct correlation between the stimulus promoted and the consumer's response. The overall aim of this tradition is to explore how companies can shape customer experience by strategically managing these different stimuli, often focusing on those touch points that are under their control: customer experience is built from the brand's ability to deliver sensory, emotional, cognitive,

behavioural and relational values (Schmitt, 1999), through the offering of memorable experiences (Pine & Gilmore, 1999), or the tangible and intangible characteristics related to the service offer (Grove & Fisk, 1992), or is a response to the integrated and holistic set of factors under the retailer's control (from the social environment to the service interface, from the store atmosphere to the assortment and price) (Grewal et al., 2009; Verhoef et al., 2009).

On the other hand, experience is considered broader and more complex as a *response to consumption processes*. This perspective recognises that customer experience is not limited to interactions between company and customer but is deeply embedded in the customer's life world. It can be influenced by various actors such as other companies, customers, stakeholders, and other factors such as norms, rules, and social structures (Akaka et al., 2015; Chandler & Lusch, 2015). All elements that are not under the company's direct control and that highlight the relevance of broader social and contextual factors, returning more systemically and holistically to the complexity of the contemporary dimension. Consumption is, in this case, recognised as personal and subjective, driven by hedonistic and utilitarian motivations (Addis & Holbrook, 2001; Hirschman & Holbrook, 1982), and experiences are co-created and emerge from consumer involvement as value-in-use within a holistic system of services (Vargo & Lusch, 2004).

Embracing both perspectives, retail design acknowledges that it cannot wholly control the occurrence of customer experiences but can try to create and manage its contexts (Petermans et al., 2013). However, the increased, sometimes simultaneous, presence of channels and touchpoints makes this process highly complex.

In such a scenario that places the customer experience at the forefront, how to manage and improve the experience across channels and interactions with customers is a priority and goes through the management of the customer journey. The term customer journey refers to the procedural and experiential aspects of purchasing processes – including interactions with communication systems, product presentation and display, connection to services and customer management systems – as seen from the customer's perspective (Følstad & Kvale, 2018). Managing the customer journey means being

able to visualise, and as far as possible govern, the interactions that the consumer has along his/her journey, with all those perceivable elements – a website landing page, a product configurator, a chatbox, etc. – that offer a potential encounter (Richardson, 2010), or touchpoint. Touchpoint management, within the customer experience, is central nowadays for two reasons. On the one hand, it represents the most precise and meaningful level within which the consumer experience can be manifested. Contrary to channels, broadly understood as the media through which this interaction happens, touchpoints represent a punctual moment of this interaction occurring through a specific interface (Barann et al., 2022). On the other hand, the multiplication of channels has resulted in an accelerated increase of touchpoints: they are highly impacted by technological evolution, constantly evolving and are the primary element of interest today to promote effective and meaningful omnichannel retail experiences.

Figure 2.1 represents a conceptualisation of the connections linking channels – properly distribution channels but more generally communication and customer service channels – and technology-enhanced touchpoints. The selection of touchpoints resulted from the systematisation of different research which, in recent years, have tried to assess the diffusion of in-store technology (Alexander & Kent, 2021, 2022; Pantano & Vannucci, 2019), and focused on how in-store technology touchpoints can impact the customer journey (Grewal et al., 2020) and the consumer engagement (Siregar & Kent, 2019). Subsequently, the systematisation was supplemented with touchpoints' mappings in e-commerce and mobile (Ieva & Ziliani, 2018; Wagner et al., 2020), and supra-categories were identified ("virtual mirrors" includes, for example, interactive mirrors, smart mirrors integrated with IoT systems, AR-enhanced smart mirrors, etc.). The conceptualisation, necessarily not exhaustive in visualising the totality of touchpoints and their connections with channels, conveys the complexity of the contemporary scenario: channels and touchpoints are variously intertwined, the customer is offered potentially infinite paths, and, in the effort to create fluid, immersive or personalised experiences, interaction and consistency become central to the creation of the experience.

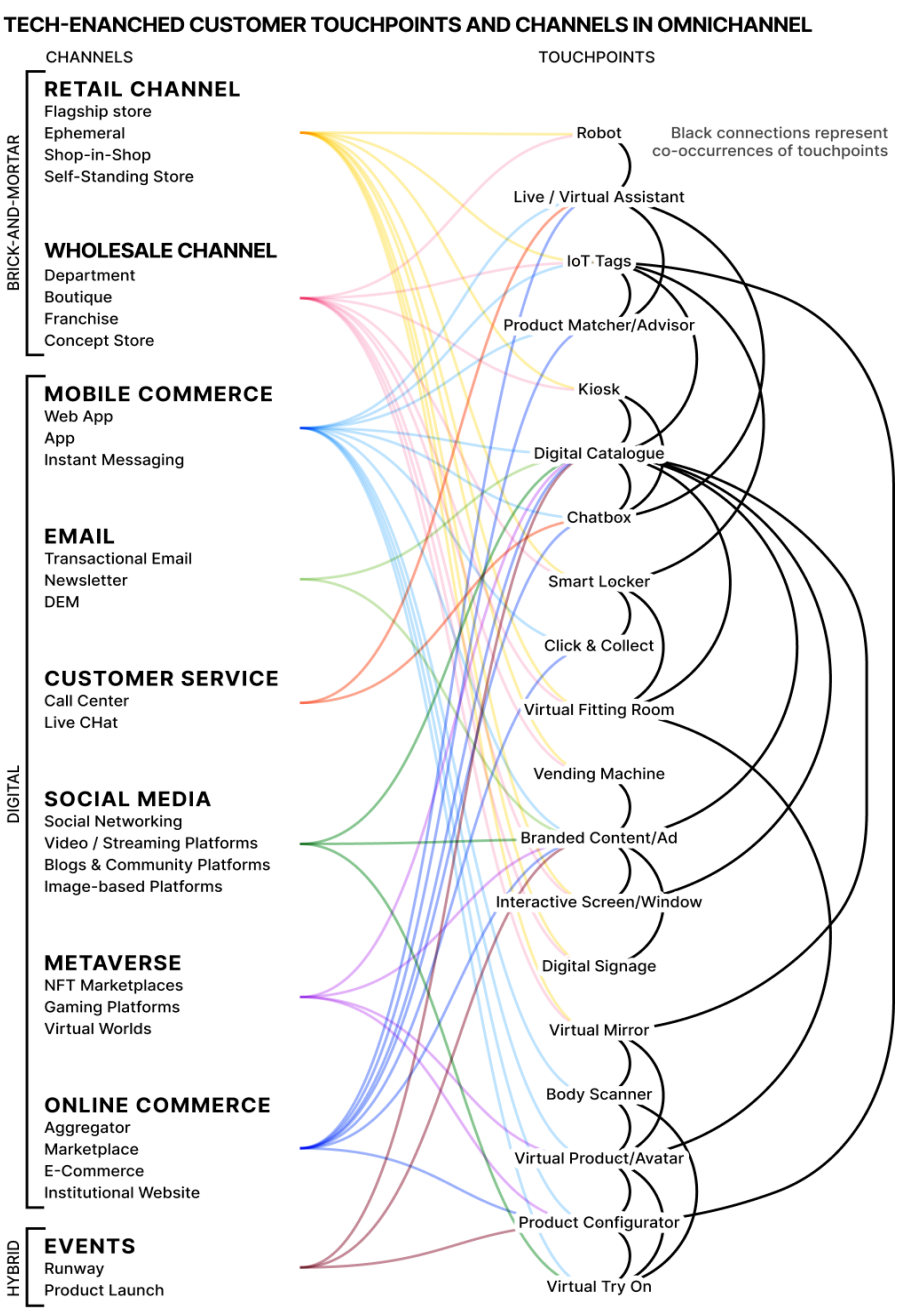

Fig. 2.1 Representation of channels and touchpoints' distribution and connections in the fashion omnichannel retail context (authors' elaboration).

2.5 The Future Challenges of Fashion Omnichannel Retail: Augmented Spaces, Retail Platforms, and AI-integration

Despite the complexities that emerge in adopting fully effective and integrated omnichannel strategies, it is possible to read some development trajectories that, starting from some excellent cases and first experiments, outline a possible and positive path for fashion brands in the near future. A first trajectory sees the consolidation of the so-called "augmented space". Despite the proliferation of online distribution channels, the physical space remains central: the space is equipped with new and powerful technological tools that shape engaging and emotional retail environments and a holistic customer experience (Alexander & Kent, 2022). A second trajectory is recognised in the emerging fashion retail platform model, which provides consumers with an increasingly broad content, service, and community-based interaction platform, thereby extending the brand experience (Wichmann et al., 2022b; Briedis et al., 2021). Finally, the third trajectory sees the adoption of Artificial Intelligence and Machine Learning to analyse, guide and build personalised, scalable, and consistent purchase paths, significantly impacting the entire fashion industry chain, from trend forecasting to design, from manufacturing to sales (Silvestri, 2020).

2.5.1 "Augmented" Retail: Technology-Enhanced Spaces

"Augmented" retail refers here to the tendency to equip stores with in-store technology by integrating the physical dimension of consumption with experiential modes that consumers are familiar with online. The "augmentation" of the physical dimension of the store translates into the integration, exhibited or mimicked within the customer experience, of different types of technologies that aim to enhance the customer experience, create connections between the in-store journey and other journeys provided by other digital channels, and make this connection more fluid and effective. Several studies have focused on mapping the in-store technologies adopted by brands in recent years, highlighting which technologies are the most

widespread and implemented and tracing their managerial implications (Alexander & Kent, 2021, 2022), discussing their impact and implications on each stage of the purchase path (pre-transaction, transaction and post-transaction) (Hoyer et al., 2020), or identifying innovation scenarios in the area of retail design (Iannilli & Spagnoli, 2021). Alexander & Kent (2022) propose two different models conceptualising the connection between customer experience and in-store technology: a "technology-induced customer experience in-store" model that differentiates technologies about the type of customer experience, whether utilitarian-oriented (driven by factors such as speed, convenience and efficiency) or hedonistic (driven by factors such as entertainment, play and immersion); and a "technology-enabled customer shopping journey in-store" model that connects technology with each stage of the customer journey. Both models aim to give retailers a more accurate picture of consumers' technology use preferences and guide them in selecting which technologies to adopt. Other studies attempt a classification of technologies about their role and function within stores (Pantano & Vannucci, 2019). These classifications require constant updating due to the high speed of technological innovation and the level of uptake and application by companies.

IoT systems, virtual mirrors and virtual fitting rooms, and Augmented Reality (AR), Virtual Reality (VR), and Mixed Reality (MR) have been integrated into fashion retailing, thus enabling different consumer experiences. IoT has enabled fashion retailers to create smarter and more personalised shopping experiences. RFID tags, for instance, are used to track inventory in real-time, ensuring accurate stock levels and preventing out-of-stock situations. Smart mirrors equipped with IoT sensors have been introduced in recent years, enabling customers to interact with products digitally and providing retailers with relevant consumer behaviour and preferences data. Many brands, including Adidas and Rebecca Minkoff, have stores equipped with smart mirrors that recognise the products customers bring into the fitting rooms, displaying complementary items and offering customisation options through touchscreen interfaces (Brown, 2019; McDowell, 2023). Fashion retailers are also increasingly embracing AR, VR and MR to engage customers in

immersive experiences. While AR applications are mainly used to allow customers to try on products virtually, VR brings consumers into virtual environments within which brand identity is transferred. Zara, for example, introduced an AR fashion styling function in selected shops in this scope. From scanning QR codes on clothing tags, customers can see the garment worn on a virtual avatar, match different outfits and receive personalised advice by integrating physical in-store shopping with its online implementation (De Klerk, 2018). Finally, systems capable of integrating features typical of online commerce – such as immediacy, speed, and access to a product portfolio independent of store sourcing – complement the physical retail space. Among the most comprehensive examples in this area, capable of concentrating and fully exploiting stores for the delivery of highly targeted services to the customer, Nordstrom Local hubs offer a full range of possibilities: click and collect, drop off returns and order online – together with alterations and styling – serve the consumer's needs and allow him/her to tailor a satisfying experience.

2.5.2 Retail Platform: Multiple Interactions Supported by Retail Ecosystems

The shift towards fashion retail platforms is part of a broader pattern that sees the emergence of business ecosystem models, networks of companies and actors that bring to the market innovative sets of interconnected services through which users can satisfy a range of cross-sectoral needs in a single integrated experience (Hariharan Joshi et al., 2021; Kandiah & Gossain, 1998). The fashion retail platform model appears as a specific declination of these ecosystems, precisely termed "brand flagship platforms" as «product-brand-owned digital platforms that mediate versatile interactions between participants within the brand-related category space» (Wichmann et al., 2022b, p. 112). This typology of platforms extends the boundaries, activities, and purposes of brand sales channels by offering vast opportunities to cocreate value through interactions that go beyond commercial activities (Ramaswamy & Ozcan, 2018) by including the delivery of content (informational, recreational, educational) or

services (product- or community-oriented). As omnichannel management broadens the focus from customer-channel interactions to customer-brand interactions across channels, branding becomes a top management priority for retailers, and the brand experience becomes central to understanding customers' relationship with omnichannel retailers (Frasquet-Deltoro et al., 2021).

An emblematic example of this strategic evolution, which hybridises the potential of omnichannel with community building through offering multiple interactions, is Nike. The sportswear giant leverages its Run Club and Training Club platforms, orchestrated around athletics, to foster consumer engagement, creating deep and long-lasting connections. Beyond the simple presentation and offering of footwear and apparel collections, these apps serve as a gateway to tangible, interactive experiences that have become an integral part of the daily lives of a community that is as expansive as it is cohesive. The Training Club app offers personalised workouts and comprehensive fitness programmes, further cementing Nike's presence in the daily routines of its users. However, the brand's efforts go beyond the athletic aspect, as it uses these platforms to curate a complex and holistic experience: Nike organises events, offers expert guidance, unveils exclusive products, provides motivational music playlists, and extends personalised training programmes. In addition, these digital platforms allow consumers to engage in creative processes by consuming or generating content and products. In the case of the Run Club, users are encouraged to inspire others within the community. This is facilitated by sharing music playlists and workout videos, which individuals can contribute to the platform for others to integrate into their fitness routines. These service systems foster and nurture a positive loop characterised by two interconnected processes: consumer crowdsourcing, which derives value from the different player actors participating in the platform (such as other consumers, the brand itself or third-party companies), and consumer crowdsending, which in turn provides value, in terms of content and services, to the participants of the platform (Wichmann et al., 2022a). Nike is one of many brands that are exploiting this transformation potential. Other fashion brands are adopting platformisation strategies and adapting them to their specificities. Lululemon, an activewear

brand, has successfully built a brand platform centred on the core brand principles of mindfulness and well-being. Lululemon's mobile application allows customers to shop, access workout content and stay in touch with the brand. In addition, the connected loyalty programme, called Lululemon Collective, offers various services to members, including early access to new collections and events. The strength of the brand's platform lies in its ability to connect the digital dimension with the store's physical dimension, where yoga and fitness classes are open to the public, customised styling and fit sessions, and other community events and workshops, such as meditation sessions, nutrition lectures or run clubs, are hosted in a structured manner. These initiatives satisfy various health and wellness interests, creating a diverse and engaged community around the brand.

2.5.3 AI-led Retail: Enhanced-Customer Experience Interactions and Operations

The term AI is used to indicate a group of digital technologies that have the potential to fundamentally change all aspects of society (Makridakis, 2017), including retail systems and the consumer sector, more generally. AI is not an entirely new issue (Nilsson, 1998), but today, we are witnessing a speeding up of the production and application of increasingly complex and high-performance AI systems, which allow more natural interaction with digital channels and touchpoints (Cortinas et al., 2021). AI, having the ability to learn and solve new problems in an ever-changing environment, has at its base a continuous data collection (Cao, 2021) and generation of new information, hence value. Retail inherently has to deal with large amounts of data of a dual nature: data beneath the supply chain, where the flows of goods and information proceed in parallel and inextricably, and data beneath the dynamics of consumption that describe, in minute detail, the behaviour, preferences, and habits of consumers. For this reason, AI can potentially change the future in two major areas: by integrating both online and offline interactions with consumers and by supporting supply chain operations (Guha et al., 2021). The main applications of AI in retail include personalisation

and recommendation systems, sales and customer relationship management, customer service management, supply chain optimisation, inventory management and shop asset creation (Shankar et al., 2021). Among the various applications of AI, those most focused on customer engagement enable retailers to build relationships with their customers and have a significant impact on the customer journey as they enable high-level personalisation of the experience, speed-up customer service and sales support functions (Oosthuizen et al., 2020).

Virtual assistants and chatbots are AI-based systems and have become integral to customer service in recent years. Providing immediate answers to customer queries, recommending products, and personalising interactions, they are designed to help brands maintain continuous, fast, and effective contact with consumers, increasing their satisfaction and loyalty. In this regard, Zalando launched the beta version of a virtual assistant using OpenAI technology on both the website and the app in spring 2023. The chatbot allows customers to converse naturally and intuitively by obtaining suggestions relevant to their requests – describing, for instance, occasions of use and preferences – within the retailer's vast assortment (Wightman-Stone, 2023). Macy's has implemented a virtual shopping assistant in selected shops that guides customers through the shop, provides product information and facilitates mobile checkout. The adoption of this technology, in this specific case, is aimed at improving customer engagement and speeding up the shopping process. AI-based systems are used to guide and assist customers, offer personalised product recommendations, optimise inventory management, and simplify supply chain operations. Nike has implemented AI technology in major flagships, experimenting with new, highly advanced ways of selecting and customising footwear. Customers can use AI-powered foot scanning technology to obtain precise measurements and gait analysis, and based on this data, the AI system recommends the most suitable shoe models and customisation options (Cheng, 2019). AI-based systems can also optimise inventory management and simplify supply chain operations. For example, Zara, H&M and many other brands are introducing AI algorithms to predict fashion trends and optimise inventory levels. This allows brands to reduce excess

inventory and respond quickly to changing consumer demands (Hickman, 2023).

2.6 Conclusion: Barriers and Opportunities for Fashion Omnichannel Retail

Despite the imperative to pursue a fully omnichannel retail – leveraging the need for companies to remain competitive and the different strategies that companies can adopt to pursue their distinctive approach to omnichannel – the path towards this goal is far from complete and often held back by different types of barriers that slow down or make it difficult to operationalise. From a strategic point of view, the main obstacles lie in a lack of clarity of vision on the value that omnichannel can bring to brands and, at the same time, a tendency to be uncritically influenced by the rush of technological innovation (Briedis et al., 2021). For example, the tendency to prioritise "new" or flashier technologies – such as Smart Mirrors, AR/VR, or, recently, the Metaverse – collides with the need to carefully consider customer needs and how these innovations in retail can create sustainable value at scale. Focusing on consumer value rather than technology allows for long-term strategic alignment while defining which omnichannel approach is most appropriate for the company and the customer community. From a managerial perspective, other barriers have been identified as strategic, logistical, and operational (Hajdas et al., 2022). As described above, strategic barriers include the lack for a long-term vision and mainly the misalignment between the company's overall strategy and the omnichannel initiatives adopted, resulting in a dispersion of processes and resources. Logistical/organisational barriers mainly concern the difficulty in centralising systems and processes, technologies, and structures, resulting in a fragmentation of data and internal flows and difficulty achieving a consistent customer experience. Finally, barriers of an operational nature refer to the management of human resources, which is confronted with the existence of "silos" of knowledge and procedures that are still strongly compartmentalised and the lack of interdisciplinary competencies and skills.

A further relevant aspect relates to the issue of non-neutrality of technologies, especially in the case of data collection and AI implementation. Nowadays, the most popular AI-based technologies are relying on a learning process built on data that cannot, by its very nature, be "objective". These data incorporate the *biases* (prejudices, disbeliefs) of those who contributed to their collection/creation. These AI systems bring with them the risk of perpetuating these biases and, ultimately, prejudices and power imbalances already inherent in society (Sandvig et al., 2014). From this point of view, the AI-led integration in the omnichannel environment could represent a risk of worsening the customer experience. However, on the other hand, it could allow brands to start considering these aspects that will be increasingly relevant in the future.

Despite these barriers, in contemporary fashion retail, the amalgamation of technology and consumer-centric strategies fosters an age of transformation, and the three trajectories outlined above demonstrate the vitality and potential in this field.

Augmented spaces, characterised by the infusion of technology within the retail store, are promising ways to enhance the customer journey. Such spaces can increase their physical borders and integrate digital elements to break down traditional boundaries between retail channels. From a customer experience perspective, during the pre-transaction phase of the customer journey, technologies such as smart mirrors and IoT sensors enable customers to interact with the offering digitally. The transaction phase benefits from streamlined processes, such as RFID tags and mobile checkout options, ensuring efficient and frictionless transactions. Furthermore, in the post-transaction phase, augmented spaces support customer engagement by suggesting complementary items, providing style advice, and enhancing product care information. These augmented spaces multiply the touchpoints and allow the end customer to gain an enhanced experience that benefits from all the features of online and physical consumption.

At the same time, retail platforms have evolved into dynamic ecosystems, extending the customer journey beyond the boundaries of pure sales, and facilitating a system of relationships spanning time and space. These platforms offer comprehensive content, including product information, reviews, and educational resources. E-commerce

features built into these platforms facilitate direct purchases, while loyalty programmes, early access privileges and exclusive events complement the transaction phase. Beyond the point of sale, retail platforms nurture customer communities, fostering interactions, participation, and content contributions.

Complementing augmented spaces and retail platforms, AI integration is a crucial and potentially disruptive aspect of omnichannel fashion retail, revolutionising both customer experience and operational efficiency. AI's ability to analyse vast amounts of data and provide real-time insights is critical to shaping the customer journey. AI-based systems have the potential to impact the entire consumer experience cycle: proposing tailored product recommendations, providing immediate assistance and relevant information, offering post-purchase support and suggesting additional products or services. Despite these assumptions, AI's short- to medium-term impact on retail may be less pronounced and more relevantly concern back-end applications (e.g., optimised inventory and supply chain management) rather than customer-facing applications (Guha et al., 2021).

While aware of critical issues, this convergence of technology and customer-centricity overall exemplifies the evolving landscape of fashion retail, foreshadowing a future in which consumers and brands co-create value in an interconnected and meaningful fashion ecosystem.

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3. Transformative Technologies and Experiential Strategies in Contemporary Omnichannel Retail: A Comprehensive Analysis

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3.1 Introduction: The Multidimensional Perspective of Retail User Journeys

While the store and, more broadly, the contemporary distribution system is constructed around the consumer, within a customer-centric perspective aiming to intercept and delineate new trajectories towards the end user through the pervasiveness of touchpoints and the hyper-personalization of experiences, they do not represent the sole actors in the system. Contemporary retail and the increasing multidimensionality of its experiences are shaped by a user-centric perspective built around three main stakeholders: the customer itself, the sales assistant, and retail management. It is within the tension between the sometimes divergent needs of these three key actors that the major digital tools of contemporary retail take shape.

These technological tools, in fact, are designed and planned by retail businesses on the one hand to reach the end user, satisfying the continuous evolution of their needs. On the other hand, they constitute the underlying information structure of the contemporary store, contributing to the functioning of its internal processes, enhancing its external relationships, and, most importantly, articulating the procedures involving industry professionals (Levy & Weitz, 2018).

Each technological tool is invariably designed in relation to other digital and non-digital points of interaction, forming a sequence of touchpoints capable of charting countless paths to and from the user,

known as customer journeys (Savastano et al., 2019; Verhoef & Lemon, 2016). These journeys vary depending on the type of experience one intends to offer. It is precisely within the realm of the user experience that these tools assume their full significance.

Major experiences are defined based on the observation and study of user needs, and the behavioural and value transformations triggered ever more rapidly by rapid technological evolution (Rigby, 2011).

Some experiences aim to satisfy *practical and utilitarian needs* common to stakeholders and do so through process automation and operational and logistical flexibility, thereby impacting all involved actors (Alexander & Kent, 2020; Babin et al., 1994). This category includes innovative payment solutions, IoT devices, interactive in-store catalogues, and diverse order management systems (OMS). Some other experiences aim to satisfy idealistic and entertainment needs and, without excluding functional aspects, amplify the consumer experience through engagement and immersion (Babin et al., 1994; Paukstadt et al., 2019). This category includes digital and interactive screens, Augmented Reality (AR) and Virtual Reality (VR) applications, chatbox and instant messaging systems and other customer management systems.

