Artificial Intelligence and Personalisation in Fashion Marketing: A Qualitative Multiple Case Study

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Abstract: Artificial intelligence (AI), data analytics and immersive technologies are transforming fashion marketing through new forms of personalisation, recommendation, size fitting, digital interaction and algorithm-assisted creation. However, their capacity to generate value depends on organisational, ethical and strategic conditions related to data quality, consumer trust, sustainability and consistency with brand identity. This article analyses how AI- and data-driven personalisation strategies create experiential, sustainable and symbolic value in fashion marketing, as well as the risks associated with privacy, algorithmic opacity, overconsumption and creative homogenisation. Methodologically, it develops an exploratory qualitative study based on a systematised literature review and a comparative analysis of four cases: Zara/Inditex, Zalando, Nike and Gucci. The findings identify four logics of technological personalisation in fashion and show that value creation emerges when these technologies are embedded in coherent governance practices that balance efficiency, transparency, environmental evidence and human creative judgement. Building on this, the article proposes a responsible marketing approach to AI-based personalisation, shifting the debate from technological fascination towards the design of trustworthy, sustainable and culturally meaningful fashion experiences.

Keywords: Artificial Intelligence; Fashion Marketing; Personalisation; Consumer Experience; Sustainability; Algorithmic Trust; Creativity.

Introduction

The fashion industry is undergoing a structural transformation driven by digitalisation, omnichannel integration, automation and the intensive use of data. In this context, artificial intelligence (AI), together with data-driven and immersive infrastructures, is redefining how brands understand, segment, serve and retain their customers (Davenport et al., 2020; Huang & Rust, 2021; Shankar, 2018). In marketing, AI enables automated decision-making, preference anticipation, product recommendation, price optimisation, inventory improvement and real-time content adaptation (Davenport et al., 2020; Duan et al., 2019; Wedel & Kannan, 2016). In fashion, these possibilities are particularly relevant because the consumption of clothing, footwear and accessories is not merely functional, but is also associated with identity, self-expression, status, lifestyle and cultural values (Han et al., 2017; Park et al., 2023).

Algorithmic personalisation can increase satisfaction, engagement, conversion, loyalty and customer lifetime value when it is coherently integrated into the customer journey (Lemon & Verhoef, 2016; Verhoef et al., 2015). However, it also generates tensions related to privacy, surveillance, intrusion, loss of autonomy and distrust (Acquisti et al., 2015; Awad & Krishnan, 2006). This privacy–personalisation paradox is particularly critical in digital fashion, where recommendation systems, sizing algorithms, virtual fitting rooms and loyalty apps may use sensitive information about bodies, habits, styles or purchasing behaviour.

The incorporation of AI into fashion is also situated within broader debates on the evolution of marketing, sustainability and creativity. Marketing 5.0 and 6.0 approaches highlight the role of technology in value creation and immersive experiences, although they require empirical grounding to avoid technocentric interpretations (Davenport et al., 2020; Kotler et al., 2021, 2024; Lemon & Verhoef, 2016; Vargo & Lusch, 2004). At the same time, the sector faces criticism for overproduction, waste, emissions, water consumption and supply-chain opacity (Ellen MacArthur Foundation, 2017; Niinimäki et al., 2020; UN Environment Programme, 2023). The combination of AI, data analytics and traceability technologies may contribute to demand forecasting, inventory optimisation, return reduction and the development of circular models (Bolón-Canedo et al., 2024; Dabas & Whang, 2022; Moretto & Macchion, 2022; Swaminathan & Venkitasubramony, 2024), although it also raises an environmental paradox associated with the energy consumption of AI models (Strubell et al., 2019).

A further tension concerns creativity. Generative AI enables the rapid creation of images, prints, virtual collections, avatars and prototypes (Rizzi & Bertola, 2025; Runco, 2022; Särmäkari & Vänskä, 2022). However, when algorithms are trained on dominant datasets, they may reproduce biases, homogenise styles and weaken aesthetic diversity (Akter et al., 2021; Särmäkari & Vänskä, 2022). The

central question, therefore, is not whether AI will replace the designer, but how it redistributes the functions of ideation, selection, curation, cultural interpretation and brand authenticity.

