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# The impact of Midjourney on students' design and design process: an exploratory study

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**Abstract:** We explored the impact of AI, specifically Midjourney, on the retail design process for master's students. Over three years, three student groups followed the same design exercise, with AI introduced at different phases. Group 3, which used Midjourney during concept development, showed increased creativity, stronger storytelling, and more cohesive designs. However, AI had no significant impact on innovativeness or originality. Midjourney did accelerate ideation, allowing students to generate concept boards quickly, reducing early-stage development by 1-2 weeks. Despite this, its use declined in later design phases, as students found it unable to fully align with their visions. The study concludes that Midjourney is most effective in the concept phase, offering fast visualization, lowering technical barriers, and inspiring creative thinking. While it may not replace traditional design methods, it serves as a valuable creative tool for exploring and refining ideas.

**Keywords**: AI; design process; creativity; retail design

## 1. Introduction

As researchers and teachers in the Faculty of Architecture and Arts, we have been working for several years to develop tools that facilitate the design process of stores for students. Several tools and models have already been published (Quartier, 2023). Influenced by recent developments in AI, we set up an experiment to explore the possible impact of an AI-tool on the design process. In scientific literature we found sound proof that AI could benefit the design process. Text-to-image AI tools like Midjourney are particularly suited for retail design by accelerating spatial planning, enhancing brand identity, and improving consumer experience. They enable rapid exploration of store layouts, help maintain visual consistency with brand aesthetics and assist in crafting immersive shopping environments. While primarily used for visual inspiration, their ability to generate diverse design concepts makes them valuable for the fast-paced retail industry. In recent years

there has been a lot of focus on appropriately integrating generative AI models into the design process. For example, we see a lot of publications around supporting the concept phase, using language or image generation to explore a broad spectrum of conceptual possibilities. The literature review by Rane et al. (2023) shows that tools like ChatGPT or Bard can play an important role in this, as they can quickly generate different alternatives, taking into account style preferences, color palettes and spatial requirements. A similar conclusion can be drawn based on the user study by Paananen et al. (2023), in which architecture students were asked to use popular models (Midjourney 4, DALL-E 2, Stable Diffusion 1.5) to generate an impression image of a floor plan, an interior and a material. Students particularly appreciated that the models took into account certain conditions (e.g., number of floors or overall size). After the concept phase, several publications explore how initial impressions can be further solidified.

For example, RoomDreaming is a prototype by Wang et al. (2024) that uses image generation to iterate quickly and efficiently over a wide range of suggestions, with the user directing the process by selecting the preference each time. As a result, suggestions in subsequent iterations quickly converge to the user's specific needs. Designers reported after a user study that a first hour of collaborative design via RoomDreaming gave similar results to several days of traditional meetings. Another example is the platform by Thakkar et al. (2024), where users first enter the dimensions of a virtual (3D) space and place objects. Then an interior image is generated that matches the space to a certain extent (in terms of layout, specific furniture, proportions ...). This shows that even with image generation, the algorithm can be somewhat controlled, by enforcing a certain spatial structure. Moreover, the platform also allows objects to be moved or removed. Research also shows how AI can assist designers in later steps of the process. For example, Hou et al. (2024) investigated how color palettes can be automatically determined via a language model supported by domain-specific knowledge, allowing the intent of the designer's textual input to be better ascertained. The colors suggested by the model can then be automatically assigned to parts of the interior (furniture, walls, etc.) and refined by the designer. Generative models such as ChatGPT and DALL-E can also be used for assigning textures and colors in a 3D scene. For example, the prototype of Gallega et al. (2024) uses these models to recommend relevant textures, generate multiple texture maps of the same type of texture, or suggest color palettes. In turn, Merell et al. (2011) developed an interactive system that proposes furniture arrangements that consider interior design guidelines (such as balance, focal points, alignment, and circulation). An informal study found that users with no prior knowledge in terms of interior design knew better arrangements when using the system.

Next, we did an online exploration to look for the tools at hand. There seems to be a breakthrough in generative AI technologies that can support and accelerate creative processes. An important evolution in the landscape of AI and creative design is the breakthrough in generative algorithms. Given the impressive advancements in recent years, this technology is well-suited for translating abstract DNA values—typical terms brands use to define themselves—into immersive visual and sensory shopping experiences. Especially interesting are image models that can convert textual input into an image based

on their extensive training. Tools such as Midjourney, Stable Diffusion, Shutterstock AI Image Generator, DALL-E, Adobe Firefly, ... are available to a wide audience, whether for a fee or not. Such tools already offer many advanced features, such as the ability to manually select and delete specific parts of an image or replace them with an alternative. There are, however, commercial generative AI tools that specialize in interior design. Some interesting players in this field are Spacely AI, AI Room Planner and RoomGPT, which promise users through their AI-based visualization to speed up and streamline the design process, while being cost-effective. They offer users a choice of interior styles, but their customization options remain very limited. These tools often require an initial image or sketch of the existing/desired room, in an attempt to meet the user's needs, but they primarily focus on generating visually appealing images of interiors similar to the user's input. Midjourney is a bit different as it allows users to generate designs by simply describing what they want in words.

After this exploration, we chose the Midjourney programme. Midjourney promises, as an AI-powered image-generation platform, offers students an opportunity to explore and visualize concepts in ways that were previously time-intensive or technically challenging. Also, Midjourney seemed to be easily accessible, offering endless conceptual images of spatial images without giving it a lot of input. So, both for conceptual thinking as store design Midjourney seemed the best fit.

## 2. Experimental set-up

The study was conducted among Master students of interior architecture majoring in retail design in the academic year 2022-2023, 2023-2024 and 2024-2025, with 2022_2023 as the control group, using no AI. With the retail design process model of Servais et. al (2012) in mind, and what we found in the literature review, two phases in the design process were selected to introduce Midjourney to the students: concept design phase, and the store development phase.

During the first year of the three (2022-2023), no Midjourney was taught nor mentioned to the 6 students following the master (group 1). After a short survey at the end of the exercise, students were found to be unfamiliar with Midjourney or any other AI design tool. During the second year (group 2), Midjourney was taught to 11 students following the master, in the store development phase with the premise that it would inspire the students to elaborate their design. The third year of study, we taught students Midjourney at the beginning of the design process, during the concept development phase (group 3). This year, there were 6 students involved. The Midjourney training consisted of a half-day session, beginning with a brief introduction to the platform. Following this, students were assigned two hands-on exercises to assess their ability to work effectively with the program. The retail design exercise remained consistent over three years: students were tasked with designing a concept store for an internationally recognized luxury brand or designer within a 400 m² space provided to them. They had the freedom to choose their brand, with selections including Louis Vuitton, Dolce & Gabbana, Dries Van Noten, Walter Van Beirendonck, and Rolex. A key focus of the exercise was crafting an immersive shop-

ping experience. Master's students were already familiar with retail design, having completed a semester-long retail design project in their third year of the bachelor's program. During that phase, they followed a structured design process with strict timelines, guided by tutors. In the master's program, however, they had greater autonomy in managing their own schedules. This flexibility allowed us to evaluate whether Midjourney influenced the timing of their design process.