3.2 Innovations in Payment Solutions

In the retail fashion sector, experiences that utilise automation technologies to simultaneously predict and facilitate processes aim to reduce the steps of the journey and maximise the perceived convenience for the actors involved (Verhoef & Lemon, 2016). Among these customer-facing experiences are smart payment experiences (e.g., Scan&Go, Cashierless Shopping, Self-service Check-out, Fully Automated Shopping). These innovative payment solutions offer a seamless and efficient way for customers to complete their transactions in a retail setting (Rigopoulos & Askounis, 2007).

In the case of innovative payments, what makes a difference, in addition to process speed, is the variety of payment methods supported by a retailer. This flexibility allows retailers to respond to various customer payment needs effectively. Customers may have different preferences when it comes to how they pay for their purchases, and a

retailer's ability to accommodate these preferences can enhance the overall shopping experience.

Omnichannel payment processing refers to a company's comprehensive capability to integrate multiple payment options into a single, consistent, and uninterrupted customer experience. To achieve this, advanced payment platforms, POS systems, or Payment Gateways are employed. These tools empower retailers to efficiently manage, observe, and monitor various payment methods from a single central dashboard. This centralised view of customer transactions not only streamlines the payment process but also provides valuable insights that can be used to refine sales and marketing strategies, creating a more customer-centric approach to retail (Rigopoulos & Askounis, 2007).

In this scenario, the customer's journey is complemented by applications and web pages accessible by personal devices or self-service kiosks within the store. These resources assist customers in the process of acquiring merchandise. Furthermore, sales personnel frequently participate in these procedures as facilitators, equipped with tools such as tablets, smartphones, and custom-designed card readers to create and manage orders.

Among the most common forms of payment are mobile payments, contactless NFC transactions, using platforms like Google Pay and Apple Pay, as well as traditional card-based POS machines. Additionally, there are payments via SMS or email with links to check-out, web payment portals, digital wallets, and recurring subscription systems, bringing digital business logic into physical retail (Savastano et al., 2019).

The payment phase is not the only stage of the user journey to be streamlined by technology. All phases of the purchasing process can be reduced through process automation tools: a variety of software and technologies that are designed to streamline and automate various operational processes within a retail environment. Automation tools are essential in contemporary retail, as they boost operational effectiveness, trim expenses, elevate the quality of the customer journey, and empower retailers to better respond to evolving market dynamics (Verhoef & Lemon, 2016).

3.3 The Transformative Impact of IoT and Data Integration in Retail Operations

Retail process automation technologies are based on a wide range of information sources and data types, which are used to streamline and optimise various aspects of retail operations (Brynjolfsson et al., 2017).

In the contemporary retail landscape, the acquisition of data through Internet of Things (IoT) devices has emerged as an imperative facet of store operations. The retail industry has undergone a profound transformation in response to the digital age, where the convergence of physical and digital commerce is reshaping the way retailers engage with customers, manage inventory, and optimise the shopping experience. In this context, the integration of IoT devices into the in-store environment has become indispensable, as it not only facilitates data collection but also empowers retailers with actionable insights to enhance operational efficiency and customer satisfaction (Savastano et al., 2019).

IoT sensors collect real-time data on various in-store conditions, such as temperature, humidity, and foot traffic. This data is used for environmental control, security, and optimising store layouts.

Thanks to the advent of the Internet of Things, it is now possible to integrate a new level of intelligence into any type of object in the store, whether small or large, making it connected and communicative. Retailers harness this potential to transform their retail spaces into "sentient places". Smart shelves, equipped with weight sensors, are an example of this transformation, aimed at reducing sales loss and shopper frustration due to out-of-stock items. For logistical purposes, merchandise is often accompanied by RFID tags that enable product tracking, allowing managers to know the real-time location and composition of stocks, thereby avoiding stockouts and excess inventory. However, IoT services go beyond this, particularly in terms of demand-driven inventory management. This means optimising logistics not based on a predefined stock level but ensuring that each individual store has the "right" amount of product based on demand forecasting, or, in other words, what customers truly desire.

3.4 Augmenting Customer Information Accessibility in Modern Retail Environments

IoT services collect data, which will be processed to strengthen the customer relationship or advance it as far as possible in the sales process. Today, even the initial stages of merchandise and store discovery by the customer can be entrusted to digital means. The trend of web rooming, which involves the use of websites, social media, and e-commerce in the information-gathering phase before purchase, has become increasingly prevalent (Chaffey, 2016). This phase allows customers to compare numerous alternatives and form an idea of the product before potentially visiting a physical store to make the purchase. Through these channels, customers can use filters, keywords, and sorting tools to quickly find the product they are looking for. Building on this established online behaviour, the idea of integrating digital tools to support self-service merchandise exploration within the physical store has emerged. Examples of such tools include interactive in-store catalogues in the form of kiosks, magic tables, and tablet lookbooks, which allow customers to access information about collections and products, and compare prices and features. Some brands scatter QR codes near products and on labels so that customers can scan them and access digital informational layers (Alexander & Kent, 2021). This enables customers to find the necessary information for an informed purchase and simultaneously eases the workload of sales associates.

Many retailers have recognised the importance of providing customers with information they possess, distributing useful information within the store, and making it accessible when needed. This is evident in the case of smart fitting rooms, where tablets, interactive screens, and smart mirrors are often installed, allowing customers to explore the offering. Interactive wayfinders are also used, helping customers navigate store sections more effectively.

The physical store thus becomes a sentient and communicative platform, where retailers position information according to user needs, enabling customers to interact with the presented content. Such information, in the form of text, images, and videos, is collected within back-end systems like Product Information Management (PIM) and Digital Asset Management (DAM) and is orchestrated cohesively

across online channels and physical stores through control and planning dashboards.

3.5 Diverse Order Fulfillment in Omnichannel Retail

In omnichannel strategies, the customer, as the focal point of the shopping experience, holds the power to decide when, how, and where to obtain the product. To fulfil the promise of flexibility in meeting customer logistics needs, such as offering multiple product acquisition options across various channels, companies have employed hybrid experiential patterns, supported by the integration of the physical and digital worlds facilitated by technology. Among these is "Buy Online, Pick Up In Store," also known as "Click & Collect," where the transaction occurs online, and the product is retrieved at a physical store (Song et al., 2020). During the pandemic, many retailers benefited from systems like "Curbside Pickup" to overcome space restrictions, setting up external areas for collecting online purchases.

Retailers implementing these experiences deploy technological tools for both end customers, such as applications and QR codes for order identification, and staff, such as Clienteling operational applications for order verification. Similarly, the "Buy Online, Return In Store" experience allows customers to use the physical store as a location for returning orders placed through the online channel (Song et al., 2020). In some cases, order pickup and return processes can be automated or semi-automated, with staff actions replaced by interactive kiosks or smart lockers, sometimes even robotic, enabling self-service.

Efficient order management systems (OMS) are crucial for these processes (Levy & Weitz, 2009). OMS orchestrates order distribution, indicating the fastest and most cost-effective path to move merchandise from a store, factory, or distribution centre according to the customer's preference, ideally providing real-time order status updates visible on any device.

Real-time inventory visibility, traditionally within the retailer's domain, is increasingly shared with customers, who can access product availability information, locations, and restocking times with greater ease. Many retailers refer to this 360° stock visibility as the

"Endless Aisle," a virtually endless shelf from which in-store customers can always access products, extending the spatial limitations of smaller locations. This shelf can be accessed directly from the customer's smartphone through the brand's e-commerce or dedicated applications. Alternatively, it is made accessible in-store through interactive touchscreens, from which customers can proceed to place orders. Even in cases where customers do not directly engage in these processes, stock visibility for retail staff enables practices such as "Ship From/To Store," allowing retailers to use the store's inventory to fulfil online orders or rapidly replenish store inventories from a central warehouse or a series of dispersed warehouses based on e-commerce orders. This provides customers with the ability to consistently find their desired products in-store (Hickman, 2023).

3.6 Enhancing the Retail Experience: Immersive Environments and Customer Engagement

The proliferation and consolidation of digital channels for product purchases have reshaped the role of the physical store in the customer journey (Alexander & Kent, 2021). To address changing customer buying habits, physical spaces are integrated with online operations to support e-commerce activities and enable omnichannel models. Simultaneously, they are enhanced to leverage their unique attributes as places for customer-brand relationships and interactions (Berman & Thelen, 2018). This context has given rise to experiences that cater to less practical and more idealistic customer needs, such as inspiration, knowledge, aesthetics, and entertainment (Pine & Gilmore, 1998). These experiences, while not excluding functional and operational aspects, help retailers engage with customers through involvement and dialogue. Technology, in this case, is employed for its capacity to amplify, rather than simplify, the user experience.

Immersive retail, characterised by its ability to engage customers on multiple sensory and emotional levels, has redefined the relationship between consumers and brands, offering a new dimension of engagement beyond traditional transactions (Huang et al., 2015).

Immersive environments are designed to engross the end customer in branded worlds. Some retailers employ digital screens and LED

walls to enhance the shopping space with dynamic and evolving content, while others experiment with augmented reality (AR) or virtual reality (VR) technologies, often integrated into in-store devices or accessible through smartphone applications (Silvestri, 2020). These immersive technologies provide a means to create dynamic, interactive environments that transcend the limitations of physical retail spaces. By overlaying digital information, such as product details or personalised recommendations, onto the physical world (AR) or by transporting customers to entirely virtual shopping realms (VR), retailers aim to captivate and delight consumers while offering innovative ways to explore products and make informed purchasing decisions.

In the fashion industry, these technologies allow customers to virtually try on clothing and accessories. Through AR applications, customers can see how a specific garment or accessory would look on them by overlaying digital representations onto real-life images or video feeds. This feature enhances the confidence of customers in their purchase decisions, reduces returns, and mitigates the need for physical fitting rooms.

Co-creation and customer involvement foster heightened engagement between retailers and their clientele. By inviting customers to actively participate in the ideation, design, and customisation of products, retailers establish a dynamic dialogue that transcends the transactional nature of commerce. This engagement nurtures a sense of partnership and shared value creation. In some cases, customers become protagonists in certain phases of product development, guided by store staff. Some retailers offer product configurators, both 2D and 3D, available at dedicated stations within the store for co-creating products. To support these experiences, sales personnel assume the roles of experts, consultants, and enthusiasts in their respective fields, equipped with smartphone or tablet applications to assist customers in customising their purchases. Many retailers have implemented digital training and development platforms for staff, many of which also recognise and reward employee performance.

3.7 Fostering Customer-Centric Engagement and Loyalty in Modern Retail Environments

Branded worlds enable retailers to shift from product-centric narratives to customer-centric storytelling (Ribeiro & Maués, 2023). Immersive environments allow customers to become active participants in the brand's narrative, co-creating their own experiences and personal connections. This transformation empowers customers to shape their own retail journeys, fostering a sense of agency and authenticity.

The value that customers place on human relationships, dialogue, and interaction is one reason they choose to visit physical stores. This is evident in the variety of initiatives aimed at improving and strengthening communication between customers and the brand. Some of these initiatives, particularly experimented during the pandemic, such as Remote Selling with Chat and Video, demonstrate some users' desire to "humanise the digital experience" by preferring technology that establishes a more authentic and personal relationship with brands (Shi et al., 2020). While automated communication systems like chatbots and instant messaging systems, more or less personalised, serve more autonomous users in real-time, in-store sales consultants are expected to adopt a more human and authentic approach. In this case, technological tools, such as advanced Clienteling applications, are used to amplify the natural capabilities of human capital in the store, enriching staff knowledge with content and technical details related to the offering and, especially, information gathered online.

What was once a retail space is now a meeting place, where events, workshops, and talks are planned to enhance the sense of belonging to the brand's community for customers (Huang et al., 2015). These events, which provide entertainment and insights into the brand's culture and values for customers, also offer retailers additional opportunities to observe and understand their customers. Playful approaches to the shopping experience, known as *gamification*, often increase user engagement and interactions. Designing playful interactions can give customers an extra reason to visit the physical store, especially if these interactions are rewarded or recognised. This dynamic is made possible through the use of omnichannel loyalty platforms, which record in-store actions and combine them with other

actions performed by users on digital channels. As a result, interactions in physical spaces can have effects in the digital realm, and vice versa. Some brands leverage omnichannel loyalty systems to go beyond traditional points-based rewards for purchases and also recognise and reward users for participating in events, visiting stores, and sharing on social media.

Membership programs serve as potent catalysts for cultivating customer loyalty. By offering exclusive benefits, rewards, and personalised experiences, retailers incentivise customers to return repeatedly. The allure of special privileges, such as discounts, early access to products, or customised recommendations, fosters a sense of belonging and allegiance to the brand (Nunes et al., 2006).

3.8 Strategic Customer Data Integration and Automation in Contemporary Retail Marketing

The synergy between omnichannel loyalty programs and CRM systems empowers retailers to deliver highly personalised rewards and incentives to individual customers. By leveraging CRM data, retailers can identify the most relevant incentives, whether they are discounts, exclusive offers, or tailored recommendations, thereby increasing the perceived value of loyalty program participation.

In-depth knowledge of customers, their habits, preferences, interests, and hobbies serves as the basis for increasingly targeted and engaging marketing strategies (Levy & Weitz, 2018). Integration among all communication channels involved in the sales process, including physical stores, is crucial to ensuring consistency and harmony in communications, factors highly valued by users. The integration of these channels is managed by omnichannel marketing CRM platforms, which work behind the scenes to acquire, organise, and automatically update all customer data, making it easily accessible to retailers through unique dashboards. Thanks to marketing CRM, integrated communication can occur across various channels, including chatbots, email, instant messaging platforms like WhatsApp and Facebook Messenger, and the physical store.

Today, these platforms are capable of achieving a high level of automation, significantly reducing the workload for retail operators.

In recent years, a new type of platform, the Customer Data Platform (CDP), has been introduced alongside CRM. CDPs offer the ability to collect a significant amount of customer information more automatedly. This includes basic data, as well as tracking all customer interactions and mapping the evolution of their needs and purchasing behaviours.

The practical implementation of personalisation strategies necessitates the design of a clear data strategy (Levy & Weitz, 2018). However, the majority of organisations still focus exclusively on basic data, while only a select group of retailers manages more complex data that enables a more comprehensive understanding of the customer. Within data platforms, customer data from multiple channels is integrated into a Single Customer View. After data collection, the next step is data enhancement, which involves analysing and deriving insights to plan functions that interact with customers.

Business analytics activities have become fundamental in the retail landscape, as they collect and analyse data to support strategic decision-making. The underlying technology for business analytics is artificial intelligence, which has had and will continue to have a significant impact on the retail sector. In this context, machine learning, which encompasses systems capable of continuously learning from data to enhance predictive capabilities, thereby allowing for ongoing adjustments without explicit programming, is of particular interest (Dwivedi et al., 2019). Within machine learning applications, clustering techniques appear to hold great promise for the retail world. Operationally, this means that retail companies can group their stores into clusters based on specific variables.

Artificial intelligence and machine learning can make a fundamental contribution to omnichannel strategies, from effective corporate data management to involvement of various business functions such as marketing and customer service, as well as the broader ecosystem and external partners, including suppliers, distributors, and other sales channels. Artificial intelligence and machine learning play a crucial role in enabling and optimising innovation projects aimed at improving not only the customer experience but also core business processes, such as marketing, online

and in-store commerce, human resource management, content management, and demand forecasting (Dwivedi et al., 2019).

The gradual transition into a world of increasingly connected, trackable, and integrated experiential spaces lays the foundation for "intelligent retail" (Adapa et al., 2020; Roy et al., 2017). This concept becomes increasingly relevant as it involves applying artificial intelligence throughout the entire value chain of the retail sector to enhance and optimise business decisions.

3.9 Conclusion: Technology's Impact from Customer to Sales Assistants to Retail Management

In the landscape of omnichannel retail, technology's role is poised to become increasingly significant for all stakeholders involved, thereby exerting a profound impact on the user experience (Verhoef, 2021). This transformative shift towards technology-driven retail strategies represents a pivotal juncture in the industry's evolution, redefining the relationships between customers, sales assistants, and retail management (Verhoef et al., 2021). In this concluding perspective, we delve into the burgeoning relevance of technology and its implications for the omnichannel retail ecosystem, focusing on how these advancements stand to enhance the user experience.

First and foremost, the adoption of advanced technological solutions by retailers underscores a pivotal commitment to customer-centricity (Shi et al., 2020). Technology serves as a conduit through which retailers can actively engage with and cater to the ever-evolving needs and preferences of their customers. Through data-driven insights and personalised experiences, technology empowers retailers to transcend traditional transactional relationships, fostering a deeper sense of connection and loyalty among their customer base. In this context, the user experience emerges as the focal point of strategic investments, fueling a continuous cycle of innovation aimed at elevating customer satisfaction.

From the customer's perspective, technology-driven improvements are evident throughout various aspects of the shopping journey. The expansion of innovative payment methods streamlined checkout processes, and immersive retail environments all play a role in creating

a more convenient and enjoyable shopping experience. These technological advancements enable customers to explore a wider range of options, experience greater convenience, and shop with increased confidence (Shen et al., 2018). The capacity to access real-time inventory information and engage in interactive in-store experiences also transforms how customers interact with brands and make their purchasing choices. In essence, technology enriches the user experience by offering customers increased choices, heightened convenience, and enhanced confidence.

Sales assistants, too, benefit significantly from the integration of technology into the retail landscape. Equipped with digital tools, these professionals transcend their traditional roles and evolve into knowledgeable experts, consultants, and brand ambassadors. With access to customer data, product information, and real-time insights, sales assistants can offer tailored recommendations, assist with product customisation, and facilitate seamless transactions. As a result, technology not only augments their capabilities but also empowers them to deliver a more personalised and efficient service, contributing to elevated user satisfaction (Roy et al., 2017).

Retail management leverages technology as the backbone of operations, streamlining processes, optimising inventory management, and enhancing overall efficiency. Automation tools, IoT devices, and data analytics platforms enable managers to make informed decisions, respond to market dynamics with agility, and ensure the seamless flow of products across channels. The real-time visibility provided by these technologies empowers retail management to adapt to changing consumer behaviours and preferences, ultimately benefiting the end user by ensuring product availability and timely delivery.

In essence, the ever-increasing relevance of technology in omnichannel retail signifies a paradigm shift in the industry's landscape (Verhoef et al., 2015). As all stakeholders – customers, sales assistants, and retail management – become more intertwined with and reliant on technology, the user experience takes centre stage as the ultimate beneficiary of these advancements. The symbiotic relationship between technology and user experience creates a virtuous cycle, where technological innovations propel superior user

experiences, further reinforcing customer loyalty and brand affinity (Muschkiet et al., 2023).

In conclusion, the future of omnichannel retail is undeniably connected with the evolution of technology. As this synergy continues to deepen, all stakeholders in the ecosystem will witness technology's expanding relevance in shaping the user experience. Through streamlined processes, personalised interactions, and seamless integration across channels, technology is set to redefine the retail landscape, making it more user-centric than ever before. In this era of transformative change, the user experience emerges as the true compass guiding the industry towards a future where technology and retail seamlessly converge to create unparalleled value for all.

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4. Omnichannel Retail in Practice: A Look at Applied Solutions in the Fashion Industry

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4.1 Introduction

The contribution focuses on omnichannel (OC) strategies applied to the fashion system. OC retail is defined as the concurrent adoption of different selling and communication channels to provide a seamless, cohesive, and integrated customer journey across touchpoints of different nature, including physical stores, e-commerce websites, mobile apps, and social media platforms (Berman et al., 2018; Verhoef et al., 2015; Hamouda, 2019; Yeh et al., 2022). The lowering of barriers between selling channels, and in particular between online and physical, may be beneficial for the fashion industry, increase the sales chances, and improve the customer journey (Fares et al., 2023; Ratchford et al., 2023).

We currently observe a scenario in which omnichannel aims to increase options and efficiency of the retail industry, with regards to the impact of physical stores and the augmentation of both online and offline shopping experiences. New formats and retail concepts are encouraged with particular regards to strategic-design experimentations (Iannilli & Linfante, 2022; Ribeiro & Maués, 2023). Such works ought to focus on permeating barriers that separate the paradigm of organizational silos (Cao, 2019), in which every selling channel is organized as a separate entity, operated individually, and evaluated with dedicated key performance indicators (KPIs). Data is also seldomly shared, missing the opportunity of looking at a comprehensive picture of products and customer's journeys. In

changing similar organisational behaviours, companies could create more advanced customer journeys (CJ) and combine the available touchpoints to implement OC in different fashions and with different aims. For example, retailers can use OC to recognize customers and offer them a personalised experience, to render more efficient the shopping experience, to multiply sales opportunities, or event to adjust production.

4.2 Methodology

Our goal is to better understand the nature and the extension of OC practices and the way in which they impact the consumer's journey, be it physical, digital or hybrid. The investigation takes place through six case studies that are organised into three clusters. Every cluster analyses two OC implementations oriented to a similar goal.

The first cluster reports on comprehensive and extended OC implementations that put into the network different selling and communication channels. It describes how different strategies are combined to provide seamless customer journeys that link actions undertaken inside and outside a store. While outside, customers can act only via remote interactions (e.g., app, website, telephone) but, if inside, a well-orchestrated OC augments instore experiences going beyond physical and local interactions and implementing connected tools for improving visitors' experience (e.g., augmenting customer agency, saving time, connecting with other stores). The cluster presents the strategies implemented by two well-established international brands: Zara and Nike.

The second cluster presents strategies that can be adopted by online brands that go physical to improve shopping experience and remove the digital mediation that hampers the selection of garments. Physical stores offer online companies an occasion to demonstrate the qualities of the products they distribute (e.g., inspecting fabrics, colours, textures, and sizes) while interpreting the values and the pillars that are foundational to their brand. Such companies may find themselves advantaged in implementing an OC retail strategy, especially if in the position of leveraging robust logistics and Information Technology (IT) systems. One key aspect of the described cases is the employment

of OC to collect data for recommendation systems and the creation of personalized experiences. The cluster presents the retail implementation of Amazon Style and Farfetch.

The third cluster aims to inquire the impact of social networks on the consumer journey and purchasing process. This debate is relevant as social networks became part of the daily lives of many consumers, especially those belonging to generation Z and Millennials, known for being digital natives (Ferrer, 2018). These individuals are increasingly influenced by the use of social networks, and this practice directly influences their purchasing decisions. More specifically, this cluster seeks to illustrate cases where the presence of social networks becomes relevant not only in purchasing decisions, but also in interaction with the brand thought social platforms. The contamination between the channels in this example remains in the digital sphere, between e-commerce, applications, and social networks. The cluster presents the experimentations of Burberry and YOOX.

The methodology adopted to conduct the research on the presented case studies is an articulation of review of scientific literature, secondary research, and qualitative research conducted on social media.

4.3 Extended OC Networks of Channels and Touchpoints

This section describes the application of omnichannel in the customer experience of two well-established brands among the largest international fashion companies: Zara and Nike. The two brands are studied to inquire the way in which different selling, marketing, and communication channels can be networked to augment physical shopping experiences.

