INTEGRATING SPACE, SERVICE, AND TIME: A STRUCTURED WORKSHOP FOR RETAIL INTERIOR DESIGN EDUCATION

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Abstract

Retail environments are increasingly required to embody not only aesthetic and functional qualities but also the immaterial dimensions of services, user flows, and temporal variability. The growing emphasis on integrating spatial design, service design, and temporal dynamics in recent years has led to viewing these spaces as active places of exchange within contemporary cities.

The Laboratorio di Sintesi Finale (LSF) of Section I1 is explicitly based on this principle. The LSF is the final design course of the Bachelor's degree in Interior Design at Politecnico di Milano, which involves 60 students. The primary objective of the course is to design new retail spaces in some of the empty areas of Milan's Stazione Centrale. To support students with the complex task of defining the function of spaces with different purposes, the teaching team has organised an intensive workshop.

The planned activity aims to introduce a guided framework that helps students understand how services can unfold within space and how design choices can reflect behaviours, needs, and temporal patterns. Through a sequence of analytical and creative phases, the exercise encourages the translation of experiential and organisational aspects into concrete spatial solutions.

The methodological framework is articulated in a preliminary task and three main phases.

The preliminary task, a photographic reportage, enables students to identify interesting real-life cases that apply to their concept.

The second phase of the intensive workshop involves providing a reading and interpretation of the architectural plan of the workspace, as well as mapping flows and representing actions using diagrammatic tools. The goal of the second phase is to develop a timeline for each sub-space, highlighting the rhythms, intensities, and variations that characterise the service dimension.

The third and final phase involves a visual and conceptual synthesis through the creation of mood boards. These do not merely communicate atmospheres and materials but also integrate temporal considerations, thus linking design choices to the previously identified time-based behaviours.

The process alternates between physical tools—useful for brainstorming and group interaction—and digital mood boards, allowing students to explore different levels of representation.

To evaluate the usefulness of the workshop and measure its effectiveness, an assessment test was carried out at the end of the activity.

The results of these activities reveal significant variability among groups, yet also a notable convergence in terms of methodological awareness. Some teams that initially struggled were able to make substantial progress thanks to a structured and guided workflow, suggesting that the framework can support learning even in heterogeneous groups with varying levels of difficulty.

Overall, the careful planning of the workshop demonstrates the effectiveness of a guided, service-oriented approach to retail interior design, enabling students to translate the intangible qualities of services into spatial characteristics.

Keywords: Interior Design, Retail Design, Service-oriented Design, Design learning process, Design Education, Mood boards.

1 INTRODUCTION

In recent decades, retail spaces have gradually expanded their scope, moving further away from purely aesthetic and functional considerations. While commercial interior design was traditionally focused primarily on the physical organisation of products and layout efficiency, today these spaces are conceived as dynamic systems, called upon to incorporate intangible dimensions related to services, user flows, and the temporal variability of the user experience [1] [2].

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In this sense, contemporary retail is a complex reality in which space, time, and behaviour interact, generating dynamic and adaptive environments rather than static configurations. In the past, numerous theoretical contributions have highlighted how the value of the consumer experience does not lie exclusively in the act of purchasing, but is constructed through a sequence of spatial, relational, and symbolic interactions that involve the user before, during, and after accessing the commercial space. From this perspective, retail can be interpreted as a *servicescape* [3], an environment that includes not only physical attributes but also relational, sensory, and temporal components [4] [5], capable of influencing perceptions, behaviours, and social relationships.

At the same time, growing interest in the experience economy [2] has helped shift the focus of design towards creating meaningful experiences, in which time, rhythm, and the sequence of actions take on a central role. This approach integrates the consumer experience into the field of design, placing the user at the centre of the design dynamics and recognising time as a structural component of the experience itself [6].

Furthermore, in recent years, the contemporary scenario – defined by the integration of spatial design and service design – has been further enriched by the addition of urban design, thus leading to a new interpretation of commercial environments as active urban interfaces, devices capable of mediating flows, relationships, and narratives, participating in the construction of the identity of the contexts in which they are inserted. Retail spaces are configured through relational services and infrastructures [7] capable of defining new forms of sociality and use of space, making the project a tool for shaping collective practices, rituals, and behaviours. These spaces contribute to the construction of place identity [8] and the production of meaning within the contemporary city, offering opportunities for encounter, exchange, and interaction beyond their mere commercial function.