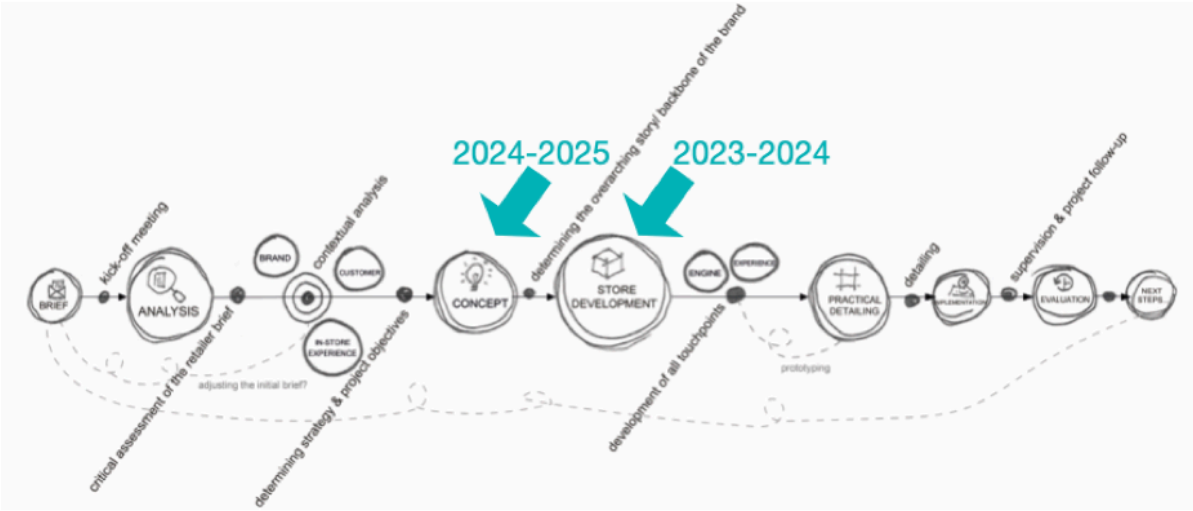


*Figure 1 Retail design process with the use of Midjourney indicated in the process*

## 3. Analysis

Over the course of three years, two teachers—a retail design expert and the author—consistently guided the design process. They maintained a stable approach, making no changes to the design exercise or their methods of instructing and mentoring students. This ensured that any variations in student outcomes were not due to differences in guidance but rather to the influencing of the AI-tool used in the process.

The design process was closely monitored in terms of both timing and visual output, using structured documentation (workflow document) and student presentations. To assess the effectiveness and impact of the process, the results were analyzed based on three predetermined criteria:

- Innovativeness – The extent to which the design introduces new and forward-thinking solutions.
- Originality – How unique and distinctive the design is compared to existing solutions in the market.
- Creativity – The depth and meaningfulness of the ideas generated throughout the design process.

By systematically evaluating these aspects, the study aimed to identify the influence of different approaches on the quality and nature of student designs.

# 4. Results

## *4.1 Use of Midjourney*

Although the students in Group 2 only learned to use Midjourney during the store development phase, many still referred to their concept boards from the concept design phase. Most of them recreated their concept boards using Midjourney (see Figure 2), though these new images were largely copies of their original work, with little further experimentation. During the store development phase, students used Midjourney primarily for inspiration but did not allow it to influence or guide their design decisions. Analyzing their workflow documents at the end of the process revealed that the frequency of Midjourney-generated images remained relatively low.

In contrast, Group 3, which was introduced to Midjourney during the concept design phase, used it extensively to experiment and develop their concept boards. These boards were notably more spatial and interior-focused than those of Group 2 (see Figure 3). Students in this group continuously generated images until they arrived at their ideal concept—an efficient process completed within half a day. However, like Group 2, they rarely used Midjourney in the later design stages, neither for inspiration nor for visualizing their ideas.

During a final review, students in both groups expressed that Midjourney did not always produce the results they envisioned. Many already had a clear mental image of their designs that the AI struggled to replicate. A key difference, however, was that Group 3 tended to keep their Midjourney-generated concept images as a guiding reference throughout the design process, whereas in Group 2, the concept board played a minimal role in further development.

*Figure 2 Concept boards of Group 2, Walter van Beirendonck and Nicky Vankets*

### *4.2 Impact on final design*

An analysis of the students' results revealed no significant impact on two of the three predetermined evaluation criteria: innovativeness and originality. In other words, the extent to which the designs introduced new solutions, and their uniqueness compared to existing designs remained relatively consistent across all groups. However, there was a noticeable increase in the creativity factor, particularly in Group 3.

In this group, the use of Midjourney appeared to enhance the depth and strength of the conceptual storytelling. The narratives behind the concepts were more compelling, and the overall design concepts were more clearly defined and cohesive. Additionally, the translation of ideas into visual design was more consistent, as illustrated in Figure 3. This suggests that AI-generated inspiration may have helped students refine their ideas more effectively, leading to stronger and more coherent design outcomes.

*Figure 3 Student work for Vivienne Westwood, group 3: left-hand side is Midjourney concept board, right hand side is final design*

### *4.2 Impact on design process*

The teachers noted that the timeline of the design process varied between groups. In Group 1 (the control group), the initial research and analysis phase lasted seven weeks. During this time, students examined the brand and target audience, culminating in the creation of two personas, a brand analysis using the brand pyramid (author, 2023), and a concept board with accompanying text. This was followed by another seven weeks dedicated to the actual design work.

Group 2 followed the same timeline for both research and design, showing no change in process duration. However, in Group 3, the use of Midjourney accelerated the early stages of concept development. The AI tool provided immediate visual inspiration, allowing students to generate ideas more quickly. As a result, the analysis and concept development phases took less time, reducing the need for the additional one to two weeks that were typically required to create a concept board manually. This suggests that AI-

driven tools can streamline the ideation process by offering rapid visual references, potentially allowing for more time to refine and develop designs.

# 5. Conclusion and discussion

When designing the exercise, we assumed that Midjourney would serve as a valuable design companion, providing students with limitless inspiration, particularly during the store development phase. However, our research shows that students are more likely to use Midjourney in the concept phase. Somewhat unexpectedly, the program was little used in the later design phase. We can conclude that:

1. Accelerating Ideation and Visualization in concept design phase: Midjourney allows students to quickly generate visuals based on textual prompts, which accelerates the brainstorming and ideation phase. This capability enables them to test multiple creative directions in a fraction of the time it would take using traditional methods. For design students, this means they can explore a broader range of ideas, iterate faster, and refine concepts more effectively.

