World Usability Day Bozen-Bolzano 2023

WUD

Co-operation and Collaboration

Edited by Letizia Bollini, Chiara Facchini & Matteo Moretti

AIAP EDIZIONI

Collaboration and Cooperation. World Usability Day Bolzano 2023

WUD Bolzano 2023, Vol. 1

Letizia Bollini, Chiara Facchini & Matteo Moretti

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To all those who, through collaboration and cooperation,
help make the world a better place.

Letizia Bollini, Chiara Facchini & Matteo Moretti (Eds.)
Collaboration and Cooperation.
World Usability Day Bolzano 2023, Vol. 1

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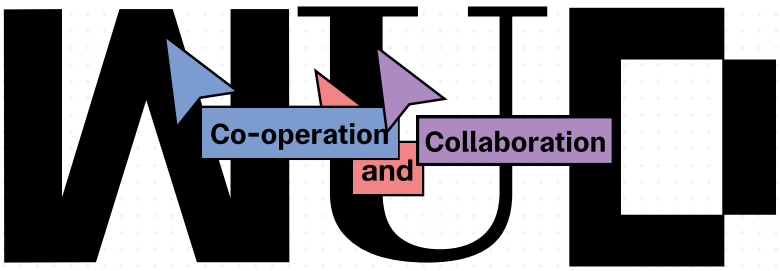
World Usability Day



Get ready for the return of Wud Bolzano and bring together the issues of usability, co-design, and user experience to the forefront of the local debate. A diverse group of twelve speakers from business, activism, and academia will share their insights on the power of collaborative and co-designing practices. They will discuss how these practices have helped bridge the gaps between science and society, academia and industry, and different segments of the population, leading to new forms of awareness and cooperation.

Curated By

The event in Bolzano is organised by Letizia Bollini, professor of Communication & Interaction Design at the Faculty of Design and Arts of the Free University of Bolzano and Matteo Moretti, co-founder of Sheldon.studio specialising in data-design, in collaboration with NOI TechPark and Exeen a Milan-based company that promotes digital innovation paths and processes for companies, products and services and promoted by AltoAdigeinnovazione, DRIN and OnTopic and side event of SFSCON 2023

wud-bz.it

Postdisciplinary Scenarios to Collaborate and Cooperate for a Better World

WUD Bolzano 2023
Letizia Bollini, Chiara Facchini & Matteo Moretti

The World Usability Day is a yearly event organised locally as a "single day of events occurring around the world that brings together communities of professional, industrial, educational, citizen, and government groups for our common objective: to ensure that the services and products important to life are easier to access and simpler to use."

WUD is one of the main events to gather together the community of scholars, practitioners and students, citizens, activists, institutions, and stakeholders in the broad field of digital design, that spans from communication to service and product design, from interaction to experience and from interface to accessibility design in a human-centred, or better to say, life-centred perspective. It is also an opportunity to innovate, share, participate, educate, and discuss the role and impact of technology and design in enhancing our daily lives.

The WUD Bolzano started in 2018, thanks to the collaboration of the Faculty of Design and Art of the Free University of Bozen-Bolzano, Sheldon.studio, specialised in communication design and data visualisation and Nois3, the activator of the WUD Rome back in 2014. This first attempt laid the groundwork for the flourishing of usability, digital design, and debate in South Tyrol. But above all, it has been a way to bring research outside the university environment and the academic "bubble". The NOI Techpark, the local tech-pole, hosted the WUD alongside practitioners, designers, scholars, students, and local people.
The topic *Design for good or evil* has been an occasion to discuss and reason together about the role of design, its good or bad qualities, its good intentions and bad results, and the importance of being aware of its impact throughout all phases of the project, especially the preliminary ones.

A topic deeply linked to the 2023 edition: *Cooperation and collaboration*. If there is a chance to face contemporary complexity with awareness, the social aspects with which design enters into dialogue, collaboration and cooperation are undoubtedly the most promising ways of encountering one another.

The level of hyper-specialisation required for a digital project is high: back-end developers, front-end developers, interface designers, user experience experts, content editors and copywriters, facilitators and researchers are just some of the professionals involved. These are increasingly vertical professions that must communicate, collaborate, and cooperate with one another for the good of the project and the people involved. This can be a demanding task: it implies questioning oneself, listening, mediating, and accepting differences, even those we do not like. If we have a chance to meet the challenges technology poses, starting with artificial intelligence, it lies in collaboration and cooperation. Building bridges, stepping out of our bubbles, breaking down disciplinary silos,

designing the conditions for new relationships and forging collaborations. This is an almost subversive activity in a social context dominated by polarisation and individualism. We can imagine collaboration and cooperation as a form of resistance to a technocratic, hyper-specialised, closed and vertical vision of the world, society and relationships.