In this context, the theme of temporality takes on a particularly important role, as contemporary commercial spaces are characterised by a high degree of variability: retail is no longer conceived as a static space, but rather as a dynamic ecosystem in which modes of access, permanence, and exit are constantly changing in response to the variability of the behaviours of a heterogeneous clientele, environmental stimuli, and pervasive technologies [9]. In this sense, temporality becomes an integral part not only of the use of space, but of the very form of space itself. Commercial spaces thus become places of transit and permanence, capable of activating processes of recognition, orientation, and belonging, contributing to urban legibility and imagery [10].

Within this general framework aimed at working with the immaterial dimensions of services, user flows, and temporal variability of retail environments, the teaching team of the Laboratorio di Sintesi Finale (LSF) of section I1 - also called Eufemia – within the bachelor's degree in interior design invited students to work on this theme.

The course draws inspiration from the idea of the city as a place where goods, stories, memories, and relationships are continuously exchanged. Therefore, retail spaces are interpreted as narrative environments capable of generating meaning, identity, and social interaction. In this perspective, retail design becomes a tool for constructing experiences, defining flows, and giving spatial form to immaterial values such as time, memory, and collective rituals. The goal was to design spaces and services distributed within currently empty areas of the Milan Central Station, owned by the Grandi Stazioni Retail group, covering an area of approximately 4,000 square meters. The company also provided guidelines on excluding food from the proposed product categories.

The Milan Central Station is located within the central area of the city, a dense and highly stratified urban context characterised by intense movement, strong symbolic landmarks [10], and a coexistence of historical and contemporary layers. This setting offers an ideal ground to investigate the relationship between retail spaces and the city, encouraging students to reflect on how commercial interiors interact with urban paths, nodes, margins, and districts [10], and how they contribute to the legibility, identity, and figurability of the urban environment.

The project is therefore called upon to confront time as an immaterial element of design, capable of influencing the perception of space, the duration of the experience, and the meaning attributed to places. This approach is more linked to reflections on the social production of space [11], in which space is not understood as a neutral entity, but as a dynamic construction resulting from the interaction between practices, representations, and experiences.

The course path fosters a critical and thoughtful approach to retail design, encouraging students to create projects that strike a balance between innovation and identity, industrial logic and craftsmanship, spatial experimentation and functional consistency.

Retail space is ultimately understood as an active component of the urban experience: a place of exchange where design becomes a medium to connect people, products, and the city.

2 METHODOLOGY

The course structure is similar to that of previous years [12],[13] and is divided into three main phases: research, concept and project development. The work is initially carried out in groups of six students, encouraging a broad vision and different points of view on the initial research. From the initial concept, the in-depth study focuses on specific aspects (or spaces) of the project, developed in pairs. This allows for greater detail and individual responsibility.

From the early stages, the research activity is supported by the analysis of significant case studies [14] that guide the development of the project from concept to the definition of the interior elements [12], [13]. The research and analysis of case studies, as reported by Muratovsky [15], enable the examination of a phenomenon – or, in this case, an architectural element – in its natural context, and the exploration and description of its fundamental elements. Along with the case studies, the teaching team supports students' work by requesting specific assignments for various deliverables (such as templates, instructions on assignments, and requests for descriptive videos) and theoretical contributions [13]. The multidisciplinary team could train students from diverse perspectives, ranging from the theory of space to the materials and tools to be used, such as artificial intelligence. Moreover, for some years now, these theoretical contributions have been supplemented with insights provided by guest lecturers from the sector who share their expertise. For the Milan Central Station project, the team identified companies that primarily work on a contract basis and can provide viable solutions for students. These are Woodskin [16], Abet [17] and Oddicini [18]. In two other cases, students left the university to enter the professional world, visiting the DeltaLight [19] showroom and the Materia 2.0 [20] materials library to experience real design contexts firsthand.