4.3.1 OC for an Interconnected and Efficient CJ: Zara's Implementation

Zara, founded in Spain in 1975, is an international clothing brand part of the Inditex group. The company is among the largest and most successful fast fashion companies in the world and grew more than

twelve times in the timeframe between 1991 and 2003. While competitors can count on customers visiting 4 times a year, for Zara the number grows to 17. The reason appears to be related to a remarkably developed Quick Response (QR) to market that is sensibly faster than its competitors. A typical retailer generally requires six to nine months to design, produce, and deliver garments to stores, while Zara can do the same in less than a month (Bhardwaj & Mohapatra, 2023). In addition, Zara is also capable of providing customer with a much larger and variable product catalogue, creating in 2011, as an example, more than 40'000 new designs (Eric, 2014). Zara embraces the idea that fashion customers demand continuous novelties on a frequent basis (Bruce & Daly, 2006). To accomplish it, the company has one hand on the "factory" and the other on the "customers". According to Eric (2014) the production chain of Zara is designed to be remarkably fast and efficient in leveraging suppliers in Spain, a country concerned about labour cost and ethics. Only the 15% of its earning, which roughly corresponds to 40% of its volume, derives from products made in low-cost manufacturing locations (e.g., Turkey or Asia). Those are the products that have a longer shelf life and are rarely affected by seasonal variations. Seasonal collections of Zara, instead, are produced with the support of local suppliers with which the brand has developed a relationship of trust. The production chain extensively uses automatized pipelines, and it can react to selling data, managing unfinished garments that are completed during the season according to the choices of customers (i.e., roughly half of the clothing items remain undyed to enable the company to promptly adapt to any mid-season fashion changes). Out of the entire seasonal volume of products, they produce around 20% before the beginning of the season, 50% at the beginning of the season, and the rest during the season. The approach results in a reliable forecasting capability that can reach 95% and respond to the "changing teste of its *fashionistas*" (Mattila et al., 2002). When looking at the stores, the company pay a meticulous attention to customers' feedback, that is collected by instore staff and returned to design departments with the goal to improve and renovate the design of garments (Bhardwaj & Mohapatra, 2023). Store managers are playing a key role in the process and are in charge of harvesting the information useful to react to customers desires

(Soloaga & Monjo, 2010). Communication, production, and logistic tasks are supported by a custom Information Technology System, that appears relatively simple and perfectly attuned to the company's requirements. Consequently, it can achieve high level of performance, while costing less than one-fourth of the average ITS in the fashion industry (Sull & Turconi, 2008).

What described above appears to be the basis for the omnichannel experience that Zara built in its shops, starting in 2018 from London and Milan (Vaghef, 2018) and expanding to other areas including other European cities in 2021[1] and India (Bhardwaj & Mohapatra, 2023).

The app is without doubts the core of the customer experience and it implements multiple new ways to interact with products, both from inside and outside the stores. With the app it is possible to scan, find, try, or collect items.

From inside, customers can scan garments codes to retrieve further information, including the available colours and sizes. They can search for a product in the stock of the visited store, but the research can be extended to other stores of the geographical area, or the entire online Zara e-commerce (for shipping a product to home). Customers can also use the app to get in-store directions for finding an item of their interest, maybe because suggested by a friend or advertised on socials networks. Once garments are identified, customers can use the app to book a fitting room. The solution is meant to save time; however, it might not work as expected in crowded days, with multiple people claiming concurrent reservations.

When outside the store, customers can use the app to place an order that can be collected in store. The order can be made against the real-time store inventory, and, in this case, it is automatically prepared for pick up by an automated service in about thirty minutes and delivered via the scan of a QR code. Finally, the app allows for the convenient preservation of all customer receipts, expediting the checkout process and diminishing the need for paper receipts (Fig. 4.1).

[1] ZARA's OC experience is well described by Insights Hunter at https://medium.com/@insightshunter/zaras-store-mode-the-ultimate-omnichannel-experience-3d3b7c4acfa (accessed 2023-09-29, archived: https://archive.ph/cLfFx)

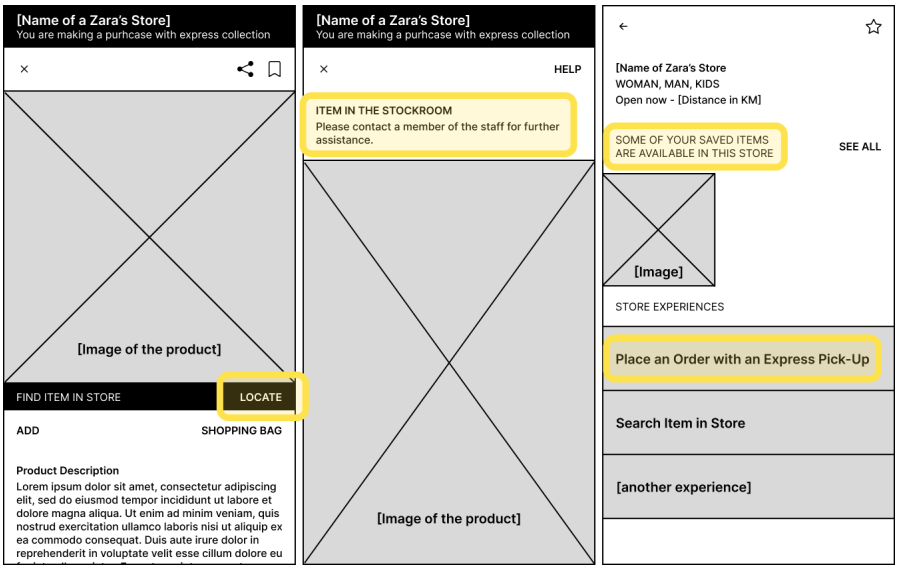

Fig. 4.1 Zara's smartphone app allows customers to locate products in stores, inspect stores inventory from home, and organize in-store pick-ups. The image shows the app wireframe and highlights the UI elements corresponding to OC functionalities.

The features described above potentially benefit customers, who can limit their attendance to crowded places, avoid unfruitful inquiries, save time on shopping, and much more. Customers can use the app to call shop assistants, who can reduce the workload and concentrate more on a quality service. At the same time, the omnichannel strategy enables the company to collect valuable data to be fed into the QR strategies described above.

According to Bhardwaj & Mohapatra (2023), the implementation of Zara's omnichannel strategy required a redesign of part of the organization, and in particular of its KPIs which were previously related to the performance of individual channels. The implementation of an omnichannel strategy requires to go beyond organizational silos and the isolation of channels, by paying particular attention to sharing data between different channels and teams. Judging from results, Zara had to establish cross-functional teams to plan and execute the omnichannel experience. These teams include executives from various departments, such as marketing, customer service, supply chain finance, physical store operations, strategic planning, e-commerce, and IT.

One critical point of Zara omnichannel, at least in India (Bhardwaj & Mohapatra, 2023), is related to the penalization that it brings to franchisees. Frequently, franchisees declined to fulfil online orders because it would occupy their valuable storage and compete with the resources invested into display areas within their stores. Additionally, these online customers were not known for their loyalty to the franchisees, which discouraged them from providing adequate service. Another critical aspect (Bhardwaj & Mohapatra, 2023) is related to logistics: ZARA did not differentiate logistics partners allocated to online services and franchisees. While this approach globally lowered expenses, it extended the waiting time for online customers. Furthermore, returns from direct customers were not processed separately, leading to even prolonged processing times and customer dissatisfaction.

4.3.2 Enhancing Nike's In-Store Experience with the House of Innovation

Nike was founded in 1964 as Blue Ribbon Sports and initially operated as a distributor for the Japanese shoemaker Onitsuka Tiger (now known as Asics). It officially became Nike Inc. in 1971[2]. The American athletic footwear and apparel corporation is known for using strategies such as technological innovation, intelligence, targeting, engagement, and events to keep its community growing strategy. As a smart community targeting strategy, the brand uses dedicated social media pages and community spaces (Nike Running, Nike Women, Nike Basketball); promote events for the community (Air Max day); utilizes User-Generated Content to boost all marketing channels (SNEAKRS app via dedicated hashtag #Kickcheck); uses community feedback to co-create at scale (Nike by you); creates dedicated app for the community (Nike Run Club); and develops new retail concepts to bring local communities together (Nike Unite).

[2] 11 Things Hardly Anyone Knows About Nike. Retrieved from https://www.businessinsider.com/history-of-nike-facts-about-its-50th-anniversary-2014-11?r=US&IR=T. (Accessed 2023-09-28, Archived: https://archive.ph/7xRoB)

In order to fulfil consumers demands related to digital shopping experiences, Nike had shifted their channel towards their website and mobile applications (Standaert, 2022). This strategy is applied, for example, in the store project called "House of Innovation", where the in-store experience is enhanced with the use of the Nike app, extending some exclusive services to those that belong to the NikePlus community. In New York, the store opened in 2018 and is called House of Innovation 000. Located on the corner of Fifth Avenue and 52nd Street, the flagship store has six floors, including a basement. The House of Innovation replaced Nike Town, which was Nike's innovative store, opened in November 1996 and closed in early 2018[3]. Before closing Nike Town, the company opened a new store model in Soho in 2016, improving the experiences offered and adding new technologies[4]. Currently, the House of Innovation has two other locations besides the one in United States, one is placed in Shanghai, China (House of Innovation 001) and the other one in Paris, located on Champs-Élysées (House of Innovation 002).

The high point of the flagship store is the interaction with the consumer, mainly through digital means. Using Nike App, those who visit the store can access various information about the pieces placed there, in addition to booking them or putting together an entire look and buying it automatically, an action that also facilitates another important feature implemented in the House of Innovation 000: the rotation of items according to community demand (Fig. 4.2). Within this context, the space called "The Speed Shop", according to Cathy Sparks[5] (Vice President and General Manager of Global Nike Stores & Services) is designed in such a way that local consumers can also make the most of the store. This space has an outside entrance where locals who live and work nearby can quickly go to pick up an order they've placed online. Additionally, due to the data gathering, they can

[3] Nike left the space occupied by Niketown on East 57th Street. Retrieved from https://www.businessinsider.com/nike-is-leaving-its-iconic-niketown-property-2017-12?r=US&IR=T. (Accessed 2023-09-28, Archived: https://archive.ph/4PjLp)

[4] Nike opens a Huge Store in the Heart of SoHo in 2016. Retrieved from: https://www.nytimes.com/2016/11/10/fashion/nike-soho-tiffany-collaboration-new-york-shopping-news.html. (Accessed 2023-09-28, Archived: https://archive.ph/7M3wL)

[5] Cathy Sparks interviewed by Peter Foreste https://www.youtube.com/watch?v=o_5C0DP4AcI (Accessed 2023-09-29, Archived: https://archive.ph/TczGe)

also find out what people in the area are buying and are able to speak directly with specialists for suggestions. These specialists can be called “store athletes”, defined by the brand as “footballers, runners, skaters, lifters and dunkers who bring every bit of their passion and expertise to work with them”.

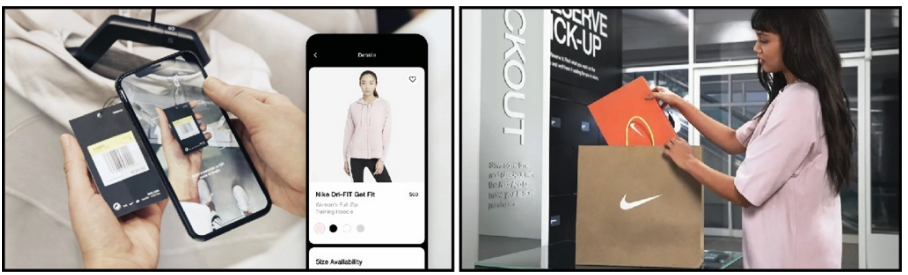

Fig. 4.2 Left: Nike app store mode. Right: “The Speed Shop” where customers buy their favourites styles online and pick them up in store. Photos: nike.com

Based on the first floor, “Nike Arena” welcomes the consumers into the store with towering digital displays and access to core pieces from Nike’s seasonal collections. The Nike Arena is home to the store’s Team Nike Service Desk, where NikePlus members can learn about in-store offerings, check in or book Nike Expert appointments; and where all consumers can make returns, checkout, schedule Courier Service and learn more about the company.

Hosting the largest concentration of seasonally current Nike footwear anywhere in the globe, the service entitled “Nike Sneaker Lab” is a completely reinvented shoe buying experience for the Brand. Designed to imitate the feeling of a Nike product innovation lab, consumers can check the latest Nike innovations and find the freshest versions of performance footwear while visiting that floor. Shopping experience is also elevated with curated seasonal product picks along with service offerings such as “Pick Up Lockers” that allows NikePlus members to reserve items while shopping out of store, and have products held for them at an in-store digital locker. Moreover, the store also has a customization space for personalizing products, called “Nike by You”, where consumers can personalize their product directly in the store. This service is provided online by Nike also outside the store context.

Convenience and personalization are key points in Nike's strategies, gathering customer data is crucial, as it pertains to the idealization of the House of Innovation. The membership-based mobile app, which is heavily used throughout the store, is the main tool implemented by the brand. The "Store Mode" of the Nike App seeks to deliver a seamless shopping experience. "Scan to Try" feature, for instance, allows clients to request an item to be brought to them for a quick fitting. With "Shop the Look" instead, they can scan a code on an in-store mannequin, browse every item that the mannequin is dressed in, check to see if specific sizes are available in-store and then request for a store athlete to send the items to a fitting room. In addition, Nike Instant Checkout feature allows customers to skip the lines and check out from within the Nike App (a payment receipt is received within the app too). Nike Instant checkout stations are positioned throughout the store so customers can bag their purchase and go.

House of Innovation proves that physical stores continue to be an important part of the shopping journey, but the intersection between digital and physical environments is crucial for retailers. When rethinking its omnichannel strategy for store implementation, Nike invested in journey mapping to identify opportunities and improve the consumer experience. In this case, the consumer's journey is mainly characterized by the use of the application within the store, where exclusive functions (such as Pick Up Lockers and Nike by You) are unlocked for members of the Nike community.

4.4 From Online to Physical: Efficiency and Personalized Experiences within OC Retail

The following cases are derived from two digital native brands: Amazon and Farfetch. The section inquiries about the role of OC in the inclusion of physical interactions in strategies previously based on online experiences only. In particular, the two companies present a strong technological drive and leveraged data to introduce personalized experiences and recommendation systems.

4.4.1 Amazon Style: Semi-Automated, Logistic-Driven Fashion Retail

Amazon is American multinational company with a strong technological drive. Founded in 1994 as an online marketplace for books, it is now one of the GAFAM[6] and is famous for having created a remarkable online customer experience with one of the larger product catalogues in the world, ranging "from A to Z" as its logo suggests. The catalogue can be browsed with the aid of a sophisticated recommendation system that act as a cross-selling technique. Suggestions can be personal, namely based on previous purchases, or determined by other customers' behaviours (e.g., products that are often bought together). Beside e-commerce, Amazon funded or acquired several subsidiaries[7], including AWS, leader in cloud computing and holding 32% of the market in Q1 2023[8]. Since at least 2015[9], Amazon is experimenting with bringing its "online touch" (including the display of stars and products reviews) into brick-and-mortar retail shops. Attempts include bookshops, no-cashiers convenience stores, and the "4-star format" for toys, household, and other items. While most of Amazon's brick-and-mortars of USA and UK have been announced to close[10], at the beginning of 2022[11] the

[6] The term GAFAM refers to the 5 largest and most influent information technology American companies: Alphabet (previously Google), Amazon, Meta (Facebook), Apple, and Microsoft.

[7] An overview of Amazon's acquisitions can be explored at https://gafam.theglassroom.org/ (accessed 2023-09-28, archived: https://web.archive.org/web/20230625085906/https://gafam.theglassroom.org/)

[8] Data about the growth of cloud services is discussed by the Synergy Research Group at https://www.srgresearch.com/articles/q1-cloud-spending-grows-by-over-10-billion-from-2022-the-big-three-account-for-65-of-the-total (accessed 2023-09-28, archived: https://archive.ph/skWN2)

[9] Data about the growth of cloud services is discussed by the Synergy Research Group at https://www.srgresearch.com/articles/q1-cloud-spending-grows-by-over-10-billion-from-2022-the-big-three-account-for-65-of-the-total (accessed 2023-09-28, archived: https://archive.ph/skWN2)

[10] Article by Jeffrey Dastin for Reuters (2022-03-22). Read it at https://www.reuters.com/business/retail-consumer/exclusive-amazon-close-all-its-physical-bookstores-4-star-shops-2022-03-02/ (accessed 2023-09-28, archived https://archive.ph/1qNTo)

[11] The goals behind Amazon Style are briefly described by Simoina Vasen (managing director) at https://www.aboutamazon.com/news/retail/amazon-reimagines-in-store-shopping-with-amazon-style (accessed 2023-09-28, archived https://archive.ph/oVhla)

company announced Amazon Style, the concept of a new physical store for apparel, accessories, and other fashion items[12]. Although Amazon is not a typical fashion brand, its new store succeeds in implementing an original OC strategy that revolves around garment and other accessories.

In the store, customers can explore a curated collection of women's and men's apparel, shoes, and accessories in "a seamless and elevated shopping experience" that employs an extended and well-orchestrated omnichannel approach. In the store, garments are displayed in only one size and customers can use the Amazon Shopping app to scan QR codes and access more information about the products, including stars and reviews from Amazon main marketplace. If interested in trying on the garments, customers can select size, colour, or other variations, and request garments to be delivered to a reserved fitting room. The solution improves CX in different ways: it significantly reduces clutter in the shop and on the racks, also reducing the risk of dropping products on the floor while searching for a fitting size; it lets customers do the shopping without carrying around products; it lets front-of-store employees spend less time in tidying up possibly resulting in having more time and energy to interact with customers.

The app allows customers to send in the fitting room a maximum of twenty products and triggers a notification in the Amazon app with the number of the room once the first garment is ready. Once in front of the door, customers must unlock the room using the app; they have a fixed amount of time to enter the room before it gets re-allocated. The room is equipped with a rack, a mirror, a closet, and an interactive touchscreen. Garments are delivered in the closet using a backdoor, customers can take them out and try them on. The touchscreen allows customers to access further options, provide feedback on items, and request additional sizes or styles, which are promptly delivered to the same room within moments. The screen shows which garments are in the room and which are on their way, and it allows to continue shopping, requesting, and trying on new garment without leaving the comfortable and safe space of the dedicated fitting room. It is

[12] Amazon Style is currently available in two USA locations: in Glendale (CA) at Americana at Brand, and in Columbus (OH) at the Easton Town Center. Both locations are popular retail destinations where to go shopping, dining, relaxing and entertain.

important to mention that the closet automatically locks at delivery time to protect customers' privacy. Products are delivered from back-of-house within minutes by employees that are supported by advanced logistics solutions like the ones used in the Amazon's fulfilment centres. After the customers decided which garments to buy, they can simply put them in a bag and go to the cash register to complete the purchase. The Amazon One option is also available for a complete autonomous payment. Alternatively, customers can try and order the garments online, receiving them at their address, or collect online orders at the store (Fig. 4.3).

Fig. 4.3 Left: the interactive screen available within the fitting rooms. Right: Customers can use the app to send items to fitting rooms. Photos: Amazon's press release archive. Source: press.aboutamazon.com.

Another important feature of Amazon Style is a recommendation system that makes use of machine learning algorithms to suggest products on top of customers' information, including preferences of style, fit, and budget, collected via the app the first time they use it. Once in the room, customers will find some unexpected garments that are flagged as "our pick for you." The delivery of these products, manifestation of Amazon's cross selling strategy, may result in a better experience. For example, with a requested dress, the system may deliver a pair of shoes and it may be the case that they match better than the ones the customer is currently wearing. While scanning an expensive piece of garment the system may suggest cheaper products with a similar texture or colour, matching customer budget, or helping them discovering new brands or designers from the ones present

throughout the store. Other forms of recommendation are provided via the "shop the look" QR codes, positioned in correspondence to certain mannequins, that display a selection of garments by famous stylists or influencers[13] that customers can request and try in the dedicated fitting room.

Amazon Style's employees oversee tasks such as providing customer service, delivering items to fitting room closets, merchandising the store to inspire discovery, helping customers at checkout, managing back-of-house operations, and much more. Until now, Amazon hasn't revealed yet what takes place during back-of-house operations. The shop opened after pandemic times, with people bored of online-only experiences and eager to "feel the fabrics". If on the first hand the CX appears to be easier and less overwhelming, on the other the store seems to be designed to conceal a part of its staff with customers capable of shopping without interacting with any other human being.

4.4.2 Farfetch's Store of the Future and its Connected Retail suite

Farfetch Limited, is a fashion retail company launched in 2008, self-described as «the preeminent global platform within the domain of luxury fashion».[14] The retailer originally operated only as e-commerce and the web traffic collected in 2017 suggests that it is now the leading destination for luxury shopping, outperforming competitors like YOOX Net-a- Porter or Neiman Marcus.[15] It then moved into physical business creating immersive in-store experiences with the employment of impressive digital solutions (Harba, 2019). Its mission is to foster connections among creators, curators, and "discerning consumers." Currently, the Farfetch Marketplace links

[13] The strategy of recommendation resembles the one conducted on Instagram with the "GET THE L👀K" stories, where multiple items are proposed to recreate the look of a model or influencer (@amazonfashion)

[14] https://aboutfarfetch.com/about/farfetch/ accessed 2023-09-28 (Archived: https://archive.ph/a6NEg)

[15] https://www.businessoffashion.com/articles/technology/inside-farfetchs-store-of-the-future/ accessed 2023-09-28 (Archived: https://archive.ph/2frJG)

consumers from more than 190 countries with an assortment of offerings originating from over 50 countries and encompassing a portfolio of over 1,400 of the most important brands, boutiques, and department stores worldwide. The retailer offers a distinctive shopping experience and grants access to «to the most extensive selection of luxury on a single platform». In more recent years, Farfetch's acquired additional luxury retailers, such as Browns and Stadium Goods, and New Guards Group, a dedicated platform for nurturing the development of global fashion brands. Possibly because its founder used to work as a programmer, the company features a department dedicated to the development of networked technologies aimed at innovating the customer journey in the world of luxury. According to the founder, high-end fashion retail experience isn't transformed by technology yet. In 2017, luxury brick-and-mortars hold about the 90% of sales and it is forecasted to decrease only to 80% in 2025. This means that the online market is supposed to grow at a high pace, but also that the offline will still hold larger volumes. Farfetch's goal, the funder explains, is to dissolve the barriers between the physical and the digital, working to preserve the interaction «that is unique to a physical store» and augmenting it with the use of digital technologies that Farfetch's uses to capture customer data. Data is invaluable to their business[16] and is used to manage human interactions between shop assistants and shoppers. The company's expectation is to release technology that will ensure greater retail productivity and sales and sell this product to other companies to help them to «dissolve temporal or geographical boundaries, in order to deliver the experience that customers require» (Harba, 2019).

In its *Store of the Future*, the company demonstrates its *Connected Retail* suite, a collection of modules introduced to facilitate the transition to OC and exploit the available touchpoints to elevate the CJ. The concept was firstly presented to the public in autumn 2017 at Browns' (London, UK), then, in March 2018, in the flagship store of Thom Browne (New York, USA). The suite is currently composed by

[16] For more details see the conversation between José Neves (founder, chairman and CEO of Farfetch) and Tom Mackenzie (Bloomberg Technology Summit) at https://www.youtube.com/watch?v=Uijh2LRMQSY (accessed 2023-09-28, archived: https://archive.ph/rp2Lr)

the consumer app, the connected retail app, and the connected devices[17].

The consumer app is designed to bring "every stage of the consumer journey into the palm of their hands" and to connect brands, retail staff and consumers. When a consumer enters a store, the app ensures he/she is recognized and triggers a push notification on the smartphone. From this moment, the in-store experience is tailored using data that Farfetch possesses about that person, guiding sales associates in suggesting products for up and cross selling. When inside the store customers can use the app to scan and retrieve information about products, experience virtual AR-powered try-on technology, check the stock, and check-in with style advisors. Additionally, and even from outside the store, the app allows to browse catalogues, compose wishlists, track orders or returns, and stay in contact with sales associates, even by booking virtual sessions.

The connected retail app is dedicated to retail teams and is devised to "deliver best-in-class experiences before, during, and after in-store visits." To support cross and upsell, it provides qualitative (i.e., in-depth notes about the customer) and quantitative data (i.e., search history, preferences about designers, bookmarked items). The app also provides retail teams with clients' contacts, that can be used to keep them informed about new items in the catalogue. According to Farfetch, these kinds of personal touches nurture brand loyalty into their customers.