We do not know precisely what this means, or rather, we are trying to understand it together, thanks in part to events such as WUD, which question us about the forms of the project and digital inclusion, which pass through languages, interfaces, technologies, data, colours, typography and accessibility. We are trying to take stock of the possibilities for collaboration regardless of disciplinary, professional, cultural and other barriers. For this reason, we have tried to put together a list of speakers who draw on the worlds of professional practice, academia and the social sphere. The aim is to address the complexity of the contemporary world from different perspectives, united by a cooperative and collaborative intention.

A union that, from its very inception, aims to help bridge the gap between the business and academic worlds, promoting a culture and an approach to design and research that draws on and feeds off both worlds.

WUD Bolzano 2023, once again, stems from the possibility and desire to activate a local community, starting from the worlds of education and university research, and from local creative industries, to involve existing businesses and institutions in the area and open up to national and international debate on the evolution of the digital world. On the one hand, the university offers students and recent graduates of various bachelor's, master's and doctoral programmes in different faculties the opportunity to broaden their education and meet and establish relationships with the professional world. On the other hand, the business world finds opportunities and reference points for discussing emerging phenomena, trends, and cross-cutting innovation processes that can transform and improve approaches, methods, and practices in the professional world. A collaboration and mutual exchange capable of enriching and growing the people and organisations that participate in it.

The event organised on 9 November 2023 to coincide with World Usability Day therefore involved local and international guests, professionals, scholars, third sector and public administration organisations, and recent graduates, creating an opportunity for dialogue, cross-fertilisation, and discussion based on the principles of collaboration and cooperation between different fields of knowledge, design, humanities, social sciences, and technology, between different players, institutions, entrepreneurs, associations, and training organisations, from various perspectives in an attempt and desire to build common and shared ground.

In particular, the day was structured around different macro areas, in which speakers addressed the theme of Collaboration and Cooperation from different perspectives and with diverse approaches and backgrounds.

Co-designing change

The event was opened by two keynote speakers: Erin Casali, VP/Sr. Director of Product and Design at Xero, and Maria Cristina Lavazza, Experience Service Designer at UtLab and author of the book Radical Collaboration. Coming from

symmetrical worlds – Erin with a technical and hybrid background and Maria Cristina with a humanities background that led her to design – they illustrated two different yet converging ways of co-designing and collaborating.

On the one hand, Casali emphasised that the growth of complex structures such as organisations and companies, and their products and services, requires a pragmatic approach to change, and that this change can be effectively driven by co-design, i.e., the participation and involvement of the people within these organisations.

It is precisely in collaboration, in fact, explains Maria Cristina Lavazza, that the transformative potential lies: deep collaboration has enormous generative potential precisely because of its ability to involve people and make them feel seen, heard and recognised. Participatory processes generate knowledge sharing and the pooling of individual skills, roles and competences, but also what we might call *collective intelligence*, the convergence and pooling of different and complementary knowledge.

It is not only companies or organisations that benefit from this approach. Indeed, whenever people are involved – whether as stakeholders or users – in participatory design activities, the impact of products and services will be significant, relevant, ethical, and positive, according to a perspective Stefano Bussolon, psychologist and lecturer in Human-Computer Interaction at the University of Trento, defines as incremental innovation. If collaboration was one of the ways to deal with the emergency during the pandemic, it can become an emerging alternative to established processes and supply chains, according to Domenico Polimeno, Digital Transformation Manager at Unindustria. A new way of thinking, working and growing by exploring and embracing, driving change rather than suffering it.

Public administration and citizens' cooperation.

The collaboration between public administration and professionals, experts, professors, and consultants from companies and digital agencies has given rise to accessible, attentive communication that seeks to engage people in dialogue. The effort to bring best practices developed in extremely innovative digital environments has led to the redesign of citizen service portals with a user-centred approach, in constant dialogue with internal stakeholders and external audiences.

This is a process of rebranding shared by Giacomo Grassi, a hybrid profile in the field of digital design, but above all, of building a different, participatory and collaborative experience that puts people back at the centre. As in the case of the Sirio project, the new INPS award-winning design system employs a collaborative approach to overcome internal fragmentation and resistance.