Since the course structure, contributions and guests' format [21] are fairly well established, this year the focus was mainly on translating the elements that emerged during the research into the actual concept and project. During previous editions, it became clear that there was a need to provide students with more guidance in designing services, particularly in understanding the functions of complex spaces and identifying the flows, behaviours, and temporal dynamics that characterise them.

To address this critical issue, the teaching team organised an intensive workshop dedicated to the design and structure of services, conceived as a moment of brainstorming and methodological experimentation: 'Time-based spaces'. The aim of the activity was to provide a guided framework that helps students understand how services are organised in space and time, and how design choices can reflect different needs, behaviours, and patterns of use, translating experiential and organisational aspects into concrete spatial solutions.

2.1 Time-based spaces workshop

The workshop organised in the context of the LSF is divided into a preliminary activity and three main phases, marked by precise timings and supported by a PPT presentation.

The preliminary activity consists of a photographic reportage that must represent inspirational spaces, with purposes like those intended for the project. Compared to the initial space assessment report, this one is more in-depth. It enables students to identify real cases [22] and critically analyse service organisations [17]. Students were asked to proceed with this activity about two weeks before the workshop.

At the heart of the workshop, the first phase is dedicated to reading and interpreting the project space and constructing a customer journey map. Using Post-it notes, maps, sketches, keywords, and diagrams, students, working in groups and pairs, map flows, actions, and interactions, making behaviours and sequences of use visible. This phase enabled them to identify the flows and nodes of interaction, allowing them to respond with a configuration of the space that best suits the hypothetical situations. This phase lasts about an hour.

The second phase, which takes place consecutively and occupies the second hour of the workshop, focuses on defining the general schedule for the space. The entire group participates in designing the calendar, as the services and spaces intersect. Students are asked to design a detailed service schedule for each sub-space, aiming to construct a timeline that highlights rhythms, intensities, and temporal variations.

The third and final phase is carried out at home. Students are given a week to refine flows and schedules and build a mood board for specific spaces. This phase involves a visual and conceptual synthesis that not only communicates atmospheres, colours and materials, but also explicitly integrates the temporal dimension, linking design choices to previously identified behaviours. The minimum requirement is one mood board per pair.

2.2 Assessment form

In order to evaluate the effectiveness, usefulness and learning impact of the course activities and the workshop, the teaching team set an assessment test at the end of the course. The form was completed individually and anonymously in approximately five minutes. It enabled the assessment of the evolution of skills and the contribution of various initiatives within the students' projects.

The form is divided into four sections. The first section concerns the guests [16][17][18] who spoke during the course. Using Likert scales, respondents were asked about the relevance of the product/material to the project, the impact it had and whether the product/material was included in the project.

The second section is dedicated to educational visits to Materia 2.0 and Deltalight. In these sections, too, a Likert scale is used to ask for assessments of the relevance, impact and inclusion of the product/material in the project.

The third section is entirely dedicated to the workshop. Students were asked to evaluate their experience of the workshop using Likert scales, open-ended questions and multiple-choice questions. Firstly, they were invited to use a Likert scale to express their opinion on how well the workshop aligned with the course objectives, the tools provided, and the results obtained. Then, they were asked to share their thoughts on the workshop's impact on the project and their motivations. The use of multiple-choice questions was for reflection on what was found most useful about the workshop. Finally, a series of open-ended and multiple-choice questions explored how the project had changed before and after the activity, any difficulties encountered and whether students had previously participated in a similar activity.

The fourth section investigated, in general, which activities/initiatives had the greatest impact on the project in terms of both number and type. The last question collected the pros and cons.

3 RESULTS

The course activities proved to be well structured. The three phases of analysis, concept generation, and project development enabled all student groups to achieve a good level of design at the end of the semester. Face-to-face lectures enriched by valuable contributions from guest speakers representing partner companies provided practical information and concrete elements for the development of the project, proving particularly relevant and in line with the course theme.

Visits to professional spaces such as Materia 2.0 and DeltaLight proved even more significant than the lectures. The exploration of innovative materials and solutions for interior lighting, conducted during the third and final phase of the course, allowed students to delve deeper into aspects related to the sensory perception of the space, which had previously been neglected. In particular, the visit to DeltaLight supported the development of lighting concepts, while the visit to Materia 2.0 contributed to the selection of materials to integrate into the projects.