The connected devices can assume different forms (e.g., screens, touchscreens, mirrors, holograms, etc.) and are aimed at integrating digital capabilities into physical stores. They invite customers to self-guided explorations and can inform about new arrivals, bookmark products, make purchases, request items for try on, or require the intervention of a sale assistant. Interactive displays can be encountered on the shop floor and are used to create situations a strong inspirational nature. These experiences are particularly useful when displaying special, expensive, and rare items that aren't available in large quantities, such as luxury jewellery. Interactive mirrors are usually

[17] Farfetch promotes its Connected Retail Suite on the page https://www.farfetchplatformsolutions.com/insights/farfetch-connected-retail (accessed 2023-09-28, archived: https://archive.ph/TQRFq)

placed in fitting rooms, they give shoppers confidence in their purchases by exhibiting each item with impactful images. Customers can use them to find answers about in-stock size availability and colour variations, creating informative experiences without leaving the fitting room, from which they can request additional items to try on. Mirrors implement the so called "head-to-toe styling" or "wear it with" cross sell strategy, namely the recommendation of outfit pairings and matching accessories. This technology also helps store employees give personalized fashion advice by showing them new brands, collections, and products on a screen. Another type of connected device is the "smart" rack, that recognizes which products are inspected by which customer with the use of Wi-Fi and ultrasound technologies.

4.5 Roles of Social Media Platforms in OC Customer Journey

The following cases reflects on the roles that social networks may cover in customer journeys and during the shopping experience. On the one hand, there is Burberry, which, by presenting a new social retail concept, seeks to engage the consumer inside the physical store through social networks, and on the other hand, YOOX, a pioneering brand in digital strategies that seeks to do the same, but through an application based on artificial intelligence. In the first case, that of Burberry and its Social Retail Store, the consumers, through their smart device, are involved in a series of experiences within the store that can be immediately shared through social. In this example it is possible to see the integration of the physical and digital channels. In the second case, using the digital mirror created by the brand YOOX with Artificial Intelligence technology, the consumer has the possibility of becoming his/her own avatar when trying on outfits through the application provided by the brand, where it is also possible to interact on social networks by sharing the content promptly.

4.5.1 Integrating In-Store Experience and Social Media: Burberry's Social Retail Store

Burberry, the British brand recognized for its famous beige, white, black, and red checkered print, was found in 1856 by the 21-year-old former draper's apprentice Thomas Burberry. Over the years, it has become an international reference in luxury perfumes, clothing, and accessories. The company designs, sources, and markets luxury men's, women's and children's clothing and non-apparel accessories globally through a diversified network of retail, wholesale, franchise, and digital commerce channels worldwide. It also licenses third parties to manufacture and distribute products using the Burberry trademarks. The company operates through its two channels to market, which include Retail/Wholesale and Licensing[18].

Burberry is an exemplary case of understanding the power of digital transformation – including social usage – and experience from the point of view of communication, of the cost of branding and retail imaging. This fact is largely due to Angela Ahrendts, who was the CEO of Burberry from 2006 to 2014 and embraced the rising digital networks, directing her attention to the luxury consumers of the future: the Millennials. At the time, Burberry found itself as a brand without the necessary consistency of image (and quality) at a global level: if in the United States it was recognizable in the classic trench coat, in Korea it was for whiskey and in Switzerland for watches; a chaotic brand portfolio and an unclear image unable to cope with the new global showcase allowed by digital networks.

In response to this situation, in parallel to the redesign and refocusing of products' architecture through a clearer definition of stylistic codes, the company has been designing a brand scenario able to include dreams, desires and daily habits of new and young audiences. This was mainly achieved through digital and social channels, the website *in primis*, and then Facebook, Twitter, and Instagram, increasingly supporting the design of *ad hoc* and original contents such as news, videos, photos. A first example of branded

[18] Burberry Group Profile by Forbes. Retrieved from: https://www.forbes.com/companies/burberry-group/?sh=491762a14e14 (accessed 2023-09-28, archived: https://archive.ph/VO2AX)

content able to involve new smart communities focusing, as explained in the previous section, on symbolic and cultural values of products. This approach ended up in the first social platform called Art of the Trench, where ordinary people, real customers, are involved to showcase Burberry's heritage British coat, posting their photographic images that portray them wearing the legendary garment.

Starting from this pioneering experience a few years later, in 2011, the company launched the Burberry Bespoke platform, allowing the customization of its trench coat directly online. The new platform becomes the space of brand engagement, where the public can experience the creative and unique context of designing with the brand. In 2012 the digitally enhanced new Burberry flagship store is launched in London. The store includes a series of full screens spread throughout the store that can be easily swapped out to function as mirrors when necessary and a giant screen in the centre of the atrium surrounding the which a stage can host shows in stores, a concept called by the brand "Burberry World Live".

Nevertheless, Burberry's history with social media began when it was one of the first fashion brands to use Facebook in 2009[19]. In the following years, the company became active on all social platforms – Twitter, Facebook, YouTube, Instagram, Google+, Pinterest, Tumblr, Polyvore, Vine, Weibo, YouKu, WeChat and others (Phan et al., 2011). In 2014, Burberry earmarked 60% of its marketing budget to social media[20]. Currently the company has more than 17 million followers on Facebook and more than 20 million on Instagram. With popular social networks like Instagram unavailable in China, Burberry decided to partner up with Tencent – China's largest social media and video game company – aiming to create an innovative space, designed to inspire and entertain luxury Chinese clients. The key part of this partnership is the WeChat platform, which is unlike any platform used

[19] How Burberry Does Digital by Sophie Doran. Retrieved from: https://www.luxurysociety.com/en/articles/2014/01/how-burberry-does-digital. (Accessed 2023-09-28, Archived:https://archive.ph/op6LF)

[20] The digital evolution of Burberry by Mandelli, Piancatelli and Arbore. Retrieved from:https://www.sdabocconi.it/en/sda-bocconi-insight/management-cases/strategy-entrepreneurship--governance-marketing--sales-digital-transformation--innovation/from-london-to-social-media-the-digital-evolution-of-burberry. (Accessed 2023-09-28, Archived: https://archive.ph/Tpd17)

in the United States or Europe. So, in 2020, Burberry announced a new retail concept, its first Social Retail Store. Located in the Chinese technology hub, the city of Shenzhen, the space blends the physical and online dimensions into an immersive digital retail experience, intending to bring social media interactions into the physical retail environment.

Mark Morris, VP of Burberry's digital commerce affirms that the initiative started from the fact that although most customer journeys start on social media (especially in China), digital natives from Generation Z and Millennials still wanted an in-store experience that they could share online. Besides that, 80 percent of its customers have used a digital touchpoint before they purchased. Furthermore, according to Marco Gobbetti, the CEO of Burberry at the time, the social store marked a shift in how Burberry engage with their customers[21].

The store is made up of 10 separate spaces, each one with its own concept and personality that offers a unique interactive experience. Building on Burberry's rich heritage, the store celebrates house codes reinterpreted by Italian designer Riccardo Tisci, who took over the creative direction of the brand from 2018 to 2022, including the Trench Coat, Thomas Burberry Monogram, Nature, and Burberry Animal Kingdom. An important detail is that there are exclusive pieces only available to buy in the Shenzhen store.

The collaboration between Burberry and Tencent resulted in the develop of a custom WeChat Mini Program that is used within the store boundaries. This mini program provides exclusive content and personalized experiences, unlocking exclusive product content, audio guides, one-to-one appointments, table reservations and upcoming events. In addition, based on a gamification strategy, each customer receives a playful digital animal character that evolves the more they interact with the space.

With an area of more than 500 square meters, the first interactive feature of the store is a window at the entrance that responds to body

[21] The Shenzhen store uses WeChat to link together online and offline lives and reward customers for engaging with the brand. Retrieved from: https://www.voguebusiness.com/consumers/burberry-tests-social-retail-in-chinas-tech-capital. (Accessed 2023-09-28, Archived: https://archive.ph/UAmQr)

movement to create a unique and immersive moment, it is a living sculpture reflecting the mirrored runway from the Burberry AW20 show. Once captured, this moment can be shared with friends. The window evolves through the seasons to reflect the latest collections and house codes.

The store also provides three immersive fitting rooms, where the customers can find a library of playlists and its own distinctive design featuring a Riccardo Tisci signature – from an infinite mirrored world to a vibrant interpretation of Thomas Burberry Monogram and a floor-to-ceiling fawn print. Additionally, the store applies QR codes to all products, which are then connected to digital screens: scanning the code unlocks additional content and storytelling, contributing to the creation of additional social currency[22]. Each time the customer interacts with the store they are rewarded with social currency that can be used for things such as unlocking new outfits for their avatars or being able to order new menu items at the café. If the user saves up enough social currency, it is possible to unlock a new world. It regards the "Trench Experience"[23], a secret and exclusive space that honours the famous trench coat of the luxury brand and offers interactive digital experiences.

The store includes a café, named "Thomas", remembering Thomas Burberry, the founder of the brand, where events such as talks, workshops, exhibitions and live performances are held. The café menu, a celebration of Chinese and English culture, also encourages the consumer to engage with the WeChat mini program and their social currency advances, unlocking new menu items[24].

Betting on a hybrid consumer journey, the new location takes social media interactions and brings them to a physical retail environment,

[22] Social Retail Store review by Roberta Maddalena, Forbes. Retrieved from: https://forbes.it/2020/07/31/burberry-apre-il-primo-luxury-social-store-in-cina-a-shenzhen/. (Accessed 2023-09-28, Archived: https://archive.ph/B5qfd)

[23] Burberry's Social Retail Store: Combining Luxury Retail with social media. Retrieved from: https://alahausse.medium.com/burberrys-social-retail-store-combining-luxury-retail-with-social-media-e2634e952dbf#:~:text=Each%20time%20the%20customer%20interacts,menu%20items%20at%20the%20cafe. (Accessed 2023-09-28, Archived: https://archive.ph/3WytA)

[24] Inside Burberry's trailblazing "social retail" store. Retrieved from: https://www.theindustry.fashion/inside-burberrys-trailblazing-social-retail-store/. Accessed on 28 Sep 2023. (Archived: https://archive.ph/dagi6).

including the dedicated WeChat mini program to offer extra features and personalization. Additionally, using QR Codes, customers can find the latest collections and seasonal products and discover exclusive store items. The collaboration with Tencent was fundamental in providing Burberry with the typical social retail tools and placing customer interaction on WeChat.

4.5.2 YOOXMIRROR by YOOX: Enriching Shopping Experiences Through Artificial Intelligence

YOOX, along with NET-A-PORTER, was born in 2000 as a pioneering platform to encourage leading luxury houses to take their first steps online. In 2009 was listed on the Milan Stock Exchange and today remains Italy's sole "unicorn"[25]. Now, joined together under one group called YOOX Net-a-Porter Group, they continue to explore innovative strategies within the fashion system. Since always, YOOX founder Federico Marchetti's explored the frontier between Human and Machine, today the group combines the latest artificial intelligence with the human spirit of the team of designers. In that sense, YOOX created its first private label brand, called 8 by YOOX, the collections were designed using the help of AI tools that survey vast swathes of the online fashion market and social media platforms, the data collected by these artificial intelligence tools was use to influence and the development of each collection[26].

YOOX has completely reconfigured the selling activity for the fashion sector (Resca & D'atri, 2012) entering the US in 2003, Japan in 2004 and, in 2006, signing a deal with Marni to launch the first online flagship store. Numerous mono-brand online stores for leading luxury brands, including a long-term partnership with the Kering Group to power e-commerce for many flagship brands such as Bottega

[25] Federico Marchetti Bio. Retrieved from: https://www.federicomarchetti.com/bio?lang=it. (Accessed 2023-09-28, Archived: https://archive.ph/aaK4E)

[26] How Yoox is using artificial intelligence to assist design in its private label brand. Retrieved from: https://www.glossy.co/fashion/how-yoox-is-using-artificial-intelligence-to-assist-design-in-its-private-label-brand/. (Accessed 2023-09-28, Archived: https://archive.ph/hUA1u)

Veneta and Saint Laurent, followed in the years after. In 2010, YOOX unprecedentedly combined RFID technology and automation in its global techno-logistics platform in Interporto Bologna. From YOOX's inception, Marchetti's ability to seamlessly bring together the worlds of technology and luxury fashion with a data-driven approach and a constant eye on innovation set it apart from any potential competitors[27].

In 2018, YOOX, was a pioneer in proposing a solution that could help reduce costs for online shops by using Augmented Reality, avoiding returns of products that did not fit as expected (Casini & Roccetti, 2020), the leading online lifestyle store has announced the launch of YOOXMIRROR – a AI-powered virtual styling suite designed to entertain customers while they express their personality, exploring the YOOX fashion offering in an interactive and engaging way. Conceived and designed by the YOOX Research & Development team, the immersive styling suite displays products in a "stories" format[28].

In its first version, a chic and fashion-conscious avatar called Daisy was the one who welcomed users to the YOOXMIRROR interface, not only wearing the outfits but at first also taking care of YOOX's Instagram. In 2019, the year after the launch of the service, YOOXMIRROR Reloaded was released, where costumers are able to create their own personalized digital, 3D avatar. Once the avatar is created, users can virtually try on outfits, as well as share their favourite outfits instantly on social media. Powered by an innovative combination of Artificial Intelligence and Augmented Reality technology, through which the selected portrait is digitalized to generate a personalized 3D avatar, this feature allows the customer to see him/herself wearing a potentially endless array of clothing and accessories (Vaccani et al., 2020). Within the application, users can instantly see how the outfits suit them, sharing their looks with friends and gaining immediate feedback before purchase or saving their

[27] Analyses of YOOX & NET-A-PORTER 20th anniversary. Retrieved from: https://www.net-a-porter.com/en-us/porter/article-a504607b1a27ed35/reporter/news/yoox-net-a-porter-20th-anniversary. (Accessed 2023-09-28, Archived: https://archive.ph/twlWK)

[28] YOOX unveils YOOXMIRROR. Retrieved from: https://www.ynap.com/news/yoox-unveils-yooxmirror/. (Accessed 2023-09-28, Archived: https://archive.ph/sKExj).

favourite items directly into their DreamBox (the Wishlist feature on YOOX)[29].

The technology behind the YOOX application was built upon the work of the YOOX merchandising team. Sophisticated algorithms detect visual elements (colour, pattern, and shape) within a product image, while Deep Learning networks extract product attributes to select alternative items, which work best with each other. Virtual Reality technology fits the selected items on a 3D model, bringing them to life against evocative immersive backdrops. The last version of the application was released in 2020, offering 50,000 fully digitized products. In addition, the entire 8 by YOOX collection has for the first time been fully digitized and made available for customers. The final addition was the share function, which allows all users to share their favourite looks on their social-media channels[30].

In this case, YOOX seeks to revolutionize the customer journey through artificial intelligence and augmented reality. The purchasing journey begins within the fashion company's application, where the consumer is able to try on outfits with their own avatar, in addition to being able to share immediately on social networks, collecting feedback before deciding to finalize the purchase.

4.6 Conclusions

This chapter analysed, through six case studies categorised into three clusters, relevant strategies applied to the fashion system regarding omnichannel practices.

The analysis conducted reveals the centrality of a series of elements in the analysed omnichannel strategies. The diagram in Fig. 4.4 shows the touchpoints, tools and actions that emerged from the presented research. Instead of separating the different cases and their

[29] Relaunch YOOXMIRROR in 2018. Retrieved from: https://www.ynap.com/news/be-your-own-avatar-yooxmirror-reloaded/ (accessed on 2023-09-28, archived: https://archive.ph/w3MnI)

[30] YOOXMIRROR feature expands its catalog to 50,000 pieces. Retrieved from: https://www.ynap.com/news/yooxmirror-yoox-unique-virtual-styling-feature-expands-its-catalog-to-50000-pieces-to-choose-from/. (Accessed 2023-09-28, Archived: https://archive.ph/KDQVC)

components, the chart merges them all together with the goal of providing an overview of possible OC strategies and techniques that goes beyond individual applications.

Among the various digital touchpoints previously described the smartphone application appears as the central element through which customer experience is supported, both inside and outside the store. The two paths can be pursued independently based on customer preferences but can later merge through the overcoming of the organizational silos model. The shopping experience is also enhanced thanks to time savings, shopping convenience, privacy in the use of fitting rooms, and overall shopping comfort.

Logistics is an invisible support that enables the efficient functioning of omnichannel mechanisms. We are talking about cutting-edge systems that operate automatically or semi-automatically within retail spaces to assist consumers, but traditional logistic systems continue to support the management of returns, pickups, and online orders. One of the most visible aspects of the paradigm shift related to organizational silos is the ability to check store inventory in relation to a selected store or geographic area. Thanks to this approach, the customer can determine which store to visit to inspect the merchandise of interest. Lastly, data, collected primarily through applications and customer interactions, permeates all touch points, allowing brands to adjust production, in-store display, and design new experiences or products.

Moreover, social media can be used to extend the shopping experience beyond sales channels, engaging a wider audience and leveraging consumer relationships. They act as a promotional tool for the brand while providing consumers with a validation opportunity.

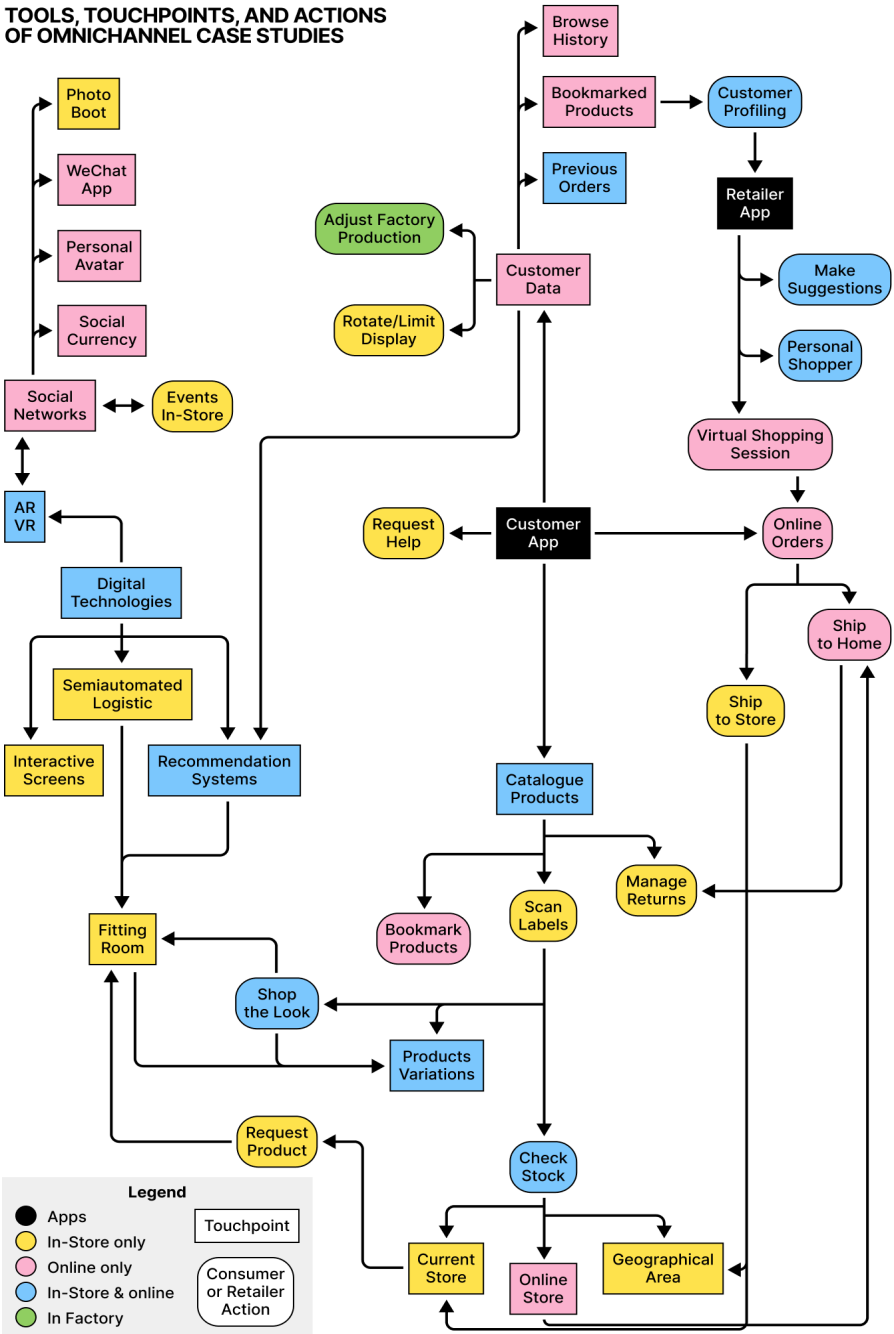

Fig. 4.4 Tools, touchpoints, and actions of omnichannel case studies (authors' elaboration).

The cluster "Extended OC Networks of Channels and Touchpoints", led by the brands Zara and Nike, focused on analysing the use of smart devices, more specifically through their applications within the physical store. From the point of view of the consumer's shopping experience, the use of the application inside the store, such as Zara and Nike's "In-store Mode", can transform the integration of different physical and digital channels into a more seamless process. Using the application inside the store allows, for example, the consumer to independently check information about the items through QR codes, as well as request assistance from an employee with one click. Furthermore, consumers also have services such as "Click&Collect", where they can buy online and collect in store and also "Self-checkout", where they can independently complete the payment for their purchases. On the other hand, when using the application, the consumer provides the brand their data, which can later also be used to adjust the production and improve the shopping experience, such as the space reserved for local Nike customers in the store in New York, where the brand, by analysing the data, designs services exclusively for that public. The availability of several interconnected touchpoints, within and outside the store, offer clients uncountable CJ, featuring multiple entry-points and personalization occasions.

The second cluster, "From Online to Physical: Efficiency and Personalized Experiences within OC Retail" concerns two cases of brands that are born digital, Amazon and Farfetch. This section seeks to illustrate how a digital brand can migrate to the physical space. In the case of Amazon, the physical store experience is entirely based on the store's app and QR Codes spread throughout the retail space. The strategy behind all this is to optimize the customer's time, as they will not waste time looking for what they want among so many products on display as in a conventional store. Technology wants to speed up this process by delivering what the customer is looking for quickly and accurately and, at the same time, collecting data for recommendations (i.e., cross sell). The case of Farfetch is somewhat similar because entirely based on digital technologies and data. However, it aims at providing a curated and memorable experience for shoppers and at demonstrating its proprietary technology that can be sold to third parties.

The third cluster, called "Roles of Social Media Platforms in OC Customer Journey" seeks to understand how the use of social networks can impact the consumer journey. Here two different cases were presented, yet, in both of them we witness the engagement strategy, guided mainly by the brand's interaction with the consumers through digital platforms. In the case of Burberry, the concept of Social Retail allows consumers to share the experience of being in a physical store on social media. The main objective in this case is to engage with generations Z and Millennials, who especially in China demonstrate that are influenced by social networks in stages prior to purchase. The second case presented in this session concerns the "YOOXMIRROR" feature within the YOOX application. In this case, there is no interaction with a physical space, the interaction of channels is limited to e-commerce and the brand's application. Users can virtually try on clothes and share them on social networks, helping them make the purchase decision. This practice also allows, in online purchases, the number of returns to be possibly reduced, since in most online purchases the consumer only tries on the item when it arrives at home.

As technology becomes increasingly part of consumers' daily lives, especially those from new consumer generations, brands seek to integrate the use of digital touchpoints and social networks within the consumer's journey, rendering the shopping experience more fluid and engaged with consumers. In this context, the case study analysis presented in this chapter sought to illustrate a selection of relevant cases regarding the application of omnichannel practices within the consumer journey. Such analysis paves the way for future discussions, such as the socio-environmental impact of these practices, as well as the effectiveness of long-term results, given that the cases presented are relatively recent.

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5. Navigating Complexity: The Evolving Role of Design in Omnichannel Retail

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5.1 Retail Design as a Fluid and Ever-Changing Discipline

The current retail system is a complex and highly transformative environment. The transformation it has undergone over the last two decades jointly mirrors the change that has taken place within the market competitiveness, the consumer horizon, and technological readiness. Whitin this context, the different domains' ecosystems and skills that contribute to the shaping and management of the retail experience have multiplied: objectives, processes, and tools have hybridised capturing and adapting to the economic, social, and technological transformations. Similarly, the role of retail design has also radically changed.

