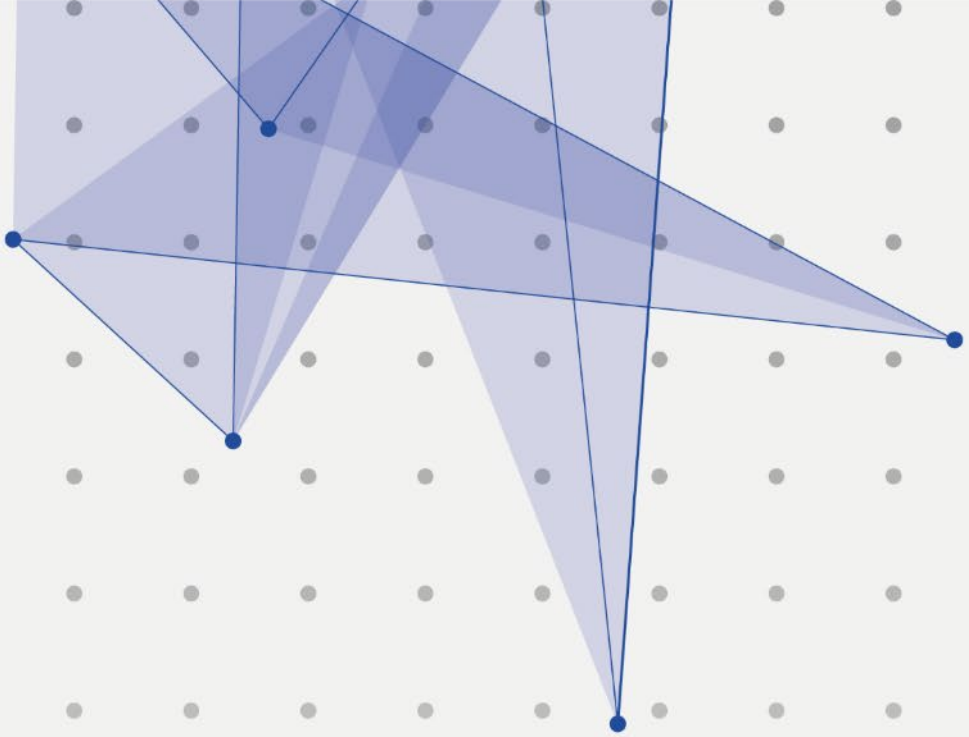

Eksig 2023

"**From Abstractness to Concreteness** – experiential knowledge and the role of prototypes in design research"

Proceedings

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Design Research Society DRS

POLITECNICO MILANO 1863
DIPARTIMENTO DI DESIGN

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Conference Proceedings

From Abstractness to Concreteness – experiential knowledge and the role of prototypes in design research

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Conference theme

Prototype and prototyping play a key role in experiential knowledge since they support the interconnections and collaboration among researchers and practitioners in many design fields. The role of prototypes in design research is characterised mainly by the general function of representing ideas and giving intelligible form to undetermined and abstract concepts pertaining to design solutions. Such a principle of transition from vagueness to clarity illustrates views on the role of prototypes which dot the diverse landscape of design research. Indeed, the evolution of design research in the past twenty years has led the path to a wide range of new possible prototypes applications.

Originally, in the industrial context, prototypes were made to test, evaluate, and improve the product until the final design and production phase. When design became an academic discipline, the scope of its enquiry expanded, embracing new areas of interest (i.e., sustainable design, materials design, participatory design, service design, user experience design, etc.), and their methodologies and scopes. During this evolution, the role that prototypes play in design research started to be questioned.

Indeed, nowadays, the role of the prototype encompasses several possibilities that link to the context and aim of the design research. When a general aim of the investigation is to develop a new design solution and make it *real* and available to users at the end of the process, prototypes support the transition from the idea to the final product. In this realm, prototypes play a crucial role, as they visualise, validate, experiment, and create such new solutions. Interestingly, prototypes for this kind of design research can be simple paper models that anticipate interactions up to complete *working* prototypes that are very close to the final product. In the digital field, provisional solutions are released on the market and updated afterwards. Prototypes, in this case, merge with the *final* products. New boundaries are broken between a final design and what is not.

Furthermore, the products that designers call to envision are becoming more and more complex. They are equipped with sensors, processors, and connected devices that support the interaction with digital interfaces, applications, and complex services. Hence, prototypes are meant to support design processes that rely on the supplementation of new kinds of expertise – such as user experience design, interaction design, material design and computer science – besides those traditionally integrated – such as product design, mechanical and electronic engineering). In this regard, the prototype embodies the translation of different design languages into a developing concept. Moreover, design research that explores and discusses possibilities might go beyond the development of concrete

solutions and tackle significant issues (i.e., the impact of technology on society; climate change, social innovation) to reach new understating and develop new knowledge. This kind of design research usually occurs in academia and requires exploratory and speculative studies. Some of this design research is about tangible objects or is based on material experimentations. Typically, prototypes play an important role in the first explorative phases, in this realm since they enable the transition *from abstract to concrete* through immediate and factual experience. Designers research by envisioning solutions, imagining possible futures, exploring new fields, and feeding the design discourse with emerging contemporary issues and fictional scenarios.

