

AI in the Luxury In-Store Atmospheric

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Abstract

Although the application of new-age technologies accelerated the orientation towards the online retailing journey in the pandemic context, the role of the physical store is still central in luxury shopping. The literature highlighted the growing impact of new-age technologies and Artificial Intelligence on consumer shopping experiences and retailing. Multiple factors are influencing luxury fashion and certainly technology changes are impacting clients' behaviours and expectations. This study explores the critical impact of AI on in-store atmospheric, influencing the consumer in-store shopping experience. Cross-fertilising the DAST (Design, Ambient, Social and Trialability) model framing consumers' experience with the growing literature on AI in retailing, this research empirically explores Chinese millennial consumers, a segment of tech-savvy consumers with a significant impact on global luxury markets. Based on 72 interviews with consumers and 12 interviews with luxury retail experts, this research elicits and discusses a set of factors framing the transversal role of AI in in-store atmospheric, framing its impact on the customer shopping experience. The study concludes by opening future research streams and critical appraisal of AI's transformational impacts on luxury retailing.

Keywords: Luxury Retailing; In-Store Atmospheric; AI; In-Store Shopping Experience; China; Millennials; Global Markets

1. AI: a New Era for Luxury

AI is one of the new-age technologies that today catalyse much attention for their disruptive potential, whose substantial influence on marketing and retailing (Forbes, 2022; Delbufalo, Di Bernardo, Risso, 2022) needs to be observed and sized (Davenport et al. 2020; Rust 2020). New-age technologies, such as AI, have emerged as conversational agents (Lim, Kumar, Verma, & Chaturvedi, 2022), similar to

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virtual reality in the metaverse context (Lim, Rasul, Kumar, & Ala, 2022). Research is still very limited and consequently encouraged – not from the technology adoption or resistance perspective – but from the behavioural perspectives amongst others (Lim *et al.*, 2022). There is still a need to uncover the role of AI from the consumer perspective, for brands and retailers to better integrate AI technologies into the customer journey, so that the benefit of AI exceeds its negative biases among consumers. New-age technologies have modified luxury retail management practices (Pentina *et al.*, 2018 ; Phau & Park, 2014; Gupta *et al.*, 2020; Kumar *et al.*, 2021).

Despite the increasing orientation towards an online retailing journey (Pantano and Pizzi, 2020; Ward, 2020; Pizzi *et al.*, 2021) increased by the pandemic context (McMaster *et al.*, 2020) and the growing interest in online retailing impact on consumers behaviour (Melumad *et al.*, 2020; Sheth, 2022), the physical store has maintained relevance in luxury brand building (Hennings *et al.*, 2013; Kluge *et al.*, 2013) and in new forms of retailing (Sheth, 2021). Babin *et al.* (2004) evidenced how a physical retail location and its atmospherics, which engage all consumers' senses (Petermans and Van Cleempoel, 2009), activate memorable customer experiences and drive motivation to shop through a sensory store ambient (Verhoef *et al.*, 2009; Klein *et al.*, 2016), do influence consumers' purchase decisions and shopping motivation. In the luxury context, the store still has a critical role (Spence *et al.*, 2014) because it provides the customer with a multisensorial immersion (Sherry *et al.*, 2001), an enhanced brand experience (Borghini *et al.*, 2009) and boosts brand attachment and attitude (Dolbec and Chebat, 2013). With respect to the importance of the in-store experience, literature has highlighted the validity of a multidimensional analysis of the in- and out-of-store experience through the DAST framework composed of Design, Ambient, Social and Trialability factors of the retail atmospherics (Roggeveen, Grewal, and Schweiger, 2020).

Limited insights have been produced on the role of AI in luxury retailing and its ongoing evolution (Davenport *et al.*, 2020; Gupta *et al.*, 2020; Kumar *et al.*, 2021; Rust, 2020). Consequently, there is room for explorative studies investigating whether and how new-age technologies, particularly AI, integrate and enhance the in-store shopping experience.

This paper aims to shed light on the integration of new-age technologies and particularly AI in the physical store atmospherics towards an understanding of how AI affects the luxury in-store experience. What AI-generated factors enhance the in-store DAST atmospherics? How and to what extent do these improve the customer shopping experience?

After reviewing the literature on luxury retailing with respect to luxury in-store atmospherics and introducing the DAST model, the study will focus on the integration of AI in the in-store environment. The empirical focus is on Chinese millennial consumers since, despite an increasing literature on millennials in marketing and retailing, more research is required on millennial shopping patterns in fast-growing markets (Weber and Ulrick, 2017), in relation to their specific impact on luxury retailing (Kang *et al.*, 2022).

2. Literature Review

2.1 Luxury In-Store Atmospherics

If traditional retail atmospherics were mainly based on the in-store environment (Baker et al. 2002), the new omni-channel retailing approach redefines it as a component of the shopping journey, and its role in consumers' shopping behaviour (Alexander & Cano, 2019; Ghiselli, 2022) throughout an unconventional customer journey (Lemon and Verhoef 2016; Grewal & Roggeveen, 2020), in creating awareness and customers/brand engagement (Russo Spena et al., 2012).

The consumer/brand experience has been focused on the process implying the consumer search for a branded product in an omnichannel purchasing context (Loureiro, 2020), where the purchasing experience has a key role in its being comprehensive and diversified (Huang, 2017; Kim and Chao, 2019). As luxury is seen as a multisensorial experience, at an emotional level (Dion and Arnould, 2011; Joy et al., 2014), the hedonic and symbolic dimensions (Amatulli *et al.*, 2020; Holmqvist, Ruiz, and Peñaloza, 2020) are crucial to the retail experience with a critical role played by the luxury store context for the brand image building and for triggering motives to shop for consumers (Levy & Weitz, 2012; Blazquez, et al, 2019).

The contribution of the store to the luxury experience was analysed from different perspectives. The store provides a vital contribution to the luxury experience, being an opportunity to design a personalized and unique moment for consumers (Manthiou, Hickman, and Klaus, 2020). The store positively impacts brands' competitive positioning and provides customers appropriate sensory and emotional experiences (Dhaliwal et al., 2020; Jain and Mishra, 2018). Innovative strategies have been sought to support hedonic emotions (Kang et al., 2021; Shieh and Lai, 2017). In the store, the customer can find an opportunity to spend time and shop more (Bohl, 2012), supported by an immersive context creating pertinent connections with the brand (Cristini et al., 2017; Kauppinen-Raisanen et al., 2020).

As anticipated, recent research supported the validity of a multidimensional analysis of the in- and out-of-store experience, by proposing the DAST framework in retail atmospherics (Roggeveen, Grewal, and Schweiger, 2020). This frames the store atmospherics as an important component (Kapferer and Bastien, 2017) of the luxury experience, creating symbolic, experiential and functional value for consumers (Atwal and Williams, 2009). The store atmosphere generates unique consumer shopping behaviour (Ballantine et al.; 2015; Blazquez et al, 2019). The effects of sensory attributes, entertainment, and design on customer involvement (Rigby, 2011; Spena et al., 2012), innovative and exciting components of the in-store experience (Bäckström & Johansson, 2006) were under scrutiny. The pandemic restricted the opportunity for in-store experiences and changed motivations for an offline luxury experience (Langer, 2020). This calls for additional efforts to investigate the impact of store atmospherics on the luxury experiences to analyse the current developments.

2.2 AI in Consumer Shopping Experience

The increasing impact of technology is expected to be one of the main drivers of change in luxury fashion in the next years (Sheth et al, 2002; Boccardelli, 2019; Mosca & LaRosa, 2019). Numerous premium brands utilize virtual and augmented reality to create immersive shopping environments. These technologies will most likely continue to develop and be extensively utilized. In addition, the use of artificial intelligence and machine learning to improve supply chain efficiency and personalize the shopping experience is expected to increase. New-age technologies and AI have been increasingly gaining importance in consumer studies (Evanschitzky et al., 2020; Klaus & Zaichkowsky, 2020; Kaplan & Haenlein, 2020; Davenport et al, 2020; Huang and Rust, 2021a; Pantano et al, 2022). Despite being a pertinent buzzword in the domain of retail (GlobalData, 2022; Morgan, 2019) and academic discourse (Grewal et al., 2017; Shankar, 2018), AI is lacking solid research in management and marketing.