2. Lowering Technical Barriers: for students who may lack advanced skills in complex design software, Midjourney provides an accessible way to create professional-grade visuals and boards. This empowers students from diverse backgrounds to engage in creative exploration without being limited by their technical expertise.

3. Inspiring Creative Thinking: by generating unexpected or unconventional results, Midjourney often pushes students to think outside the box. The AI's interpretations can serve as inspiration, challenging students to reconsider their assumptions or explore new creative directions.

So, Midjourney could become a powerful companion in the design process for students, offering inspiration, some level of efficiency (producing a lot of images in a short timeframe) and accessibility. We noticed that it is especially useful in the concept generation phase.

# 6. Limitations

While our study provides valuable insights into the role of AI in the design process, the small sample size (6-11 students per year) presents certain limitations, particularly regarding broader applicability. Beyond sample size, several potential biases could influence our findings: group dynamics and cognitive bias in Perception of AI Assistance. Regarding group dynamics, although students worked individual on their project individual differences, dominant personalities, and peer influence can affect student performance, making it harder to isolate the study's impact. In term of cognitive bias, students' preconceived notions about AI—whether overly optimistic or skeptical—could affect how they engage with the tool. If participants expected AI to be highly creative, they might have relied on it more, whereas skeptics may have underutilized its potential. A more structured approach, such as comparing AI-assisted and non-AI-assisted design processes, could help isolate these effects.

By addressing these biases in future research, we can gain a more nuanced understanding of AI's role in design education and ensure that findings are more broadly applicable.

Overall, a quantitative component, such as larger-scale data collection or statistical analysis, would strengthen the findings by providing more objective insights.

# References

Gallega, R. W., & Sumi, Y. (2024). Exploring the use of generative AI for material texturing in 3D interior design spaces. *Frontiers in Computer Science*, 6.

Hou, Y., Yang, M., Cui, H., Wang, L., Xu, J., & Zeng, W. (2024). C2Ideas: Supporting Creative Interior Color Design Ideation with a Large Language Model. *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems* (CHI '24). ACM.

Merrell, P., Schkufza, E., Li, Z., Agrawala, M., & Koltun, V. (2011). Interactive furniture layout using interior design guidelines. *ACM SIGGRAPH 2011 Papers* (SIGGRAPH '11). ACM.

Paananen, V., Oppenlaender, J., & Visuri, A. (2023). Using Text-to-Image Generation for Architectural Design Ideation. *ArXiv*.

Quartier, K. 2023. *The big book of retail design*. Leuven: Lannoo Campus.

Rane, N., Choudhary, S. & Rane, J. (2023). Integrating ChatGPT, Bard, and leading-edge generative artificial intelligence in architectural design and engineering: applications, framework, and challenges. *SSRN Electronic Journal*.

Servais, E., Quartier, K. and Vanrie, J. (2021), "Designing Valuable Experiential Retail Environments: A Review of the Design Process", Quartier, K., Petermans, A., Melewar, T.C. and Dennis, C. (Ed.) The *Value of Design in Retail and Branding*, Emerald Publishing Limited, Leeds, pp. 159-170. https://doi.org/10.1108/978-1-80071-579-020211013

Thakkar, K., Vadgama, K., Ranawat, K., Sharma, R., & Mangla, M. (2024). Generative AI based Interior Designing. *International Conference on Electrical Electronics and Computing Technologies* (ICEECT), 1.

Wang, S., Su, W., Chen, S., Tsai, C., Misztal, M., Cheng, K.M., Lin, A., Chen, Y., & Chen, M. (2024). RoomDreaming: Generative-AI Approach to Facilitating Iterative, Preliminary Interior Design Exploration. *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems* (CHI '24). ACM.

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# The Role of Consumers in the Retail Design Process

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**Abstract:** Marketing and design emphasise consumer-centricity and advocate for a participatory, co-creative role for consumers. However, retail designers often view consumers as constraints with limited influence on store design. A literature review analysing retail design from a consumer perspective reveals three key approaches: brand-based frameworks, which align retail design with brand identity; handover-based frameworks, which incorporate consumer insights in a design brief; and empathy-based frameworks, focused on understanding consumers through iterative design. In these frameworks consumer participation remains minimal. Barriers to greater involvement are largely linked to the role of the designer. The review suggests that a more creative and participatory role for consumers in the design process could lead to more customized, meaningful experiences and make retail spaces more consumer-centric. A proposed 5-level ladder of consumer involvement offers a tool for aligning retail challenges with appropriate levels of consumer participation, enhancing consumer-centric design in retail spaces.

**Keywords**: Retail design; Consumer-centricity; Co-creation; Participation ladder.

## 1. Introduction

Since the 1970s, designers have progressively adopted a consumer-centric approach, focusing not only on what they design but also on how they engage consumers (Sanders & Stappers, 2008). Consumers have played a more active role in the early stages of the design process, particularly during idea generation. This emphasis on consumer involvement parallels the evolution of a marketing concept where customer-centricity has become pivotal. In the previous century, many service-oriented firms progressed from a product-centric and internally focused approach to an external focus, serving specific customer segments (Sheth et al., 2000). Advances in technology have since driven this further, enabling a shift from market orientation toward a customer-centric model in which firms prioritize developing and maintaining relationships with individual customers (Guo et al., 2020; Sheth et al., 2000). Consumers increasingly seek to influence all as-

pects of the business system, turning every point of interaction from design and production to consumption into opportunities to create and extract value (Prahalad & Ramaswamy, 2004). This movement toward consumer-centricity in both marketing and broader design disciplines contrasts with the way consumer roles are described in retail design literature. For instance, Münster and Haug (2017) find that fashion store designers underrate consumers compared to other stakeholders and consumer influence diminishes as the design process progresses. In response to this gap, frameworks proposed by Schüller (2020) and Servais (2023) advocate for making retail design more consumer-centric. This shift is important because creating value for customers inherently generates value for retail firms: "the true essence of the customer-centricity paradigm lies not in how to sell products but rather in creating value for the customer and, in the process, creating value for the firm; in other words, customer-centricity is concerned with the process of dual value creation" (Shah et al., 2006 p.115). First, an understanding of the current role of consumers is required before discussing possible more co-creative roles because value creation for consumers may occur without requiring their active participation. Consumer co-creation can be defined as a collaborative approach in which consumers work actively with designers and retailers to achieve shared goals (Bødker et al., 2022). This literature review examines the current role of consumers in retail design. This helps to understand why the consumer's role in the retail design process is undervalued, despite the pivotal role consumers play in the marketing concept and the widespread adoption of consumer-centric approaches in design. The topic of this study is relevant to both marketing and design disciplines but ultimately it focuses on the retail design process and specifically, on the way one of the stakeholders, consumers, are involved.