Overall, the multifaceted landscape of today's design research opens to a wide range of meanings that define what a prototype is and does. The discussion on prototypes' identity is open. Instead of seeking to find an ultimate definition of prototype and its role in today's design research, the conference aims at eliciting a conversation around the current and multiform panorama of experimentations around and with prototypes.

The call for paper encourages contributions with the following:

- What are the new roles of prototypes in these evolutionary pathways in design research?
- How do new sophisticated, integrated, and advanced prototypes support research in various areas of design?
- How do different research contexts (practice, R&D, and academia) collaborate in design research due to the making and use of prototypes?
- How do prototypes enable the creation of theoretical knowledge and support speculative research?
- How do prototypes enable the creation of practical knowledge and support empirical research?
- How do prototypes enable the exploration of new research fields?

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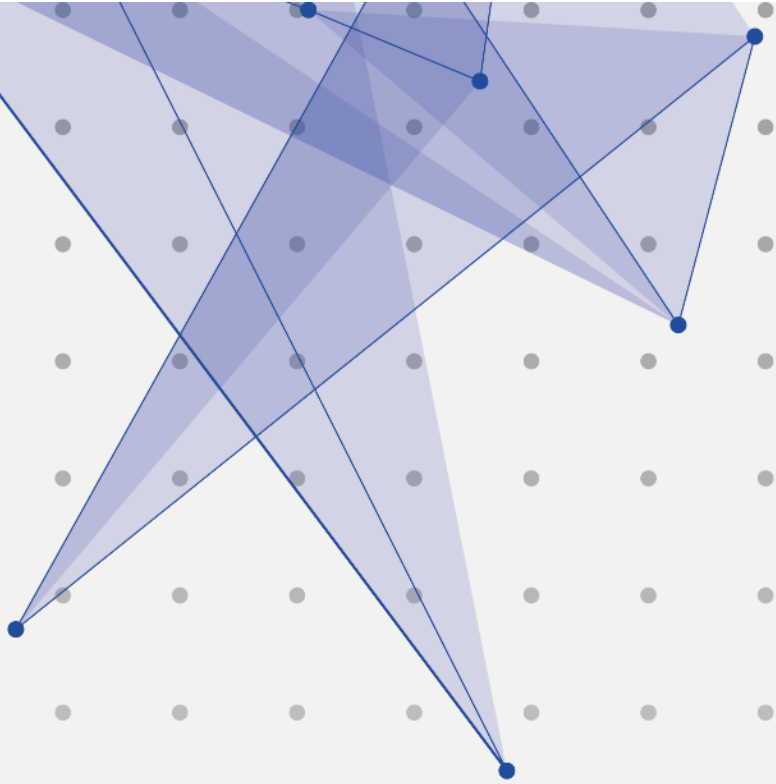

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- Prototyping an employee experience model. A participatory action research project to support organizations in redefining the working routines starting from Employee Experience Design

Prototyping an employee experience model.
A participatory action research project to support organizations in redefining the working routines starting from Employee Experience Design.

Michele Melazzini, Politecnico di Milano, Department of Design, Milan, Italy
Federica Colombo, Politecnico di Milano, Department of Design, Milan, Italy
Gianluca Carella, Politecnico di Milano, Department of Design, Milan, Italy

Abstract

In the post-pandemic context, organizations are facing critical and systemic changes, particularly in people's way of working and related processes. In the last decades, Design and Business Innovation literature presented the different ways Design supports organizations' innovation and transformation processes. This paper starts analyzing experimental approaches - namely *design intervention* - that Design may implement to support organizations in redefining working modes. The focal point of this contribution consists in the redefinition of working routines through the prototype of employee experience models. Furthermore, the existing literature presents a gap in the experimentation and implementation of prototyping activities in the employee experience design. Indeed, the application of service prototyping to employees' experience represents a stimulating challenge among design practitioners and researchers. In a moment of massive uncertainty in knowledge workers' routines, how can Design be applied to Employee Experience to support organizations in redefining working scenarios? More specifically, how may we be able to co-design employee experience through a service prototyping approach?
The theoretical purpose is to reflect on whether implementing service prototyping to employee experience may represent a fertile design research topic. The study presents a qualitative analysis with a Participatory Action Research method, partnering with an Italian bank's HR department and involved employees. Specifically, the paper is built on an experimental project that applies Employee Experience Design and Service Design Prototyping methods to redefine working habits in evolving contexts. Findings show the importance of employee experience prototyping in activating behavioral changes by triggering awareness-raising mechanisms in individuals. Additionally, the lengthy process of changing working practices and routines within organizations can be approached effectively by co-designing employee experience models and iteratively testing and evaluating them. The paper aims to show the potential benefits of exploration for design research in applying prototyping to employee experience design.