An integrative effort to include the technological dimension (Pantano et al., 2017; Willems et al., 2017) into the luxury in-store analysis is grounded in the technology's contribution to innovative shopping experiences (Dacko et al., 2017; Willems et al., 2017, Bonetti and Perry 2017) and retail atmospherics (Das, 2014; Roggeveen et al. 2019). New-age technologies have modified consumer experience in omni-channel retailing and oriented the in-store experience towards a multi-sensorial (Kent et al., 2015; Godey et al., 2016) approach, impacting positively consumers' shopping attitude, engagement (Hagberg et al., 2015; Silva and Bonetti, 2021; Huang and Rust, 2021b), and brand value co-creation (Demirkan & Spohrer, 2014; Von Wallpach et al, 2017). In the retailing domain, AI has been discussed to act as a value-adding tool.

Academic literature has provided several definitions of AI. The highly-cited definition by Russell and Norvig (2016) refers to AI as systems mimicking cognitive functions associated with human attributes - including learning and problem solving. A definite consensus in AI definition has not been reached (De Bruyn et al., 2020).

Consistent research has analysed AI's diverse functions applied to marketing and retailing concerning cost reduction or customer emotions boost (Johnson et al., 2022), increasing customer enjoyment and modifying customer interactions (Rabby, Chimhundu & Hassan, 2021) or machine learning for mobile marketing customisation (Tong, Luo, and Xu 2020). Core tasks in AI applications include supply chain management (Weber & Schütte, 2019) customer service management, including point of sales digitisation and in-store virtual assistants (Cao, 2021). AI for big data generation was also attracting research interest with respect to the improved understanding of consumer behaviour (Filieri & Mariani, 2021; Hofacker et al., 2016).

The customer-facing AI applications have transformed the way retailers manage in-store experiences and the way customers are engaged (Guha et al., 2021; Kumar et al. 2019).

Mustak et al. (2021) have identified six topics in consumer-related studies, from consumer sentiments to customer, from an analysis of electronic word of mouth (eWOM) to the use of AI for brand management, from AI stimulating customers' loyalty and trust to the use of AI for customer relationship management. Despite AI

increases customer satisfaction (Ransbotham et al., 2017), prior studies have highlighted the utilitarian perceived value more than the hedonic one for AI applications. Consumers seemed to prefer products and service recommendations by humans when hedonic goals are involved, while they seemed to prefer AI when utilitarian goals are sought (Ivanov et al., 2022; Longoni et al., 2019; Mende et al., 2019; Longoni & Cian, 2020; 2022).

Limited studies have examined consumers' perception of AI use in retailing and specifically in the shopping experience. De Bellis and Johar (2020) examined the enablers and barriers to AI adoption among shoppers, finding functional benefits as the key motivation in AI technologies' adoption. Customers have shown to opt for AI instead of human-supplied service in uncomfortable circumstances (Pitardi et al., 2021). Psychological and cultural barriers were reported in the use of AI applications, with demographical factors playing a role (Huang *et al*, 2022), besides technological factors (Mani & Chouk, 2018; Park et al., 2021).

AI was considered in relation to the derived autonomy in shopping, which increased the desirability of AI- enhanced shopping experiences (Hu et al., 2022). Gursoy et al. (2019) found that other factors, besides the functional ones, such as social influence, hedonic motivation, and effort expectancy, were conducive to AI technologies' use as well as experiential and emotional scopes were listed in the value of AI for hedonic consumption, (Motoki et al., 2019).

Consumer ethics and privacy concerns remain an issue (Kopalle et al., 2022; Silva et al., 2022) in AI adoption despite customer benefits, despite the positive influence of explanations as in the case of big data collection (Querci et al, 2022), discussed in the emerging literature. However, additional studies are required to improve understanding in customer benefits in AI (Mariani et al, 2022) and in retailing.

3. Research design and methodology

The study adopted a qualitative approach to explore the critical impact of AI in enhancing the in-store experience in a specific market segment (i.e. Chinese millennials). This consumer segment is the result of a theoretical sampling leading to select the segment that, for its characteristics, allow the researcher to develop deeper understanding of the object of analysis (Eisenhardt et al., 2016). Such characteristics consist in this segment's fundamental push to global luxury growth and the cultural values boosting digitalisation in luxury consumption (Bazi et al., 2020; Kim and Zhang, 2013; Gapper, 2018). Chinese millennials have appeared to be highly relevant to this research for their relationship with technologies in luxury shopping (Ko & Jang, 2012; Li et al., 2013). Their responses to the integration to AI into the luxury in-store atmospherics were under scrutiny.

The case design allows researchers to examine a phenomenon situated in a specific context (Hancock and Algozzine, 2017), advocating it is possible to develop an in-depth understanding of a specific case. This empirical study refers to the AI phenomenon in the context of millennial consumers in-store shopping experience; it explores situations, allowing researchers to consider different outcomes (Yin, 2014)

and to investigate a phenomenon using diversified data sources to draw out its multiple sides (Baxter and Jack, 2008). With this respect, mainly two interview perspectives on the object of analysis were adopted, the one of the customers reporting their shopping experiences and the one of practitioners reporting about their professional experience of the market, their customer and technological knowledge.

3.1. Data collection

Selected participants matched the defined sampling requirements (i.e., millennials between 18 and 39 years of age for customers, and know-how in the field for luxury experts). A convenience sample of 72 customer respondents was built through “the person on the street” method, interviewing customers exiting flagship luxury stores in two fashion districts in Beijing (i.e., Beijing Sanlitun Fashion District) and Shanghai (i.e., Shanghai Xintiandi fashion area). 12 experts were identified through the researchers’ professional network and through snowballing (Table 1). Most of the experts’ interviews were held online. Each meeting lasted approximately 45 minutes. Data related to customers’ behaviours and shopping purchase were held at one AI pervasive flagship store in Shanghai and one in Beijing. Interviews guidelines were developed, integrating open-ended questions to collect in-depth data.

Table 1: *Respondents’ Sample Description*

Interviewee	Occupation	Age	Interviewee	Gender	Occupation	Age
1	University finance student	23	37	Female	University master’s student	24
2	University master’s student	25	38	Female	University master’s student	23
3	Shopping Assistant	25	39	Male	University finance student	21
4	University finance student	22	40	Male	Administration assistant	28
5	Administration assistant	28	41	Male	Italian translator	28
6	English and French translator	27	42	Male	Purchasing and research assistant	29
7	Purchasing and research assistant	27	43	Male	University marketing student	29
8	University finance student	22	44	Male	Content manager	27