Against this background, this article addresses the following research question: how do AI- and data-driven personalisation strategies create experiential, sustainable and symbolic value in fashion marketing, and what governance conditions are necessary to avoid risks related to privacy, sustainability and creative homogenisation? While these ecological, ethical and creative tensions provide an essential backdrop for understanding AI in fashion, this article adopts a marketing management perspective, focusing primarily on how firms strategically leverage AI- and data-driven personalisation to create, enhance and safeguard fashion marketing value. The objectives are to identify applications of AI and data-driven technologies in fashion marketing, analyse their effects on experience, efficiency and loyalty, examine ethical, environmental and creative tensions, and propose a conceptual model of responsible AI- and data-driven personalisation.

The article contributes to the literature in three ways. First, it develops a typology of personalisation logics in fashion: operational, algorithmic, ecosystemic and symbolic–immersive. Second, it proposes a framework for responsible AI- and data-driven personalisation that connects experiential efficiency, data governance, algorithmic trust, verifiable sustainability and human creative curation. Third, it formulates theoretical propositions explaining when AI-based personalisation creates value and when it produces risks related to privacy, sustainability or creative homogenisation.

Theoretical Framework

AI, Marketing and Omnichannel Experience

AI has become a strategic resource in contemporary marketing by enabling task automation, improving predictive accuracy and personalising interactions at scale (Davenport et al., 2020; Huang & Rust, 2021). In retail, its applications include product recommendation, dynamic segmentation, behavioural prediction, price optimisation, content generation, conversational assistance and advertising automation (Davenport et al., 2020; Duan et al., 2019; Wedel & Kannan, 2016). However, its value does not derive solely from the technology itself, but from its integration into organisational processes, data systems and coherent strategic decision-making (Verhoef et al., 2015).

From the perspective of the customer experience literature, customer experience depends on the coordination of physical and digital touchpoints throughout the purchase journey (Lemon & Verhoef, 2016; Verhoef et al., 2015). In this context, AI and data-driven infrastructures support omnichannel strategies by enabling consumer recognition, tailored recommendations, anticipation of needs, channel integration and friction reduction. Nevertheless, a purely instrumental view is insufficient: the value of AI depends on sociotechnical factors such as data quality, governance, organisational capabilities, trust, human interpretation and ethical legitimacy (Dwivedi et al., 2021; Wilson & Daugherty, 2018).

Algorithmic Personalisation and Trust

Personalisation can be defined as the adaptation of products, messages, services or experiences to the individual characteristics of the consumer (Sicilia et al., 2016). In digital marketing, this adaptation relies on declared and transactional data, browsing behaviour, purchase history, in-app behaviour and contextual signals. AI increases its scale and precision through machine learning, recommendation systems and predictive models. The literature has identified positive effects of personalisation on satisfaction, engagement, purchase intention, loyalty and customer lifetime value (Lemon & Verhoef, 2016; Verhoef et al., 2015).

However, personalisation may also trigger resistance when it is perceived as intrusive or associated with a loss of privacy. Awad and Krishnan (2006) show that consumers resist personalisation when they perceive a loss of control, while Acquisti et al. (2015) describe the information paradox: individuals value personalised services but do not always wish to disclose the data required to receive them. In fashion, this tension is intensified because data may be linked to the body, identity, style, self-esteem or purchasing behaviour.

Trust is therefore a fundamental condition for the acceptance of automated systems. Lee and See (2004) define it as the expectation that a system will help achieve objectives under conditions of uncertainty. In the field of algorithmic trust, the literature highlights transparency, explainability,

perceived fairness and human oversight as key factors (Dwivedi et al., 2023; Longoni & Cian, 2022). In addition, the GDPR, the AI Act and European guidelines on trustworthy AI reinforce the need for lawfulness, data minimisation, security, human control, privacy, diversity and accountability (European Union, 2016, 2024; High-Level Expert Group on Artificial Intelligence, 2019).

AI, Sustainability and Creativity in Fashion

Sustainability is one of the major structural challenges facing the fashion industry. The linear model of production, rapid consumption and disposal has been questioned for its environmental, social and reputational impact (Ellen MacArthur Foundation, 2017; Niinimäki et al., 2020). In this context, AI can contribute through predictive models that align production and demand, size recommendation systems that reduce returns, and analytics tools aimed at improving inventory management. Complementarily, digital traceability technologies—such as blockchain, big data, digital product passports and interoperable information systems—can increase supply-chain transparency and support circular, recommerce and second-hand models (Bolón-Canedo et al., 2024; Dabas & Whang, 2022; Moretto & Macchion, 2022; Swaminathan & Venkitasubramony, 2024).

