UNIVERSITAT POLITÈCNICA DE VALÈNCIA

HEAd '23

9th International Conference on Higher Education Advances

June 19-22, 2023

Valencia, Spain

ADE Facultat d'Administració i Direcció d'Empreses /UPV

Departamento de Economía y Ciencias Sociales

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Congress UPV
9th International Conference on Higher Education Advances (HEAd'23)

The contents of this publication have been evaluated by the Scientific Committee according to the procedure described in the preface. More information at http://www.headconf.org/

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Cover design by Gaia Leandri

Publisher

2023, Editorial Universitat Politècnica de València
Cno. de Vera, s/n.
46022 Valencia (SPAIN)
www.lalibreria.upv.es / Ref.: 6379_01_01_01

ISSN: 2603-5871
ISBN: 978-84-1396-085-2

Print on-demand

DOI: http://dx.doi.org/10.4995/HEAD23.2023.16871

9th International Conference on Higher Education Advances (HEAd'23)

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Editorial Universitat Politècnica de València http://ocs.editorial.upv.es/index.php/HEAd/HEAd23

Preface

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Abstract

This is the preface for the ninth edition of the International Conference on Higher Education Advances (HEAd). HEAd'23 brought together researchers, educators, students, and professionals from around the world to exchange ideas and research findings on student preparation and higher education systems. The conference facilitated thought-provoking discussions, innovative ideas, and collaborative efforts to advance teaching, learning, and the overall higher education landscape. The scientific program, curated by a committee of 188 members from 44 countries, received 326 full paper submissions. Of these, 98 papers were accepted for full-paper presentation, while 40 short papers and 35 posters were also included. The contributions covered diverse topics such as pedagogical approaches, technology integration, student engagement, assessment methods, curriculum design, and educational policies. Additionally, three keynote speeches and three pre-conference workshops enriched the conference experience.

Keywords: *Higher education; innovative materials; educational technology; evaluation and assessment; globalization in education.*

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1. Introduction to HEAd'23

This volume contains the selected papers of the Ninth International Conference on Higher Education Advances (HEAd'23), which was held in Valencia, Spain, from 19 to 22 June 2023. HEAd'23 provided a dynamic platform for researchers, educators, students, and professionals from around the world to come together and exchange ideas, experiences, and research results regarding the preparation of students and the organization of higher education systems. The conference served as a catalyst for thought-provoking discussions, innovative ideas, and collaborative endeavors, all aimed at advancing teaching, learning, and the overall higher education landscape.

The selection of the papers for the scientific program was conducted by a team of 188 committee members representing 44 countries on all five continents. Following the call for papers, the conference received 326 full paper submissions with authors from 48 different countries. All the submitted papers were reviewed by at least two program committee members under a double-blind review process. Finally, 98 papers were accepted as full papers for oral presentation during regular sessions, representing an overall full paper acceptance rate of 30%, reflecting the conference's commitment to showcasing the highest-quality work. Additionally, 40 submissions were accepted for short paper presentations and 35 for poster presentations, all of them receiving high review scores, and were published by UPV Press in this volume. The organization committee congratulates all the authors for having their papers accepted in the proceedings of such a competitive conference.

The contents of the program represent a diverse and comprehensive range of topics and research interests in the field of higher education. The selected papers cover various aspects of teaching and learning, including pedagogical approaches, technology integration, student engagement, assessment methods, curriculum design, and educational policies. This rich and varied collection of research contributes to the advancement of knowledge in higher education and offers valuable insights and innovative practices that can inform and enhance teaching and learning experiences worldwide.

The conference program featured three keynotes that overview important and current topics. The first keynote, "Pedagogical Practices in Large Classes in Higher Education: Challenges and Opportunities," delivered by Anna Logan and Ann Marie Farrell (Dublin City University, Ireland), examined the unique challenges faced by educators in large class settings and explored innovative pedagogical approaches to enhance student engagement and learning outcomes. The second keynote, "What Higher Education can learn from Games – more than fun!" by Martin R. Wolf (FH Aachen University of Applied Science, Germany), highlighted the transformative potential of incorporating game-based learning principles into higher education, emphasizing the benefits of immersive, interactive, and experiential learning environments. Lastly, the keynote titled "The Transformation of the University: Contributing

to Integral Human Development," presented by Josep Gallifa Roca (Ramon Llull University, Spain), explored the evolving role of universities in fostering holistic development and societal transformation, emphasizing the importance of integrating academic pursuits with social impact and personal growth. These keynotes provided valuable insights and sparked thought-provoking discussions, contributing to the overall richness and impact of HEAd'23.