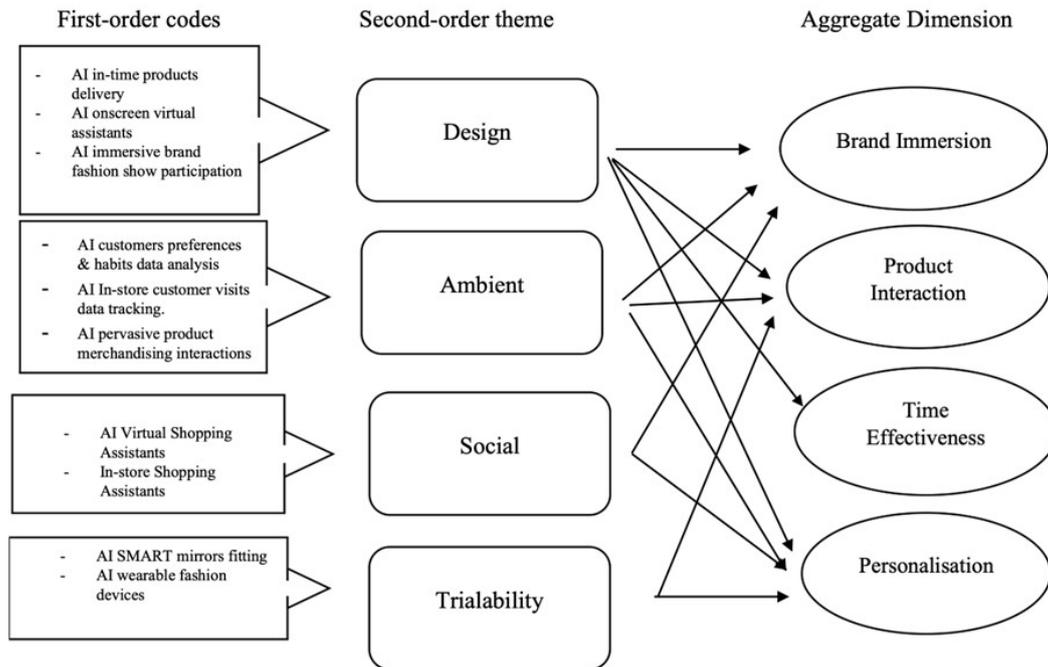
9	Administration assistant	26	45	Male	Fashion Personal Shopper	25
10	English and French translator	24	46	Male	University Art student	22
11	University economics student	24	47	Male	Fashion Store Assistant	23
12	University business student	23	48	Male	Business Administrator	26
13	Administrator	28	49	Male	Digital Content Creator	23
14	Administrator	28	50	Male	Web Manager	26
15	Personal trainer	30	51	Male	Sales manager	28
16	University finance student	22	52	Male	Digital marketing executive	29
17	University economics student	21	53	Male	Store Associate	28
18	Teaching assistant	26	54	Male	Fashion Consultant	29
19	Accountant	31	55	Male	Restaurant waiter	21
20	Engineer	29	56	Male	Financial Analyst	28
21	Graphic designer	28	57	Male	Big Data analyst	27
22	Business owner	53	58	Male	Lawyer	28
23	Brand Director	39	59	Male	Procurement officer	27
24	General Manager	43	60	Male	Data protection consultant	29
25	Digital Manager	37	61	Male	Project manager	25
26	Fashion Brand Owner	45	62	Male	Project Manager	26
27	Luxury Store Director	39	63	Male	Personal Shopper	27
28	University management student	23	64	Male	Fashion Store Associate	24
29	University business student	25	65	Male	University marketing student	23

30	Marketing coordinator	26	66	Male	Social media assistant	25
31	University graduate	21	67	Male	Business Owner	43
32	Content developer	23	68	Male	Chief Marketing Officer	51
33	University master's student	25	69	Male	Financial Director	39
34	University economics student	24	70	Male	Fashion Consultant	43
35	Cashier and waitress	26	71	Male	Social Media Director	37
36	University finance student	25	72	Male	VP Digital Strategy	53

3.2 Data Analysis

The study relied on the DAST framework to structure the interview scheme. Following Gioia *et al.* (2013), a systemic approach was structured to introduce the different resulting codes and themes (Corley and Gioia, 2011). Interviews were analysed following three analytic paths. In the first analysis, a narrative of experiences and interactions with respect to AI technologies' terms associated to the in-store experience were identified and, through codes, transcribed into categories. The codes from the first-order analysis were narrowed down through the connection to the emergent second-order themes associated to the DAST components. The third-order analysis conceived the data into main themes-based comments and definitions mentioned by respondents and researchers' understanding. Figure 1 illustrates the analytical framework, the analysis path and the results.

Figure 1: Analytical Framework and Findings



4. Findings: AI in the In-Store Atmospherics

When asked about the impact of AI applications experience in the diverse DAST components, most of millennial respondents evidenced that AI applications intertwine in-store DAST components with positive emotional impacts on their in-store customer experience. An interviewee (I3) reported that: *It is a thrilling environment; you would stay inside the store longer....it is an ongoing discovery not simply a visit to a store to choose what to buy or to try an outfit you like from that brand, or you had seen online, it is an enchanting journey into the world of the brand.*

The empirical results suggested what AI-generated factors enhance consumers in-store experience in the in-store DAST atmospheric and their role in the luxury shopping experience in the brand in-store environment. As an interviewee put it: *It is a unique shopping experience that you live...it is not as shopping online and it is neither as going to a tradition store for a moment of shopping....it is... A hyper-experience? It is a completely different store context that offers me emotions and enjoyment...and I choose to go to the store because of this (I8).* This also suggests how the in-store retailing shopping experience is regaining momentum in the post-Covid and how AI-generated factors are reinforcing it (Fortuna, Riso, Musso, 2021).

Findings revealed significant consensus on the importance of the retail and the experience that the context provides customers. 78% of respondents mentioned this aspect. No respondents reported that the atmosphere is not relevant at all, and main AI pervasive technologies and experiences were positively mentioned and could be related to a specific DAST atmospherics component.

Below the findings related to the DAST model components are reported.

4.1 Design

The store design is highly relevant from diverse perspectives; it translates brand identity into products for a satisfying shopping experience (Jones et al., 2010) but it can also increase brand awareness and value in customers' perceptions thanks to the emotional journey (Spena et al., 2012) in a high-quality environment (Elliot and Maier, 2014),

Interviews indicated that AI-generated immersive brand experience in the *Design* component is crucial and significantly influencing the choice towards in-store shopping experience confirming recent studies on the subject (Guha et al., 2021; Kumar et al. 2019): the opportunity to be immersed in a virtual fashion reality, have a shopping experience that integrates an effective and on-time product delivery, and have AI-created personalised products and services in the store enhance the product-customer interaction. As explained by an interviewee: *It is so exciting that type of store [integrating AI], it is like to be in a kind of magic brand atmosphere, it is not only about purchasing a product of your favourite brand but you can even play in a certain way with products...some of them are in the shop and some of them are not so you relate to them in a different way"*(I12).

AI-generated immersive brand experience in the store *DAST Design* component appears a crucial factor influencing the choice towards the in-store shopping experience: the opportunity to be immersed in a virtual fashion reality or other brand related event and to be enjoying their luxury shopping experience in this context was reported to make them feel closer to the brand: *When I entered in the store, well it was not like being exactly inside the store, I felt more like being invited at the brand last fashion show and I felt in a certain way privileged to be there...I was assisting at the fashion show in front of the catwalk...simply stunning and exciting!* (I58).

Respondents enjoyed being immersed in the luxury brand and its essence is driven by the AI-generated *Design*. These results extend current literature related to new-age technologies in the in-store atmosphere that examined the customers feel immersed in a multi-sensorial (Godey et al., 2016) shopping experience increasing their sense of value (Demirkan & Spohrer, 2014; Von Wallpach et al, 2017).

On-time products delivery was the only utilitarian aspect of AI generated in-store experience element mentioned by respondents.

4.2 Ambient

The store ambient is considered to positively impact purchasing orientation in luxury fashion by providing a hedonic and/or utilitarian experience, in enhancing customers' willingness to pay (Scarpi, 2006) or boosting excitement (Ashley et al.; 2010). AI technologies impact this DAST component as adjusting the ambient to the

needs and decision-making process of the customers during the in-store experience, as one of the experts highlighted: *AI is an excellent tool to analyse customers choices and profiling...through AI data analysis luxury brands can adapt the store ambient to the type of customer they want to target as well as products choices and availability to their expectations.* This extends previous research evidencing an improved understanding of consumer behaviour and needs (Fileri & Mariani, 2021; Hofacker et al., 2016) to the luxury field.

Furthermore, respondents evidenced how they enjoyed purchasing their products in an AI-pervasive store when products merchandising was also integrated in the new AI pervasive atmosphere, and the enjoyment of the experience was frequently mentioned by our respondents. This is an example: *[The store atmosphere] is breathtaking and so cool! I certainly prefer to go shopping in this stimulating context, no comparison with online or with traditional context (I52).*

The ambient in an AI pervasive store was mostly defined as unique and appealing. Only a few respondents considered it as more effective. Interviewees mentioned the pervasive presence of AI through touch screens, wearable devices, virtual shopping assistants, immersive fashion show technologies. They highlighted the interaction with the products increased by diversifying the exposition to them. Product selection beyond the in-store product availability was an important determinant of value for respondents and AI mirrors and virtual shopping assistants were reported as giving the possibility to combine, enjoy and customise outfits in a more personalised shopping approach.