However, not all groups were able—or deemed it appropriate—to integrate the solutions observed during visits and meetings with professionals into their projects. This can be attributed, on the one hand, to the specificity of the solutions presented (e.g., Woodskin's three-dimensional wooden surfaces, which are not always compatible with all design languages but they serve as a stimulus for new applications of design solutions) and, on the other hand, to the applicative nature of products such as Oddicini's movable walls, which are considered relevant only in certain retail concepts characterised by a high need for spatial transformation.

To support the progressive development of the projects, the workshop organised by the teaching team encouraged brainstorming and interaction among students, with a particular focus on constructing spatial narratives, understood in relation to time, temporality, and practices of space use.

Below are some of the results achieved by two groups during these workshop activities. Group 1 (G1), starting from the preliminary analysis, defined a retail space dedicated to mountain sports equipment and clothing, in relation to the Milan-Cortina 2026 Winter Olympics. They made Milan Central Station the main hub that connects all the mountain Olympic venues.

During the first phase of the workshop, G1, following the path of a specific user profile, progressively highlighted the various touchpoints, key actions, and potential critical issues in managing the space. Those are mainly possible long waiting times at the entrance and cash registers, risk of crowding at the entrance, complexity of wayfinding due to the distribution over several floors and the large surface area available, as well as the need to enhance the architectural elements in relation to the exhibition structures (Fig. 1a). The use of colour coding—via Post-it notes or graphic elements in different colours—to distinguish positive aspects, critical issues, and elements of uncertainty helped to make the brainstorming process more effective and the results more readable.

Furthermore, Group 6 (G6) — whose preliminary analysis led to the development of a retail space concept dedicated to streetwear and street sports, such as basketball and skateboarding — conducted a particularly structured flow analysis. This analysis began with the definition of the target audience and the main touchpoints and highlighted the strengths and weaknesses of the space in relation to user interaction (Fig. 1b). Of particular interest—and at the same time a critical element—was the inclusion of a small-scale basketball court within the space, intended for testing the products marketed by the brands present. The management of this service proved crucial to the entire project's development, maintaining its relevance throughout the process.

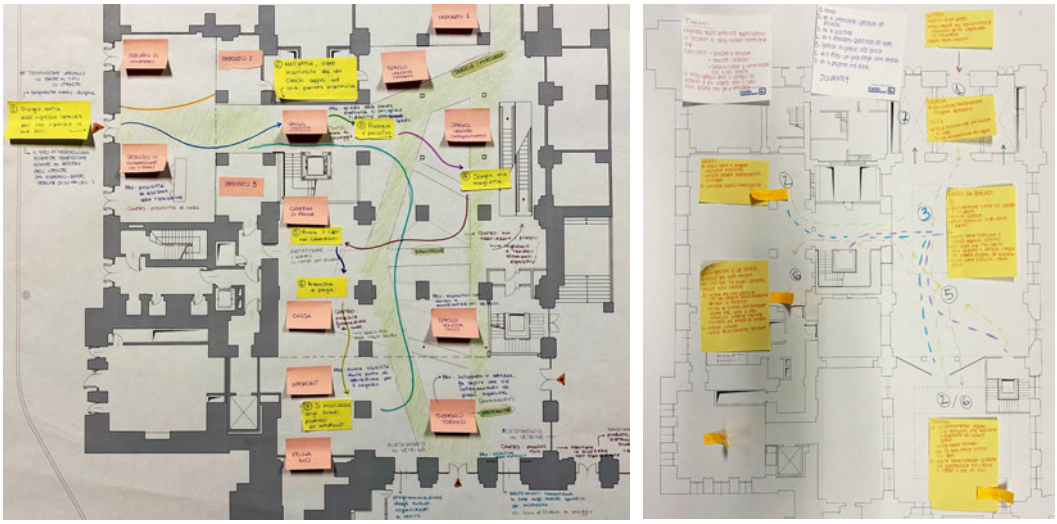

Figure 1ab. Customer journey maps of G1 and G6, respectively.