Employee Experience; Service Design; Prototyping; Organizational transformation; Co-design

This paper addresses the current role of Design within organizations through *design interventions*: the creative distress that permeates organizational life. Building on recent contributions which reflect on the role of individuals as starting point of organizational change, the study proposes an exemplar of using co-design and service prototyping practices applied to employee experience design. In the knowledge workers' realm,

designers recently supported HR in transformation processes, implementing "creative acts of making" (Sanders & Stappers, 2014) to co-design prototypes of employee experience. Thus, the study draws on an experimental project developed by applying Employee Experience Design and Service Design Prototyping methods to redefine working scenarios in uncertain times, like during the COVID-19 pandemic. The research aims are: to reflect on the theoretical implications of an experimental study based on a research and design project developed in a precise context; furthermore, to experiment and co-design service prototypes in unexplored realms, such as the one of employee experience, aiding the changing of working habits and nurturing employee engagement. The paper performs a qualitative analysis with a Participatory Action Research method by testing a prototyped *employee experience model*, co-designed with the partner – a financial institution HR department. Therefore, the prototype developed in the study consists of an *employee experience model*: a set of experiential options that could be freely chosen and navigated by the participants inside the specific context of experimentation. The proposed prototyping framework includes service design elements: tangible touchpoints, spatial configurations, and experience conditions. A significant sample of employees participated in two different iterations of the experimental test of this model to explore how the working experience is changing. The findings highlight the role of the *employee experience model* prototyped: to activate awareness-raising processes in individuals and train them to avoid reintroducing old working routines such as the one adopted before the pandemic. Thus, the *employee experience model* was designed to trigger critical thinking among the organization's people rather than a catalogue of designed workspaces. The different experiential options prototyped can play a crucial role in facing organizations' complex and systemic changes regarding new working life; indeed, co-designing employee experience options– iteratively testing and evaluating them - can represent a practical approach to the lengthy process of changing working habits and routines within organizations. In addition, making employees experiment with a different experience and working model can represent a novel way to enhance knowledge workers' engagement in these critical times.

The paper articulates into four sections. The *background theory* presents the relationship between design, employee experience, and service design prototyping to transform organizations. The *methodology* and *research design* describe how the research was conducted. *Research activities and results* express the diverse areas of inquiry and the primary derived data. Finally, a *discussion* highlights the theoretical and practical implications.

Background theory

Designers are experimenting with practices to face the complexity of the current context, especially in novel and fertile realms for the design discipline. In the last decade, organizations have employed Design approaches and methods - often referred to as "Design Thinking" - to start transforming their structural features and be ready to take the risks that every systemic change entails (Zurlo, 2019).
The adoption of Design within corporations has historically been motivated by strategic factors such as facilitating disruptive innovation pathways or enhancing customer experiences. Lately, the diffused direction has focused on the purposes more oriented to internal cultural growth feeding internal teamwork across the organization silos or changing

internal mindsets and enticing talent (Dunne, 2018). In mature contexts, Design adoption even aims to activate organizational and social transition processes, which can be considered system changes. The advancement of the design discipline and organizational structure are closely linked, according to Buchanan, who stated that "the product to be designed is not an artifact or a customer service anymore but the organization, itself" (Buchanan, 2015).

The *design intervention* mentioned above thus permeates the organizational change actual topics and related literature. Organizational change is the process by which an organization modifies its current structure, **daily working routines**, strategies, or culture in ways that could significantly impact the organization (Herold et al., 2008). Significant organizational change can be planned or unplanned. Planned change happens when a review of business operations identifies issues that must be fixed immediately (Li et al., 2021). Thus, organizations can proactively boost their performance and effectiveness by modifying their business structures and developing new offerings. On the other hand, unplanned change is frequently brought about by unforeseen external forces. The main objective of unplanned change is to maximize potential benefits, reduce the adverse effects of the problematic situation, and turn the crisis into an opportunity (Schermerhorn Jr et al., 2011). Unplanned organizational change, as for the COVID-19 pandemic, can expose employees to uncertainties, leaving them with doubts and concerns that could affect their relationships with the organizations (Li et al., 2021).

The design approaches, *designerly way of organizing* (Zurlo, 2019), have redirected the reflections to the individuals as the starting point of organizational change. Business transformation's drivers are employees' capabilities, skillsets, and mindset, which are crucial components and indicators of organizational culture (Elsbach & Stigliani, 2018).

Therefore, User Experience Design approaches applied to employees are becoming fundamental for reacting to unplanned changes and activating organizational transformation processes (Auricchio et al., 2018). Indeed, by observing people's needs and behaviors within the organization, design can inspire organizational change. With businesses' increasing need to bring people at the center of organizational transformation projects, the *employee experience design* stands out as an experimental topic for design researchers and professionals. Thus, organizations need to invest the resources necessary to design, produce, and stage an equally unique, memorable, and engaging employee experience if they want to consistently offer value in the area of engagement experience. It is a self-reinforcing cycle with better employee experience resulting in better customer experience, which then feeds back to mankind into more engaging employee experiences possible (Pine II, 2020; Maylett & Wride, 2017). While there is extensive research on customer experience, employee experience has received less attention from both the Business & Innovation management literature body and the Design one (Batat, 2022).