A point that all interviewees clearly made concerns the integrated merchandising and interconnected service experience. As an expert said, *Chinese millennials are expecting an integrated AI store environment, and this is the winning 'plus' for luxury fashion brands (I22).* An AI-based experiential ecosystem characterised by a fluid and continuous experience for customers is where the luxury fashion system seems to point, according to the interviewees.

4.3 Social

The social factor is related to people, including other shoppers and in-store service staff (Roggeveen, Grewal, and Schweiger, 2020). Prior studies have shown the importance of the social element, particularly in the in-store shopping context. Grewal et al. (2020) also argued that in today's socially connected world, consumers are seeking social engagement and interactive experiences while shopping in-store.

Only a few respondents mentioned positively AI on-screen shop assistants' or virtual shop assistants' interactions that eliminates human contact with in-store personnel. Prior research found that consumers appreciate being advised by humans in a hedonic situation but prefer AI when utilitarian goals are activated (Ivanov et al., 2022; Longoni et al., 2019; Mende et al., 2019; Longoni & Cian, 2020;2022). In addition to courtesy, patience and respect, sales assistants may have been missed mainly for their know-how towards the brand, but this does not seem to be the case anymore as respondents mentioned that knowledge about the products can be acquired through online social media

interactions. Respondents indicated considerable appreciation for the social interaction with human shopping assistants, as anticipated in literature by Grewal et al (2020): *When we enter into a store it is pleasant to be welcomed and also to exchange opinions about the brand or new products or simply to socialize... I don't like at all to talk with a virtual assistant, it is absurd....there is no human connection, it is great to share also the experience with them (I64).*

Results contrast Hu et al.' findings (2022) suggesting that autonomous shopping systems empower customers and make them more eager to shop using AI applications. An interviewee reported the following: *For me shopping in a store implies talking with the staff and also being helped by them in the shopping moment... this does not mean that I don't like to shop in an AI store... on the contrary I love it, the innovation in the shopping experience is just WOW but I also have people that pamper me and simply smile to me! (I15)*

4.4 Trialability

Trialability refers to the comfort and tools through which a customer tries a product or service during the shopping experience. The significant availability and accessibility of brand information and products updates, social connections amongst shoppers were reported by 78% respondents to make a difference in enhancing their brand awareness and more specifically the brand recall. Those references were associated to the trialability components of the DAST framework: most of interviewed customers enthusiastically considered the opportunity to try outfits using AI mirrors and enjoy the innovative and more personalised experience, customised on their own appearance and desires. One interviewee mentioned that: *In a store, you can "touch and feel" the fabric, the quality of the textile and craftsmanship but I can go to a store if there is AI to play with the AI-generated outfits, and to discover and immediately try and see on me new creations of the brand (I18).*

In addition, respondents testified the comprehensive presence of brand information and products updates that is offered by AI pervasive in-store technologies, increasing accessibility and interaction with new product collections when trying them on *I don't only try one garment on me....with the new mirrors I can try also those from the new collection that in some cases are not arrived in store yet and are not online neither....in the AI store I can try them already and see if they suit and fit me, really unique, something exclusive that the brand is doing for me (I68).*

5. Emerging Themes Framing the AI in the DAST Atmospherics

Four emerging themes emerged from this research framing AI-enhanced atmospherics in the in-store customer experience. Findings revealed a strong connection between the AI-enhanced atmospherics and the customer experience, responding to increasing millennial consumers' eagerness for a digital continuum in the omnichannel retailing experience. Terms and comments from the empirical

interviews highlighted that millennials are attracted not only by the experience that the in-store offers but also by the uniqueness of AI-derived atmospherics, which emerged as a criterion to buy in the store. However, the human factor remains relevant in the interviewees' words, and it is not understood in contrast with the AI in-store integrations.

The physical store is still central when purchasing expensive luxury goods, not only for the opportunity to check the product quality or for conventional trialability, but also for the store integration with the online and virtual customer experience. As the DAST-based analysis showed, a *disconnected store experience seems to be no longer accepted* and AI integration is what Chinese millennial customers expect and value from different perspectives. The AI technologies embedded in the diverse DAST components demonstrated to enhance product interaction, personalisation, and brand essence immersion, connected to the hedonic value of the experience, boosting the brand presence in the in-store luxury shopping experience, as shown in Figure 2. Time-saving is an additional theme emerging from the analysis, the only one related to the customer experience's utilitarian dimension.

Figure2: *AI Pervasive In-Store Luxury Experience: The Emerging Themes*



5.1 Product Interaction

In-store AI combines the physical store as a guarantee in the shopping experience with an engaging technological setting. The experts interviewed in this study

indicated that Chinese millennials rarely buy expensive luxury fashion products online, because of doubts related to products' authenticity amongst other factors. The store keeps playing an important role, but an emerging theme concerns how digitally sensitive millennials search for unique in-store AI technologies that surprise, tempt, and allow them to enjoy an enchanting shopping experience in an "untraditional way", extending research in the demographic aspect in consumers AI perception (Huang *et al.*, 2022), besides technological (Mani & Chouk, 2018; Park *et al.*, 2021) factors. AI technologies offer pioneering in-store atmospherics, generating a different impact on the luxury shopping experience in consumers' interaction with the products and a highly immersive brand experience, consequently affecting consumer/brand engagement as anticipated (Guha *et al.*, 2021). Our research complements prior literature that has evidenced that, beyond traditional beliefs, new-age technologies are significantly integrated in the stores, embodying Ryding *et al.*'s (2016) notion of in-store digitalised entertainment, debunking its traditional design, ambient, social and trialability components.

5.2 Personalisation

The *ambient* related DAST component complemented by AI technologies appears to be more beneficial to luxury brands than customers experience, with respect to the acquisition of consumer-related data. However, consumers indirectly benefit from this by having a more personalised experience because of an increased understanding of individual customer profiles. With more in-depth knowledge of customer needs and expectations during the luxury in-store shopping experience, an enhanced personalisation of the experience could be developed by brands. From this perspective, AI as part of the new-age or smart technologies does not simply assist in the effective customer data management and collection for retailing strategy design (Bennett and Savani, 2011; Pantano *et al.*, 2017), or a closer customer engagement (Hagberg *et al.*, 2015; Silva and Bonetti, 2021; Huang and Rust, 2021b), but also in offering a bespoke in-store luxury shopping experience.

5.3 Brand Immersion

It is also noteworthy that respondents attached much importance and enjoyment to the hedonic experience in the immersive AI-driven atmospherics *design*, principally driven by the increasing digital eagerness of millennial consumers' segments, and dissimilarly from previous research evidencing only that customers opt more for AI instead of human-supplied service in uncomfortable circumstances (Pitardi *et al.*, 2021). Respondents highlighted that the comprehensive AI-generated atmospherics, in its diverse components, was enhancing not only the enjoyment of the in-store experience, but it was wholly immersive into the world of the brand and its essence, thereby making them "feeling inside the brand". Prior literature described a boost in customer satisfaction (Ransbotham *et al.*, 2017) associated with AI, reiterating the utilitarian element rather than the hedonic scope of AI in consumption (de Bellis and

Johar (2020). This explorative research revealed contrasting findings, suggesting the need to expand the inquiry. The diverse AI-generated technologies in the DAST atmospherics components were enhancing not only the enjoyment of the in-store experience, but also immersing consumers into the brand and its essence, thereby extending the study by Gursoy et al. (2019) on the hedonic factors driving willingness to use AI technologies.

5.4 Tim Effectiveness

AI-based in-store experiences contribute to the omnichannel shopping journey. Chinese millennials seemed to search for an integration of their online brand experience and product information search with the in-store experience. The AI-connected atmospherics of the store is relevant for guaranteeing effectiveness in time management with respect to product delivery, packaging and service. This confirms previous literature focusing on in-store AI applications for ordering products, managing inventory and packaging delivery (Weber & Schütte, 2019).

Empirical results suggested that the AI environment is expected to be integrated into the whole purchasing process, from apparel search and choice to luxury item delivery, interactions with store associates and personalised customer services, check-out and real-time shipping. All these aspects contribute to more effective time management.