During the second phase, G1 chose to focus on defining the annual schedule, proceeding month by month starting from January 2026, through a survey of national and international events related to mountain sports (skiing, snowboarding, cycling, trekking, climbing, etc.), with particular reference, of course, to the 2026 Olympics. The schedule (Fig. 2a) significantly influenced the configuration of spaces dedicated to sponsoring individual sporting events and areas for projecting and disseminating related content. In particular, the design of the "Olympic Corner" highlighted the need for lightweight, temporary solutions that could be effortlessly replaced at the end of the event, in view of new content ideation related to subsequent events (e.g., Giro d'Italia, Tour de France).

G6, on the other hand, developed both a weekly and an annual schedule, reflecting on all four suggested time scales (daily, weekly, monthly, and yearly) (Fig. 2b). Starting from the definition of opening and closing times in relation to the services offered daily, the group proposed an annual schedule including occasional events related to streetwear, basketball, art, and DJ sets, as well as the periodic reconfiguration of temporary spaces (pop-up stores, exhibition areas, art installations). This allowed for a more in-depth design of these environments, favouring practical and flexible solutions over the rest of the retail space.

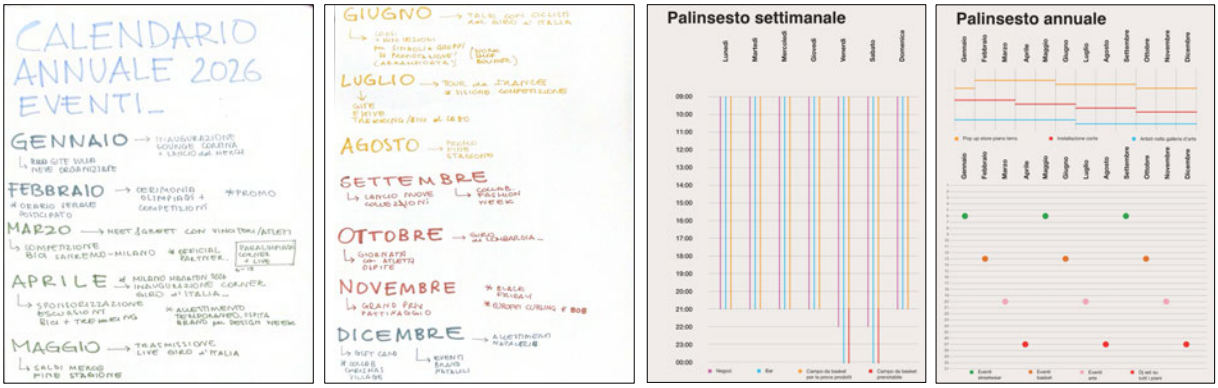

Figure 2. General project schedule of G1 and G6, respectively.

It is relevant that the results of this phase (as the previous one) produced intermediate outcomes that the students continued to consider, develop, and refine during the following weeks, until the end of the course.

The last phase, as explained so far, involved creating mood boards that represented the different spaces, revealing both the spatial connotations and the temporal dimensions of the project.

G1 produced three mood boards, each referring to a specific sports category sales area (skiing & snowboarding, cycling, trekking & climbing). These highlighted the colours identifying the environments and related product categories, accompanied by images and keywords aimed at evoking the different characterising moods (Fig. 3). Similarly, G6, to enhance the functional variety of the space, developed three mood boards consistent with each other and, at the same time, characterised by specific features (Fig. 4).

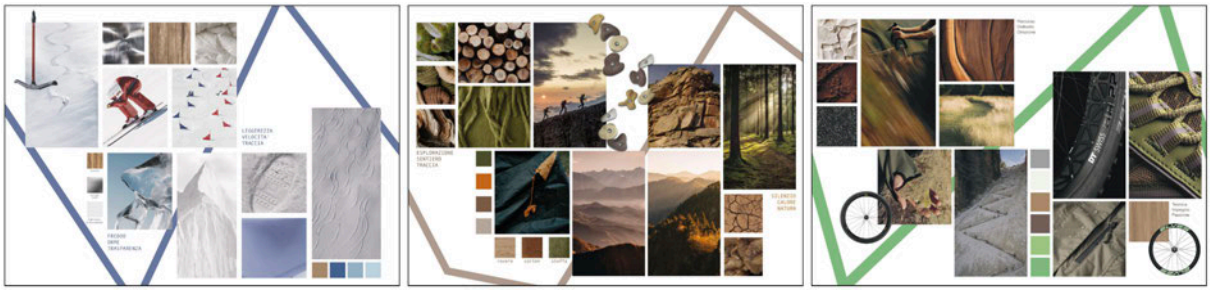

Figure 3. Mountain sports equipment and clothing retail space mood boards, G1.