However, algorithmic sustainability presents contradictions. AI can optimise resources, but it can also increase the energy consumption associated with digital infrastructures and model training (Strubell et al., 2019). Moreover, hyper-personalisation may stimulate overconsumption if every interaction becomes a purchasing incentive. For this reason, responsible application should be assessed through verifiable metrics, including reductions in surplus stock, returns, digital footprint, reverse logistics, material traceability and effects on consumption habits.

Creativity constitutes another critical dimension. Generative AI enables the rapid production of images, prints, colour combinations, avatars, virtual garments and prototypes (Rizzi & Bertola, 2025; Särmäkari & Vänskä, 2022). However, the production of variations does not necessarily equate to culturally meaningful originality (Runco, 2022), and models trained on dominant images may reproduce canons, obscure peripheral aesthetics and amplify representational biases (Akter et al., 2021; Särmäkari & Vänskä, 2022). The designer therefore does not disappear but is reconfigured as an algorithmic curator: interpreting outputs, correcting biases, protecting brand identity and providing narrative meaning to AI-assisted production.

Methodology

This study adopts an exploratory qualitative design based on a systematised literature review and a multiple case study. This approach is appropriate because the application of artificial intelligence (AI) and data-driven technologies to fashion marketing constitutes an emerging, complex and context-dependent phenomenon in which technology, data, customer experience, sustainability, creativity, regulation and brand identity interact. For this type of phenomenon, case study research makes it possible to analyse contemporary practices in their real-world context and to understand mechanisms that are difficult to observe through aggregate approaches (Yin, 2018).

The literature review was designed as a systematised review, inspired by PRISMA 2020 and adapted to the fields of management and marketing (Page et al., 2021). Peer-reviewed articles indexed in Scopus and Web of Science were prioritised, complemented by corporate reports, regulatory documents and institutional sources. The main search period was 2014–2025; foundational works were also incorporated when necessary, including Lee and See (2004), Verhoef et al. (2015), Lemon and Verhoef (2016), Braun and Clarke (2006) and Yin (2018). The searches combined terms related to AI, personalisation, marketing, fashion, retail, customer experience, algorithmic trust, privacy, sustainability, traceability, generative AI and creativity.

The empirical analysis was conducted through a multiple case study. The cases were selected through maximum-variation theoretical sampling, rather than statistical representativeness. The aim was to observe differentiated configurations of AI, data and immersive technologies in fashion marketing, while ensuring sufficient publicly available evidence for analysis. This logic is consistent with the analytical generalisation characteristic of case study research: the objective is not to extrapolate findings to the entire sector, but to identify patterns, tensions and mechanisms that may be transferable to comparable contexts (Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Yin, 2018).

Zara/Inditex, Zalando, Nike and Gucci were selected according to five criteria: sectoral relevance, technological intensity, strategic heterogeneity, availability of public information and theoretical value. Zara/Inditex enables the analysis of operational personalisation based on data-driven infrastructure, RFID, integrated inventory and omnichannel integration. Zalando represents algorithmic personalisation focused on recommendation, size fitting and returns management. Nike allows the study of an ecosystemic logic in which apps, community, training data and digital experiences are integrated into an ongoing relationship with the consumer. Gucci represents a symbolic–immersive logic linked to digital luxury, augmented reality, virtual goods and the management of exclusivity.

The analysis was conducted in two phases: first, an intra-case analysis of technological applications, strategic objectives, benefits, risks and success conditions; and second, a cross-case comparison through pattern matching. Coding combined a deductive approach, based on categories derived from the literature—personalisation, experience, trust, privacy, sustainability, creativity and governance—with an inductive approach aimed at identifying emerging categories such as operational personalisation, size friction, algorithmic curation, digital exclusivity and algorithmic greenwashing (Braun & Clarke, 2006; Gioia et al., 2013).

In practical terms, the documentary evidence from corporate reports, sustainability disclosures and investor presentations (for example, Inditex annual reports and Zalando or Nike sustainability reports) was segmented into meaning units related to AI, data use, personalisation, customer experience, sustainability and creativity. These tokens were then coded into first-order concepts (such as "RFID-based stock visibility", "predictive size recommendation", "returns reduction analytics", "digital exclusivity experiences" or "sustainability claims without metrics") and progressively aggregated into second-order themes. Through this iterative process, the analysis crystallised into higher-level coding families, including operational, algorithmic, ecosystemic and symbolic–immersive personalisation, as well as transversal categories such as algorithmic greenwashing, ensuring a transparent link between raw documentary tokens and the conceptual categories used in the findings.