6. Conclusion and Future Research

The study mainly refers to the different functions and impact that AI technologies have in marketing and retailing specifically to customer hedonic enhancement (Johnson et al., 2022) and in this perspective affecting customer interactions (Rabby, Chimhundu & Hassan, 2021). Empirical results evidence that AI highly contributes to the hedonic dimension, contrary to what previously affirmed, and it explains how. Data from the empirical analysis have proven that AI makes the store atmospherics attractive, adding to its role of guarantor in the purchase, providing elements of curiosity, enjoyment, and entertainment. Beyond the "surprise" and curiosity effect, the AI impact in the long term represents an important future research avenue.

In-store luxury shopping atmospherics is highly appreciated for its unicity derived from the AI applications, extending literature on the luxury shopping experience, and providing insights for brands to incorporate a personalized and unique moment for consumers using AI technologies (Manthiou, Hickman, and Klaus, 2020). The AI-generated atmospherics appears highly relevant to keep the value of the in-store atmosphere, representing a continuing important component (Kapferer and Bastien, 2017) in the customer shopping experience. The evidence from this research addressed one segment in the Chinese market. Additional empirical research is needed to explore other geographical markets.

The findings are very interesting and further research can be considered in relation to: a) other market segments in order to measure AI impact in retail strategies (e.g.

older customers may not appreciate AI during their shopping experience because they are more familiar with the traditional in-store dynamics and don't feel comfortable with AI); b) culture matters, so it is likely that differences in AI perception may be found by studying customers in other countries, as the authors highlighted; particularly, it would be interesting to carry on a cross-analysis about the same segment (millennials) in multiple countries.

This research was limited to an explorative study suggesting a set of emerging themes that should be further investigated towards a theory building. This would be necessary in a field with limited and fragmented literature, such as AI in luxury retailing. Further evidence is also needed towards the definition and adaptation of viable retailing strategies based on customers' response knowledge.

In addition, from a more managerial perspective, this study results can be useful for luxury brands strategy for their in-store retailing strategy in the Chinese market and what affects millennials' positive shopping experience and consequent purchasing decisions. However, this research is only a first step in a better understanding of millennials' response - at a global level - to AI-pervaded in-store experience; a further comparative study may be required to analyse millennials response in diverse geographical markets – in relation to a different local culture – or different demographics consumer segment response to this type of in-store experience.

Bibliography

- Alexander, B., & Cano, M. B. (2019). Futurising the Physical Store In The Omnichannel Retail Environment. In *Exploring Omnichannel Retailing* (pp. 197-223). Springer, Cham.
- Amatulli, C., De Angelis, M., & Donato, C. (2020). An Investigation on The Effectiveness of Hedonic Versus Utilitarian Message Appeals in Luxury Product Communication. *Psychology & Marketing*, 37(4), 523-534.
<http://dx.doi.org/10.1002/mar.21320>
- Atwal, G., & Williams, A. (2009). Luxury Brand Marketing – The Experience Is Everything! *Journal of Brand Management*, 16, 338–346.
<http://dx.doi.org/10.1057/bm.2008.48>
- Azemi, Y., Ozuem, W., Wiid, R., & Hobson, A. (2022). Luxury Fashion Brand Customers' Perceptions of Mobile Marketing: Evidence of Multiple Communications and Marketing Channels. *Journal of Retailing and Consumer Services*, 66, 102944.
<http://dx.doi.org/10.1016/j.jretconser.2022.102944>
- Bäckström, K., & Johansson, U. (2006). Creating And Consuming Experiences in Retail Store Environments: Comparing Retailer and Consumer Perspectives. *Journal of Retailing and Consumer Services*, 13(6), 417-430.
<http://Dx.Doi.Org/10.1016/J.Jretconser.2006.02.005>
- Ballantine, P.W., Parsons, A. And Comeskey, K. (2015) A Conceptual Model of The Holistic Effects of Atmospheric Cues in Fashion Retailing. *International Journal of Retail & Distribution Management*, 43(6), 503-517.
<http://dx.doi.org/10.1108/IJRDM-02-2014-0015>
- Baxter, P. and Jack, S. (2008), "Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers", *The Qualitative Report*, 13(4), 544-559.

- Bertacchini, F., Bilotta, E., & Pantano, P. (2017). Shopping with a Robotic Companion. *Computers in Human Behavior*, 77, 382-395.
<http://dx.doi.org/10.1016/j.chb.2017.02.064>
- Boccardelli, P. (2019). Real Opportunities in the Era of Connectivity. *Symphonya. Emerging Issues in Management (symphonya.unicusano.it)*, (2), 25–29.
<http://dx.doi.org/10.4468/2019.2.03boccardelli>
- Bonetti, F., & Perry, P. (2017). A Review of Consumer-Facing Digital Technologies Across Different Types of Fashion Store Formats. *Advanced Fashion Technology and Operations Management*, 137-163.
- Cao, L. (2021). Artificial Intelligence in Retail: Applications and Value Creation Logics. *International Journal of Retail & Distribution Management*, 49(7), 958-976.
<http://dx.doi.org/10.1108/IJRDM-09-2020-0350>
- Chandra, S., Verma, S., Lim, W. M., Kumar, S., & Donthu, N. (2022). Personalization In Personalized Marketing: Trends and Ways Forward. *Psychology & Marketing*, 39(8), 1529-1562.
<http://Dx.Doi.Org/10.1002/Mar.21670>
- Christodoulides, G., Athwal, N., Boukis, A., & Semaan, R. W. (2021). New Forms of Luxury Consumption in the Sharing Economy. *Journal of Business Research*, 137, 89-99.
<http://dx.doi.org/10.1016/j.jbusres.2021.08.022>
- Corley, K. G. and Gioia, D. A. (2011). Building Theory About Theory Building: What Constitutes a Theoretical Contribution? *Academy of Management Review*, 36(1), 12-32.
<http://dx.doi.org/10.5465/amr.2009.0486>
- Davenport, T., Guha, A., Grewal, D., & Bressgott, T. (2020). How Artificial Intelligence Will Change the Future of Marketing. *Journal of the Academy of Marketing Science*, 48(1), 24-42.
<http://dx.doi.org/10.1007/s11747-019-00696-0>
- de Bellis, E., & Johar, G. V. (2020). Autonomous Shopping Systems: Identifying and Overcoming Barriers to Consumer Adoption. *Journal of Retailing*, 96(1), 74-87.
<http://dx.doi.org/10.1016/j.jretai.2019.12.004>
- De Bruyn, A., Viswanathan, V., Beh, Y. S., Brock, J. K. U., & Von Wangenheim, F. (2020). Artificial Intelligence and Marketing: Pitfalls and Opportunities. *Journal of Interactive Marketing*, 51(1), 91-105.
<http://dx.doi.org/10.1016/j.intmar.2020.04.0>
- Delbufalo, E., Di Bernardo, M., & Risso, M. (2022). Human-Machine Interaction and AI for Competitive Business in the Digital Era. *Symphonya. Emerging Issues in Management (symphonya.unicusano.it)*, (2), 134–143.
<http://dx.doi.org/10.4468/2022.2.12delbufalo.dibernardo.risso>
- Demirkan, H., & Spohrer, J. (2014). Developing a Framework to Improve Virtual Shopping in Digital Malls with Intelligent Self-Service Systems. *Journal of Retailing and Consumer Services*, 21(5), 860-868.
<http://dx.doi.org/10.1016/j.jretconser.2014.02.012>
- Dubois, A., & Gadde, L. E. (2002). Systematic Combining: An Abductive Approach to Case Research. *Journal of Business Research*, 55(7), 553–560.
[http://dx.doi.org/10.1016/S0148-2963\(00\)00195-8](http://dx.doi.org/10.1016/S0148-2963(00)00195-8)
- Eisenhardt, K. M., Graebner, M. E., & Sonenshein, S. (2016). Grand Challenges and Inductive Methods: Rigor Without Rigor Mortis. *Academy of management journal*, 59(4), 1113-1123.
<http://dx.doi.org/10.5465/amj.2016.4004>
- Evanschitzky, H., Bartikowski, B., Baines, T., Blut, M., Brock, C., Kleinlercher, K., & Wunderlich, N. V. (2020). Digital Disruption in Retailing and Beyond. *Journal of Service Management Research*, 4(4).
- Filieri, R., & Mariani, M. (2021). The Role of Cultural Values in Consumers' Evaluation of Online Review Helpfulness: A big data approach. *International Marketing Review*, 38(6), 1267-1288
<http://dx.doi.org/10.1108/IMR-07-2020-0172>
- Fortuna, F., Risso, M., & Musso, F. (2021). Omnichannelling and the Predominance of Big Retailers in the Post-Covid Era. *Symphonya. Emerging Issues in Management (symphonya.unicusano.it)*, (2), 142-157.
<http://dx.doi.org/10.4468/2021.2.11fortuna.risso.musso>