The term "employee experience" was first coined by Abhari et al. (2008); Morgan later provided its conceptualization concerning an organizational and HR perspective (Morgan, 2017). Morgan described the employee's experience as a source of innovation, a way to increase customer satisfaction, and a plan to attract talent, engage them, and boost their performance (Morgan, 2017). Thus, employee experience influences employees' behaviors and attitudes, impacting organizational performance and well-being (Whitener, 2001; Batat, 2022). Indeed, employee experience is the intersection of employee expectations, needs,

and wants and the organizational Design of those expectations, needs, and wants (Morgan, 2017).

In 2022, Batat developed an employee experience theoretical framework (EMX) that combines the different views on the Employee Experience definition, rooted in the organizational and HR management literature; EMX is the employees' personal and changing perceptions of their cognitive, behavioral, and emotional states, as well as their social interactions with other employees, managers, and other internal and external social actors within the employing organization (e.g., suppliers and clients). These perceptions result from various interactions impacting employees' perceived value and well-being throughout their experiential journeys within organizations (Batat, 2022).

Design discipline brings a holistic and experiential view of the employee experience to be extended to what has been named "human experience" (Rossi, 2021): designers have to consider components such as the community, physical workspace, environment, tools, activities, and social platform simultaneously (Lesser, 2016). Therefore, designing Employees' experience means interacting with three spheres: employees' physical environments, their social connections, and the work to be done (Lesser, 2016). Furthermore, applying the User Experience design in the workplace means empathizing with employees as individuals and as a part of representative groups to fulfill experiential needs - cognitive, emotional, social, behavioral, and sensorial (Abhari et al., 2008; Plaskoff, 2017).

Designing employee experience implies looking at the entire experience through the employment lifecycle, a pathway including a multitude of touchpoints - employee interactions, experience with tools, physical spaces, procedures, and policies - as well as interaction with outside sources - conversation with family and friends, former employees, and media reports (Itam & Ghosh, 2020). To provide employees with a comprehensive and tailored experience, organizations must assess and identify the needs of the workers throughout all stages. (Maylett & Wride, 2017).

Organizations adopt design practices to transform processes and outputs of various human-centred activities, including managing human resources (Deserti et al., 2018). The worlds of Design and HR are becoming more and more entwined.

The *employee experience design* serves as the intersection point of these two research areas; thus, this study's theoretical and experimental focus relies on the opportunity to explore this emerging topic. Moreover, the existing literature highlights a gap in the experimentation and implementation of prototyping activities in the employee experience design.

In the professional context, what happens is that designers are asked to participate in the HR transformation process through a variety of co-design activities. In this scope, what plays a crucial role is the implementation of "*creative acts of making"* by designers (Sanders & Stappers, 2014) to co-design and evaluate prototypes. As Sanders and Stappers sustain (2014), through adopting methods for making, professionals can "make things" – as co-designed prototypes - that can activate reflections on future experiences and life habits. Furthermore, employee experience design relates to the practice of service prototyping, intended as a set of approaches and activities aimed at collaboratively representing, communicating, and evaluating design concepts (Blomkvist & Holmlid, 2010). In particular, the challenge in this context consists in how to prototype whole services accurately

representing the experience of the future service in a realistic setting.

In the knowledge worker areas, managers frequently ask designers to aid with employee reflection on particular issues and the collective finding of new solutions (Auricchio et al., 2018). Furthermore, managers are experimenting with new leadership approaches based on co-design: they set up their organization's settings to allow everyone to play an active role and maximize their potential. Design is frequently perceived as a catalyst for team building, but the profession's primary objective in this scope has always been to co-design and involve various stakeholders in developing novel solutions to complex issues (Rossi, 2021).

Starting from the explained background theory and observing the significant changes that are occurring in the working habits of office employees the research challenges specific questions: how to apply Design to Employee Experience to support organizations in re-defining working scenarios? How to co-design employee experience through service prototype approach? The research activity presented in the next chapter aims to face the transitions happening in working routines caused by the pandemic.

Methodology

Research Purpose

The research process has a particular experimental design approach, due both to the nature of the experiment and to the specific methodological choice in addressing the identified research questions. The work adopts qualitative and exploratory research methods, to create new knowledge contributions and develop the primary assumption (Creswell et al., 2007).

The concept of prototyping employee experience models to understand - and subsequently define - how working logics are changing is debated by practitioners. However, it is still poorly defined from a scientific point of view. For this reason, and in an effort to be coherent with the complex challenges addressed, the research strategy adopts an explorative approach. Exploratory research does not employ confirmatory mechanisms, as hypothesis. Its aim is to maximise the discovery of generalizations, that lead to the understanding of phenomena through an extensive collection of insights on a specific subject (Stebbins, 2001).