HEAd'23 also hosted three pre-conference workshops to offer participants the opportunity to explore specific topics relevant to the conference. The workshops included "The future higher education classroom: Introducing new types of learning, executive function processes, and strategies to foster students' motivation and academic success," organized by Genny Villa (Université de Montréal, Canada), "Reinventing University: the Digital Challenge in Higher Education," led by Stefania Capogna (Link Campus University, Italy) and Erika Zuperkiene (Klaipeda University, Lithuania), and "Learning experience design in the age of metaverse," organized by Eman AbuKhousa (Higher Colleges of Technology, UAE).

The conference was supported and hosted by the Faculty of Business Administration and Management of the Universitat Politècnica de València, which has been recently ranked as the best technical university in Spain by the Academic Ranking of World Universities (ARWU) 2022.

The organizing committee would like to thank all of those who made this year's HEAd a great success. Specifically, thanks are indebted to the invited speakers, authors, scientific committee members, reviewers, session chairs, presenters, sponsors, supporters, and all the attendees. Our final words of gratitude must go to the Faculty of Business Administration and Management of the Universitat Politècnica de València for supporting, once again, the HEAd conference, making it possible to become a great event.

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9th International Conference on Higher Education Advances (HEAd'23)
Universitat Politècnica de València, València, 2023
DOI: http://dx.doi.org/10.4995/HEAd23.2023.16111

Retail design education. Designing new and reframed learning tools for experience-based learning

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Abstract

The retail industry is a fast-changing sector characterized by innovations' openness to adoption dictated both by technological advancement, supply chain management transformation and consumer behaviour evolution. As an increasingly knowledge-intensive industry, updated retail skills and competencies need to be investigated and improved, promoting new educational and learning approaches.

The paper presents the results of an experience-based learning held within the "Fashion Retail Experience Studio" course at the School of Design of Politecnico di Milano and rooted in a project-based approach. Several learning tools were developed and applied in order to investigate how design can properly manage multi-level and multidisciplinary retail challenges fueling and generating meaningful innovation. A transdisciplinary perspective was also adopted in designing new design learning tools or adapting management, marketing and IT retail tools to enhance design competencies and skills with a holistic approach.

Keywords: *Retail design; retail education; experiencial-based learning experience; design learning tools; transdisciplinary perspective.*

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Editorial Universitat Politècnica de València

1. Introduction to Retail Transformation

A radical transformation has characterised the retail sector over the last twenty years. On the one hand, the progressive dematerialisation of goods and the consolidation of the so-called service economy have mutually fuelled each other, driving the retail transformation from a predominantly product-centric to a service-centric approach (Lusch & Vargo, 2006). Retail, from being primarily focused on goods' transactions, has become capable of catalysing and promoting value co-creation within an interdependent system of service innovation, meaning generation and consumer centrality (Kustrak Korper et al., 2021). On the other hand, technological acceleration has pushed towards a radical change in the economic and social sphere with significant effects on manufacturing and distributive systems and on collective living and behaviours. In particular, new digital channels (social media and web platforms from traditional online channels to the metaverse) and advanced technologies (AR/VR, IoT, advanced 3D modelling technologies, adn Digital Twins, AI, etc.) have rapidly entered the production and distribution systems profoundly impacting their processes and operations and multiplying the touch points connecting the consumer with products/services in an experiential and relational continuum (Shankar et al., 2021). The consumer experience is now embedded within a mature omnichannel system that requires a seamless connection in a complex and interwoven system of physical, digital and mixed channels, streamlining and fast-tracking operations and the compliance with consumer expectations (Hoyer et al., 2020). The retail system has thus proven to be a remarkably open and receptive sector to the adoption and promotion of innovation with impacts on business models, supply chain management, and consumer value delivery models (Mostaghel et al., 2022). Moreover, being a highly transformational field, the compentence domains involved into the retail system are multiple and constantly redefined their roles, hierarchies and intervention models. Retail design, marketing, management and, more recently, IT converge within a system that requires transdisciplinarity (Iannilli et al., 2019a) and design, in particular, needs to redefine its role and develop new tools and approaches to bring value to the system. In this context, a reflection on retail design education becomes necessary both to frame the new levers that design can use to promote significant retail innovations and explore the most effective competencies and skills that will be relevant in the future.