- Ghiselli, I. (2022). The Retail Sustainable Approach. *Symphonya. Emerging Issues in Management (symphonya.unicusano.it)*, (2), 102-109.
<http://dx.doi.org/10.4468/2022.2.09ghiselli>
- Gioia, D. A., Corley, K. G. and Hamilton, A. L. (2013), "Seeking Qualitative Rigor In Inductive Research: Notes on the Gioia methodology", *Organizational Research Methods*, 16(1), 15-31.
<http://dx.doi.org/10.1177/1094428112452151>
- Godey, B., Manthiou, A., Pederzoli, D., Rokka, J., Aiello, G., Donvito, R., & Singh, R. (2016). Social Media Marketing Efforts of Luxury Brands: Influence on Brand Equity and Consumer Behavior. *Journal of Business Research*, 69(12), 5833-5841.
<http://dx.doi.org/10.1016/j.jbusres.2016.04.181>
- GlobalData. (2022). Leading Retail Companies in the Artificial Intelligence Theme. Retail Insight Network, GlobalData. Available online:
<https://www.retail-insight-network.com/data-insights/top-ranked-retail-companies-in-artificial-intelligence/> (accessed on 15 July 2023)
- Grewal, D., Roggeveen, A. L., & Nordfält, J. (2017). The Future of Retailing. *Journal of Retailing*, 93(1), 1-6.
<http://dx.doi.org/10.1016/j.jretai.2016.12.008>
- Grewal, D., & Roggeveen, A. L. (2020). Understanding Retail Experiences and Customer Journey Management. *Journal of Retailing*, 96(1), 3-8.
<http://dx.doi.org/10.1016/j.jretai.2020.02.002>
- Grewal, D., Noble, S. M., Roggeveen, A. L., & Nordfalt, J. (2020). The Future of In-store Technology. *Journal of the Academy of Marketing Science*, 48, 96-113.
<http://dx.doi.org/10.1007/s11747-019-00697-z>
- Guha, A., Grewal, D., Kopalle, P. K., Haenlein, M., Schneider, M. J., Jung, H., . . . Hawkins, G. (2021). How Artificial Intelligence Will Affect the Future of Retailing. *Journal of Retailing*, 97(1), 28-41.
<http://dx.doi.org/10.1016/j.jretai.2021.01.005>
- Gursoy, D., Chi, O. H., Lu, L., & Nunkoo, R. (2019). Consumers Acceptance of Artificially Intelligent (AI) Device Use in Service Delivery. *International Journal of Information Management*, 49, 157-169.
<http://dx.doi.org/10.1016/j.ijinfomgt.2019.03.008>
- Hancock, D. R. and Algozzine, B. (2017), *Doing Case Study Research: A Practical Guide for Beginning Researchers*. Teachers College Press, New York.
- Hennings, N., Wiedmann, K.-P., Behrens, S., Klarmann, C., & Carduck, J. (2013). Brand Extensions: A Successful Strategy in Luxury Fashion Branding? Assessing Consumers' Implicit Associations. *Journal of Fashion Marketing and Management*, 17(4), 390-402.
<http://dx.doi.org/10.1108/JFMM-03-2013-0022>
- Hofacker, C. F., Malthouse, E. C., & Sultan, F. (2016). Big Data and Consumer Behavior: Imminent Opportunities. *Journal of Consumer Marketing*, 33(2), 89-97.
<http://dx.doi.org/10.1108/JCM-04-2015-1399>
- Holmqvist, J., Ruiz, C. D., & Peñaloza, L. (2020). Moments Of Luxury: Hedonic Escapism as a Luxury Experience. *Journal of Business Research*, 116, 503-513.
<http://dx.doi.org/10.1016/j.jbusres.2019.10.015>
- Hu, P., Lu, Y. B., & Wang, B. (2022). Experiencing Power Over AI: The Fit Effect of Perceived Power and Desire for Power on Consumers' Choice for Voice Shopping. *Computers in Human Behaviour*, 128, Article 107091.
<http://dx.doi.org/10.1016/j.chb.2021.107091>
- Huang, R., Kim, M., & Lennon, S. (2022). Trust as a Second-Order Construct: Investigating the Relationship Between Consumers and Virtual Agents. *Telematics and Informatics*, 70, Article 101811.
<http://dx.doi.org/10.1016/j.tele.2022.101811>
- Huang, C. C. (2017). The Impacts of Brand Experiences on Brand Loyalty: Mediators of Brand Love and Trust. *Management Decision*, 55(5), 915-934.
<http://dx.doi.org/10.1108/MD-10-2015-0465>

- Huang, M. H., & Rust, R. T. (2021a). A Strategic Framework for Artificial Intelligence in Marketing. *Journal of the Academy of Marketing Science*, 49(1), 30-50.
<http://dx.doi.org/10.1007/s11747-020-00749-9>
- Huang, M. H., & Rust, R. T. (2021b). Engaged to a Robot? The Role of AI in Service. *Journal of Service Research*, 24(1), 30-41.
<http://dx.doi.org/10.1177/1094670520902266>
- Husain, R., Paul, J., & Koles, B. (2022). The Role of Brand Experience, Brand Resonance and Brand Trust in Luxury Consumption. *Journal of Retailing and Consumer Services*, 66, 102895.
<http://dx.doi.org/10.1016/j.jretconser.2021.102895>
- Ivanov, A., Head, M., & Biela, C. (2022). Mobile Shopping Decision Comfort Using Augmented Reality: The Effects of Perceived Augmentation and Haptic Imagery. *Asia Pacific Journal of Marketing and Logistics*.
<http://dx.doi.org/10.1108/APJML-06-2022-0518>
- Jain, S., Mishra, S., & Mukhopadhyay, S. (2021). Critical Success Factors for Luxury Fashion Brands in Emerging Markets: Insights from a Qualitative Study. *Journal of Global Fashion Marketing*, 12(1), 47-61.
<http://dx.doi.org/10.1080/20932685.2020.1845765>
- Jones, P., Comfort, D., Clarke-Hill, C. and Hillier, D. (2010). Retail Experience Stores: Experiencing The Brand at First Hand. *Marketing Intelligence & Planning*, 28(3), 241-248.
<http://dx.doi.org/10.1108/02634501011041408>
- Kang, I., Koo, J., Han, J. H., & Yoo, S. (2022). Millennial Consumers Perceptions on Luxury Goods: Capturing Antecedents for Brand Resonance In The Emerging Market Context. *Journal of International Consumer Marketing*, 34(2), 214-230.
<http://dx.doi.org/10.1080/08961530.2021.1944832>
- Kapferer, J. N., & Bastien, V. (2017). The Specificity Of Luxury Management: Turning Marketing Upside Down. In *Advances In Luxury Brand Management* (pp. 65-84). Palgrave Macmillan, Cham.
- Kaplan, A., & Haenlein, M. (2019). Siri, Siri, In My Hand: Who's The Fairest in The Land? On The Interpretations, Illustrations, and Implications of Artificial Intelligence. *Business Horizons*, 62(1), 15-25.
<http://dx.doi.org/10.1016/j.bushor.2018.08.004>
- Kaplan, A., & Haenlein, M. (2020). Rulers of The World, Unite! The Challenges and Opportunities of Artificial Intelligence. *Business Horizons*, 63(1), 37-50.
<http://dx.doi.org/10.1016/j.bushor.2019.09.003>
- Kent, A., Dennis, C., Blazquez, M., Helberger, E. and Brakus, J. (2015) Branding, Marketing, and Design: Experiential In-Store Digital Environments. In *Successful Technological Integration for Competitive Advantage in Retail Settings*. IGI Global, 1-22.
- Kim, R. B., & Chao, Y. (2019). Effects of Brand Experience, Brand Image and Brand Trust on Brand Building Process: The Case of Chinese Millennial Generation Consumers. *Journal of International Studies*, 12(3), 9-21.
- Kim, A. J., & Ko, E. (2012). Do Social Media Marketing Activities Enhance Customer Equity? An Empirical Study of Luxury Fashion Brand. *Journal of Business research*, 65(10), 1480-1486.
<http://dx.doi.org/10.1016/j.jbusres.2011.10.014>
- Klaus, P., & Zaichkowsky, J. (2020). AI Voice Bots: A Services Marketing Research Agenda. *Journal of Services Marketing*, 34(3), 389-398.
<http://dx.doi.org/10.1108/JSM-01-2019-0043>
- Klein, J. F., Falk, T., Esch, F. R., & Gloukhovtsev, A. (2016). Linking Pop-Up Brand Stores to Brand Experience and Word of Mouth: The Case of Luxury Retail. *Journal of Business Research*, 69(12), 5761-5767.
<http://dx.doi.org/10.1016/j.jbusres.2016.04.172>