## 2. Research design

A semi-systematic, scoping literature review was chosen to take the process of summarising and disseminating research findings "one step further by drawing conclusions from existing literature regarding the overall state of research activity" (Arksey & O'Malley, 2005 p.21). Systematic reviews aim to evaluate the quality of publications addressing a highly focused research question, whereas scoping reviews seek to identify gaps in the existing literature. This study exhibits characteristics of both approaches. Its systematic nature is reflected in its replicable process, the inclusion of only peer-reviewed publications, and the assignment of characteristics to a selection of publications for analysis. On the other hand, its scoping nature is evident in the broadly rather than narrowly defined research question and the reflexive application of inclusion criteria, which evolved with increasing familiarity with the literature. First, publications were selected that included "store design" or "retail design" and at least one of the following terms: "consumer", "shopper", "customer" or "end-user". The search included a wide range of sources such as Arts & Architecture Source, EBSCOhost, Scopus and Web of Science from their moment of first publication till 1 August 2023. As this resulted in tens of thousands of publications, in a next step the selection was restricted to English and peer-reviewed publications in the academic disciplines of architecture, business, economics and social sciences. Next, the abstracts of these publications were checked for mentions of the retail design process, stakeholders in the design process, and/or consumer participation in the

design process. This generated a first list of 43 publications to which 7 publications were added based on references in the first list. They were read in full to check if they also related to physical stores. The 50 publications were coded based on characteristics of the retail design process, stakeholder types, consumer involvement and key themes, enabling the identification of barriers and accelerators of consumer involvement in retail design. 22 publications in particular contained detailed information relevant to the review.

# 3. Findings

First, those publications are selected that describe processes in various phases to develop a physical store, hereafter called retail design frameworks. Clustering of such individual frameworks may help to identify the context in which they are effective and enables a discussion at the group rather than the individual level. After reporting on framework typologies, all publications are used to discuss the findings on process, stakeholders, consumer role, barriers and accelerators.

## *3.1 Frameworks*

Retail design frameworks were evaluated on aspects that could inform us on consumer involvement in retail design: the intensity of involvement of the consumer, the timing of the involvement, the actor that invites consumers into the process and finally the actor that is the main driver of the design process. Intensity of consumer involvement is described as low if the consumer assumes the role of informant in one or a few research steps, is characterised as one of the constraints, and/or functions as a trigger of the process. This attribute value is medium if the consumer is perceived as a valuable source of information and inspiration at various steps, not merely as informant in the analytical phase. Finally, intensity is high if the consumer is co-creator in one or more parts of the process and assumes decision-making responsibilities. Timing of the consumer involvement was divided into 3 phases of the process: at the start, in the middle and/or at the end. Both intensity and timing did not result in much differentiation and therefore they are not helpful for grouping frameworks. In all of the identified retail design processes the consumer involvement is low, and if there is any, consumers are observed or interviewed in an analytical phase at the start of the process and as input into the briefing for the designer. However, the models differ in the choice of the actor who leads the overall process and the selection of the actor who carries the responsibility of involving the consumer. When the frameworks are plotted on these two aspects three types of frameworks appear (figure 1): brand-based framework, when the retailer takes the lead; handover-based frameworks when the designer leads the overall process and uses the design brief as handover moment while relying on the retailer for consumer insights; and empathy-based frameworks when the designer leads the process from start to finish, not relying on the retailer. Figure 2 shows the main differences among the 3 types. Interestingly, there is no framework that describes a collaborative process where the retailer leads the overall design process and the designer is responsible for involving consumers. Most frameworks give the responsibility of involving consumers to the retailer.

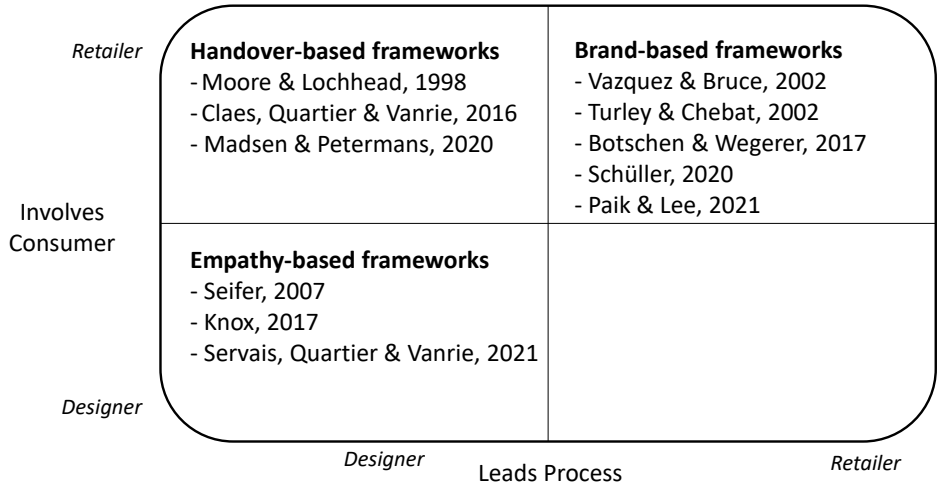


*Figure 1 Typology retail design frameworks*

### *3.2 Process*

The brand-based frameworks share a strong connection between retail design and the retailer's strategic marketing processes. The process starts with the current brand identity or guides the (re)definition (Botschen & Wegerer, 2017; Paik & Lee, 2021; Schüller, 2020), is harboured in retail strategy (Turley & Chebat, 2002), and/or is a response to consumer demand, retail competition and/or supplier action (Vazquez & Bruce, 2002). The brand-based frameworks suggest a number of sequential steps: determining brand principles, analysing the context, setting retail strategy and translating this into retail design. At the end of the process Turley and Chebat (2002) create a feedback loop from retail design implementation to retail strategy. Botschen and Wegerer (2017) ensure that strategic marketing plans are elaborated in retail employee behaviour, processes and structures.

In handover-based frameworks designers take overall responsibility but call on retailers to present information on the retail context, retail strategy and consumer insights in a design brief. Apart from this, these frameworks differ on many other aspects of the retail design process. Moore and Lochhead (1998) see the design process as an essentially creative response by designers to an actual or perceived problem. Claes et al. (2016) present an iterative, never-ending process.