2. Insights from the Evolution of Retail Education

In light of this changing scenario, the research in retailing is prolific, with multiple scientific researches aiming both at identifying the impacts and areas of application of advanced technologies within retail processes and outlining and conceptualising the sector's innovation trajectories. However, the interest in retail education appears to be more limited (Pantano et al., 2020) and does not have the same spread within all disciplinary fields that nowadays interplay within the retail system. Assuming a disciplinary perspective, marketing education

appear to be the areas that first recognised how the relevance of retail transformations needed updating in terms of both competencies and learning approaches. Grewal et al. (2018) address the issue by examining major changes in retail and consumer landscapes, tying them to changes in retail education. Taking a historical view on retailing education, the authors highlight its past, its present, and the likely future of retailing technologies and education, emphasising how technologies must become an opportunity to enhance active learning. Within the editorial introducing the 2018 special issue "Educating the Retailers of Tomorrow" in the Journal of Marketing Education, Roggeveen and Beitelspacher (2018) provide insights on innovative teaching methods, innovative pedagogical tools, and an overview of retailing education. The first two sections, in particular, showcase a variety of educational experiences. On the one hand, they demonstrate the effectiveness of experiential, situated and skill-based learning (Lange et al., 2018; Rhee, 2018), able to provide wins for students, partnering retailers, and faculty when retailing curricula developed cross-functional partnerships with retailers. On the other hand, these experiences demonstrate how innovative pedagogical tools can be incorporated into classrooms to improve students' knowledge and skills to effectively integrate relevant retail issues (e.g. Mobile Retailing, Corporate Social Responsibility) (Beitelspacher & Rodgers, 2018; Fischbach & Guerrero, 2018). The experiential nature of all the described learning experiences is consistent within the special issue's articles. This approach results in a student's active involvement with consequent positive impacts on knowledge advancements through hands-on activities and reflective practices. Similarly, faculty and retailers jointly benefit from exploring contemporary challenges in retailing (Lange et al., 2018) and allowing retailers to reflect on the competencies of young prospective practitioners.

The experience-based learning approach is also crucial from a retail management perspective and, of course, a retail design perspective. Soft skill development, simulated navigation of roles, support in pursuing success, and bridging the gap between textbook and real-world emerge as the main positive outcomes for students in participating in comprehensive course projects exposing them to work with retailers or companies to solve particular issues the firm faces (Jones et al., 2021). Similarly, the need for collaboration in educational curricula between educational institutions, here, in particular, Higher Educational Institutions (HEIs), professionals and retailers, becomes crucial to provide students with up-to-date competencies suited to the changing retail sector. Technology-driven changes, specifically, have rekindled attention to retail education. The technological transformation's speed indeed imposes a need to provide digital skills (or hard skills). However, it simultaneously requires reinforcing soft skills to understand and fully exploit the potential of new technologies (Woods et al., 2022). This viewpoint has also been adopted by retail design. Research and theoretical conceptualisations in this area are still scarce but sufficient to signal a renewed need both to redefine the role of design in contemporary retail and to investigate the expected competencies of future retail designers. Mainly assuming an interior design perspective,

Quartier et al. (2020) claim a need for a multi-dimensional competence model to frame all the required contemporary competencies (in terms of knowledge, abilities, skills, and attitudes) and to cope with future change dynamically. A set of meta-competences and multi-level retail design competencies was framed, bringing together design, research, socio-cultural studies, communication, branding, marketing, omnichannel and management. This multi-dimensional perspective at the core of the design approach is also mirrored in retail design research and learning experiences, thus both developing HEIs curricula capable of increasing digital literacy in knowledge-intensive and creative sectors harmonising new educational methods (e.g. Massive Open Online Courses MOOCs) within project-based design studios (Iannilli et al., 2019a) and merging transdisciplinary, theoretical and operational knowledge in design and experiential-based learning (Iannilli et al., 2019b).