To strengthen methodological quality, criteria of source triangulation, evidence traceability and systematic comparison across cases were applied. The study relies on secondary and publicly available information and may therefore be affected by corporate self-presentation bias. It also focuses on large companies and does not allow statistical causality to be established. Accordingly, the findings should be interpreted as a theory-oriented analytical generalisation, rather than as a statistical inference about the sector as a whole.

Results

Emerging Patterns from the Case Analysis

This section presents the main empirical patterns identified across the four cases analysed. The aim is not yet to discuss their theoretical contribution, but to show how each brand articulates AI-based technologies, data and immersive experiences within its fashion marketing strategy. Table 1 summarises the documentary evidence used and the analytical logic associated with each case, thereby moving from narrative case description towards a grounded analytical comparison.

Table 1. Documentary Evidence for the Cases Analysed

Case	Main Documentary Evidence	Analytical Logic
Zara/Inditex	Use of RFID and the Integrated Stock Management System (SINT) to integrate store and online inventory, locate items and improve product availability (Inditex, 2024).	Operational personalisation based on data-driven infrastructure, availability, logistical efficiency and the reduction of omnichannel friction.
Zalando	Recommendation tools, size-fitting solutions, conversational assistants, image generation and data-based solutions aimed at improving the online experience (Zalando SE, 2025).	Algorithmic personalisation oriented towards recommendation, predictive fitting, uncertainty reduction and returns management.
Nike	A digital ecosystem based on apps, user data, Nike Fit, personalisation, community and direct-	Ecosystemic personalisation in which AI, apps, community, fitting and loyalty are integrated into an ongoing relationship with the consumer.

	to-consumer digital experiences (Nike, Inc., 2024).	
Gucci	Use of digital experiences, augmented reality, virtual goods and immersive environments as part of its digital luxury strategy (Park et al., 2023; Rizzi & Bertola, 2025).	Symbolic–immersive personalisation linked to digital luxury, aesthetic curation and cultural exclusivity.

Note. Author's own elaboration based on the corporate and academic sources cited in the table: Inditex (2024), Zalando SE (2025), Nike, Inc. (2024), Park et al. (2023), and Rizzi and Bertola (2025).

The comparison shows that the cases were not selected as isolated examples of technological innovation, but as differentiated configurations of personalisation in fashion. Zara/Inditex represents an operational logic; Zalando an algorithmic logic; Nike an ecosystemic logic; and Gucci a symbolic–immersive logic.

Zara/Inditex: Operational Personalisation and Omnichannel Efficiency

Zara/Inditex represents a logic of operational personalisation primarily supported by data-driven infrastructure. Unlike brands that make AI visible through conversational interfaces or advanced recommendation systems, Inditex has developed a technological architecture centred on inventory integration, RFID, logistics, physical stores and product availability. Its integrated stock system enables the connection of stores and e-commerce, the location of garments, improved replenishment and reduced friction across channels (Inditex, 2024).

From the consumer's perspective, this form of personalisation is less explicit, but nevertheless relevant: it improves availability, speeds up the purchase process, facilitates collection or returns and strengthens omnichannel continuity. In fast fashion, where turnover, trend responsiveness and size availability are critical, data analytics and technological integration can improve the alignment between supply and demand. However, the case also shows that operational efficiency does not necessarily equate to full sustainability, nor does it replace human judgement in decisions concerning communication, image and brand narrative.

Zalando: Algorithmic Recommendation and Uncertainty Reduction

Zalando represents a logic of algorithmic personalisation characteristic of fashion e-commerce. Its model is based on large catalogues, multiple brands, behavioural data, product recommendation, segmentation and sizing tools. AI reduces choice friction and the uncertainty associated with online purchasing, especially in categories where fit, size and returns are critical factors (Zalando SE, 2025).

Size fitting is one of the most relevant areas. Recommendation systems combine purchase history, return behaviour, product attributes and comparisons across brands. This application creates value for consumers—through reduced frustration and greater confidence—and for the company—through lower logistics costs, higher conversion and a potential reduction in returns. However, Zalando also illustrates the paradox of fashion e-commerce: AI can optimise recommendations, but it does not, by itself, eliminate the environmental tensions of reverse logistics or the need for transparency, consent and perceived control (Acquisti et al., 2015; Awad & Krishnan, 2006; Longoni & Cian, 2022).