Research Design

The research follows a Participatory Action Research (PAR) methodology, developing, prototyping, and testing new employee experience models with an Italian financial institution, the partner organization in this study. The research project, titled *Working Life Scenario in Evolution* (WLSE), is developed with the organization’s HR Department, specifically with the People Development team.
The sample is composed of 38 employees, from three different business units, with diverse job roles and seniority levels.
The research team includes one professor, two researchers and two junior service designers. The project lasts ten months, including the final assessment phase.

Multiple methods of data collection were used and subsequently triabngulated in order to understand partecipant experiences. Due to the COVID-19 pandemic restrictions during the first phases of the research, most data collection tools implemented are digital.

The main tools adopted are semi-structured interviews and individual virtual and in-presence conversations. The team also employed methods inspired by ethnography and digital ethnography research, such as user observation to monitor the testing of the prototyped employee experiences and digital user observation to document routines.

The co-design approach and methods permeate the whole set of research activities implemented with the HR team of the partner organization.

The research process follows the reiterative steps of the PAR approach: Planning, Action, and Reflection, followed by Evaluation (Lewin, 1946; Kindon et al., 2007). Therefore, the research goes through a repetition of these stages until the action is complete. The performed activities follow five steps:

- *Step 1 - Planning – WLSE ideation and definition of LAB 1*: is the planning and structuring of the activities, from the preliminary research to the definition of the employee experience models prototyped in the WLSE Iterative LAB 1. It actively involved the partner organization and its employees both through the exploratory research and the co-design of the LAB. The aim was to collaboratively define and plan the experiment so that it would coherently fit with the study context and address the emerged employees' needs.
- *Step 2 - Action – WLSE Iterative LAB 1*: is the first set of the main experimental activities, specifically the prototyping of employee experience models to co-design and test in a participatory session with the employee of the partner organization.
- *Step 3 – Reflection – redesign: WLSE Iterative LAB 2*: is the analysis of the data collected during the WLS Iterative LAB 1 to generate insights, redesign the employee experience models and prototype them through LAB 2. As in step 1, the partner organization was actively involved to co-design the second iteration of the prototype.
- *Step 4 – Action - WLSE Iterative LAB 2*: it includes the second set of the main experimental activities, specifically the prototyping of employee experience models - redesigned during the previous phase according to the insights gathered through LAB 1 - to test in a participatory session with two other teams of the partner organization.
- *Step 5 – Reflection and Evaluation – prototypes and experiment assessment*: is the activity of assessment of the prototyped employee experience models and of the experimentation and project results. Findings were compared with the framework developed in the previous phases of the research project.

Research activities and results

The research activities included the ideation, prototyping and testing of new employee experience models, through two iterations corresponding to WLSE LAB 1 and WLSE LAB 2. To define and build the prototype, the research team developed a specific framework, that

addresses the peculiarities of the prototyping *object* itself: a set of experiential options that could be freely chosen and navigated by the participants, inside the specific context of the bank's headquarters in Milan. Therefore, the prototyping framework includes the prototyping of three service design elements, tightly interconnected: tangible touchpoints, spatial configurations, and experience conditions (fig. 1). The *design intervention* thus consisted of the configuration of spaces, with the prototyping of diverse working environments, each characterized by specific layouts, furniture, and technological tools; and of the design of tangible touchpoints that could stimulate the various working experiences: communication touchpoints, guiding touchpoints. Although various limitations prevented the implementation of major spatial modifications, the research team designed this reconfiguration ad hoc.