3. The need of a holistic approach to contemporary retail design

Today, retail design can be considered as a specific transdisciplinary design discipline, which concerns the design of virtual or physical spaces for selling products, services and/or brands to consumers (Quartier et al., 2020). In their works Quartier et al., try to update the list of competencies and skills needed in contemporary retail design, with an eye on both educational and professional finalities. The authors (2017) set the new requirements for the retail designer in the age of phygit, asserting that now more than ever designers should assume a holistic approach and that trans-disciplinary work is necessary to manage the complexity of customer experience. They further argue that the approach to the contemporary retail designers' education path should be aimed at: (i) understanding how digital technologies can be applied and how they work; (ii) ability to generate creative ideas; (iii) ability to think across channels starting from the customer journey and technology integration, considering variables and conditional factors.

Architects' and designers' work is typically characterized by the use of tools. Some meet the coordinative functions as objects of persuasive communication while others help to develop a general understanding of an idea or a task and others still may work as recall of design principles, approaches, methods or open questions. Still, some others help to keep control of the activities and materials while others represent the design decisions to a predetermined level of detail and technical precision (Lança & Loução, 2013). The new directions in retail experience design raise questions about which educational and professional tools need to be integrated in designers' educational path. Firstly, the questions address which tools designers use to generate creative ideas, to think across channels and, to integrate technology. Further, it is to understand how these tools have been modified or need to be updated to be respondent to the new requirements. Furthermore is important to understand how to foster trans-disciplinary work; and facilitate the dialogue and the exchange of ideas and concepts between the different, heterogeneous actors during the customer experience design process. This

discourse is a necessary premise to understanding the motivations underlying this work, which describes the experience in the "Fashion Retail Experience Studio" course held within the Design for the Fashion System master degree - Politecnico di Milano. Building on the strong and established relationship between design and experiential learning theories (Iannilli et al., 2022), several tools were involved in the teaching activities aiming at letting the students gain "some intellectual concepts from the very beginning that become part of a practical activity enriching it" (Dewey J., 1961). The course has been structured following design-project phases, namely: "meta design", the first project phase including a research and analysis step and an early concept definition step; "concept development", the phase in which the concept starts to be shaped and its meaning defined; "project definition" is when all the details are defined and the final project is clearly described in all its parts.

The tools map (fig. 1) correlates project phases and project tools, moreover, since retail customer experience design is a transdisciplinary activity, and so are the tools used, a label shows from which discipline each tool originates. It is interesting to notice the presence of some overlapping of labels between the disciplines regarding some of the tools, that is where transdisciplinary and holistic-approach work happens. Even if the map cannot still be considered exhaustive, and has improvement margins, it has been a good starting point in the choice-making process for the tools to use in the course as didactic tools.

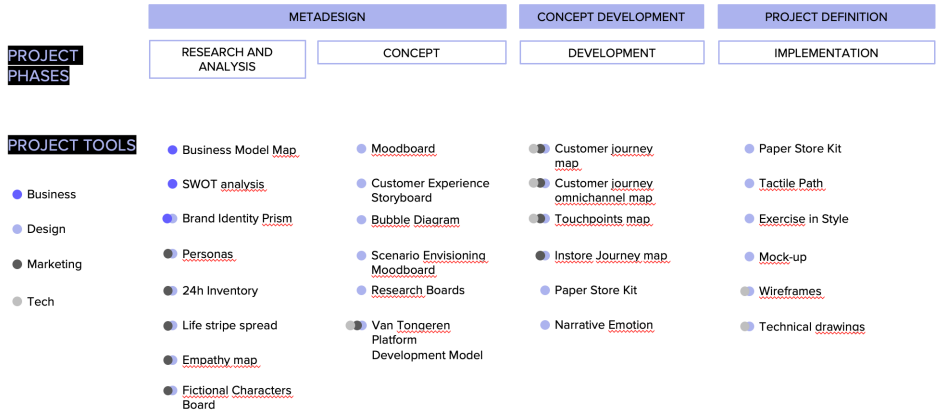

Figure 1. Retail Design Experience Tools Map.