In empathy-based frameworks designers maintain control and direction throughout the process. The frameworks demonstrate a commitment to gaining a deeper understanding of consumers. Seifer (2007) starts with observational research of consumers, Knox (2016) emphasizes awareness of the consumer situation and further context as a first step, and Servais et al. (2021) rename 'target group' from the framework by Claes et al. (2016) into 'customer'. The frameworks accept continuous adaptation through feedback from monitoring that is incorporated into subsequent iterations. Servais et al. (2021) encourage self-reflection by 'finishing' their process with a next phase called 'Next step…?'. Knox (2016) suggests the designer to lead the process to the end up to guiding the opening of the store and monitoring performance.

| | Brand-based | Handover-based | Empathy-based |
|---|---|---|---|
| **Takes lead in process** | Retailer | Designer | Designer |
| **Involves consumer** | Retailer | Retailer | Designer |
| **Guiding principle** | Retail brand identity | Connectivity | Continuous improvement |
| **Role of consumer** | Trigger, evaluator | Subject of research | Subject of research |
| **Phasing consumer** | Start, middle | Start, middle, end | Start, middle |
| **# Stakeholders** | High | Low | Low |
| **Main stakeholders** | Variety of retailer functions, designer | Retailer, designer | Variety of designer functions, retailer |
| **Framework** | Sequential | Sequential, non-sequential, visual | Sequential |
| **Type of journals** | Marketing, retailing | Consumer, retailing, design | Design |
| **Timing publications** | 2002-2021 | 1998-2020 | 2007-2021 |
| **Main characteristics** | Interwoven with retailer strategic marketing process. Implies consumer research. | Retailer informs designer on strategy, context and consumer in design brief. | Desire for deeper understanding of consumer. Emphasises continuous adaptation. |

*Figure 2 Overview of retail design frameworks*

### *3.3 Stakeholders*

Retail design frameworks differ in the quantity, type, and level of detail regarding stakeholder identification, which influences the role of consumers. Brand-based frameworks position consumers as one of many stakeholders. This corresponds with an amended, broader definition of the marketing concept (Gundlach & Wilkie, 2009). In addition, brand-based frameworks encompass various specific retailer functions such as for assortment and social media. In empathy-based frameworks where designers lead the process, specific design roles such as for conceptual and product design are emphasized. Finally, the handover-based framework focuses on the interaction between retailer and designer with little attention given to other stakeholders. Figure 3 provides an overview of stakeholders that are identified in our literature review. This emphasizes the complexity of the retail design process. In addition, it offers a starting point for future analyses of the role of consumers in possible connection with other stakeholders. The structure of the overview follows Kent (2007) which is the first retail design specific overview and has often been used as a basis for subsequent frameworks (see e.g. Schüller (2020)). Stakeholders in the literature review were categorised according to this structure into three types: stakeholders directly involved in the retail design process, stakeholders affected by the retail design process and stakeholders affected by the outcome of the retail design process. In this typology consumers are classified as an indirectly affected group that are affected by the outcome and exert the least impact on the process itself.

| Stakeholders directly involved in the retail design process | Stakeholders affected by the retail design process | Stakeholders affected by the outcome of the retail design process |
|---|---|---|
| **1. Retailer, and more specifically:**<br>a. Real estate and building department<br>• Store development/property arm<br>• Store design<br>• Store planning and layout team<br>b. Senior management<br>• Board executives<br>• Department heads<br>c. Commercial department<br>• Assortment manager<br>• Buying and merchandising team<br>• Merchandise planning<br>• Visual merchandising<br>• Expert in food design<br>d. Store operations<br>• Area manager<br>• Local store management<br>• Franchisees<br><br>**2. Designer (at retailer / design agency)**<br>a. Architect / Retail designer<br>b. Conceptual design team<br>c. Design service providers incl. product or packaging designer<br>d. Department heads in architectural practices<br><br>**3. Consultant** | **4. Retailer, and more specifically:**<br>a. Marketing department<br>• Corporate brand management / Brand owners<br>• User experience design<br>• Social media marketing<br>b. IT department at retailer<br><br>**5. Store owners / landlords**<br><br>**6. Communication agency**<br>a. Below-the-line agencies, e.g., POP, sales promotion, DM, etc.)<br>b. Advertising and other above-the-line agencies<br><br>**7. Real estate management**<br>a. Facility / property management<br>b. Building supervisor<br>c. Property manager<br>d. Project manager of project development<br>e. Owner of mall property<br>f. Retail mall manager | **8. Consumer / Customer**<br>**9. Store employees**<br>**10. Competitors**<br>**11. Suppliers**<br><br>**12. Financial community**<br>a. (Retailer) Shareholders<br>b. Banks<br><br>**13. Local community**<br>a. Adjacent businesses<br>b. Residents<br>c. Local pressure groups<br>d. Local chamber of commerce<br><br>**14. Government**<br>a. National legislators and government<br>b. Local legislators and government<br>c. Town planners<br>d. Local planning authorities<br><br>**15. National and local media**<br>**16. Political groups**<br>**17. Trade associations**<br>**18. Activist groups**<br>**19. Historians** |

*Figure 3: Stakeholders by involvement*

## *3.4 Consumer role*

In brand-based frameworks retailers operate with the consumer in mind, but they regard the consumer as a target that may trigger the start of the process by the retailer (Vazquez & Bruce, 2002) or evaluate the outcomes. Turley and Chebat (2002) highlight the concept of consumer-oriented design, emphasizing the advantages of tailoring store environments to specific market segments. They discuss the potential for decentralized designs that align with the unique characteristics of local communities or regions, the way consumers respond to targeted marketing tools, and the value of a feedback loop that enables consumers to influence and shape retail strategies. Still, brand-based frameworks prioritize the representation of consumer interests within the design process without necessitating direct consumer participation. Their guiding principle is the desired brand identity as they aim to connect the retail design with the retail branding process. The retail design process is interwoven with strategic marketing processes and "while traditional retail format design is intended to target consumers in their buying behaviour, our branding perspective suggests including all internal and external stakeholders" (Botschen & Wegerer, 2017 p.876).

Both handover-based and empathy-based frameworks view consumers as subjects of research rather than participants in the design process. In handover-based frameworks designers lead the overall design process and extract information on consumer needs from the design brief drafted by the retailer. These frameworks differ on many other aspects. In

the framework by Moore and Lochhead (1998) retailers frame the problem, provide an accurate portrait of the consumer, conduct a trends analysis and ask designers to create a solution. Claes et al. (2016) propose a visual model showing activities, actors and tools in a retail design process. The framework highlights the complex intertwining of the retailer, the retail designer and society in which the consumer is embedded. The consumer is investigated in market research when establishing a need and defined as target group and/or personas. The consumer is involved at various steps of the process, but it is undefined to which extent the consumer actively engages as a valuable source of information and inspiration. Madsen and Petermans (2020) present a view of a designer's observable universe consisting of four subsystems: place of business, retailer spaces, staff, brand and product mix. The type of consumer involvement is not detailed, but the frameworks could be interpreted such that consumers are involved in the design process.