Retail design – a discipline that jointly contributes to shaping the consumer experience within a network of both physical and digital spaces and settings – is a relatively new and, at the same time, highly fluid and constantly changing discipline.

Retail design was intended, in its initial connotation, as an area of interest in interior architecture (Kent, 2007; Petermans, 2012). It obtained its first recognition in the 1960s and in a more mature way from the 1980s when brands began to be recognised as capable of encompassing a system of tangible and intangible values that made them distinctive and meaningful for the consumer. It was during these years that retail design developed «a specific character that distinguished its practice from the related fields of corporate, packaging and product design» (Kent, 2007, p. 739), evolving from a

«graphical, 2D approach in the creation of an identity, to the combined concept of external architecture and internal spaces» (Kent, 2003, p. 140). Relying on an initial focus on interior design aspects, the designer's main task was translating the brand image and values into the tangible nature of physical retail spaces. The concept of atmospherics (Kotler, 1974), which meant the control of synaesthetic perceptions within a retail environment in terms of tactile-material, chromatic, olfactory dimensions, and layout management, became central as a tool to influence perception and guide consumer behaviour (Donovan et al., 1982; Gardner & Siomkos, 1986). At the same time, the graphic elements, capable of transferring and transmitting brand identity through visual experiences, became a design component within stores: the corporate image, consisting of elements such as displays, signs, general shop information and many other communication artefacts, was recognised as an important design tool to foster consistency in the consumer experience (Kent & Stone, 2007). In this context, the store's role as a communication channel between the brand and its audience was consolidated.

Since the end of the 1990s, the shift from a product-centric approach to a more service-centric one (Lusch & Vargo, 2006; Merz et al., 2009) and, at the same time, a higher emphasis on the emotional and experiential dimension (Hirschman & Stern, 1999; Pine & Gilmore, 1999) has influenced the practice of retailers and designers by promoting retail environments capable of combining entertainment, fun and leisure within spaces conceived as "theatres of experience" (Petermans, 2012). Retail design is increasingly gaining autonomy as a professional practice with distinctive elements from interior design; however, there was still little structured reflection on the discipline.

With the strengthening of the experiential dimension, the discipline of marketing, particularly experiential marketing, increases relevance and becomes a driving force. For a long time, marketing has been driving practices, defining guidelines, and providing both professional practice and theoretical-critical reflection. Similarly, the servitisation process that has affected the production, distribution, and consumption system (Dinges et al., 2015), together with the complexification of the relationships between the different channels and touchpoints (Hickman et al., 2020; Piotrowicz & Cuthbertson, 2014) within an

omnichannel environment, has subsequently supported management's leading position. The ever-increasing complexity of retailers' activities and the related back and front-end management processes have required comprehensive governance of the strategic, procedural, and operational dimensions of goods and services flow within the distribution knots (Grewal & Roggeveen, 2020) – between suppliers and final customers – capable of ensuring consistency, fluidity, and effectiveness. In this complex context, technological spread and transformation effects were progressively integrated.

Finally, as advanced technologies have been able to trigger a continuous exchange and strengthen the merge between the physical distribution and the consumption experiences' virtual dimension (Beck & Rygl, 2015; Blázquez, 2014), the whole IT sector grew exponentially and quickly in prominence, becoming a driving force in the sector's transformation dynamics. Indeed, the current technological availability impacts all the management flows of goods, services, information, and experiences in the consumer sphere and systematically involves the entire back end (supplier management, fulfilment, CRM, etc.) and front-end (on-site and online customer experience, service assistance, etc.) process chain.

Throughout these transitions, design has been forced to redefine its role and tools in response to the intervening changes: from an approach predominantly grounded in the interior design domain and expertise, retail design has embraced the domains of product design and communication design and, more recently, is finding bridges with service design and interaction design. However, in the face of the transformations that retail design practice has undergone, little research still adopts a holistic approach that reflects on the disciplinary specificities of retail design (Iannilli, 2010; Petermans & Kent, 2016; Quartier, 2016). Most studies, in fact, tend to adopt a vertical approach to the different areas of design: interior design, communication design and product design (Christiaans & Almendra, 2012).

Consequently, nowadays, retail design is calling upon to envision how to interrelate with all other domains and retail functions – from marketing to management to IT – to evolve into a discipline that truly embraces interdisciplinarity and keeps bringing innovation to the sector.

5.2 The Design's Role in the Omnichannel Retail Environment

In this complex context characterised by a co-presence of different actors, concerns, competencies and sometimes even objectives, the building and managing of the knowledge network that "informs" contemporary retail takes on central importance. This entails questioning phenomena such as production and technological processes, competitive systems, the dissemination of knowledge and the drive for innovation, adopting a new point of view that is aware of the framework's dynamism.

From the point of view of the innovation impulse promoted by design, this often resulted in an innovation of meaning. Concerning design-led innovation processes, Verganti recognised, in addition to design's commitment to improving functional performance or use, a major commitment to infusing new meanings into products, services and processes (Verganti, 2009). The key capability of design-driven innovation is to access and share knowledge, identify critical actors with whom to share the "design context", and convey and recombine such knowledge to build new value propositions (Verganti, 2008). This peculiarity of design-driven innovation relates to the fact that design, among the projectual disciplines, is the one that has performed a reinterpretation of disciplinary boundaries the most, «transforming dividing boundaries into platforms for disciplinary interaction» (Iannilli, 2010, p. 127). Within these "dividing boundaries", design has recognised opportunities for coordinating and integrating different disciplinary knowledge and, thus, a favourable terrain for creation and innovation.

Retail design is recognised precisely for this cross-disciplinary nature as a practice that arises and develops from interaction with other knowledge areas. Whitin this scenario, retail design has moved, and still moves today, in its ongoing transformation, along three interconnected directions that need to be questioned and investigated: design as a "navigator" of complexity; design as a bearer of open knowledge; design as an agent of synthesis and analysis.

5.2.1 Design as a "Navigator" of Complexity

Retail today goes beyond its physical perimeter and explodes into new virtual and phygital platforms along new customer journeys, where an organised network of new channels and touchpoints ensures novel customer experiences. The overlapping and merging of physical and digital dimensions, the multiplicity of streams and players operating within distribution systems, and the focus on the processual dimension of the consumer experience represent some of the aspects that make the sector today a complex system: a system composed of variable and strongly interconnected elements that are indivisible and require a "holistic" approach to their investigation and handling.

This scenario returns, in parallel, the complexity that the designer assumes in defining new meaningful projects, increasingly informed by a considerable amount of multidisciplinary knowledge. Designing within the retail system means tackling and holding together technical-operational, strategic-communicative and business-commercial knowledge and practices and embodying solutions capable of holding together material and immaterial company and consumer values.

In this regard, the need emerges to create and experiment with new design tools and methods capable of taking into equal consideration the different knowledge domains that enter into the new retail innovation processes, not only with respect to the new omnichannel approach but also to the apparent new service orientation.

If we consider design as a cognitive and operational tool employed to envisage change – ranging between what is and what could be – the designer's attitude to "embrace discontinuity and indeterminacy" (Michlewski, 2008) is a way of accepting and navigating complexity. This approach, by assuming to «engage in a process that is not predetermined or planned ahead in detail and where outcomes are unknown or uncertain» (Michlewski, 2008, p. 380), allows the designer to recognise the lack, or inadequacy, of codified operational tools to deal with this complexity and thus prompts to use old tools innovatively, perhaps reconfiguring them, or creating new ones from scratch by operating inter- or trans-disciplinary syntheses. Thus, design can provide a framework of meaning to the project within a mobile and in transformation landscape.

5.2.2 Design as a Bearer of Open Knowledge

Today's retail environments require knowledge beyond multidisciplinarity and the ability to interact with other knowledge fields and share interpretative codes and research methods. If humanistic and social science research, economic-managerial research, and business research have already been contributing fruitfully to the implementation of innovation in retail formats and concepts for some time, the current role of digital technologies, servitisation processes and the new circular economy, which characterise the emerging retail panorama, point to the necessary inclusion of new variables within retail design contexts. The urge to call for the intrinsically interdisciplinary character that characterises retail design comes from the need for openness to these new variables.

The design activity is the result of a complex knowledge that places itself comprehensively and pragmatically with respect to the necessary know-how related to the competitive company needs, to the customer centrality, to the product system in a retail omnichannel environment, in which the physical space is more and more "augmented space" (where interior design, communication, interaction and services design operate in an integrated way). In this context, the design concept becomes the unifying setting capable of giving significance to the variables required to address a precise demand for enhancement, innovation, and competitive value.

The clear separation between technical skills and management skills, between specialised knowledge and organisational knowledge loses its importance in virtue of the need to build "bridges" between the various company functions and processes, to trigger dialogue and information and knowledge transfer processes, to manage relationships, even conflictual ones, and to tackle complex problems and solutions in a proactive manner (Iannilli, 2010, p. 140). Design is among the disciplines that have most frequently questioned its role, disciplinary boundaries, and methodologies, and, in light of this, it is by its very nature an open discipline: open to change, open to transformation and open to accepting the instances of other know-how, skills and techniques, offering itself as a "facilitator of flows". In the retail field, this system of flows and nodes is constantly changing, and

the instances that pass through it – of a managerial-competitive nature, associated with consumption transformation and driven by technological innovation – follow largely unpredictable trajectories. The discipline's plasticity and systemic approach (Jones, 2014; Ryan, 2014) thus appear functional in handling this unpredictability by proposing open, porous, "mobile" solutions.

5.2.3 Design as an Agent of Synthesis and Analysis

The complexity of doing design, today and especially in a system as articulated as retail, emphasises the need to work for strongly multidisciplinary teams that operate in different project stages. Traditionally, design is associated with the role of director of the design process, and this is tied, on the one hand, to the ability to visualise and represent complex systems and, on the other, to the ability to create a ground for sharing and consensus between the different players involved in the process thanks to the ability of coding and decoding – carried out through representation – which is part of every design activity. Designers, often integrated within extended project teams, assume a multifaceted role that goes beyond their design responsibilities, involving the crucial function of mediators, or facilitators, between team members (Celaschi, 2008; Minder & Heidemann Lassen, 2018). Within multidisciplinary contexts, in particular, design can contribute by acting as a facilitator both at the process level (guiding through a flexible and open co-creation process, introducing creative methods and techniques, providing external information, or helping to create acceptance) and at the level of creative input (inspiring new ideas and visions, supporting exploration and visualising ideas) (Minder & Heidemann Lassen, 2018). Indeed, in optimal scenarios and by their cultural and traditional grounding, designers strive to know and understand the different disciplines' technical lexicons and interpret the heterogeneous contributions of the various experts that make up the team. In this role, designers are often considered pivotal "synthesisers" within the project team.

Complementing this role of "synthesisers", a second aspect also emerges, complementary to the first, which sees them as capable of

«“looking at a situation from a wide variety of perspectives”, bringing together “humanistic standpoint”, “deep understanding” and technical limitations» (Michlewski, 2008, p. 377). In this sense, the designer’s role appears apparently divergent: on the one hand, creating connections; on the other hand, bringing a different point of view and exploring further problems and opportunities.

In the retail context, designers have the potential to express a broad spectrum of competencies, including strategic design, experience design, communication design, interaction design and service design. Furthermore, by making a substantial contribution as cognitive mediators, their role can be functional as a nexus between business entities (such as sales managers, sales associates, and agents) and key participants involved in upstream processes (including the domain of consumption behaviour and scenarios, and trends research) (Iannilli, 2010). A figure of connection and integration between the different knowledge involved, in contact with both technical and managerial instances and those of consumers.

5.3 A Still Ongoing Discussion on the Retail Designer’s Role and Competencies

Considering the complexification of contemporary retail processes, objectives and even boundaries, the discussion on the skills and competencies a retail designer should possess today is running and still open (Claes et al., 2016; Iannilli et al., 2019; Morone, 2016; Quartier et al., 2020). This discussion is also informed by the retail field’s change, which has led to a multiplication, overlapping and interconnection of spaces, times, and occasions to experience products and services.

In this context, the tasks of the retail designer have become increasingly broader, moving from the area of interior design to the field of experience design and now encompassing the domains of service and interaction design. At the same time, other disciplines have become increasingly relevant, such as marketing, management, and IT. We can say that today, they are driving the transformation, challenging

design in its capacity to be a process facilitator, knowledge aggregator and synthesiser.

Within this highly fluid scenario within which design operates on different fronts and transversal across knowledge domains and expertise, the discussion about the current role and specificity of retail design is relevant but still unstructured. For this reason, discuss processes and methodologies supporting retail design appears relevant and promising. The following chapters are part of this research stream by proposing a reflection on what and how interdisciplinary tools can be helpful to facilitate the design process and promote innovation in retail and by presenting, through a series of experiments, a design-led operating model for omnichannel retail in different disciplinary contexts.

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6. Retail Design Tools: An Omnichannel Retail Design Process Conceptualisation

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6.1 Introduction

Within the rapidly evolving retail landscape, competence domains within the retail system continually redefine their roles, hierarchies, and intervention models. Also, the quick changes in the retail industry have sparked academic interest and increased demand for experts in the field. With the lines between conventional and online shopping becoming increasingly blurred, digitalisation has emerged as a significant force behind this transition.

As a unique multidisciplinary design profession, retail design currently includes creating both virtual and physical locations for selling goods, services, and experiences to customers. The duty of the retail designer has changed in this changing environment (Cheetham & Chivers, 1996; Iannilli et al., 2019; Quartier et al., 2020). Moving from a multidisciplinary to an interdisciplinary approach, retail design necessitates collaborative teamwork, with various professionals working in concert to address the complexities of omnichannel retail and beyond (Quartier et al., 2020). Claes et al. (2017a, 2017b) set new requirements for the retail designer in the age of phygital, asserting that now more than ever, designers should assume a holistic approach aiming at transdisciplinary work, which is necessary to manage the complexity of customer experience. The authors further argue that the competencies to be integrated into retail designers' skills are: understanding how digital technologies can be applied and how they work; the ability to generate creative ideas; the ability to think across

channels starting from the customer journey and technology integration, considering variables and conditional factors. To this regard, it is important to underline that, although aiming at interdisciplinarity and transdisciplinarity (according to the different academic positions), the present retail design process can surely be categorised as multidisciplinary.

In this context, the conceptualisation of the process and tools for retail design has been developed from a design perspective and from a design culture background in order to provide a contribution to the retail discipline in the broad sense.

6.2 The Conceptualisation of The Process and Tools – Methodology

The new directions in retail experience design raise questions about which tools need to be integrated into the retail experience design process. As previously remarked, being a highly transformational field, the expertise domains in the retail sector are always changing in terms of their functions, structures, and methods of intervention (Cheetham & Chivers, 1996; Iannilli et al., 2019; Quartier et al., 2020). The complex intertwining demands that require not only spatial design skills but also marketing, strategy, branding, communication, service, management, omnichannel and digital converge within a system that requires interdisciplinarity, which can be fuelled by design tools integrated into the design process.

In this context, a reflection on the omnichannel retail design process and on the tools that are being used during its phases is presented in this work, with the intent to map the state of the art and come to a conceptualisation of the process and tools for a better understanding of the current retail design framework and its pain points and spaces for the evolution of the contemporary omnichannel retail design process.

The conceptualisation of the process and tools for retail design illustrates the correlation between retail design process phases and the corresponding tools and actors involved in the process, with a specific focus on highlighting how and when the use of tools is aimed at fostering interdisciplinary work.

The conceptualisation of the process and tools for retail design develops vertically, showing first the design process phases divided into six as follows (shown in Fig. 6.1 and 6.2 in the black boxes). The first phase is the *Brief,* which involves thoroughly instructing or informing someone in preparation for a task to be "solved". The next phase is *Research and Analysis,* where data from the context and case studies is collected and analysed to gain insights and inspiration for the project. Following there is the *Concept Generation* phase in which ideas take shape but remain somewhat abstract. Afterwards, thanks to the *Project Development* the concept becomes more concrete, and technical skills come into play to make the project achievable. Project Development is followed by the *Project Implementation* phase, in which issues and pain points in the developed project become apparent and improvements are made. Finally, the completed project undergoes a systematic and objective assessment thanks to the *Evaluation* phase.

It is important to emphasise that although the phases are represented here as a linear and highly codified process, during design practice, they are subjected to a continuous process of proofing and iteration, proper to the design discipline, oriented towards questioning the results and outputs obtained cyclically and systematically. The same happens naturally, and even more so within the sub-phases.

In each primary phase of the retail design process, there is a set of more detailed sub-phases, depicted within the white boxes of Fig. 6.1 and 6.2: Within the *Understanding Design Brief* sub-phase, a comprehensive analysis is conducted to scrutinise the problems and future requirements of the project. Following this, the *Composing Design Brief* sub-phase involves the collection of data from the previous sub-stage, which is then used to construct a comprehensive project brief. In the *Cross-sectoral Blue-sky Research* sub-phase, an open and non-structured process unfolds, aimed at establishing connections among various pieces of information. The primary goal is to unveil and systematise a range of inputs and stimuli that prove valuable to the project's creative process. Progressing, the *Contextual Analysis* sub-phase strives to gather all relevant information concerning the project's surrounding context. This contextual understanding forms a crucial foundation for comprehending subsequent phases more effectively.

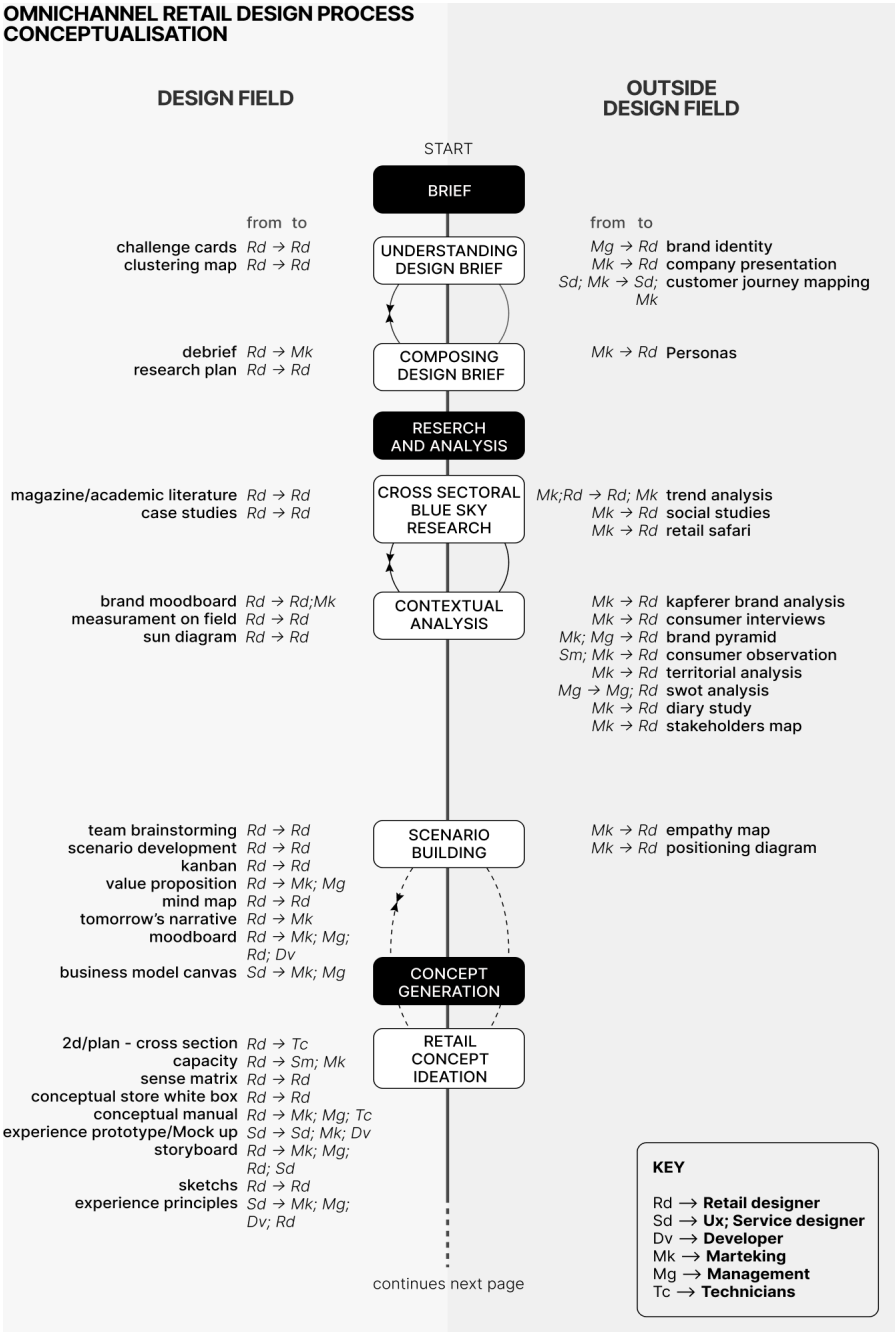

Fig. 6.1 Visual Conceptualisation of Omnichannel Retail Process and Tools, part 1 (authors' elaboration).

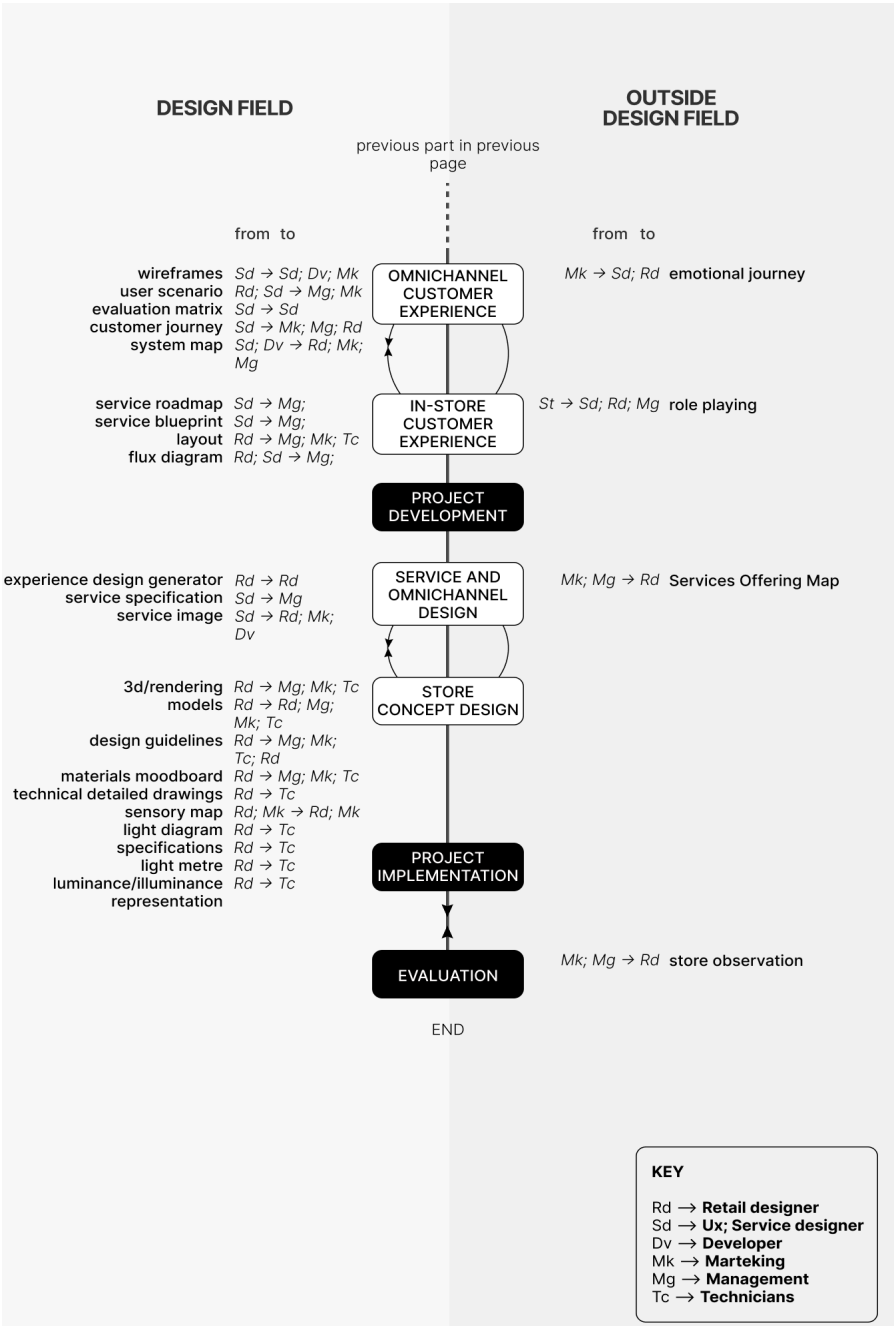

Fig. 6.2 Visual Conceptualisation of Omnichannel Retail Process and Tools, part 2 (authors' elaboration).