Nike: Ecosystemic Personalisation and Community

Nike represents a logic of ecosystemic personalisation. Its value proposition is not limited to recommending products; rather, it integrates apps, training data, community, limited releases, product personalisation and digital experiences into an ongoing relationship with the consumer. Apps such as Nike Run Club, Nike Training Club and SNKRS make it possible to collect data, support routines, activate community and strengthen the direct relationship with the brand (Nike, Inc., 2024).

In this case, personalisation is linked to athletic performance, habits, goals, belonging and cultural aspiration. Tools such as Nike Fit, based on computer vision and size recommendation, illustrate the potential of AI to address specific e-commerce frictions. At the same time, Nike's experience with digital goods and RTFKT shows that immersion and virtual scarcity may extend the brand into new communities, but do not guarantee sustainable value unless they are supported by perceived utility, a strong community and a coherent narrative.

Gucci: Digital Luxury and Symbolic Immersion

Gucci represents a logic of symbolic–immersive personalisation supported by digital technologies, augmented reality and virtual goods. In luxury, technology must be managed with particular care because the brand competes not only on functionality, but also on exclusivity, desire, aesthetics, heritage and cultural capital. The adoption of virtual experiences, digital goods and immersive environments enables the brand's symbolic universe to be extended into digital spaces.

The Gucci case shows that immersive technologies can create new forms of engagement, especially among younger consumers accustomed to video games, avatars and virtual worlds. A digital garment or accessory can function as a status symbol in online communities, just as a physical product operates as a marker of distinction in face-to-face contexts (Park et al., 2023). However, digital luxury faces a dilemma: the mass accessibility of virtual environments may place pressure on exclusivity. Immersion therefore generates value only when it is integrated into a coherent aesthetic narrative, with creative curation and symbolic control of the brand.

Cross-Case Synthesis

Table 2 summarises the four logics of technological personalisation identified across the cases.

Table 2. Comparative Synthesis of the Logics of Technological Personalisation in Fashion

Case	Dominant logic	Strategic objective	Value for the consumer	Main risk
Zara/Inditex	Data-driven operational personalisation	Integrated stock, availability and efficiency	Reduced friction and greater omnichannel continuity	Confusing efficiency with full sustainability
Zalando	Algorithmic personalisation	Recommendation, sizing and reduction of returns	Better fit, lower uncertainty and greater relevance	Privacy, opacity and reverse logistics
Nike	Ecosystemic personalisation	Community, apps, performance and loyalty	Continuous experience, belonging and motivation	Digital volatility and loss of authenticity
Gucci	Symbolic and immersive personalisation	Digital luxury, immersive experiences and exclusivity	Aspirational experience and digital status	Trivialisation of exclusivity

Note. Author's own elaboration based on the comparative case analysis and the documentary evidence synthesised in Table 1.

The cross-case synthesis identifies four empirical patterns. First, the technologies analysed generate greater value when they reduce specific frictions in the customer journey, such as product availability, size fitting, recommendation or omnichannel continuity. Second, the more intensive data-driven personalisation becomes, the more relevant transparency, perceived control and algorithmic trust become. Third, sustainability emerges as a conditional promise: it requires verifiable metrics and cannot be assumed from technological deployment alone. Fourth, in the more symbolic or creative cases, authenticity depends on human curation and on the narrative coherence of the brand.

Discussion

A Model of Responsible AI- and Data-Driven Personalisation

Drawing on the patterns identified, this section interprets the cases in light of the literature on AI in marketing, customer experience, algorithmic trust, sustainability and human–AI creativity. The findings suggest that AI, when combined with data-driven infrastructures and immersive technologies, can enhance experience, efficiency and loyalty when it is coherently integrated with brand strategy and data governance. However, its value depends on conditions that are not strictly technological: trust, transparency, sustainability, creativity and cultural coherence. Technological personalisation in fashion should therefore be understood as a sociotechnical system, rather than as a mere automation tool.