The empathy-based frameworks call upon designers to give empathic attention to consumers often in a first step of the retail design process. The framework by Seifer (2007) starts with data gathering preferably through observational research. Knox (2016 p.139) gives the name awareness to the first phase of the retail design process when "designers must make themselves acutely aware of the needs of their clients, the customers, and the landscape or climate". Knox (2016 p.141) emphasises consumer empathy: "An interest in, and an understanding of, human thought and behaviour will help determine what becomes effective design". Servais et al. (2021) highlight the consumer role in the analytical phase after the briefing by the retailer. They rename target group to customer which comprises the aspects of personality/self-image and expectations/value perception.

### *3.5 Barriers*

In the frameworks being examined, consumers have limited involvement in the retail design process and are predominantly regarded as subjects of research. This stands in contrast to marketing and design literature, which highlights a shift toward consumer-centric approaches, where consumers are given the opportunity to co-create solutions and actively participate throughout the entire process (Sanders & Stappers, 2008; Sheth et al., 2000). The publications under discussion were reviewed to explore potential explanations. 6 barriers are identified: the first 5 pertain to the role of the retail designer, while the sixth is associated with the design process.

The first barrier relates to the role complexity of the designer, because they need to balance many aesthetical, functional, commercial, financial and legal aspects (Münster & Haug, 2017) at different abstraction levels (Haug & Münster, 2015) from many stakeholders (Knox, 2016), potentially even more stakeholders than in other design disciplines (Schüller, 2020) while one changed aspect results in a domino effect of changing other aspects (Knox, 2016). If designers plan retail space with financial and volume metrics of retailers in mind, they may overlook the deeper emotional drivers that make consumers choose a store and form the foundation of a relationship between the consumer with the retail brand (Quartier, 2011). Despite their best intentions, retail designers often base their decisions on intuition and personal aesthetic preferences (Raffelt & Meyer, 2012). Also, both designers and consumers derive pleasure from novel design, but it may result in higher perceived complexity for consumers (Murray et al., 2017).

The second barrier concerns the indirect inclusion of the consumer perspective. Designers often assume that retailers, who are perceived as having more knowledge of consumers, have incorporated consumer needs (Münster & Haug, 2017). Retailers typically conduct most consumer behavior and needs research (Quartier et al., 2008). However, this indirect knowledge transfer, rather than direct consumer engagement, is unreliable, especially when consumers interpret concepts like experience differently than other stakeholders. While retailers prioritize creating exciting experiences, consumers often seek more practical or utilitarian experiences (Bäckström & Johansson, 2006). The indirect inclusion may also be hindered by differences in argumentation style and vocabulary between designers and retailers. Petermans et al. (2013) note that retailers use more rational, logical arguments in the design process, while designers rely on emotional, narrative reasoning.

The third barrier relates to the type of consumer research. Available research from marketing and psychology disciplines sheds light on consumer behaviour by testing the influence of isolated environmental or atmospheric stimuli (Petermans et al., 2013). However, this collides with the holistic view by designers and as a result, retail designers do not take the consumer research into account sufficiently (Petermans & Quartier, 2021). Furthermore, designers may dismiss consumer research due to a perceived lack of credibility and relevance. More often than not, they associate research with questionnaires giving insight into consumer intentions and claimed behaviour rather than observed behaviour in actual retail environments.

A fourth barrier stems from the disconnect between academia and design practitioners. While marketers value academic insights from marketing and psychology, designers remain skeptical of consumer behaviour research, viewing experimental studies in artificial settings as lacking credibility and relevance (Calienes et al., 2016). Additionally, limited access to scientific knowledge often leads designers to rely on intuition rather than evidence-based practices (Petermans & Quartier, 2021).

Münster and Haug (2017) identify a fifth barrier: unlike other stakeholders, consumers express their preferences less explicitly. Designers do not intentionally overlook these preferences but often struggle to identify unconscious ones. Münster and Haug (2017 p.138) argue that “if designers had a better understanding of the consumers, they might be able to target their store designs even better, and they would have stronger arguments for their design choices in discussions with their clients”.

Finally, a sixth barrier results from perceived process complexity. Consumer interests are overlooked in a retail design processes that have been described as “evolutionary phases and continuous tweaking” (Kent, 2007 p.740; Schüller, 2020 p.28). Servais et al. (2021) conclude that decisions on experience are made in an intuitive way, are approached differently in each case, and happen in the executional post-concept development phase. Yet, when consumers are involved from the start of the design process, creative thinking and new approaches to problem-solving may flourish (Kent, 2007).

### *3.6 Accelerators*

Though the selected publications do not suggest a participatory role for consumers in the design process, they hold arguments that may accelerate a more consumer-centric retail design. These arguments revolve around 4 themes: market dynamics, call for inclusivity, new technology and consumer experience.

First, as the number of options available for selling, distribution, communication, and payment increases, consumer expectations regarding retail environments evolve more rapidly in various ways (Christiaans & Almendra, 2012). Retail spaces are expected not only to reflect shifting societal trends but also to take a stance on societal debates, such as the sustainable use of materials (Lehner, 2015). Moreover, the more consumers perceive products as homogeneous, the more retailers strive to differentiate themselves through various means, with retail design serving as an enabler (Willems et al., 2016).

Secondly, the call for inclusivity may lead to more consumer-centric design. Various authors highlight the necessity for stores to accommodate the needs of particular target groups, such as an aging population (Petermans & Van Cleempoel, 2010; Yu et al., 2022), Millennials (Calienes et al., 2016) and consumers with physical and/or cognitive limitations (Celik & Yakut, 2021; Edwards et al., 2018). For instance, consumers with mobility impairments frequently encounter architectural barriers, such as entryway steps, while those with vision loss face challenges in reading store signage.

Thirdly, as a shopping journey integrates physical and digital components and advances in technology give consumers greater control, consumers expect a seamless retail brand experience across various media and retail channels (Kartajaya et al., 2019). In-store technology such as virtual reality is creating new opportunities to enhance the shopping journey (Bonfanti & Yfantidou, 2021; Siregar & Kent, 2019).

A final accelerator of consumer-centric design is the consumer search for meaningful and customised experiences (Petermans et al., 2013; Quartier, 2017). In the experience economy consumers are no longer viewed solely as buyers of products but as individuals with distinct personalities and feelings (Quartier, 2017). This shift necessitates new insights into consumers' self-image and emotions. Millennials, as a new generation, have stimulated the demand for experiential stores, as they seek to be entertained, value authenticity, appreciate perso-nalisation and are tech-savvy (Calienes et al., 2016).