Designing collaboratively for the common good, public administration and citizens is something that can be learned. It can be learned at university in an educational context where collaboration becomes a driver of innovation and promotion of the very way of doing design. These are the cases described by Gianni Sinni, professor of Communication Design at the Iuav in Venice, and Luciano Perondi, professor at the Iuav in Venice, where he is deputy director of the User Lab, a laboratory dedicated to empirical experimental activity, and former director of Isia Urbino.

In their respective presentations, the two colleagues share project experiences developed with students.

The collaboration between public administration and design universities is, in fact, the starting point for training competent professionals in the design of public utility services and communication.

In particular, the Titilium project has been presented as a case study of co-creation born from student collaboration and progressively developed and implemented thanks to a constant process of peer cooperation under the supervision and support of the teacher. A typography and communication project that incorporates common values of legibility and portability and, thanks to the open source licence, returns the educational and cultural investment to the community.

Data, Common good, and social participation.

But collaboration and cooperation arise and develop above all from values that focus on collective goods and people. These may be territorial mappings that allow spatial data to be shared in order to develop common knowledge and understanding, or collective phenomena, such as those presented by Maurizio Napolitano, who coordinates the Digital Commons Lab unit where he works on digital commons, including open data and OpenStreetMap. The focus of his research is on developing policies, actions and software related to open data, a key theme in cities and data. He engages in civic hacking and creating maps for smart cities, a mix of technology, data and community engagement where the high potential of open data can be amplified through collaborative and co-design practices, giving rise to true digital commons, an enzyme for active citizenship, decreasing the gap between science and society.

Or it can be events, festivals, such as *Sete* in Rovereto, described by Emanuele della Piana. A two-day meeting in which citizens, entrepreneurs, activists, artists and researchers felt at home, reflecting and interacting without prejudices on climate change and water scarcity, which involve people directly in experiencing and understanding pressing social issues in a playful, active and participatory way.

It is the case with Davide Falzone and Silva Rotelli of the Piano B projects, a collective of artists, designers and teachers who bring social innovation projects to life through art and inclusive design workshops for collective well-being, interpersonal relationships, cultures and generations, with an innovative impact. Provides art direction for the Volontarius Group to discuss social work, facilitate dialogue, and create experimental multimedia communication products that blend analogue and digital. The projects presented at WUD were mainly carried out in the province of Bolzano and the South Tyrol region, with minorities, migrants and women, i.e. groups that are often marginalised, which collaboration and open, direct dialogue can bring back to the centre of their own experience.

This last cluster also includes research dedicated to citizen science – *The Bridge* – developed as a master's degree thesis by Lisa Bachmann and Virginia Professione under the supervision of the two authors – Letizia Bollini and Matteo Moretti – at the conclusion of their studies in Eco-social design at the Faculty of Design and Art of the Free University of Bozen-Bolzano.

Finally, we, Letizia Bollini, professor of Communication/Interaction/Transmedia Design at the Faculty of Design and Art of the Free University of Bozen-Bolzano, and Matteo Moretti, professor of Info-Design at the Department of Design, Architecture, and Planning of Alghero at the University of Sassari, and co-founder of Sheldon.studio, together with Chiara Facchini, user experience designer and co-organiser of WUD Bolzano 2023, would like to express our gratitude.

We would like to thank and acknowledge the support of NOI TechPark and the sponsorship of Sheldon.studio and Exeen.it, a Milan-based company that promotes digital innovation pathways and processes for businesses, products, and services.

The event has also been promoted by AltoAdigeInnovazione, DRIN, and OnTopic.

WUD Bolzano has been established as a side event of SFSCON 2023, and has the patronage of the Faculty of Design and Arts of the Free University of Bolzano, AIAP – Italian Association of Visual Communication Design, Architecta – Italian Society of Information Architecture and Dolomiti Ux.

But above all, we would like to thank the more than 90 participants in this new edition for their presence, as well as the speakers, colleagues, students, and friends who made this event engaging, enriching, and inspiring.

Buona lettura!

Alghero/Bologna/Bolzano/Milano/Moena/Torino/Anywhere, 2 December 2025

Everything, Everywhere All at Once. Discovering and Boosting Radical Collaboration

Authors

Maria Cristina Lavazza
Utlàb - Experience designer

Biography

Experience designer and facilitator of participatory processes. She teaches human-centered design, facilitates workshops and coaching to improve relationships with clients, citizens and collaborators.
She is author of people-centered books, papers and games, and participates in national and international events on participatory design.