From this perspective, the cases help to refine the frameworks of Marketing 5.0 and Marketing 6.0. Zara/Inditex and Zalando approximate a Marketing 5.0 logic, as they use data, automation and

recommendation to reduce functional frictions and improve the efficiency of the purchase journey (Kotler et al., 2021). Nike occupies an intermediate position by combining functional fitting and recommendation tools with apps, community and brand experiences. Gucci, by contrast, moves closer to the logic of Marketing 6.0, using immersive technologies and digital goods to expand the symbolic value of luxury (Kotler et al., 2024). Nevertheless, the cases show that these frameworks remain insufficient unless they incorporate data governance, algorithmic trust, verifiable sustainability and human creative curation.

Responsible personalisation can be defined as personalisation that uses data proportionate to its purpose, communicates clearly how personalisation is carried out, allows consumers to adjust or reject personalisation, and generates perceived benefits that outweigh the cost of data disclosure. This definition connects the customer experience literature with the ethical governance of AI (European Union, 2016, 2024; Lemon & Verhoef, 2016; Longoni & Cian, 2022). It also requires a shift from algorithmic sustainability as a promise to sustainability as evidence: AI may reduce surplus stock, improve recommendations or decrease returns, but it may also stimulate overconsumption or increase the energy impact of digital infrastructures (Bolón-Canedo et al., 2024; Strubell et al., 2019).

At the creative level, generative AI can accelerate prototyping and expand visual variation, but fashion requires more than formal efficiency: it requires cultural meaning, disruption, narrative coherence and authenticity. AI-assisted creativity is therefore understood here as creativity augmented by human curation. AI acts as a generative partner, while human professionals interpret outputs, correct biases, protect brand identity and provide cultural meaning to algorithm-assisted production (Akter et al., 2021; Runco, 2022; Särmäkari & Vänskä, 2022; Wilson & Daugherty, 2018).

Drawing on the literature review and the case analysis, the article proposes a model of responsible AI- and data-driven personalisation in fashion structured around five dimensions:

Table 3. Model of Responsible AI- and Data-Driven Personalisation in Fashion

Dimension	Function in the model	Risk if it fails	Possible indicators
Experiential efficiency	Reduces frictions in the customer journey: search, size, availability, recommendation, delivery and returns.	Irrelevant automation or improvement with no perceived impact.	Satisfaction, conversion, reduction of returns, search time, product availability.
Data governance	Legitimises the use of personal information through transparency, proportionality and consent.	Surveillance, intrusion, misuse of data or regulatory non-compliance.	Informed consent, data minimisation, traceability, privacy, GDPR/AI Act compliance.
Algorithmic trust	Facilitates acceptance of recommendations and automated decisions.	Rejection, opacity, perceived unfairness or loss of control.	Explainability, perceived control, transparency, correction mechanisms, human oversight.
Verifiable sustainability	Connects AI, analytics and traceability with the reduction of environmental or social impacts.	Technological greenwashing, overconsumption or lack of environmental evidence.	Surplus stock, returns, logistics emissions, circularity, traceability.
Human creative curation	Preserves authenticity, aesthetic diversity and brand identity in AI-assisted processes.	Visual homogenisation, representational biases or creative weakening.	Perceived originality, brand coherence, visual diversity, human review, narrative quality.

Note. Author's own elaboration based on the literature review and the comparative case analysis. The model integrates contributions on customer experience and omnichannel integration (Lemon & Verhoef, 2016; Verhoef et al., 2015), AI in marketing (Davenport et al., 2020; Huang & Rust, 2021), privacy and algorithmic trust (Acquisti et al., 2015; Awad & Krishnan, 2006; Longoni & Cian, 2022), sustainability in fashion and green AI (Bolón-Canedo et al., 2024; Dabas & Whang, 2022; Niinimäki et al., 2020), and human–AI creativity and algorithmic bias (Akter et al., 2021; Runco, 2022; Särmäkari & Vänskä, 2022; Wilson & Daugherty, 2018).

These dimensions are mutually reinforcing. Efficiency without trust may be perceived as manipulation; personalisation without sustainability may encourage excessive consumption; algorithmic creativity without curation may homogenise aesthetics; and immersion without narrative may become superficial entertainment. On the basis of the model, six theoretical propositions are formulated to guide future empirical research.