The *Scenario Building* sub-phase serves as an early step in the concept creation process, consolidating all available information to explore potential responses to the project's brief. Within the *Retail Concept Ideation* sub-phase, the project's concept takes shape, providing more precise guidelines that will direct the project towards successful completion in the following phases.

In the *Omnichannel Customer Experience* sub-phase, a comprehensive analysis and design are carried out for the customer experience across all channels involved. The ultimate objective here is to ensure a seamless and unified user experience. Following in the *In-store Customer Experience* sub-phase, the focus shifts to outlining the consumer experience within the physical store environment. This includes highlighting the flow of the experience, the touchpoints consumers will encounter, and elucidating the operational mechanisms involved. The *Service and Omnichannel Design* sub-phase places meticulous attention on the aesthetics and finer details of the services provided across various channels. Finally, in the *Store Concept Design* sub-phase, all facets of the project's concept are transformed into the tangible project itself. This final step yields a detailed plan that includes technical specifications and other essential particulars for successful implementation.

The selection of the phases was guided by a combination of models that all followed the design thinking method and systemic thinking. The latter helps to understand the complexity and the constant changes that each designer – in the case of the retail design – has to face, and it guides them into a flexible and collaborative approach with a system, keeping in mind that the complexity depends not only on technology but on the interaction between a multiplicity of innovative actors, each of whom brings a plurality of values, interests, beliefs, needs to the decision-making process (Manzini et al., 2004). One model taken into consideration was developed by John Chris Jones, explained in his book called "designing designing" (Jones, 1991). Another consulted model was the one explained by Vanrie et al., in which they tried to delineate the holistic approach in the omnichannel retail design (Vanrie et al., 2016). All these methods were analysed, combined, and integrated with insight from academia and practice.

Keeping the design point of view on the multiple disciplines operating within the omnichannel retail design process, the conceptualisation is divided into the "design field" and the "outside design field". This separation happens in order to create neatness in the design mix, which is defined by the interdisciplinarity from which the discipline draws, and the route of elaboration required to reach the desired output (Germak et al., 2008). In the "design field" part, positioned on the left side of the conceptualisation, the tools have been generated into the design sphere or are adequately used by designers. The side of the "outside design field", on the right, has the tools that are usually proper and used in management and marketing disciplines. The "outside design field" tools are valuable and participatory in the design process, but they are not used directly by designers instead, designers use the results of the tools as insight to organise better and/or develop their work.

The actors involved in the omnichannel retail design process came not only from the design field, as can be deduced from the preceding passages, but also from the field of marketing and management (Claes et al., 2017a; Iannilli et al., 2019). In Fig. 6.1 and 6.2, all the actors presented in the conceptualisation are retail designers, UX/service designers, developers, management, marking specialists, and technicians. Each of them has been identified with a couple of letters. An arrow illustrates the workflow for each tool in the process. When the arrow moves from one actor to another, it clearly indicates a point where the tools act as facilitators for the exchange of information and ideas between different disciplines during the design process, which was the goal of the present conceptualisation.

Each tool, who uses it and who applies or sees the result of the tool. The main two classifications of actors are designers and stakeholders participating in the design process. The design classification is composed of the specialised figure needed for the creation and realisation of an omnichannel project, both physical and digital, and they are retail designers, UX/service designers, and developers. The stakeholders participating in the design process classification are established by all the figures, outside the design field, needed for the realisation of the omnichannel retail design process, which are management, marketing, and technicians – e.g., electricians.

As the retail sector has evolved, the analysed tools – divided into the suitable sub-phases of the conceptualisation – are from all the fields mentioned previously.

The first set of tools is from the interior design and architectural field (e.g., technical drawings) because retail design is a branch born from those disciplines (Teufel & Zimmermann, 2015). All the spatial tools analysed and chosen were selected to face the increasing challenges in the spatial store design process. The intricacy of this situation arises from the numerous interconnections among various store design factors. A modification to one factor can influence others, triggering a chain reaction. Additionally, the dynamic nature of the retail store design process introduces unforeseen constraints that emerge as decisions are made during spatial planning. Consequently, designers must navigate both emerging and existing constraints, making the retail store design process a challenge of managing multiple interrelated design choices simultaneously (Haug & Münster, 2015). The retail designer, besides spatial skills, needs to have other capabilities due to the new challenges of the market (Quartier et al., 2020) brought by the omnichannel system (Melero et al., 2016), the new technologies involved in the fashion and retail system (Shankar et al., 2021; Verhoef et al., 2015) and the service-dominant logic (Lusch & Vargo, 2006). In fact, other tools were added from different design fields, such as the tools from UX design and service design. Service and UX tools play a vital role since services underpin our daily lives in all domains. They accompany us in numerous daily activities. Among the various professions essential for delivering a service, the service designer takes on the responsibility of crafting the overarching vision. Their task is to ensure that all stakeholders contribute to delivering a gratifying experience for both users and the organisation offering the service (Tassi & Meroni, 2019). UX design and its tools are fundamental to the experience and services on digital channels adopted by the omnichannel retail system. These tools make it possible to design the interaction the consumer will have with digital retail with a given interface. The concept of interface, applied to services, makes it possible to approximate the behaviour of the service to the behaviour of interactive artefacts, and to use the tools developed in the discipline

that deals with their design to identify a new apparatus of conceptual and operational tools for the design of services (Manzini et al., 2004).

As already anticipated, in addition to the tools previously mentioned, there are others categorised as "outside design tools" within the field of marketing and management. In today's retail design landscape, these disciplines play a pivotal role. From a design perspective, these tools are indispensable, as they generate valuable insights crucial for executing intricate omnichannel retail design projects.

6.3 Tools Role and Functions in The Design Process

To better frame the present research and analyse the omnichannel retail experience design process and the tools related to it, it is important to define the design activity from a cognitive point of view.

Following Buchanan (1999) explanations of the four orders of design it is possible to frame omnichannel retail design in the fourth order, in which design has moved toward outputs that are at the same time tangible and intangible, as for services, systems, interfaces and objects. This implies design, in its fourth order, to be focused on the understanding of the interactions and relationships between the different components of the system it operates in, and on the relationships between the actors involved. To deal with the complexity underlying the system and, in the attempt, to navigate it, representations gain a great importance in the understanding and shaping of systems, and (relating to the specific focus of this work) of the omnichannel retail design.

In the design process building representations offers the possibilities to designers to broaden their perception and understanding of issues (Jones, 1981), and following Lawson (2007) the visual representation of the knowledge accumulated in the process allows new forms of manipulations of the ideas. The same concept of visualisation as a form of understanding and manipulation of ideas is recalled in the theories of Schön (1983), Rittel (1987), Dorst (2009) and Cross (2001).

In the context of the omnichannel retail design process, the visualisations have the purpose of understanding the complexity of the

system and characterize the *designerly* approach to project and interdisciplinary work.

Considering design as the construction of representation, clarifies the well-established presence of tools involved in the work of designers, these may involve different types of input and output representations, from structured texts to final prototype. The production of diverse representations in the design process is typically supported and guided using several tools and instruments that are meant to foster the exploration, conception, implementation, and communication of their ideas in the form of representations (Visser, 2010).

Some tools own coordinative functions as objects of persuasive communication while others help to develop a general understanding of an idea, or a task and others still may work as recall of design principles, approaches, methods, or open questions. Still some others help to maintain the control of the activities and materials while others represent the design decisions to a predetermined level of detail and technical precision (Loução et al., 2013).

It is important to underline that tools are not neutral. They perform as an "Epistemic Machine" that transforms the perception of reality allowing the construction and the interpretation of new phenomenon's and evoke of design fundamentals, strategies, techniques, or unanswered questions (Loução et al., 2013).

Furthermore, in the contemporary design process of the omnichannel retail experience, the process of design and representation of ideas and solutions is not a solitary path, thus many actors participate in the process and contribute to it by bringing their professional knowledge from different fields. Indeed, the explosion in potential customer touch points and the reduced control of the experience require firms to integrate multiple business functions, including information technology (IT), service operations, logistics, marketing, human resources, and even external partners, in creating and delivering positive customer experiences (Lemon &Verhoef, 2016). This implies the collaboration and exchange of knowledge and information among the different professionals involved in the project.

The intertwining of knowledge brought into the process by the different participants to the project is responsible for its unique interpretation, demonstrating the importance of the contributions of every participant in the process. According to Fischer (2000), the predominant activity in designing complex systems, as omnichannel retail experience can be considered, is that participants teach and instruct each other. Because complex problems require more knowledge than any single person possesses, communication and collaboration among all the involved stakeholders are necessary. In the context of this study, the tools systematised in Figs. 6.1-6.2 also have the function to support and enhance the exchange of knowledge between the different actors participating in the design process, and more precisely, drawing from Fischer (2000): (i) create and capture knowledge in the context of collaborative design activities; (ii) sustain the timeliness and utility of evolving information; (iii) articulate knowledge in a form that other people can understand; (iv) enhance existing knowledge with new knowledge; and (v) create visualisations that help stakeholders think, and help analyse their constructions and artifacts (Fischer, 2000).

The intermediatory function of the tools among the stakeholders collaborating in the omnichannel retail design process is central in this study; according to Schmidt and Wagner (2002) in cooperative work, their main function is not informative, but coordinative: they contribute to a more or less effortless and fluent coordination and integration of individual activities in coordinative practices. Indeed following this idea, in the conceptualisations of the tools in the omnichannel design process presented in this chapter (Figs. 6.1-6.2), the authors represent the tools applied to the different phases of the design process, but also more importantly, the exchange of the representation generated by the use of such tools between the different actors involved in the retail omnichannel design process, demonstrating how the different stakeholders face the complexity of this process with the help of tools originating from different disciplines and exchange respective professional knowledge and contribution through these form of shared representation.

Visualization plays an important role in materially mediating the collaborative processes (Simonsen et al., 2014). The visual expression

in a collective setting may nevertheless improve integration of the group process, by facilitating the access to previously expressed ideas, in fact the activities shaped by the tools form a common ground where participants ideally meet on equal terms, with all their differences, and are offered ways to express their opinions and analyse, discuss, model, and reflect on design issues. Visualisation tools have been found to facilitate exchange between the people who experience products, interfaces, systems and spaces and the people who design for experiencing (Sanders & Dandavate, 1999).

Prototypes and other expressions such as sketches, diagrams, and scenarios, are the core means by which the designer builds the connection between fields of knowledge and progresses toward a product (be it tangible or intangible). Prototypes serve to instantiate hypotheses from contributing disciplines, and to communicate principles, facts, and considerations between disciplines. They speak the language of experience, which unites us in the world. Moreover, by training (and selection), designers can develop ideas and concepts by realizing prototypes and evaluating them (Stappers, 2007).

After having framed tools functions and clarified their contributions to the design process, the observation of the conceptualisation proposed in this work, can bring forward a more detailed discussion on the different functions that tools have in relationship to the activities characterizing the omnichannel retail design process phase they belong to.

Referring to *Brief* and *Research and Analysis* design process phases, in these initial phases the designer collects information from the different stakeholders involved and the activities are aimed at the precise definition of requirements, goals and constraints to be addressed with the design project. That is designers will interpret the input to a design project (the requirements and other data that they receive or collect) in order to generate a first representation – which may consist of an ensemble of representations. Consequently, all the tools involved in this phase are aimed at facilitating the generation of this first representation of the design project. These tools are mainly analytical and propositional.

In the activities within the *Concept Generation* phase, the ideas start to gain shape, consequently the representations are mainly

descriptive, concrete, visual or constructed, these include sketches, concept diagrams, prototypes etc.

In the end, the tools aimed at representing design decisions, organizing, and controlling execution activities are central in the *Development and Implementation* phases.

To sum up, the tools relating to the Brief and Research and Analysis phases have mainly organizational, analytical, and propositional functions; those used in the Concept Generation, Development and Implementation phases are descriptive, visual, and organizational as well.

Further in the reflections on the conceptualisation of the tools presented in this work, it can be noted that, while in the first stages of the design process the exchange of information is balanced in terms of exchanges of materials between the design field and outside, and thus the flux of information transferred inside the interdisciplinary work; in the *concept generation and development* phases the exchange becomes more intense in the direction from the design field to the outside. It can be drowned that the interdisciplinary work mostly takes place in the first steps of the design process and involves all the actors actively, while the definitions of specifications and details of the design projects are mainly concentrated in the design field.

It is interesting to notice that the use of some tools is not exclusive to one discipline, some examples, like *user scenario* or *customer journey mapping*, have a shared usage between the different actors that work respectively on the same representation bringing their unique point of view, suggesting solutions and improvements and innovation opportunities.

Moreover, in some cases the same tool evolves through the process and serves more than one phase. This is the case of *customer journey* which in the *brief* phase involves both the designer and marketing team in the mapping of the current situation of the different possible paths and touchpoints the customers use to interact with the brand, in order to have a clear understanding of the starting point of the project and possible points of intervention. The same tool evolves from the mapping stage to become a propositional tool in the *concept generation* phase where the proposal for the new projects regarding the customer journey and the touchpoints involved is represented as

customer journey visualisation and discussed between the stakeholders with the aim of assessing the new idea and the possibilities opening new directions for the project. As this assessment takes place, it can bring to revisions and the production of new versions of the customer journey, generating some iteration in the process, which in the map presented here are represented by circular arrows connecting the project phases. The circularity among the different sub-phases is fuelled by the use of tools, for their nature of being means through which ideas are shaped, shared and discussed. Even in the *brief* phase the stakeholders discuss requirements and constraints, to come up with new shared versions of the project briefing, constructed in an interdisciplinary way by the use of tools.

Further, it is to observe how the tools mapped in the present work originate from all the different disciplines involved, marketing, management, service and user experience design and retail design in its more traditional understanding, whereas none of the tools mapped is a specific tool for the omnichannel retail experience design, this proving how the evolution of the discipline is still in its infancy, and that as it develops the need for new dedicated and on purpose tools could arose.

6.4 Discussion, Conclusions and Future Work

During the past two decades, digitalisation and the emergence of new online/mobile channels have changed retailing dramatically (Verhoef et al., 2015). The progressive dematerialisation of goods and the consolidation of the so-called service economy have mutually fuelled each other, driving the retail transformation from a predominantly product-centric to a service-centric approach (Lusch & Vargo, 2006). The proliferation of channels and consumers' demand for a seamless experience across them, is challenging retailers' business strategies (Melero et al., 2016). Being a highly transformational field, the competence domains involved into the retail system are multiple and constantly redefined their roles, hierarchies and intervention models.

In this context of transformations, the investigation from a design point of view on the new challenges of omnichannel retail raises questions about how designers are handling the increasing complexities related to the new demands of the retail landscape. As a contribution to this discourse, this work presents a conceptualisation of the design process of the omnichannel retail experience, in relationship to the tools involved in the work and the different actors participating in the process. More specifically, the analysis of the present conceptualisation has a focus on how, during the process, knowledge and information are being shared and shaped among the different actors using specific tools originating from different disciplines, creating the unique intertwining of competencies needed to bring projects to the final realisation.

From the design discipline point of view the competencies needed in the process pushes toward the building of a design team, a group of experts, each with their own specialized skills, embracing realms of user experience (UX) and service design.

The role of the tools in the entire process is not just linked to the final aim of designing a seamless experience, but to fuel the design process itself, becoming catalysts for collaborations, integrating the group work and creating and capturing knowledge in the context of collaborative design activities, sustaining the evolution of ideas, articulating knowledge in a form that can be shared between different professionals with different backgrounds; enhancing existing knowledge and creating visual translations that help stakeholders think.

Observing the flow of information and knowledge generated by the use of tools, evidences a stronger concentration of sharing project materials in the first phases (*Brief* and *Research and Analysis*) of the design process, soliciting questions about the motivations underlying this observation and how the process is going to evolve in the future. Further investigation into this inquiry could expand the knowledge on the subject and contribute to a deeper understanding of the omnichannel retail design process and its possible evolutions.

Focusing on the observation of the tools involved in the process, is clear that these have been inherited from the different disciplines involved in the omnichannel retail design process, influenced by the new requirements resulting from ongoing transformations of the retail

sector, even though none of it has been adapted in order to meet specific functions following its introduction in the retail context, with a notable absence: a dedicated toolset for crafting physical spaces within the digital sector. This gap of toolset presents a compelling avenue for future research and practical innovation. It signals the need for specialized tools tailored to the unique demands of retail design in the digital age. These tools hold big potential, promising new possibilities for research and advancement, and the chance to bridge the gap between physical and digital retail seamlessly.

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7. Piloting a Design-led Operational Model for Retail Design in Multidisciplinary Environments

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7.1 Framing the Context: Driving Innovation within the Omnichannel Retail Environment

The complexity of the contemporary distribution and consumption system reflects the complexity of roles, functions, and procedures underlying the architecture of the retail ecosystem. Moreover, the systemic dimension of the technological transformation – which has fostered the diffusion of new business models with impacts on the entire fashion value chain including, indeed, the distribution, representation and selling phases – has made it urgent to reflect on the different competencies and skills needed to cope with the ongoing change (Bertola et al., 2020).

In this context, the need emerged to understand how design can intervene to foster innovation in the retail environment by exploring and studying a design-led operating model capable of addressing the concurrent aspects and dimensions that inform the current consumer experience. As a complex system, the contemporary retail environment requires the convergence and integration of disciplinary knowledge and transversal skills of a social, managerial and problem-solving nature, connecting the latter, in particular, more closely with the design-applicative domain (Iannilli et al., 2019). If on the one hand, design, marketing, management, and IT contribute, each with their own approaches, to handling a specific facet of the retail system (Madsen & Petermans, 2020; Petermans & Kent, 2016). On the other hand, the current multidisciplinary context requires tackling complex

and multidimensional problems (Brown et al., 2011), sharing languages and procedures, and integrating different methods and knowledge in favour of a proper interdisciplinary synthesis (Moran, 2010).

Contemporary retail, taking shape and boundaries of a true ecosystem (Jacobides et al., 2018), consists of a diverse and variable network of companies, technologies, and processes that underpin the constitution and streamlining of the customer experience. This system is by its very nature multidisciplinary: the different disciplinary areas, which contribute to shaping the retail value chain, exchange knowledge, share objectives, and compare results without, however, integrating processes, thus maintaining their own distinctive character. The complexity of the contemporary retail environment, however, demands an endeavour towards an increasingly interdisciplinary approach: a "horizontal" approach that enables an adequate understanding of the complex systems and contexts within which retail is embedded and that promotes the integration of knowledge, methods, and procedures from different disciplines by adopting a proper synthesis of approaches. Design as a discipline that resides "at the intersection of several large fields" (Friedman, 2000) – including the humanities, social sciences, technologies and engineering, and the arts – and simultaneously owns its processes and methods for approaching problems is by nature interdisciplinary. More precisely, design has, in this context, the potential to embrace interdisciplinarity and promote innovation within complex systems (Iannilli et al., 2019).

Within this framework, and with the specific aim of facilitating the incorporation of innovation trajectories within omnichannel retail processes, a Design-led Operational Model for Retail Design is proposed (Fig. 7.1). The Design-led Operational Model is intended to be applied in multidisciplinary environments and at the same time, promote an integrated interdisciplinary and design-led perspective. Within the omnichannel retail environment, design has already embraced multiple disciplines over the past decade going beyond aesthetics and functional space design: interior design, product design, communication and UX design, and service design represent the many faces of retail design practice to which social sciences, branding theory, marketing and technology are also connected (Claes et al., 2016).

Moreover, the recent digital and technological transformation has further emphasised the importance of building relevant, meaningful, and consistent consumer experiences (Hoyer et al., 2020), confirming the centrality of design in guiding and signifying the experience and relating the network of involved channels. In this context, the Design-led Operational Model intends to represent a helpful process to strategically manage the omnichannel retail design phase taking into account both the ongoing transformations – above all, the technological transformation – and the intertwined levels that make up the retail project – from the design of interiors to the design of services, from the implementation of in-store technology to the holistic design of the experience through the multiple digital channels. Due to its inherently interdisciplinary approach, the model is primarily aimed at a new profile of retail designers capable of embracing complexity beyond strictly disciplinary boundaries. At the same time, the model also provides a valuable tool for marketing, management, and technology practitioners to adopt a more holistic and innovation-oriented approach within their own operational processes.

7.2 Framing the process: a Design-led Operational Model for Retail Design

The Design-led Operational Model for Retail Design focuses on the early stages of design, which are considered the most promising for introducing innovative elements into the system, particularly the metadesign and concept generation phases (Fig. 7.1). These early phases, which are traditionally described in product/service development innovation practice and literature as the (Fuzzy) Front End of Innovation stage (Koen et al., 2001), are the starting point where new opportunities mostly emerge, new ideas are generated, and concepts are developed, laying the foundations upon which the development of new projects can be based. At these early stages, design can significantly intervene and bring added value through its practices and tools, its ability to deconstruct given briefs, tackle wicked problems, and become a resource for guiding innovation processes (Calabretta & Gemser, 2015).

Whitin the model, the process's central knot is the customer experience-defining phase in an omnichannel context. This action becomes strategic as the design environment is transformed, and, with it, the design practice and process are also called upon to adapt: from the first experiential theorists in the 1980s (Holbrook & Hirschman, 1982) to marketing practice that embraces the study of experiences (Pine & Gilmore, 1999; Schmitt, 1999) the concept of customer experience becomes progressively more and more central in retail both in scientific reflection and in praxis and essential at a time of increasing channels multiplication, primarily digital (Gerea et al., 2021). Similarly, this concept increases its importance within the design domain when research on service design recognises the value of the experience in designing a new service (Teixeira et al., 2012; Zomerdijk & Voss, 2010) and, later on when the Human Computer Interaction (HCI) domain incorporates it as an extension of User Experience (UX) (Rusu et al., 2020). Considering the customer experience definition phase as central to the design process therefore means focusing strongly, from a design perspective, on the definition and design of the interactions between the consumer and the different elements and touchpoints along the customer journey as a key aspect in driving innovation. Moreover, taking the consumer perspective in designing omnichannel retail solutions allows adopting a human-centred and holistic perspective, capable of considering, as a whole, the connection and complexity of the various designed elements of the retail experience, from the physical space to the system of products-services offered, from the integrated in-store technology to the network of other connected digital channels.

The Design-led Operational Model, therefore, proposes a conceptualisation of the design process in omnichannel retail in a highly multidisciplinary environment, highlighting design macro- and meso-phases, their correlation with each steps' specific objectives, and the related flow of design/process activities. The macro-phases taken into consideration involve the *metadesign phase* (Celaschi & Deserti, 2007), which from research and analysis, leads to concept generation, and the *concept design phase*, which from concept generation, leads to its development and finally to its refinement. As previously stated, the subsequent executive phases, taught towards the development and

implementation of the project – be it in the physical, digital, or integrated sphere – were not the subject of this research, which instead had the main objective of investigating new models and processes to promote retail innovation within the early stages of project idea feeding and generation. Within the metadesign phase, the project is provided with the insight to analyse and interpret the context's signals and generate opportunities: it is a process capable of stimulating creativity within the created scenarios and thus directing potential innovations (Celaschi & Deserti, 2007). Within the subsequent concept design phase, as previously highlighted, the concept of omnichannel customer experience guides the generation and development of the design idea, focusing on the consumer's point of view with respect to the various designed elements that assemble the specific retail ecosystem.