4. Fashion Retail Experience Studio – In-class experience

The "Fashion Retail Experience Studio" course addressed in this work dates back at spring 2022, at Politecnico di Milano. It involved sixty-eight international students attending Fashion System mater degree, at their first year of study, a team of four retail experience design professors with strong professional backgrounds and Deutsche Telekom, a telecommunications company, providing solutions for business and corporate customers. The

students, divided into teams of five to six people, were asked to design the concept of a phygital retail experience, able to create innovative and valuable relationships among contemporary consumers and fashion products, services and physical/digital spaces.

The students were guided through the whole course, with frontal lessons and individual in-class activities supported by specific tools, aimed at consolidating key concepts and/or having a first-hand experience in applying them. In the design process, as group work, students were guided to the use of specific tools aimed at clarifying and supporting the organization, creation, communication and discussion of concepts and ideas. For the individual work, the tools used were: the "24h inventory" tool and the "empathy map". The 24h inventory activity aimed at consolidating the ability to analyse consumers' habits and preferences. The empathy map, from the marketing field, helps to schematize knowledge about end-users in order to create understanding of user needs in decision-making processes. In the group work, through the design process, the students were supported by the following tools: "research boards", "scenario moodboard", "fictional characters", "personas" "customer journey map", "storyboard". In the first project phase of research and analysis, students were asked to organize their research using research boards. This tool was specifically adapted to the course requirements, for helping students at categorizing their research findings on technology applications by specific focuses. "Scenario moodboards" were used to visually describe the first project's concepts and directions. "Fictional characters" and "personas" were used to understand and describe the ideal customer to whom the project is addressed, by describing lifestyle, personal interests, and tastes, in a schematic and visual way. "Customer journey map" belongs to the concept development phase, and aims at the description of all the steps through which the customers go while approaching the purchasing experience, also considering pre- and post-purchase steps, and possible variations. The "storyboard" tool, also referred to the concept development phase, clarifies the details of "customer journey map", by the use of a narrative example. Following the briefing agreed with the company involved, the course stopped at concept development phase, since students were not asked to build real-size simulations or actual prototypes of their ideas.

5. Conclusions

Retail designers of the present and next generations need to develop a sharp view on the transformations happening and an extensive set of competencies and skills, which will allow them to understand and operate in the increasing complexity of contemporary retail design and customer experience. In this work a teaching experience is presented, where transdisciplinary tools were designed and/or reframed to help develop a holistic view and comprehension while designing complex phygital retail systems. Withdrawing from related literature, the tools adopted refer to the disciplines involved in retail esperience design, namely: the "24h inventory" tool belongs to the realm of social studies on consumption, as

an observation tool; “empathy map”, “fictional characters” and “personas” are part of marketing and user experience design disciplines; “research boards”, “scenario moodboard”, and “storyboard” come from the design realm; “customer journey map” is a intersciplinary tool used in the collaboration between management, marketing, information-technology and design disciplines. The tools involved in the teaching experience described in this work were specifically aimed at developing the ability to generate creative ideas (“research boards”, “scenario moodboard”, and “storyboard”) and ability to think across channels considering variables and conditional factors (“24h inventory”, “empathy map”, “fictional characters”, “personas”, “customer journey map”). The requirement of understanding how digital technologies can be applied and how they work, was covered during the course as well, with the aid of frontal lessons delivered in the class, desktop and case study research conducted by students. With this work, our contribution lies in gaining a better understanding of how the developments of digitalisation and omni-channel retailing influence the education of (future) retail designers, and of how tools borrowed from professionals’ experience and from different disciplines can be integrated in the learning experience, with the aim of applying a holistic approach to retail experience design. Although improvements can still be applied to future versions of the course, specifically in the development of specific tools related to the aims of the didactic activities, the learning outcomes were satisfying, and the students’ engagement was high.

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