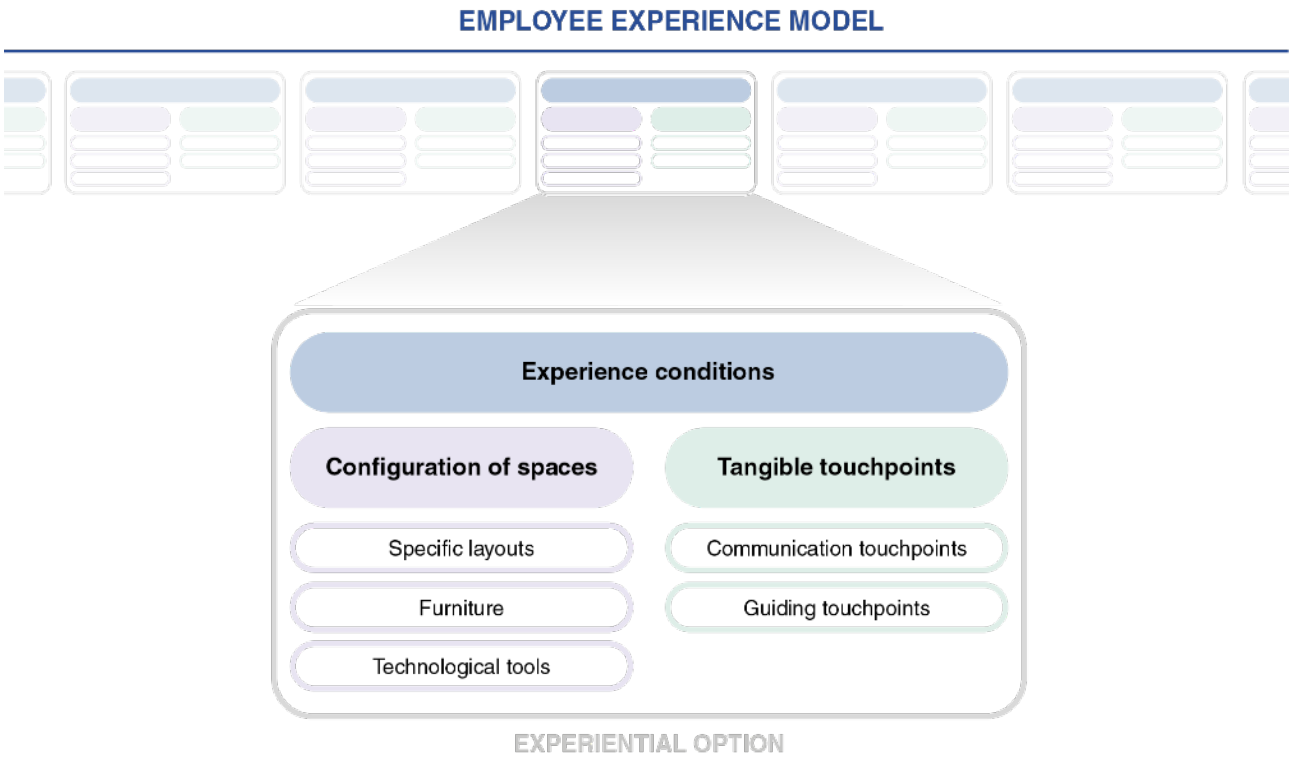

Figure 1: Prototyping framework developed to define and build the prototype

WLSE LAB 1 – first prototype iteration

The ideation of LAB 1 started from the insights gathered through the preliminary research activities (*step 1 – planning*), which explored how to redefine and co-design the employee experience in a post-pandemic scenario within the context of the bank. The aim was to define a collaborative project considering the organization's emerging needs. Therefore, WLSE is an experimental project to orient workers in shaping new work habits by experimenting with novel employee experience models.

The preliminary research included the definition of a set of *personas* representing the recurring professional figures within the organization. These *personas* became the starting point to develop a visual representation of employees' journeys, reproducing a condensed

version of a hypothetical working day. The use of this tool allowed to map critical areas and opportunities in the working routines of each employee's profile and guided the definition of a digital conversation format to collect punctual data through semi-structured interviews with the company's key informants, representing the *personas* priorly developed. This phase of digital ethnographic research guided the definition of the urgent topics for the organization's employees to address through the WLSE Iterative LAB 1.

Indeed, the WLSE iterative LAB 1 prototyped a new employee experiences model, following the framework explained in the previous paragraph. To define this new employee experiences model, the research team considered the working framework adopted by the partner company: Activity Based Working (ABW) model. This model aims at giving people autonomy and flexibility in deciding where, when, and how to work. Consequently, workspaces need to adapt to individual needs, offering diverse space options. The bank structures the ABW model around four pillars, referred to work-related areas significant for their businesses. The pillars, named 4Cs, are: Concentration – activities requiring individual focus -; Collaboration – tasks involving team or interdepartmental work -; Communication – activities involving information sharing and conversations between colleagues, not exclusively work-related -; and Contemplation – individuals' needs and time to decompress. Therefore each *experiential option* addressed the activities related to one of the 4Cs - as visible in Figure 2 - to stimulate distinct behaviors, and presented a specific setup to allow employees to test novel working experiences. *Spazio Attivo* and *Spazio Morbido* – two Concentration options – allowed pure operational work and focused and/or private tasks. Collaboration activities – as proactive discussions and collaborative sessions - could be performed in *Spazio Fluido*. *Spazio Raccolto* fostered hybrid Communication – among in-office and remote workers –, while *Spazio Espresso* informal discussions during breaks. Finally, *Spazio Respiro* option addressed the need to decompress from intense working activities.

Figure 2: WLSE Iterative LAB 1, graphic representation of the different employee experience options and related label

As previously explained, the experiential option prototype consists of designing the employees' working experience and related services (experience conditions), the reconfiguration of spaces and a series of tangible touchpoints (communication touchpoints, guiding touchpoints). The *design intervention* on spaces aimed at offering people suitable environments for the working needs addressed by the 4Cs. Communication touchpoints consisted of a Manifesto introducing the whole LAB and posters to briefly describe each working option, to explain their purposes and stimulate participants' reflections. Guiding touchpoints included an explanatory booklet and a leaflet with advice for each employee experience option. Through prototyping spaces and touchpoints, the research team was also able to define and prototype employees' experiences, to be tested by participants.