Since the Design-led Operational Model for Retail Design is intended to be applied within multidisciplinary environments, consolidated, new or enhanced tools have been mapped and developed to help the different actors face complex design challenges within the different design stages.[1] These tools, selected and entangled to both the project objectives and the actors' different disciplinary backgrounds, aim to integrate, and enhance the players' creative, strategic, and technical expertise. *Creative competence*, intended as the ability to look beyond current boundaries to propose ideas that are both original and innovative as well as effective (Runco & Jaeger, 2012), has emerged as a relevant and cross-curricular competence that has recently been enriched by the possibilities offered by new technologies to discover, communicate, and prototype new innovative solutions (Bertola et al., 2020). *Strategic competence*, intended as the ability to acquire, store, recall, interpret, and act upon information (Sparrow & Hodgkinson, 2006) in order to orient and direct goals and decisions, proactively shapes processes and actions involving a broad set of actors through interrelated processes of sensemaking and sense-giving (Kolko, 2010; Gioia & Chittipeddi, 1991). Creative and strategic expertise is crucial for navigating and managing complex contexts, such as the contemporary omnichannel retail environment,

[1] See chapter 6, Retail Design Tools: An Omnichannel Retail Design Process Conceptualisation

and at the same time, must now be complemented by *technical competencies* and hard skills comprising the knowledge and abilities required to apply specific and specialised technical principles.

The model was thus applied to three pilot cases to test its validity within higher different educational contexts and grounded in different disciplinary backgrounds. In all three pilot cases, the experimentation was framed within the retail design in an omnichannel context to nurture and activate the system of competencies and meta-competencies (Siddique et al., 2013; Quartier et al., 2020; Belolipetskaya et al., 2020) needed to cope with the changes taking place. The first experimentation aimed at integrating strategic and technological knowledge and skills within a fashion design background (MSc Design for the Fashion System, POLIMI Design School); the second experimentation integrated creative and strategic knowledge and skills within a management background (Master in Brand and Business Management, MFI); the third experimentation integrated strategic and technological knowledge and skills within an architecture and interior design background (Master in Furniture Design, Retail Experience Module, POLI.Design). These three experimentations allowed the implementation of different variations of the Design-Led Operational Model to make adaptations per the target disciplinary setting and to verify its effectiveness as a model capable of promoting new forms of knowledge, skills, and competencies for retail design.

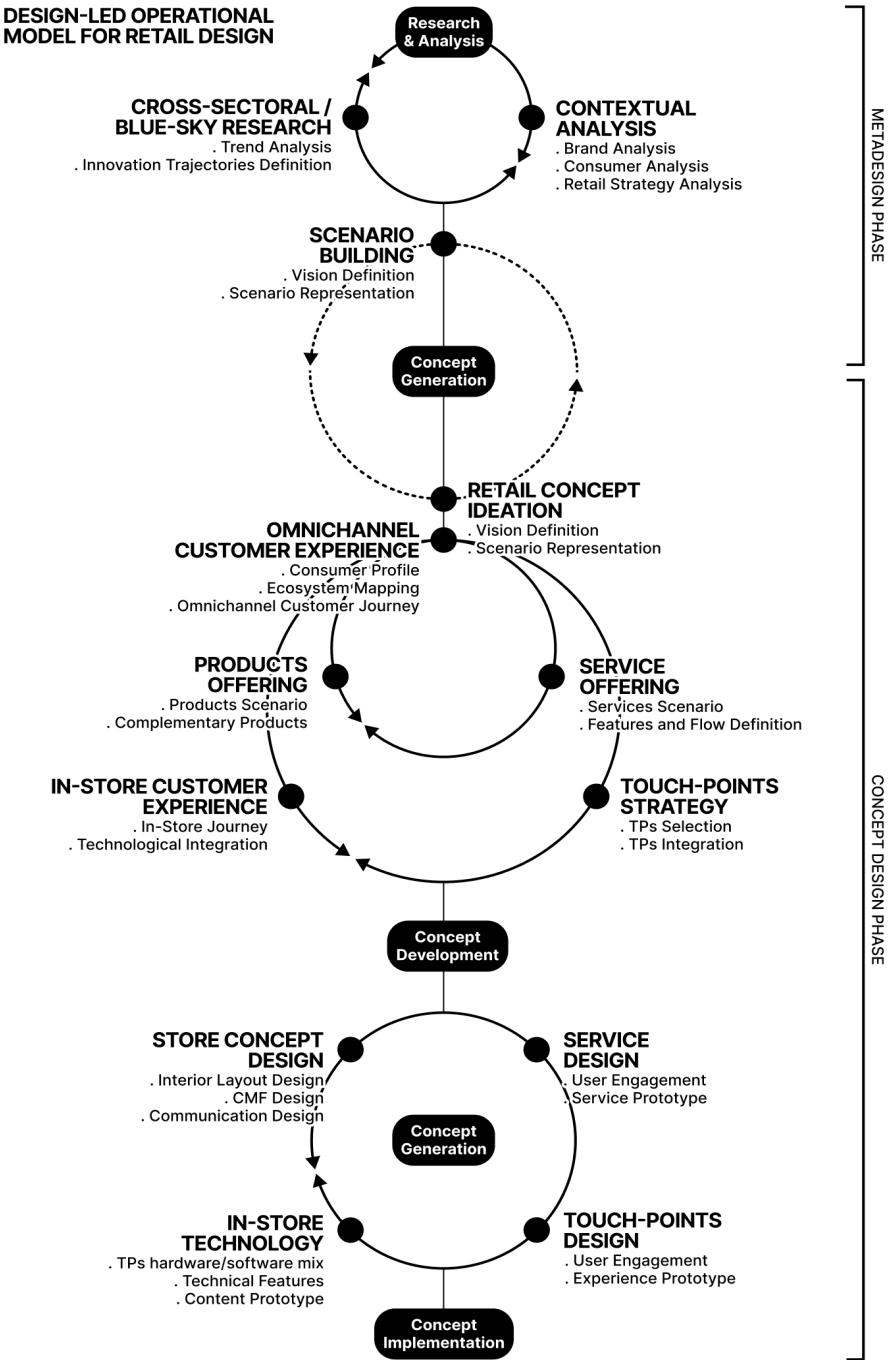

Fig. 7.1 Design-led Operational Model for Retail Design (authors' elaboration).

7.3 Envisioning Technology-Fuelled Fashion Retail Futures. A Pilot Carried Out at the MSc Design For The Fashion System, POLIMI Design School

The first experimentation aimed at testing the model described in the previous paragraph, took place in spring 2022, in the "Fashion Retail Experience Studio" course of the MSc Design for the Fashion System at Politecnico di Milano. It involved sixty-eight international students attending Fashion System Master's degree, at their first year of study, a team of four retail experience design professors with strong professional backgrounds and Deutsche Telekom, a leading integrated telecommunications company, which provides information and communication technology (ICT) solutions for business and corporate customers. Deutsche Telekom Customer Experience and Design Area involved in the project has been an important contribution, both for the technical expertise and the strategic one. The professionals involved brought to the class their knowledge of advanced technologies and a strategic long-term vision on the technical evolution and its possible impacts on the retail sector.

The majority of the students had a bachelor's degree in fashion design, and no previous experience in retail design. The participants were divided into teams of five to six people. The project brief was to design the concept of a phygital retail experience, able to create innovative and valuable relationships among contemporary consumers and fashion products, services, and physical/digital spaces.

Through the whole course, frontal lessons and individual in-class activities guided the students with the support by specific tools, aimed at consolidating key concepts and/or having a first-hand experience in applying them, with a learning-by-doing approach. During the whole design process, for their group work, students were advised to use specific tools aimed at clarifying and supporting the organization, creation, communication and discussion of concepts and ideas (Fig. 7.2).

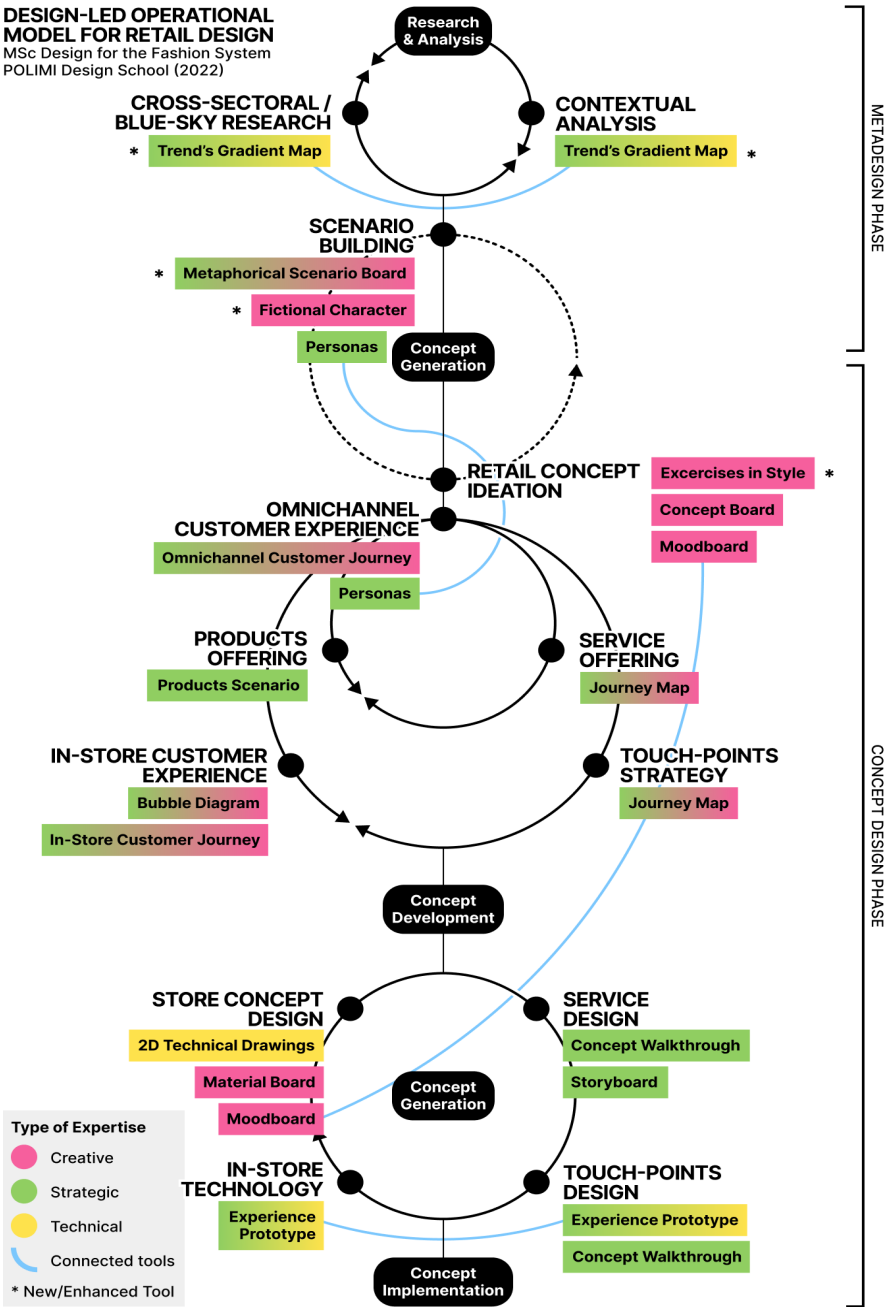

Fig. 7.2 Design-led Operational Model for Retail Design and applied tools within the "Fashion Retail Experience Studio", MSc Design for the Fashion System, POLIMI Design School (2022); (authors' elaboration).

The course also offered some individual activities aimed at training specific abilities, more precisely two activities have been proposed: the *24h inventory* and the *empathy map*. The *24h inventory* activity aimed at consolidating the ability to analyse consumers' habits and preferences and to describe concepts visually. The request of the exercise was to describe the personality of an ideal customer by illustrating the products he/she used in a typical day. The *empathy map*, a tool originally belonging to the marketing field, helps to schematise knowledge about end-users, in order to create understanding of user needs in decision-making processes and to understand the emotional impact of the design choices in the customer experience.

In the group work, through the design process, the students were supported by the following phases and tools. For the phases of Research & Analyses and Concept Generation: *trends' gradient map*; *metaphorical scenario board*; *fictional characters*; *personas*; *exercises in style*; *moodboard* and *concept board*. For the phase of Concept development: *omnichannel customer journey*; *journey map*; *bubble diagram* and *in-store customer journey*. Finally for the phase of Concept Implementation: *concept walkthrough*; *storyboard*; *2D technical drawings* and *experience prototype*.

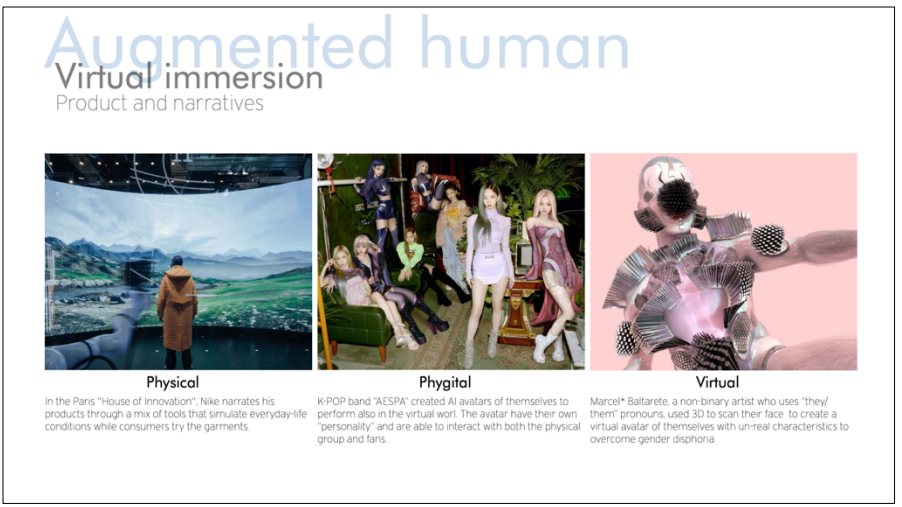

Fig. 7.3 Example of research board elaborated for the Fashion Retail Experience Studio (Diego Dani, Francesca Marzolla, Francesca Rizzo, Irene Sapuppo, Wei Wang).

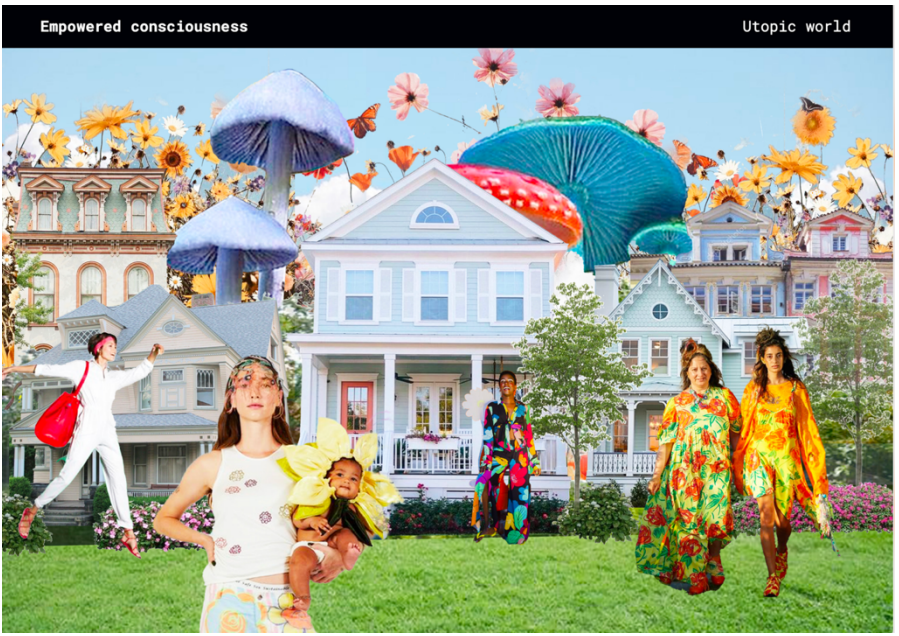

Fig. 7.4 Example of scenario moodboard created for the Fashion Retail Experience Studio (Bryan Bachmann, Francesca Bergamini, Enola Cappellari, Yuanjing Zhang, Federica Mora).

Some examples of the work from students, participating the Fashion Retail Experience Studio, are presented in Fig. 7.3 (*research board*) and 7.4 (*scenario moodboard*). Through the *research board* the students organized the research inspiring their concept into physical, phygital and virtual case studies, to systematize the research and gain clearer insights about the trends in the retail experience field. While thought the *scenario moodboad*, the students created visualisations to communicate the concept, values and visual mood of their main idea, training creative and communication expertise.

The project presented high complexity and required students to explore not only the creative field, but also the strategic and technical one. In a first step of the Metadesign Phase, students conducted a Cross-Sectoral/Blue-sky Research together with Contextual Analyses. The *trend's gradient map* tool was specifically adapted to the course requirements, with the aim of helping students categorize the results of their research on technological applications by specific focuses. For concept generation, *scenario building* techniques were used to

visually describe the concepts and directions of the first project. The tools for obtaining the result were the *metaphorical scenario board* and *fictional characters* and *personas*, used to understand and describe the ideal client to whom the project is aimed, describing lifestyle, personal interests, and tastes, in a schematic and visual way. Still within the Concept Generation phase, for the Retail Concept Ideation step, the tools used were *exercises in style*, and *moodboard* and *concept board*.

The Concept Development step, part of the Concept Design phase, was divided into five parts. The first concerned the Omnichannel Customer Experience, where the students were asked to describe how the integration between channels could be achieved by constructing *personas* and *omnichannel customer journeys*. The second and third parts refer to Services Offering and Touch-points Strategy, both guided by the creation of a *journey map*. It is important to do journey mapping to get a visual overview of how customers interact with your website, products, or business at various touchpoints. A fourth part refers to Products Offering, developed through *products scenario*, with the aim of illustrating how the consumer will interact with a product. Finally, we have the development of the In-store Customer Experience, done through *bubble diagrams* (schematic drawing for the purpose of planning and organizing space) and *in-store customer journey* (describing the step-by-step experience within the store, detailing all the points of contact and interactions from the consumer's point of view, their feelings, and sensations at each stage).

The transition from the Concept Design Phase to the Concept Implementation includes four parts, which the students were not able to do completely, as they were not asked to build a real-size prototype. However, they developed the Service Design through the *concept walkthrough* and *storyboard* tools, and the Store Concept Design through the tools *moodboard*, *material board* and *2D technical drawings*. The next steps, which were not possible to develop, refer to the prototyping phase of Touch Point Design and In Store Technology. To sum-up, in the Fashion Retail Design Studio experience, the focus on envisioning the evolution possibilities for technological enhancement of retail experience spaces, required integration of some new or enhanced tools in design process, also considering students'

background, mostly centred on fashion design. The integration was specifically regarding the first, meta-design phases. In the Research and Analysis phase the integration of tools aimed at improving technical and strategic skills in the formulation of a neat organization of the research paths, that was central for a better understanding of the themes involved in the general topic and the context related to the project brief. In the concept generation phase, the tools introduced in the process had a focus on enhancing strategic and creative skills, with the aim to encourage the formulation of creative solutions capable of putting together technological evolution and cultural and social meaning.

7.4 Redefining Branding and Retail Strategies in an Omnichannel Context. A Pilot Carried Out at the Master in Brand and Business Management, MFI

The second pilot takes place within the context of the Master in Brand and Business Management, offered by the Milano Fashion Institute in 2022. The project lasted a total of thirty days, between the months of June and July. The class was composed by about 40 students from different nationalities, mostly with an academic background in the business field, except for some with a background in the design area.

Guided by two main teachers and two co-teachers, the pilot is part of a multidisciplinary educational context, which combines the areas of management, design, and social sciences for fashion, while still focusing mainly on the management area. The format of the classes was composed by an initial frontal theoretical class followed by reviews to check the progress of the project; the final result was presented by each group in a final 15-minute presentation.

The project brief is linked to the English brand called Labour and Wait. Established in 2000 in the heart of East London's market district, the store was founded by two former menswear designers who wished to promote well-made and durable home goods. Currently, there are four locations in London and another one in Tokyo. The store offers a range of timeless, functional products for everyday life, defending the

concept of timeless and high-quality products. Within this context, the students, divided into groups, were invited to imagine what it would be like to place Labour and Wait within the Italian environment, in the city of Milan. The difficulty in developing a project of this kind is due to the strong aesthetics transmitted both through the physical and digital stores, where the British essence is present. Furthermore, the curation in choosing the products and the story told through each of them visually is strategically thought out, the decision to take such a concept to another country requires a new strategy to conquer the market. Nevertheless, the main objective of this project was the design of an innovative consumer experience that, starting from the physical space, should be connected to other touchpoints (physical, digital, mixed) through technology.

More specifically, the project aimed to create the Italian physical and virtual store experience, intending to: offer a unique brand experience adapting the customer journey – both physical and online – to the Italian market focusing on curatorial approach; propose collaborations with new brands (fashion, food, beauty sectors) and implement new services and physical/virtual experiences. The development of the work covers creative and strategic techniques. Within this context, creative expertise refers to the ability to see the task from another perspective, using imagination to generate ideas, visualizations, and innovative designs. As for strategic expertise, it refers to the ability to have critical thinking to analyse data, making decisions with a clear vision of the business. Developing both creative and strategic skills and using them together can make a difference, strategic skills help identify market signals, before they become trends, allowing you to detect opportunities and anticipate possible risks for the brand. On the other hand, creative skills allow you to move away from what already exists and propose something new.

Starting in the Metadesign phase and then evolving to the Concept Design phase, four main steps are proposed, namely: Research and Analysis, Concept Generation, Concept Development and Concept Implementation (Fig. 7.5). In this context, the phases that most impacted the good development of projects are the initial ones, which involve analysing and understanding the brand's positioning, as well as identifying growth opportunities, in order to generate the concept.

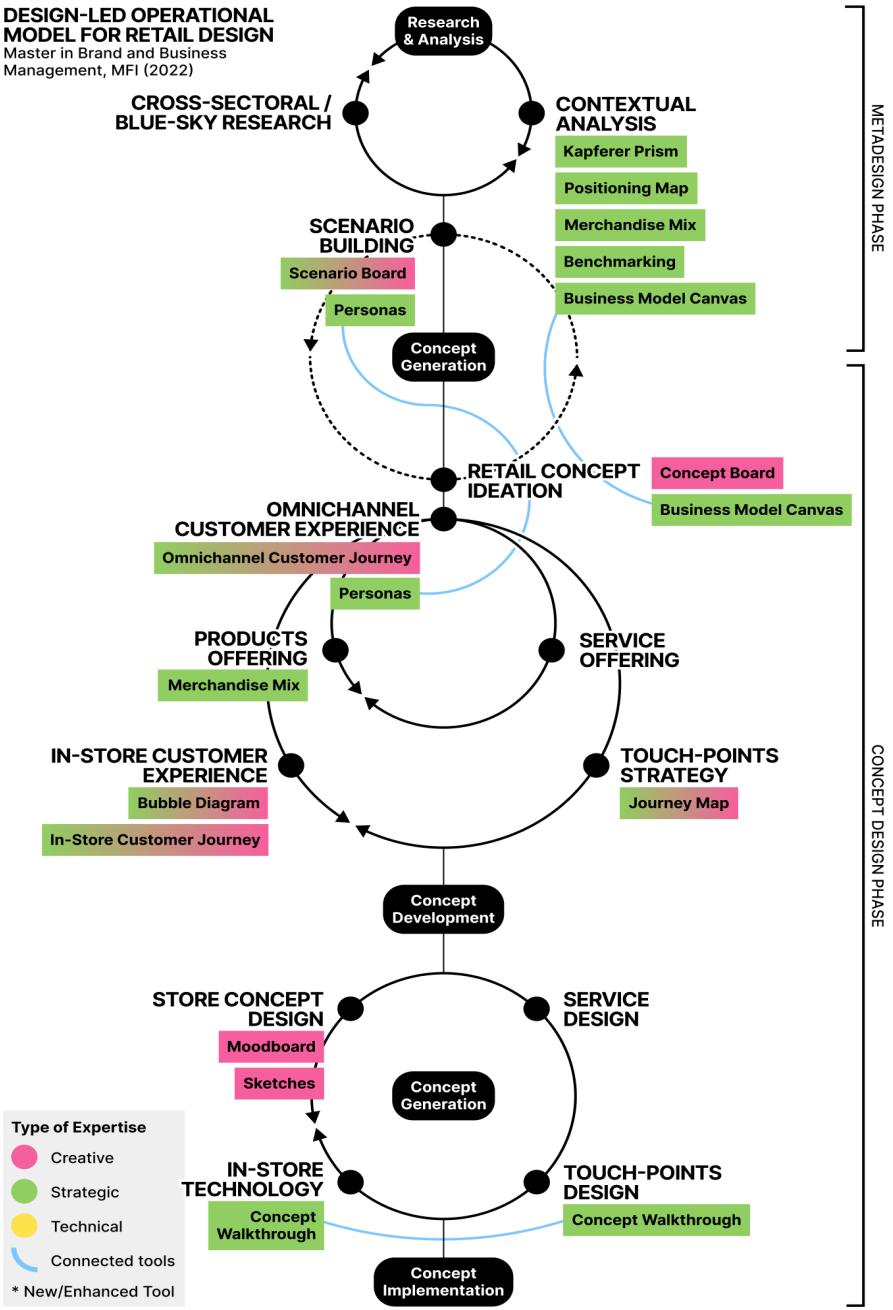

Fig. 7.5 Design-led Operational Model for Retail Design and applied tools within the "Phygital Retail Experience", Master in Brand and Business Management, MFI (2022); (authors' elaboration).