- Kluge, P. N., Königsfeld, J. A., Fassnacht, M., & Mitschke, F. (2013). Luxury Web Atmospherics: An Examination of Homepage Design. *International Journal of Retail & Distribution Management*, 41(11/12), 901-916.
<http://dx.doi.org/10.1108/IJRDM-01-2013-0013>
- Ko, E. J., & Jang, J. H. (2012). A Longitudinal Study on Fashion Lifestyle Variable of Global Consumer-Comparison among US, China and EU. *Journal of Fashion Business*, 16(1), 26-40.
- Kopalle, P. K., Gangwar, M., Kaplan, A., Ramachandran, D., Reinartz, W., & Rindfleisch, A. (2022). Examining Artificial Intelligence (AI) Technologies in Marketing Via a Global Lens: Current Trends and Future Research Opportunities. *International Journal of Research in Marketing*, 39(2), 522-540.
<http://dx.doi.org/10.1016/j.ijresmar.2021.11>
- Kumar, V., Rajan, B., Venkatesan, R., & Lecinski, J. (2019). Understanding The Role of Artificial Intelligence In Personalized Engagement Marketing. *California Management Review*, 61(4), 135-155.
<http://dx.doi.org/10.1177/0008125619859317>
- Levy, M. & Weitz, B. (2012). *Retailing Management*. 8th edition, New York: Mc-Graw Hill Irwin.
- Li, N., Robson, A., & Coates, N. (2013). Chinese Consumers' Purchasing Impact of Value and Affect. *Journal of Fashion Marketing and Management: An International Journal*, 17(4), 486-508.
<http://dx.doi.org/10.1108/JFMM-03-2013-0030>
- Lim, W. M., Rasul, T., Kumar, S., & Ala, M. (2022). Past, Present, And Future of Customer Engagement. *Journal of Business Research*.
<http://dx.doi.org/10.1016/j.jbusres.2022.03.093>
- Lim, W. M., Kumar, S., Verma, S., & Chaturvedi, R. (2022). Alexa, What Do We Know About Conversational Commerce? Insights From a Systematic Literature Review. *Psychology & Marketing*, 39(6), 1129-1155.
<http://dx.doi.org/10.1002/mar.21654>
- Lim, W. M., Kumar, S., Pandey, N., Verma, D., & Kumar, D. (2022). Evolution and Trends In Consumer Behaviour: Insights from Journal of Consumer Behaviour. *Journal of Consumer Behaviour*, 22(1), 217-232.
<http://dx.doi.org/10.1002/cb.2118>
- Longoni, C., Bonezzi, A., & Morewedge, C. K. (2019). Resistance to Medical Artificial Intelligence. *Journal Of Consumer Research*, 46(4), 629-650.
<http://dx.doi.org/10.1093/jcr/ucz013>
- Longoni, C., & Cian, L. (2020). When Do We Trust AI's Recommendations More Than People's. *Harvard Business Review*. Available Online: https://www.researchgate.net/profile/Luca-Cian/publication/344660982_When_Do_We_Trust_AI's_Recommendations_More_Than_People's/links/5f87946892851c14bcc8d3c3/When-Do-We-Trust-AIs-Recommendations-More-Than-Peoples.pdf (accessed on the 3rd August 2023).
- Longoni, C., & Cian, L. (2022). Artificial Intelligence in Utilitarian Vs. Hedonic Contexts: The "Word-Of-Machine" Effect. *Journal of Marketing*, 86(1), 91-108.
<http://dx.doi.org/10.1177/0022242920957347>
- Loureiro, S. M. C., Jiménez-Barreto, J., & Romero, J. (2020). Enhancing Brand Coolness Through Perceived Luxury Values: Insight from Luxury Fashion Brands. *Journal of Retailing and Consumer Services*, 57, 102211.
<http://dx.doi.org/10.1016/j.jretconser.2020.102211>
- Mani, Z., & Chouk, I. (2018). Consumer Resistance to Innovation In Services: Challenges and Barriers in the Internet of Things Era. *Journal of Product Innovation Management*, 35(5), 780-807.
<http://dx.doi.org/10.1111/jpim.12463>
- Manthiou, A., Hickman, E., & Klaus, P. (2020). Beyond Good and Bad: Challenging The Suggested Role of Emotions in Customer Experience (CX) Research. *Journal of Retailing and Consumer Services*, 57, 102218.
<http://dx.doi.org/10.1016/j.jretconser.2020.102218>

- Mariani, M. M., Perez-Vega, R., & Wirtz, J. (2022). AI In Marketing, Consumer Research and Psychology: A Systematic Literature Review and Research Agenda. *Psychology & Marketing*, 39(4), 755-776.
<http://dx.doi.org/10.1002/mar.21619>
- McMaster, M., Nettleton, C., Tom, C., Xu, B., Cao, C., & Qiao, P. (2020). Risk Management: Rethinking Fashion Supply Chain Management for Multinational Corporations In Light Of The COVID-19 Outbreak. *Journal of Risk and Financial Management*, 13(8), 173.
<https://dx.doi.org/10.3390/jrfm13080173>
- Melumad, S., Hadi, R., Hildebrand, C., & Ward, A. F. (2020). Technology-Augmented Choice: How Digital Innovations Are Transforming Consumer Decision Processes. *Customer Needs and Solutions*, 7(3), 90-101.
<http://dx.doi.org/10.1007/s40547-020-00107-4>
- Mende, M., Scott, M. L., van Doorn, J., Grewal, D., & Shanks, I. (2019). Service Robots Rising: How Humanoid Robots Influence Service Experiences and Elicit Compensatory Consumer Responses. *Journal Of Marketing Research*, 56(4), 535-556.
<http://dx.doi.org/10.1177/0022243718822827>
- Morgan, B. (2019). The 20 Best Examples of Using Artificial Intelligence for Retail Experiences. Forbes. Available online : <https://www.forbes.com/sites/blakemorgan/2019/03/04/the-20-best-examples-of-using-artificial-intelligence-for-retail-experiences/?sh=42247e264466> (accessed on 3rd August 2023).
- Mosca, F., & La Rosa, E. (2019). 4.0 Technology Within Fashion and Luxury Production. *Symphonya. Emerging Issues in Management (symphonya.unicusano.it)*, (2), 82–94.
<http://dx.doi.org/10.4468/2019.2.08mosca.larosa>
- Mustak, M., Salminen, J., Plé, L., & Wirtz, J. (2021). Artificial Intelligence in Marketing: Topic Modeling, Scientometric Analysis, And Research Agenda. *Journal of Business Research*, 124, 389-404.
<http://dx.doi.org/10.1016/j.jbusres.2020.10.044>
- Pantano, E., & Pizzi, G. (2020). Forecasting Artificial Intelligence on Online Customer Assistance: Evidence From Chatbot Patents Analysis. *Journal of Retailing and Consumer Services*, 55, 102096.
<http://dx.doi.org/10.1016/j.jretconser.2020.102096>
- Pantano, E., & Scarpi, D. (2022). I, Robot, You, Consumer: Measuring Artificial Intelligence Types and their Effect on Consumers Emotions in Service. *Journal of Service Research*, 25 (4).
<http://dx.doi.org/10.1177/10946705221103538>
- Park, S. S., Tung, C. T. D., & Lee, H. (2021). The Adoption of AI Service Robots: A Comparison Between Credence And Experience Service Settings. *Psychology and Marketing*, 38(4), 691-703.
<http://dx.doi.org/10.1002/mar.21468>
- Pentina, I., Guilloux, V., & Micu, A. C. (2018). Exploring Social Media Engagement Behaviors in The Context Of Luxury Brands. *Journal of Advertising*, 47(1), 55-69.
<http://dx.doi.org/10.1080/00913367.2017.1405756>
- Petermans, A., & Van Cleempoel, K. (2009). Retail Design And The Experience Economy: Where Are we (Going)? *Design Principles and Practices an International Journal—Annual Review*, 3(1),171-181.
- Pizzi, G., Scarpi, D., & Pantano, E. (2021). Artificial Intelligence And The New Forms Of Interaction: Who Has The Control When Interacting With A Chatbot? *Journal of Business Research*, 129, 878-890.
<http://dx.doi.org/10.1016/j.jbusres.2020.11.006>
- Pitardi, D., Meloni, D., Olivo, F., Loprevite, D., Cavarretta, M. C., Behnisch, P., Brouwer, A., Felzel, E., Ingravalle, F., Capra, P., Gili, M., Pezzolato, M., & Bozzetta, E. (2021). Alexa, She's Not Human But... Unveiling the Drivers Of Consumers' Trust in Voice-Based Artificial Intelligence. *Psychology & Marketing*, 38(4), 626–642.
<http://dx.doi.org/10.1002/mar.21457>