The testing lasted 3 days, in July 2021 (Step 2 – action), involving 11 people from the Financial Engineering team. During the preliminary onboarding sessions - one dedicated to the team leader and one to the whole team -, the research team introduced the LAB principles and the prototyped employee experience models. In the testing phase, participants could freely use, live, and experiment with the experiences proposed, conducting their regular job activities.

Each day, the research team performed observations, informal conversations with participants and a semi-structured debriefing moment; while an additional debriefing meeting with the team leader and HR members took place one week later. These ethnographic activities allowed to collect data and insights on the prototyped employee experience models, later analyzed by clustering them to identify recurring themes. Specifically, the main topics that emerged were diffusion of the Activity Based Working approach, experience transitions (from one working experience to another and from one working area to another) and spillovers (knowledge and ideas sharing among employees). For each of them, the research team highlighted two types of reflections: cultural awareness insights – theoretical and research-based – and design implications – prototype-oriented. These reflections also allowed to define the significant aspects to address during the LAB redesign (*step 3 – reflection*).

The need to accompany people through new ways of working emerged, to increase cultural awareness on ABW and avoid re-proposing old habits when experiencing new working models.
As a design implication, the need of involving more participants arose, to further diffuse new working models and highlight feedbacks and criticalities about the prototyped employee experience model. Thus, the research team – together with HR people – decided to involve two teams from likewise industries in the LAB 2.

Experience transitions emerged as a critical element: employees should be trained on the importance of moving to different areas according to specific working necessities. The research team planned a training session at the beginning of LAB 2 and a dedicated communication campaign, to stimulate reflection among the participants.
As a design implication, the relevance of distributed privacy areas emerged, allowing employees to individually work without the need to return to their main office and thus facilitating the transitions. This insight was practically translated in the redesign of the experience models prototype of the LAB.

Spillovers and serendipitous contaminations emerged as significant elements of the workplace routine. In-presence working fosters the exchange of ideas and information, as

well as the cross-fertilization among different departments and the creation of weak ties (Granovetter, 1973). The decision to involve two teams in the WLSE Iterative LAB 2 allowed to investigate these aspects further.

WLSE LAB 2 – second prototype iteration

The WLSE Iterative LAB 2 prototyped new employee experiences models, responding to the need – emerged from LAB 1 - of transmitting to participants a deeper understanding of the WLSE principles and of raising awareness about the new ways of working. As in the first LAB, the research team followed the prototyping framework priorly depicted.

Also in this LAB, the experiential options followed the 4Cs framework. However, some of the provided employee experience options changed following the insights gathered during the Reflection phase. *Spazio Espresso* became open to employees not taking part in the test, in a highly frequented area. *Punto Ricarica* instead addressed participants' needs of taking a break with colleagues. *Spazio Morbido* left place to more areas dedicated to individual working experiences.

Figure 3: WLSE Iterative LAB 2, graphic representation of the different employee experience models and related label

These changes in the experiential options provided consequently influenced the prototyped spaces and tangible touchpoints. Moreover, their aim changed also to address the identified insights on cultural awareness, stimulating participants' critical thinking on new ways of working and new working habits. Communication touchpoints consisted of a series of posters with triggering questions to foster reflections and raise awareness on ABW and on the new employee experiences among the whole bank division population. Guiding touchpoints included a landing page, providing detailed information about the whole project and the specific employee experience models.

The testing lasted 3 days, in October 2021 (*step 4 – action*). It involved 27 people from two teams belonging to the business areas of BM & HC and Energy. Team leaders participated to an onboarding moment to bring them closer to the LAB purpose, structure and aims. Instead, the whole team engaged in preliminary training, aiming to explain how the ABW, and the new ways of working shaped the LAB 2 definition. As in LAB 1, in the testing phase, participants could freely use, live, and experiment with the employee experience models proposed, conducting their regular job activities.

The research team performed observations and informal conversations with participants on the first day of the test. A semi-structured debriefing moment took place on the final day of the test, involving all the participants. One week after, a debriefing meeting with the team leader and HR members allowed to collect additional insights.

The finale step of the PAR process, the Reflection and Evaluation phase, is presented as a discussion of the research results in the following chapter.

Figure 4: Visual representation of the experiential option of Spazio Fluido: prototyped spatial configurations (illustration of designed spaces), tangible communication touchpoint (digital version of the printed posters) and experience conditions (photo taken during the WLSE Lab)

Discussion

This paper aims to describe and discuss the practice of service prototyping applied to employee experience design and the roles and implications of these *design interventions* on working routines and habits. The significant number of research activities and data collected and analyzed during the research are synthesized below in a set of key findings.