Figure 4. Streetwear and street sports retail space mood boards, G6.

Although particularly effective in constructing the narrative of the spaces in terms of colours, finishes, materials, and atmosphere, both groups showed difficulty in integrating the temporal dimension and, consequently, the transformability of the environments in relation to different times of the day or year. The assessment form also provided feedback on the workshop's effectiveness. Over 70% of participants stated that they had not previously carried out similar activities specifically focused on defining and analysing the user journey and the palimpsest; despite this, only 11% reported difficulties in carrying out the activities. The evaluations collected indicate that the workshop was perceived as consistent with the course objectives and as a practical tool for the design methods aimed at improving the management of spaces and services. In particular, the activities were effective in identifying critical issues, supporting functional organisation, and defining consistent spatial division criteria. The mood boards also encouraged a deeper

understanding of the experiential aspects of space, helping to define the design atmosphere through specific design solutions.

Overall, student feedback shows that the workshop stimulated greater attention to the design of the user experience, as well as the physical space. The activities were remarkably helpful in defining flows and schedules, setting a functional analysis, and characterising the atmosphere of the environments; on the other hand, they did not directly influence choices regarding materials. The activities were rated "quite useful" by most students, but they did not stimulate radical design changes; rather, an increase in the level of detail and completeness of the solutions was observed. The workshop led to the revision of some services and specific changes to the spaces, mainly in the transit areas and connections between sales and service areas.

In conclusion, considering the entire semester and all the activities carried out, the workshop—together with the visits to DeltaLight and Materia 2.0—were considered particularly useful: 53% of students stated that most of the initiatives had a concrete impact on the project, while only 18% considered only a few initiatives to be truly helpful. The guests' presentations and external visits were judged to be well-organised and appropriately distributed throughout the semester, with particular appreciation for the visit to the Materia 2.0 materials library. Some students also suggested bringing the workshop forward in time so that they could be more effective as a starting point for project development.

4 CONCLUSIONS

The entire teaching process synergistically integrated analogue and digital tools: the former proved particularly effective in the brainstorming, interaction, and collaborative work phases in the classroom, while the latter—such as the online mood boards developed at a later stage—promoted further levels of critical reflection and design refinement. In this sense, the workshop took the form of an intensive creative experimentation and design focus device, contributing significantly to strengthening students' awareness of the service dimension of space.

Overall, the activities carried out proved highly effective in supporting the design development of the various working groups. In light of the feedback from the assessment form, the teaching team intends to confirm the involvement of external professionals and the organisation of visits to reference spaces, recognised by students as particularly stimulating and educational, for future editions. At the same time, a reorganisation of the workshop schedule is planned, dividing it into several moments distributed throughout the course, to ensure greater depth of elaboration.

From this perspective, the creation of the customer journey map could be brought forward to the initial stages of project development, while the definition of the schedule could be kept for a later stage, although it could be introduced gradually to stimulate design considerations that take into account not only the spatial dimension but also the temporal one. The mood boards, developed at a later stage, have proven to be an effective tool for defining the identity of the project and can be further enhanced as a support for the selection of materials and the construction of material boards.

Finally, the systematic administration of the assessment form proved to be a strategic tool for evaluating the impact of teaching activities and for implementing a process of continuous improvement of the course, reinforcing the reflective and evidence-based approach of the teaching team.