Table 4. Theoretical Propositions Derived from the Model

Proposition	Formulation
P1	AI- and data-driven personalisation will have a positive effect on satisfaction when it reduces specific frictions in the customer journey, particularly in relation to size, product availability and product relevance.
P2	The relationship between algorithmic personalisation and loyalty will be mediated by perceived algorithmic trust.
P3	Transparency in the use of data will positively moderate the acceptance of personalised recommendations in fashion.
P4	The reduction of returns attributable to predictive fitting systems will have positive effects on perceived brand sustainability only when it is communicated in a verifiable manner.
P5	The use of generative AI will increase creative efficiency, but its effect on perceived originality will depend on human curation and the diversity of the dataset.
P6	In luxury brands, digital immersion will generate engagement only when it preserves narrative coherence and symbolic mechanisms of exclusivity.

Note. Author's own elaboration. The propositions synthesise the theoretical relationships derived from the proposed conceptual model and from the patterns observed in the cases of Zara/Inditex, Zalando, Nike and Gucci.

Theoretical and Managerial Implications

The article offers four main theoretical implications. First, it integrates the literature on AI in marketing, customer experience, sustainable fashion, data-driven technologies and creativity—fields that are often addressed separately. Second, it proposes a typology of four logics of technological personalisation in fashion—operational, algorithmic, ecosystemic and symbolic–immersive—which makes it possible to differentiate uses of AI and digital technologies according to business model and brand positioning. Third, it qualifies the Marketing 5.0 and 6.0 frameworks: the cases suggest that technology can personalise, reduce friction and create immersive experiences (Kotler et al., 2021, 2024), but they also show that these approaches must be complemented by data governance, algorithmic trust, verifiable sustainability and human curation. Finally, the proposed model contributes to evaluating personalisation not only through commercial metrics, but also through relational, ethical, environmental and creative ones.

From a managerial perspective, the findings suggest that the adoption of AI in fashion should start from specific problems in the customer journey, rather than from mere technological fascination. The most robust applications are those that reduce verifiable frictions: finding the right size, improving product availability, personalising recommendations, reducing returns, optimising stock or facilitating traceability. In addition, brands should design clear, understandable and consumer-oriented data policies, as trust depends on the use of personal information being perceived as proportionate, useful and respectful.

Moreover, the sustainability associated with AI should be measured through verifiable indicators, such as return rates, surplus stock, logistics emissions, circularity, traceability and the energy consumption of digital systems. Otherwise, technological personalisation may lead to algorithmic greenwashing. Finally, generative AI should be integrated under human direction in order to avoid aesthetic homogenisation, loss of identity or creative weakening. For fashion SMEs, the priority should not be to replicate the infrastructures of large groups, but to progress gradually in segmented CRM, returns analytics, basic recommendation systems, customer service automation, demand forecasting and simple traceability.

Conclusions

This article has analysed how artificial intelligence, data analytics and immersive technologies are reconfiguring personalisation in fashion marketing. Drawing on a systematised literature review and a qualitative multiple case study—Zara/Inditex, Zalando, Nike and Gucci—the findings show that technological personalisation does not take a single form, but is expressed through four differentiated logics: operational, algorithmic, ecosystemic and symbolic–immersive.

The main contribution of the study is the proposal of a model of responsible AI- and data-driven personalisation in fashion, structured around five dimensions: experiential efficiency, data governance, algorithmic trust, verifiable sustainability and human creative curation. This model makes it possible to move beyond technocentric approaches and to understand that AI generates sustainable value only when it is integrated with transparency, human oversight, brand coherence, environmental evidence and cultural sensitivity.

The study also shows that AI-based personalisation can create functional, relational and symbolic value, but it is not free from risks. Algorithmic opacity, the intensive use of personal data, the potential intensification of consumption, technological greenwashing and aesthetic homogenisation constitute relevant challenges for brands, consumers and regulators. Competitive advantage, therefore, will not lie merely in greater automation, but in better personalisation: with greater responsibility, user control and alignment between technology, ethics, sustainability and creativity.

The article has limitations. It is based on secondary information and on cases of large companies; future studies should therefore incorporate interviews with managers, designers, consumers and technology professionals, quantitative analyses of AI acceptance, experiments on trust, privacy and recommendation, and specific studies on fashion SMEs. It would also be relevant to measure empirically the net impact of AI on returns, overproduction, energy consumption, circularity and perceptions of creative authenticity.

In conclusion, fashion can become a privileged laboratory for observing the evolution of AI- and data-driven marketing. However, its potential will depend on digital technologies being placed at the service of more meaningful, sustainable, transparent and culturally authentic experiences.

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