The study first reflects on the role of *design interventions* in redefining the employee experience and in guiding transformation processes inside organizations: co-designing employee experience models orient and support people to reflect on novel working habits. Avoiding the tendency to reintroduce old working routines, such as the one adopted before the pandemic, is the main challenge for employees. Prototyping and testing employee

experience models represent an effective way to train individuals and raise awareness of the new working routines available to them but they have limited impact when it comes to changing employees' habits. In this sense, the experimentation's initial purpose of changing the employee working routines redirects the focus on activating an awareness-raising process in individuals. Even if, from a theoretical point of view, prototyping can both be implemented with the purpose of designing for and designing with people (Sanders & Stappers, 2014), the findings highlight the effectiveness of co-designing and prototyping employee experience models with the final beneficiaries of the experience. Therefore, making employees experiment with experience models enhance knowledge workers' engagement in these critical times. Thus, the employee experience models were designed and prototyped as a service to trigger critical thinking among the organization's people rather than a catalog of designed workspace.

Therefore, the research project aims to collaboratively engage the employees in the design process by proposing them a set of options through an experience model. In this way, each participant can navigate them according to their personal needs and personally experiment with novel working conditions. This design choice effectively gives the employees the freedom to explore and test different solutions while allowing them to maintain their current working habits. The design of experience "way out" in the prototyped models increasingly helps in making the employees perceive this opportunity.

The crucial contribution of this study is its effort in experimenting with accurately prototyping and then testing the employee experience in an authentic setting. These experiential prototypes can play a key role if implemented by organizations facing complex and systemic changes regarding new working life. Iteratively co-designing, testing, and evaluating employee experience models through prototypes can guide companies in gradually redefining the working logics and adopting new routines. Additionally, the analysis of these findings also highlights how service prototype supports the design research process and the catalytic role that prototyping may have in activating organizational transformation process.

In practice, the developed employee experience prototypes are a combination of different design elements: first, a set of tangible touchpoints – communication and guiding touchpoints -, spatial configurations adapted to the existing physical space – including specific layouts, furniture and technological tools to empower the hybrid interactions - , and then, a series of experience conditions. This combination could serve as an extension of the widely accepted definition of service and experience prototype, which defines it as "the physical environment, the service employees, the service delivery process, fellow customers and back office support" (Zomerdijk & Voss, 2010).

Finally, the study results highlight a set of implications for practitioners. The workplace must deliver value to employees, becoming a place of contamination. Furthermore, the hybrid context influences employees' interpersonal relationships, making them less linear and defined. This change in interpersonal relationships must be considered during the design of employee experience models. Another design implication that emerged concerns experience transitions – changing working needs and settings. When defining hybrid employee experience models, it is critical to consider transitions not only from an individual cognitive point of view but also adopting a systemic approach: practitioners should design experiential conditions that allow a smooth cognitive, physical, and temporal transition.

Finally, it is worth acknowledging the limitations of this study. First, the replicability of the employee experience models proposed should be further verified, understanding how the different organizational context impacts its outcomes. Second, there should be greater understanding of the impact that the time constraints had on the PAR phases of the study: in the project's scope, it is challenging to conduct repetitive verifications and make explorative discoveries capable of grasping potential tangible changes in working routines. Lastly, the subjectivity in the interpretation process is an explicit limitation of this study. That said, the interpretative paradigm is the foundation of the design-based research philosophy.

Despite these limitations, the study puts forward an experimental approach to employee experience design: applying and testing experience and service prototyping practices to face actual challenges in the knowledge workers' realm.

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Michele Melazzini

Michele Melazzini, Ph.D. in Design, is a Researcher at the Department of Design - Politecnico di Milano. The research activity focuses on design's role in the organization, covering strategic design and design management research areas. With a background in product design, Michele built his experience in applying and developing design practices to support cultural transformation and innovation processes. He collaborates on international research projects (Horizon 2020, Interreg, Erasmus+) that deal with Creative Industries, Design Thinking processes applied to SMEs, and Entrepreneurship. Michele has been teaching at the Politecnico di Milano Design School and POLI.Design Consortium in the last years. Michele has started learning and discovering the design culture's soul during a long collaboration with Fondazione Achille Castiglioni.

Federica Colombo

Research Fellow at Politecnico di Milano, Design Department. She is a post-grad in Integrated Product Design at Politecnico di Milano. Her research focuses on how strategic design can support innovation in companies and organizations and on the development of digital services and ecosystems in the education field. She mainly works on applied research, supporting enterprises, financial institutions in the innovation of both their internal organization and customers' offer. Her main research topics are Strategic Design and Service Design. She is teaching and tutoring in courses related to her research topics both in the School of Design of Politecnico di Milano and in the POLI.design Consortium.

Gianluca Carella

PhD candidate with a background in Product Service System Design and Management Engineering. His research is focusing on how design can support companies in creating innovation, understanding how to overcome the barriers that companies may face in adopting design thinking. At the same time, he is working on projects that deal with entrepreneurship, supporting start-ups in combining the design and the business binomial, and understanding the role of design inside technology start-ups. Actually, he is collaborating with the Department of Design of Politecnico di Milano where he is working as designer and researcher involved in European research projects (Horizon 2020, Interreg, Erasmus+). His main streams

of research are Design Thinking, Strategic Design, Service Design, Design Management and Entrepreneurship. In the last years, Gianluca is teaching subjects related to his research activity both in the School of Design – Politecnico di Milano and in POLI.Design Consortium

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