Briefly, the focus of the Research and Analysis step was to analyse the target, history and DNA of Labour and Wait, to understand then current business model and the merchandise mix, and to conduct benchmarking and competitive analysis (Fig. 7.6). After the Research and Analysis phase, participants should suggest a 360° integrated retail branding strategy for the new stores in Milan. Imagining the retail store (physical and online) where Labour and Wait collaborates with three new brands from fashion, food, and beauty sectors. To do so, the main actions indicated were: resetting the business model; resetting the category (understanding the market and consumer behaviour, redefines the category, planning changes and improvements to the category); assortment planning (to optimize a store's visual merchandising, layout, and the placement of the products, services); choose the location – strategic suggestions considering the in-store shopping experience, digital and interactive tools to engage customers into sustainability concepts, visual and communication elements.

The Research and Analysis phase is based on cross-sectoral/ blue-sky research and contextual analyses, where group members were invited to gather information not only about the history of the brand but also about the strategies behind the sales channels. The tools used during this phase were: *Kapferer prism*; *positioning map*; *merchandise mix*; *benchmarking*; *business model canvas*. All these tools belong to the marketing/management area, which are familiar to students.At this stage, such tools guided the study of the brand, helping to understand the brand identity, customer profile, brand positioning and conduct benchmarking and storytelling research. Furthermore, in this step the *business model canvas* intends to review the current situation of the brand and discover points for efficiency improvements, opportunities for innovation and even to increase competitiveness.

The Concept Generation phase takes place through Scenario Building (with the application of *scenario boards* and the creation of *personas*) and retail Concept Ideation, where the *business model canvas* tool is also present, in addition to the creation of the concept board. This is the phase where students are challenged to rethink the strategies implemented by Labour and Wait, considering what should be maintained and what should be adapted or added to place the brand

on the Italian market, as well as the choice of the public to be reached. Since every country has its own unique identity and culture is critical to hone your cultural knowledge as well as understanding how business is conducted in your target market. The goal of this step is to investigate the brand; define the claim and purpose; define consumer profile and behaviour and choose a suitable location. As this step unfolds, the group must rethink the entire *business model canvas* created at the beginning identifying the points to be changed, but always taking into account the peculiarities of the new location and its culture, not letting the essence of the brand die.

Certainly, one of the most complex phases of the project is Concept Development and Concept Implementation. Initially, for the development part, students had to present the Services Offered, the Touch-points Strategy (through the *journey map*), the Product Offer (through the *merchandising mix*, as shown in Fig. 7.7) and the In-Store Customer Experience (through the *bubble diagram* and *in-store customer journey*). Regarding the Product and Services Offering, the goal was to do a category reset, redefining it, planning changes and improvements. As for the Customer Experience, a touch-points selection and integration were requested, along with the build of a customer journey, storyboard and content definition. The implementation phase is where the design activity presents itself, since at this final moment of the project the group must present the service design, the touch-point design (through the *concept walkthrough*), the Store concept design (through *moodboards* and *sketches*) and In-store Technologies (through *concept walkthrough*).

Considering the students' background, one of the difficulties in implementing this project was the integration of the strategic analysis phase with the more creative phase of concept proposition. The tools used between concept generation and development were important, as they provided students with the acquisition of new knowledge.

Fig. 7.6 Example of Benchmarking and competitive analysis elaborated for the Master in Brand and Business Management (Dumandzic Milagros, Julin Victoria, Kim Taein, Kocjan Monika, Pasqualini Capone Giulio, Viganò Francesca).

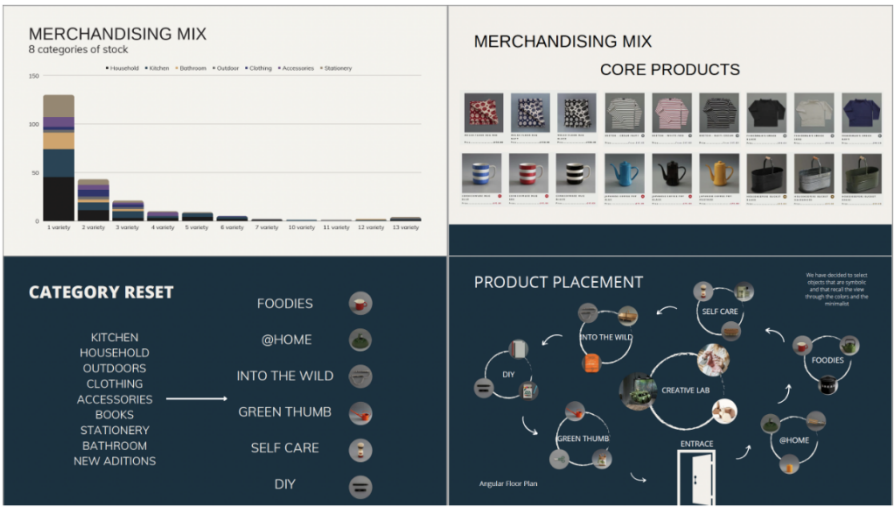

Fig. 7.7 Example of Merchandising Mix, elaborated for the Master in Brand and Business Management (Francesca Guidi, Aramis Agrapart, Patricia Sandoval, Eva Castillo Cruz, Francesca Bianchini, Juliana Varuseckina, Leonardo Manganelli).

7.5 Designing a Technologically Enhanced Retail Experience. A Pilot Carried Out at the Master in Furniture Design, POLI.Design

The third pilot experience has been conducted during the Master in Furniture Design, Retail Experience Module at the POLI.Design school in the academic year 2023.

The program is a post-graduate master and addresses a systemic vision of the role of design in the furniture industry – aiming to develop new knowledge in innovation that responds to the challenges posed by technological, social and market changes – teaming new fields of interest to the traditional focus on product development, along with the growing importance of brands and its tangible and intangible elements of expression; in this context the Retail Experience Module has been aiming at the design of a concept for a smart retail experience for new furniture scenarios for a company in a omnichannel & narrative context. The class consisted of thirty students, most of whom with a background in interior design or architecture, and some work experience in the design field. The students worked divided into five groups of six students.

The design brief for this course has been to design a technologically enhanced retail experience addressing the next design furniture scenarios. A fixed plan of the space in which to set the experience was given to the students, together with a list of Italian design furniture firms from which the students could choose the company to work.

In the design process, as group work, students were guided to the use of specific tools aimed at clarifying and supporting the analysis and concept generation in the form of specific activities aiming at enhancing the analysis and interpretation of the context's signals and the detection of opportunities for potential innovation. Specifically, following the design process, as clearly illustrated in Fig. 7.8, for each design phase some omnichannel design tools were involved in the activities in order to foster specific expertise.

First, in the analysis phase students have been asked to create: *company analysis moodboards*, relating different aspects of the chosen company identity (such as merchandise mix, colours, materials board; brand identity); and *touchpoints boards*, in which the goal was

to analyse which touchpoints the company is using, the tone of voice used in it and to map the possible customer journeys enabled by the touch points. After the brief was launched to the students, a *Mystery Shopping* activity was proposed to fuel the first step of analysis and strategic expertise, in order to foster understanding of the system in which to operate, to analyse the existing interrelations between digital and physical environment and develop a critical vision on the new connection possibilities that could be enhanced in the project proposal. The activity consisted in the observation and analysis of in-store customer experience. The activity required to visit a store of the brand chosen for the project and produce a sketch of the store plan locating: the technology in use in the store with its function; the services offered in the store; brand communication elements placed in the store. The students were also asked to highlight the connections between the physical elements in the plan and digital environments, to let them focus on the omnichannel experience and on spotting where and if a digital enhancement of the physical space has been taking place. The students have been provided with specific templates guiding the different steps of the activity.

In the concept generation phase the request was: firstly, to define the narrative of the experience through occasion choice, product and services selection, location and narrative scenario, through the use of different tools aimed at the development of creative skills, such as moodboards and concept boards; secondly the definition of a customer journey with the description of touch-points selection and integration, storyboard, and content of the experience; thirdly, a focus on the concept of the space as a phygital retail concept in which the experience (or a part of it) has been thought to take place, to be described with retail layout boards, technological integration boards and specific contents of the experience.

The tools used in these phases were meant to support mostly strategic and creative skills (as in fig 7.8 *dynamic personas*, *omnichannel customer journey*, *journey map for services and touch points* and *phygital experience blueprint*).

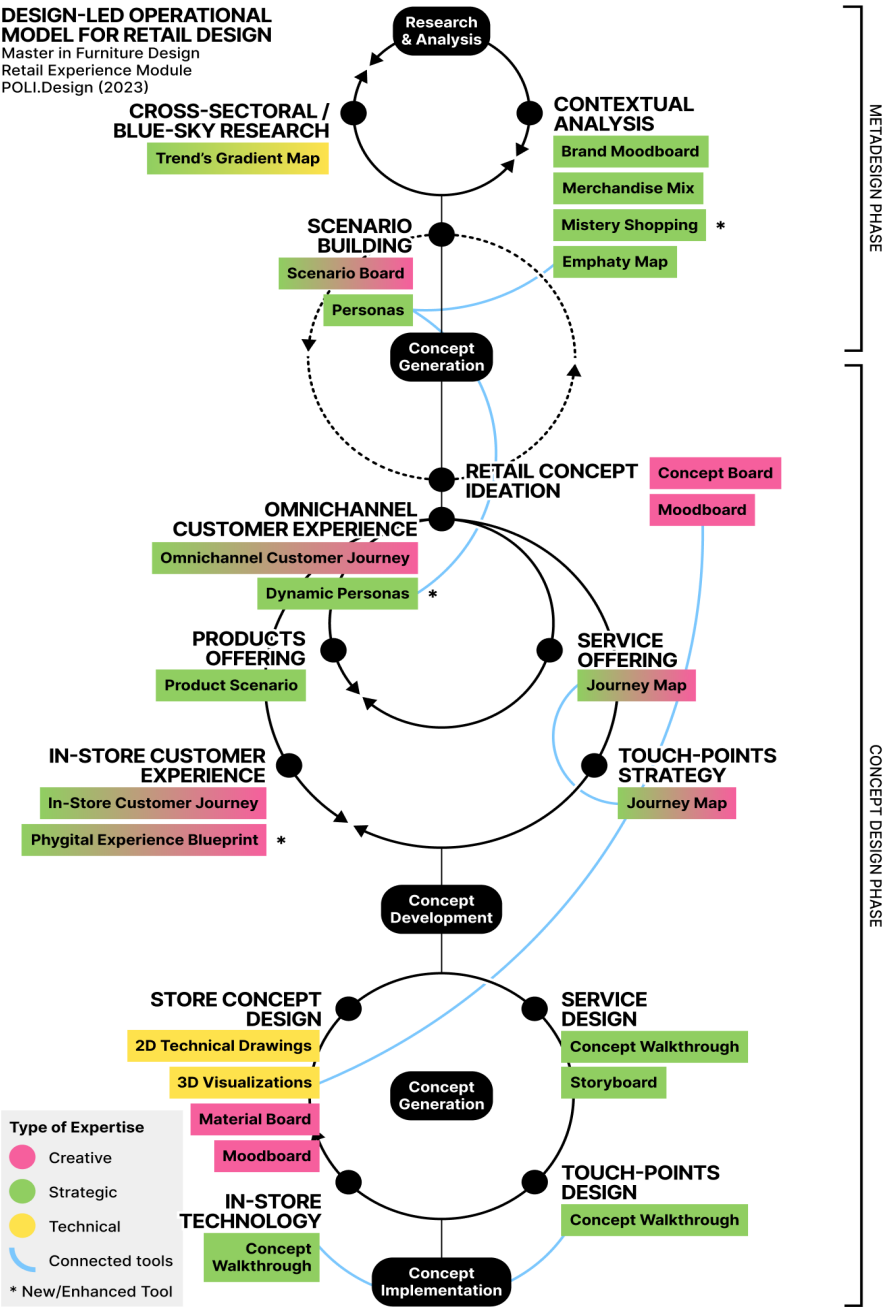

Fig. 7.8 Design-led Operational Model for Retail Design and applied tools within the "Retail Experience and Exhibit Design" module, Master in Forniture Design, POLI.Design (2023); (authors' elaboration).

For the concept generation phase, the activity proposed aimed at focusing on technological integration into the in-store experience, and more specifically to find innovation opportunities for the retail space to be augmented digitally, and therefore to produce a *phygital experience blueprint*.

To foster awareness and promote a meaningful introduction of technology in the in-store experience project, the activity proposed to reflect on how and which technologies could relate to and perform business functions in their smart retail concept. As a tool to facilitate the understanding, to clarify the possibilities, and to suggest possible directions of intervention for in-store experience innovation, a *matrix interrelating technologies and business functions* has been proposed to the students. Technologies and business functions constituting the matrix have been drowned from previous research on retail design and refer to literature in the fields of retail marketing, business management and human computer interaction (Grewal et al., 2017; Kotler, 2021; Pantano & Vannucci, 2019; Soloviov & Danilov, 2020). In particular, the business functions included in the matrix (namely: entertainment/engagement, servitisation, storytelling / brand identity / values, visual display / merchandise offer / decision making, fulfilment, data collection, analytics and profitability) have been synthetized from Grewal et al. (2020) and Alexander et al. (2020).

Thanks to the matrix the master students could reflect on how the combination of different technologies could bring to an innovative way to perform the business functions and services they could include in their concept, fostering the discussion on alternatives and possible variants.

In order to assess the introduction of the two activities and tools proposed in the analysis and concept phases, a questionnaire has been proposed to the students involved, asking to describe, if any, the advantages brought into the design process by the tools proposed. The majority of the respondents positively assessed the tools, and in particular, some of the comments underlined that the tools were helpful for the design choices and acted as a trigger for deepening knowledge of cutting-edge technologies and gaining a wider view on the possibilities of innovation to be included in their projects.

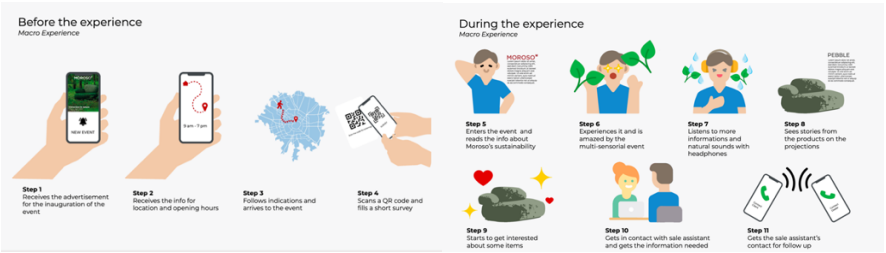

Fig. 7.9 Omnichannel Customer Experience. Moroso Immersion in Nature, Smart Retail Experience – Master in Furniture Design – Poli.Design (Fernando Cebeira, Maria M Del Campo, Javier Fernandez, Michele Fazio, Silvana Archila, Maria Fernanda Rosario).

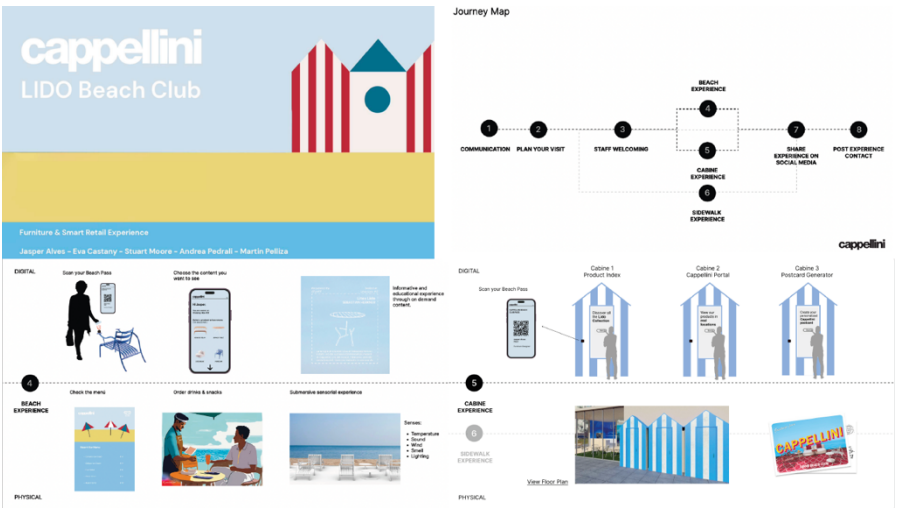

Fig. 7.10 Phygital Experience Journey Map and Blueprint. Cappellini Lido Beach Club, Smart Retail Experience – Master in Furniture Design – Poli.Design (Jasper Alves, Eva Castany, Stuart Moore, Andrea Pedrali, Martin Pellizza).

Some examples of the results of the work from students participating the Master in Furniture Design, Retail Experience Module are presented here in Figs. 7.9 and 7.10. In Fig. 7.9, the group of students successfully designed an omnichannel experience customer journey, also considering pre- and post- experience possibilities, the narrative setting, and the digital activation and triggers for their experience context. Relating to the phygital experience blueprint, in Fig. 7.10, the group of students has been illustrating an example of concept

proposal, successfully describing the whole experience journey both from the physical and the digital side.

Overall, the project work proposed has been undertaken by most of the students with great effort and enthusiasm, also the results were fully positive and showed improvements in the students' understanding of the retail omnichannel experience. Considered students' background, mostly linked to interior design and architecture, the main challenges of the course were represented by the understanding and application of the omnichannel customer journey and the ability to design a system encompassing different channels and touchpoints. Even if this was not an easy challenge, the groups were successfully delivering well-thought-out and consequent solutions. In particular, the projects presented proposed innovative solutions consequently integrated into the brand view and took into consideration both physical and digital environments for the development of the experience, integrating at their best technology, functions, and services in the concept, resulting into adequate solutions responding to the brief in a satisfactory way.

7.6 Conclusions

The Design-led Operational Model for Retail Design was systematically tested and refined through three separate pilot experiences conducted in different educational contexts characterised by diverse disciplinary backgrounds. These pilots demonstrated the model's adaptability and effectiveness in fostering innovation in the early stages of retail design projects while emphasising the crucial role of interdisciplinary collaboration and the integration of creative, strategic, and technical competencies.

The first pilot project, conducted as part of the MSc Design for the Fashion System programme, was aimed at students with a background mainly in fashion design and included players in the role of experts with significant experience in promoting innovation in new technologies. The challenge was introducing these students, relatively new to retail design, to the intricate world of phygital (physical and digital) fashion retail experiences. Through a combination of creative

and strategic tools, they embarked on a journey to design innovative retail concepts that bridged the gap between fashion's physical and digital realms. Some of the tools – in particular, *trend's gradient map* and *fictional characters* – were adopted to repurpose the students' trend and consumer research consolidated skills within the strategic context of retail design. Likewise, the entire concept development and implementation phase was facilitated by applying tools to nurture the omnichannel project's processual nature by "unpacking" the different "designable elements" into minimal and manageable units. The pilot highlighted the model's adaptability to students from creative backgrounds, emphasising its ability to ignite their imagination and encourage the generation of innovative ideas.

The second pilot, located within the Master programme in Brand and Business Management, brought together a cohort of students with predominantly business-oriented backgrounds. In this case, the challenge was to reimagine the positioning of a specific brand – the British brand Labour and Wait – in a different market, requiring both strategic acumen and creative vision. The students were tasked with translating the brand's essence and designing an innovative consumer experience, emphasising the importance of preserving brand identity while adapting it to a new cultural context. In this specific case, the entire research and analysis phase was conducted by adopting tools belonging to the marketing and management domains the students belong to. New tools balancing the strategic and creative dimensions were adopted in the concept generation and development phases. The focus on the building of omnichannel customer journeys – by their very nature aimed at restoring the complex dimension of the consumer experience in the interweaving of the various channels and touchpoints identified – promoted a more holistic and interdisciplinary vision, forcing the students to follow new paths and project the concept in the medium term. The pilot project demonstrated how the model can effectively guide students in the fusion of strategic thinking and creative ideation.

The third pilot project, part of the Retail Experience module of the Master degree in Furniture Design, was aimed at students experienced in interior design and architecture. Their mission was to design technologically advanced retail experiences for Italian furniture

companies. The pilot project integrated tools that encouraged in-depth analysis, interpretation of contextual signals and identification of innovation opportunities. By fostering awareness and promoting a meaningful introduction of technology in their projects, the students endeavoured to design phygital retail experiences. In this specific case, given the students' design background, different tools were adapted to the phygital context and applied – such as *mystery shopping*, *dynamic personas* and *phygital experiences blueprints* – to frame the complex dynamics of interaction between the various levels that make up the retail experience within a technology-enhanced physical space. This pilot project highlighted how the model can empower students to imagine and realise smart retail experiences in an omnichannel context.

Overall, these three pilots emphasised the adaptability and effectiveness of the Design-led Operational Model for Retail Design. Applied to fashion, branding or design scenarios, students learned how to harness multidisciplinarity, embracing new technologies and combining creative and strategic skills to drive innovation in retail. The model proved to be a valuable guide for the next generation of retail designers, equipping them with the tools and methodologies to tackle the ever-changing challenges and opportunities of the dynamic retail landscape.

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The fashion industry is entering the dynamic global competitive market, promoting various actions prioritising design, creativity, sustainability, and technological advancement as pivotal factors. At the same time, it is re-imagining its business models to adapt to the changing landscape. The rise of pervasive connectivity, intuitive interfaces and innovative interaction channels has triggered a revolution in fashion retail, reshaping customer behaviour and expectations. The traditional retail framework has evolved into a fully interconnected omnichannel system. This transformation is characterised by the proliferation of physical and virtual channels and touch points and by the adoption of a more flexible and integrated approach.

In this dynamic context, design plays a central role, possessing the ability to impart meaning to the production and distribution system. Design-led innovation represents an incremental form of innovation that injects a nuanced range of meaning into the marketplace, extending beyond tangible objects, including discourses, expressions, narratives, visual images, symbols, metaphors, and spaces.

The book analyses the multifaceted nature of the fashion retail experience through the lens of the design discipline, aiming to contextualise the evolution of retail within increasingly complex processes, networks and interconnections, both theoretically and practically. The focus is on retail design, delving into the new skills required and the valuable tools needed to apply them in inherently multidisciplinary contexts. Ultimately, the aim is to navigate the intricate terrain of retail evolution and shed light on the evolving role of design in this multifaceted sector.

FrancoAngeli
La passione per le conoscenze