## 4. Discussion

Current retail design frameworks do not suggest that a consumer-centric design outcome requires a high level of consumer involvement. To better understand how designers and retailers could involve consumers, it is beneficial to make a clearer distinction between varying levels of involvement. The ladder of citizen participation by Arnstein (1969) served as foundation for conceptualising a similar ladder of increasingly higher levels of consumer involvement in the retail design process. To illustrate these levels, we utilised examples drawn from the publications in our review. We suggest 5 levels on which consumers:

1) are documented in consumer research reports;

2) are observed as part of the process;

3) give feedback on ideas, concepts and products;

4) create together with professionals in some phases of the process;

5) engage with the team as co-designers throughout the process.

The frameworks in our literature study facilitate designing retail space for consumers (levels 1 till 3), but they do not match the trends in marketing and design to co-create with consumers (levels 4 and 5). If consumers derive more of the value being created in retail from their experiences and their interaction with the retailer and other consumers rather than from the exchange of goods and services, the role of the consumer changes from buyer to actor in a store staged by the retailer (Pine & Gilmore, 2011). The consumer experience goes one step deeper if the stage is not set only by the retailer and consumers also co-create the stage (Prahalad & Ramaswamy, 2004; Russo Spena et al., 2012). We think that increasingly consumers will help decide on the stage and artefacts of the store. This is driven by the inherent characteristic of stores that production and consumption of the service occur simultaneously and the highly personal nature of an experience. Inviting consumers to co-create retail space, will tap into their creative capabilities and increase their engagement with the retail brand. This may also leverage retail design in a way to differentiate one retail brand from another (Petermans et al., 2013) which requires knowledge about which aspects of the retail design are important to consumers.

Co-creation may not be an objective in itself but a means to achieve consumer-centric retail design. Co-creation in all design phases is perhaps the highest level of consumer involvement as opposed to observing consumers and asking feedback on designs created by others. When delivering consumer-centric design, retailers may have relied on sales data or in-store observations, but whether such approaches are robust enough to withstand future developments such as the demand for in-store experiences remains unclear. The required level of consumer involvement may depend on the situation. When retailers roll out an existing concept it may be sufficient to measure the change in the composition of households in the catchment area in order to reallocate category space. More radically new retail concepts targeting previously unknown target groups may require more consumer involvement. This has implications for the choice of the retail design framework. Designers and retailers need to know for which situations the retail design framework was developed and select the relevant frameworks depending on the context. Also, the retail design frameworks may be designed in a flexible manner and allow for various levels of consumer involvement in the retail design process in terms of phase of the process, duration of the involvement and type of contribution.

## 5. Implications, limitations and future research avenues

This literature review of retail design processes, examined from the consumer's perspective, highlights the opportunity for greater consumer-centricity in store development. A key question is whether consumer-centric design can be achieved with minimal or no participation from consumers. We propose conducting experiments that vary the degree of

consumer involvement, assessed against a range of criteria representing the diverse priorities of stakeholders. These experiments could also explore how increased consumer involvement can be achieved without overly complicating the design process or the designer's role both of which currently are perceived as barriers to high consumer participation.

An additional contribution of this review lies in identifying barriers and facilitators to consumer involvement, which may help stakeholders optimize their processes. Six primary barriers to high consumer involvement in the design process were identified, most of which relate to the designer's role. Future research should also consider retailer-specific factors, such as budget constraints. Importantly, identifying these barriers and facilitators from the same body of literature that informed the frameworks and stakeholder analysis ensures specificity. However, employing alternative search terms might uncover a broader array of relevant factors.

Building on existing literature, we developed three types of frameworks for the retail design process. Brand-based frameworks are most applicable when developing or revisiting a brand identity statement, enhancing synergy across marketing instruments, working with less stringent time constraints, or operating within an organizational culture favouring structured approaches with clear accountability. Handover-based frameworks where the design brief plays a central role, are suited to contexts where designers are unfamiliar with the retailer's environment or where significant changes are anticipated. Empathy-based frameworks may prove effective in organizations with cultures that prioritize continuous change and adaptability. Further research is needed to validate two critical aspects within these frameworks: the actor leading the overall process and the actor responsible for involving consumers. Additionally, the applicability of the frameworks themselves requires evaluation. Rather than viewing the three frameworks as distinct processes tailored to specific contexts, they could be considered interwoven, allowing retailers and designers to integrate emphasis on brand identity, the design brief, and iterative feedback. This perspective suggests the need for a unified process description offering a menu of options that can be tailored to the specific requirements of the retail design context.

# References

Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International journal of social research methodology*, *8*(1), 19-32.

Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of planners*, *35*(4), 216-224.

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. https://doi.org/10.1016/j.jretconser.2006.02.005

Bødker, S., Dindler, C., Iversen, O. S., & Smith, R. C. (2022). *Participatory Design* (1 ed.). Springer Nature. https://doi.org/10.1007/978-3-031-02235-7

Bonfanti, A., & Yfantidou, G. (2021). Designing a memorable in-store customer shopping experience: practical evidence from sports equipment retailers. *International Journal of Retail & Distribution Management*, *49*(9), 1295-1311. https://doi.org/10.1108/IJRDM-09-2020-0361

Botschen, G., & Wegerer, P. K. (2017). Brand-driven retail format innovation: a conceptual framework. *International Journal of Retail & Distribution Management*, *45*(7/8), 874-891. https://doi.org/10.1108/IJRDM-10-2016-0181

Calienes, E., Carmel-Gilfilen, C., & Portillo, M. (2016). Inside the Mind of the Millennial Shopper: Designing Retail Spaces for a New Generation. *Journal of interior design*, *41*(4), 47-67. https://doi.org/10.1111/joid.12085

Celik, A. A., & Yakut, E. (2021). Consumers with vulnerabilities: in-store satisfaction of visually impaired and legally blind. *The Journal of services marketing*, *35*(6), 821-833. https://doi.org/10.1108/JSM-05-2020-0191

Christiaans, H. H., & Almendra, R. A. (2012). Retail design: a new discipline. DS 70: Proceedings of DESIGN 2012, the 12th International Design Conference, Dubrovnik, Croatia,

Claes, S., Quartier, K., & Vanrie, J. (2016, 27-30 September 2016). Reconsidering education in retail design: Today's challenges and objectives. 10th International Conference on Design & Emotion, Amsterdam.

Edwards, K., Rosenbaum, M. S., Brosdahl, D., & Hughes, P. (2018). Designing retail spaces for inclusion. *Journal of retailing and consumer services*, *44*, 182-190. https://doi.org/10.1016/j.jretconser.2018.06.013

Gundlach, G. T., & Wilkie, W. L. (2009). The American Marketing Association's New Definition of Marketing: Perspective and Commentary on the 2007 Revision. *Journal of Public Policy & Marketing*, *28*(2), 259-264. https://doi.org/10.1509/jppm.28.2.259

Guo, M., Liao, X., Liu, J., & Zhang, Q. (2020). Consumer preference analysis: A data-driven multiple criteria approach integrating online information. *Omega*, *96*, 102074. https://doi.org/https://doi.org/10.1016/j.omega.2019.05.010

Haug, A., & Münster, M. B. (2015). Design variables and constraints in fashion store design processes. *International Journal of Retail & Distribution Management*, *43*(9), 831-848. https://doi.org/10.1108/IJRDM-11-2013-0207

Kartajaya, H., Kotler, P., & Hooi, D. H. (2019). Marketing 4.0: moving from traditional to digital. *World Scientific Book Chapters*, 99-123.