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REFERENCES

[1] Verhoef, P. C.; Lemon, K. N.; Parasuraman, A.; Roggeveen, A.; Tsiros, M. & Schlesinger, L. A., "*Customer Experience Creation: Determinants, Dynamics, and Management Strategies*", *Journal of Retailing*, vol. 85, Issue 1, pp. 31- 41, 2009. DOI:

[2] Pine II, J. & Gilmore, J. H., *The experience economy: competing for customer time, attention, and money*. Boston, Massachusetts: Harvard Business Review Press. 2020. ISBN: 978-1-63369-797-3

[3] Bitner, M. J., “Servicescapes: The Impact of Physical Surroundings on Customers and Employees.” *Journal of Marketing*, vol. 56, no. 2, pp. 57-71, 1992. DOI: 10.1177/002224299205600205

[4] Klaus, P. & Maklan, S., “Towards a Better Measure of Customer Experience”. *International Journal of Market Research*, vol. *55*, issue 2, pp. 227-246, 2013. https://doi.org/10.2501/IJMR-2013-021

[5] Lemon, K. N., & Verhoef, P. C., “Understanding Customer Experience Throughout the Customer Journey”. *Journal of Marketing*, vol. *80*, Issue 6, pp. 69-96, 2016. https://doi.org/10.1509/jm.15.0420

[6] Gentile C., Spiller N., & Noci G., “How to sustain the customer experience: an overview of experience components that co-create value with the customer”. *European Management Journal*, vol. 25, issue 5, pp. 395-410, 2007.

[7] Manzini, E., Design, When Everybody Designs*:* An Introduction to Design for Social Innovation. Cambridge, Massachusetts: The MIT Press. 2015

[8] Gerosa, G.; & Guarnieri, F., “The facade as communication tool between brand identity, localism and sustainability”, in Quartier, K., Iannilli, V. M., Spagnoli, A., Elli, T., Prinsloo, I. (eds.), *Designing Retail & Services Futures Colloquium: Sustainable Retail and Services Futures*, 14-15 May, Milan, Italy. 2025. https://doi.org/10.21606/drsf.111

[9] Gensler, S.; Neslin, S. A.; & Verhoef, P. C., “The Showrooming Phenomenon: It’s More than Just about Price”. *Journal of Interactive Marketing*, vol. *38*, issue 1, pp. 29-43, 2022. https://doi.org/10.1016/j.intmar.2017.01.003

[10] Lynch, K., *The image of the city*. Cambridge, Massachusetts: The MIT Press. 1960.

[11] Lefebvre, H., *The Production of Space*. Translated by Donald Nicholson-Smith. Oxford, UK: Blackwell, 1991.

[12] L. Sossini, F. Guarnieri, L. Grossi, L. Donvito, B. Del Curto, and G. Gerosa, “Designing by students for students: an educational roadmap in the design of university campuses”, *INTED2024 Proceedings*, pp. 3677-3686, 2024. doi: 10.21125/inted.2024.0971

[13] L. Sossini, F. Guarnieri, S. Valassina, L. Donvito, B. Del Curto, and G. Gerosa, “Designing by students for students: a multidisciplinary approach to redesign spaces and services for University campuses and surrounding neighbourhood”, *INTED2025 Proceedings*, pp. 4587-4595, 2025. doi: 10.21125/inted.2025.1146

[14] P. Baxter, and S. Jack, “Qualitative case study methodology: Study design and implementation for novice researchers,” *The qualitative report*, vol. 13, no. 4, pp. 544-559, 2008.

[15] G. Muratovski, *Research for designers: A guide to methods and practice*. SAGE Publications, 2016.

[16] Woodskin, Accessed 8 January, 2026. Retrieved from: https://wood-skin.com/

[17] Abet, Accessed 8 January, 2026. Retrieved from: https://abetlaminati.com/

[18] Oddicini, Accessed 8 January, 2026. Retrieved from: https://oddicini.com/

[19] DeltaLight, Accessed 8 January, 2026. Retrieved from: https://deltalight.com/en

[20] Materia 2.0, Accessed 8 January, 2026. Retrieved from: https://www.materia2puntozero.it/

[21] B. G. Davis, Tools for teaching. Hoboken: John Wiley & Sons, 2009.

[22] J. Rowley, "Using case studies in research,” *Management Research News*, vol. 25, no. 1, pp. 16-27, 2002.