- Querci, I., Barbarossa, C., Romani, S., & Ricotta, F. (2022). Explaining How Algorithms Work Reduces Consumers' Concerns Regarding the Collection of Personal Data and Promotes AI Technology Adoption. *Psychology & Marketing*, 39(10), 1888-1901.
<http://dx.doi.org/10.1002/mar.21705>
- Ransbotham, S., Kiron, D., Gerbert, P., & Reeves, M. (2017). Reshaping Business with Artificial Intelligence: Closing The Gap Between Ambition And Action. *MIT Sloan Management Review*, 59(1).
- Rigby, D. (2.1). The future of shopping. *Harvard Business Review*, 89(12), 65-76.
- Rovai, S. (2016). *Luxury The Chinese Way: The Emergence of A New Competitive Scenario*. Springer.
- Roggeveen, A. L., Grewal, D., & Schweiger, E. B. (2020). The DAST Framework for Retail Atmospherics: The Impact of In- and Out-of-Store Retail Journey Touchpoints on the Customer Experience. *Journal of Retailing*, 96(1), 128-137.
<http://dx.doi.org/10.1016/j.jretai.2019.11.002>
- Russell, S. J., & Norvig, P. (2016). *Artificial Intelligence a Modern Approach*. Pearson Education Limited.
- Russo Spena, T., Caridà, A., Colurcio, M., & Melia, M. (2012). Store Experience and Co-Creation: The Case of Temporary Shop. *International Journal of Retail and Distribution Management*, 40(1), 21-40.
<http://dx.doi.org/10.1108/09590551211193586>
- Ryding, D., Vignali, G., Caratù, M., Wang, Y. Y., & Carey, R. (2016). 21st Century Luxury Fashion Retailers' Marketing Strategies for Customer Satisfaction: UK Perspective. *International Journal of Business and Globalisation*, 16(1), 79-103.
<http://dx.doi.org/10.1504/IJBG.2016.073630>
- Rust, R. T. (2020). The Future of Marketing. *International Journal of Research in Marketing*, 37(1), 15-26.
<http://dx.doi.org/10.1016/j.ijresmar.2019.08.002>
- Scarpi, D. (2006). Fashion Stores Between Fun and Usefulness. *Journal of Fashion Marketing and Management*, 10(1), 7-24.
<http://dx.doi.org/10.1108/13612020610651097>
- Shankar, V. (2018). How Artificial Intelligence (AI) Is Reshaping Retailing. *Journal of Retailing*, 94(4), VI-XI.
[http://dx.doi.org/10.1016/S0022-4359\(18\)30076-9](http://dx.doi.org/10.1016/S0022-4359(18)30076-9)
- Sheth, J. N. (2021). Future of Brick-And-Mortar Retailing: How Will It Survive and Thrive? *Journal of Strategic Marketing*, 29(7), 598-607.
<http://dx.doi.org/10.1080/0965254X.2021.1891128>
- Sheth, J. N., Jain, V., Roy, G., & Chakraborty, A. (2022). AI-Driven Banking Services: The Next Frontier for A Personalised Experience In The Emerging Market. *International Journal of Bank Marketing*, 40(6), 1248-1271.
<http://dx.doi.org/10.1108/IJBM-09-2021-0449>
- Silva, E. S., & Bonetti, F. (2021). Digital Humans in Fashion: Will Consumers Interact? *Journal of Retailing and Consumer Services*, 60, 102430.
<http://dx.doi.org/10.1016/j.jretconser.2020.102430>
- Silva, S. C., De Ciccio, R., Vlacic, B., & Elmashhara, M. G. (2022). Using Chatbots In E-Retailing - How to Mitigate Perceived Risk And Enhance The Flow Experience. *International Journal of Retail & Distribution Management*.
<http://dx.doi.org/10.1108/IJRDM-05-2022-0163>
- Spena, T., Caridà, A., Colurcio, M. and Melia, M. (2012). Store Experience and Co-Creation: The Case Of Temporary Shop. *International Journal of Retail & Distribution Management*, 40(1), 21-40.
<http://dx.doi.org/10.1108/09590551211193586>
- Tong, S., Luo, X., & Xu, B. (2020). Personalized Mobile Marketing Strategies. *Journal of the Academy of Marketing Science*, 48(2), 64-78.
<http://dx.doi.org/10.1007/s11747-019-00693-3>

- Verhoef, P. C., Lemon, K. N., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L. A. (2009). Customer Experience Creation: Determinants, Dynamics and Management Strategies. *Journal of Retailing*, 85(1), 31-41.
<http://dx.doi.org/10.1016/j.jretai.2008.11.001>
- Von Wallpach, S., Voyer, B., Kastanakis, M., & Mühlbacher, H. (2017). Co-Creating Stakeholder and Brand Identities: Introduction To The Special Section. *Journal of Business Research*, 70, 395-398.
<http://dx.doi.org/10.1016/j.jbusres.2016.08.028>
- Ward, C. (2020). Consumer Behavior and COVID-19. *Business Education Innovation Journal*, 12(1), 138-142.
- Weber, J., & Urlick, M. J. (2017). Examining The Millennials' Ethical Profile: Assessing Demographic Variations In Their Personal Value Orientations. *Business And Society Review*, 122(4), 469-506.
<http://dx.doi.org/10.1111/basr.12128>
- Weber, F. D., & Schütte, R. (2019). State-Of-The-Art and Adoption of Artificial Intelligence In Retailing. *Digital Policy, Regulation and Governance*, 21(3), 264-279.
<http://dx.doi.org/10.1108/DPRG-09-2018-0050>
- Wiedmann, K. P., Hennigs, N., & Klarmann, C. (2017). Luxury Consumption In The Trade-Off Between Genuine And Counterfeit Goods: What Are The Consumers' Underlying Motives And Value-Based Drivers? in *Advances in Luxury Brand Management* (pp. 85-122). Palgrave Macmillan.
- Willems, K., Brengman, M., & Van De Sanden, S. (2017). In-Store Proximity Marketing: Experimenting with Digital Point-Of-Sales Communication. *International Journal of Retail & Distribution Management*.
<http://dx.doi.org/10.1108/IJRDM-10-2016-0177>
- Yin, R. K. (2014). *Case Study Research: Design And Methods* (5th ed.). Thousand Oaks, CA: Sage.
- Zhang, B., & Kim, J. H. (2013). Luxury Fashion Consumption in China: Factors Affecting Attitude And Purchase Intent. *Journal of Retailing and Consumer Services*, 20(1), 68-79.
<http://dx.doi.org/10.1016/j.jretconser.2012.10.007>