Kent, T. (2007). Creative space: design and the retail environment. *International Journal of Retail & Distribution Management*, *35*(9), 734-745. https://doi.org/10.1108/09590550710773273

Knox, M. (2016). Evaluating retail design. In A. Petermans & A. Kent (Eds.), *Retail Design* (pp. 143-160). Routledge.

Lehner, M. (2015). Translating sustainability: the role of the retail store. *International Journal of Retail & Distribution Management*, *43*(4/5), 386-402. https://doi.org/10.1108/IJRDM-02-2014-0013

Madsen, S. M., & Petermans, A. (2020). Exploring the system of digitised retail design—flattening the ontology. *Journal of retailing and consumer services*, *54*, 102053. https://doi.org/10.1016/j.jretconser.2020.102053

Moore, C. M., & Lochhead, M. (1998). The management of retail design: demystifying the activity. *Journal of consumer studies and home economics*, *22*(3), 121-130. https://doi.org/10.1046/j.1365-2737.1998.00071.x

Münster, M., & Haug, A. (2017). Management of constraint generators in fashion store design processes. *International Journal of Retail & Distribution Management*, *45*, 122-142. https://doi.org/10.1108/IJRDM-01-2016-0013

Murray, J., Elms, J., & Teller, C. (2017). Examining the role of store design on consumers' cross-sectional perceptions of retail brand loyalty. *Journal of retailing and consumer services*, *38*, 147-156. https://doi.org/10.1016/j.jretconser.2017.06.001

Paik, H., & Lee, J. H. (2021). Analytical framework, typology and retail experience design process for integrated relational brand experience. *International Journal of Retail & Distribution Management*, *49*(4), 466-490. https://doi.org/10.1108/IJRDM-12-2019-0394

Petermans, A., Janssens, W., & Cleempoel, K. V. (2013). A Holistic Framework for Conceptualizing Customer Experiences in Retail Environments. *International journal of design*, *7*(2), 1-18. https://go.exlibris.link/GnZMrvF8

Petermans, A., & Quartier, K. (2021). Introduction. In K. Quartier, A. Petermans, T. C. Melewar, & C. Dennis (Eds.), *The value of design in retail and branding* (pp. 1-6). Emerald Publishing Limited. https://doi.org/10.1108/978-1-80071-579-020211025

Petermans, A., & Van Cleempoel, K. (2010). Designing a retail store environment for the mature market: A European perspective. *Journal of interior design*, *35*(2), 21-36.

Pine, B. J., & Gilmore, J. H. (2011). *The experience economy*. Harvard Business Press.

Prahalad, C. K., & Ramaswamy, V. (2004). Co-creating unique value with customers. *Strategy & leadership*, *32*(3), 4-9. https://doi.org/10.1108/10878570410699249

Quartier, K. (2011). *Retail design: lighting as a design tool for the retail environment: doctoraatsproefschrift* (Publication Number Dissertation/Thesis) Hasselt. https://go.exlibris.link/V1ygbVZ8

Quartier, K. (2017). *Retail Design: What's in the Name?* Routledge. https://go.exlibris.link/STJ7JjlX

Quartier, K., Christiaans, H., & Van Cleempoel, K. (2008). Retail design: lighting as an atmospheric tool, creating experiences which influence consumers' mood and behaviour in commercial spaces.

Raffelt, U., & Meyer, A. (2012). Architectural Branding. In H. H. Bauer, D. Heinrich, & M. Samak (Eds.), *Erlebniskommunikation: Erfolgsfaktoren für die Marketingpraxis* (pp. 207-222). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-21133-1_12

Russo Spena, T., Caridà, A., Colurcio, M., & Melia, M. (2012). Store experience and co-creation: The case of temporary shop. *International Journal of Retail & Distribution Management*, *40*(1), 21-40.

Sanders, E. B. N., & Stappers, P. J. (2008). Co-creation and the new landscapes of design. *CoDesign*, *4*(1), 5-18. https://doi.org/10.1080/15710880701875068

Schüller, S. C. (2020). *Brand-adequate design of retail environments* (Publication Number 5020) University of St.Gallen]. St. Gallen. https://www.alexandria.unisg.ch/handle/20.500.14171/113106

Seifer, B. (2007). Brand Strategy and Retail Environments. *Design Management Review*, *18*(2), 17-25. https://doi.org/10.1111/j.1948-7169.2007.tb00079.x

Servais, E. (2023). *The value of experiential retail environments and in-store experience: Gaining a better understanding of the phenomenon in order to better design for it* Hasselt University]. 2023.

Servais, E., Quartier, K., & Vanrie, J. (2021). Designing valuable experiential retail environments: A review of the design process. *The value of design in retail and branding*, 159-170.

Shah, D., Rust, R. T., Parasuraman, A., Staelin, R., & Day, G. S. (2006). The Path to Customer Centricity. *Journal of service research : JSR*, *9*(2), 113-124. https://doi.org/10.1177/1094670506294666

Sheth, J. N., Sisodia, R. S., & Sharma, A. (2000). The antecedents and consequences of customer-centric marketing. *Journal of the Academy of Marketing Science*, *28*(1), 55-66. https://doi.org/10.1177/0092070300281006

Siregar, Y., & Kent, A. (2019). Consumer experience of interactive technology in fashion stores. *International Journal of Retail & Distribution Management*, *47*(12), 1318-1335. https://doi.org/10.1108/IJRDM-09-2018-0189

Turley, L. W., & Chebat, J.-C. (2002). Linking Retail Strategy, Atmospheric Design and Shopping Behaviour. *Journal of marketing management*, *18*(1-2), 125-144. https://doi.org/10.1362/0267257022775891

Vazquez, D., & Bruce, M. (2002). Exploring the retail design management process within a UK food retailer. *The International review of retail, distribution and consumer research*. https://doi.org/10.1080/09593960210151199

Willems, K., Leroi-Werelds, S., & Swinnen, G. (2016). The impact of customer value types on customer outcomes for different retail formats. *International journal of service industry management*, *27*(4), 591-618. https://doi.org/10.1108/JOSM-11-2015-0364

Yu, H., Rahman, O., Marlatt, D., & Robichaud, Z. (2022). Experiential value and shopping well-being of aging consumers. *Canadian journal of administrative sciences*, *39*(2), 168-183. https://doi.org/10.1002/cjas.1662

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