Keywords: Usability, Prototyping, Reframing, Visualization, Facilitation

Abstract

Radical collaboration is presented as a transformative approach that begins with individual awareness and expands to the entire system, enabling organizations to navigate complexity through collective intelligence. Collaboration requires courage, creativity, emotional engagement, strategic intent, active listening, playfulness, and skilled facilitation.

What does collaboration really mean? What is the state of collaboration in our organizations? Where is the highest potential to create unique value? And above all, what are the requirements for deep and generative collaboration? These questions guide a practical and light-hearted exploration of how organizations can evolve—both with and without a clear vision—toward more meaningful and sustainable ways of working together.

Good morning, I'm very happy that you are here.
I'm MCL and today we're talking about radical collaboration in organizations. Before we dive into the speech, I invite you to a little experiment, not mine but Lucia Berdini's for TED conference. I need you to stand up, please!

Collaborating means first and foremost coming into contact with each other. It always starts with ME and then with the relationship with another. It always begins with 2 people, 2 people in deep connection. But collaboration needs more: the will to collaborate. Collaboration wants actions and grit. It asks courage, the courage to act without prejudices and fear. It's the courage of the tiger. Tiger is like that: ROAR. Try it.

Strength is not enough, collaboration needs a new mindset, a creativity change that transform our way to be. Collaboration needs to be surprising like the fireworks with which U we say wow. Fireworks are like that: PUM PUM WOW. Try it!

We have the actions/grit, we have creative confidence but we need something more the deep motivation for working together: the emotions that move us to act.
Emotions are like that PAM PAM SMACK. Try it!

Pair up with the person near U. Whoever is alone, raise the hand, find a companion! Now stand back-to-back, enstablish a deep thinking connection with the person back to U. To my 3 represent your idea of collaboration: tiger, fireworks, emotions. Ready? 1, 2, 3 TURN AROUND and give ourselves a round of applause. Collaboration it is this and much more than this. Lets see in practice!

Collaboration
Let's talk about collaboration. Let's see its definition. Collaborate comes from Latin. Latin comes from Sanskrit. KR among other things means Transform the reality. A curiosity: do you know that collaborating is a similar word in Japanese too? Korabosan.

How means we
Collaborating doesn't just mean working together, it presupposes a WE, you can't work together alone! WE mean Human. Our human beings have an important role and specific weight in a changing world. We are immersed in a messy universe, and we have to manage a growing complexity.

"Once upon a time we knew the world by heart", wrote the poetess Wisława Szymborska. Today this is no longer like that. Today we are increasingly connected, immersed in tireless challenging services and experiences.
We lost the capacity to listen, to dialogue, to do together. Everything must be high-performance, taking away space for the beauty of the unpredictable of human factor.

Yet the human factor is the only one capable of saving us from the domination the complexity of scenarios, to help to identifying roads, paths, in the solution of increasingly tangled problems. It is no longer enough to even split problems into smaller ones because we no longer have the key to the problem. Where do we start from? How and where do we proceed?

We must start from people.
Starting from the human factor means tackling problems from a simple, concrete and usable point of view. Usability is what brings us back to earth with the question: what is the goal? What needs does it solve? What do people think and how do they act? Design is a key: it provides us with method and tools. The organizations understand that design can address complex problems. This represents the dark side of the situation: Give it to the designer, he/she has the solution!

Design is so popular that everything has become design: experience, product... Everything magically became design, as if design had the magic formula for every problem to be faced. But design has no pixie dust: it's no the only answer to the future in front of us like a Hokusai wave. We need to add a prefix to design. A "CO" able to transform the process into collective intelligence, to trigger a different way of thinking, a way to become a Learning Organization, able of learning from itself with individuals who learn from each other. Learning organizations are living org. that know how to react and transform themselves, shaping their future. They are the only response to the uncertainty. Codesign is inspired by the creative processes of design thinking that range from understanding the problem, the scenario, the Zeitgeist, to exploring people's needs and responses by reframing the challenge. Define means interpreting data and building actionable syntheses for ideation. We design together and together we build the prototype that we will test, until we share the path in a collaborative new way.

We said together, but together with whom?
Who do we involve in codesign? Who cares! says Harrison Owen, creator of the World Café: anyone who has some interest in the topic. But, above all, those who have always been excluded from the process. There are different levels of involvement ranging from me as an individual, to my team, to the temporary team working on a project within the organization up to the entire system: customer, user, providers, suppliers, citizens, communities of interest, public opinion. Everyone can be involved in different ways and at different times. So for each step of the process, we can involve different actors. From top management to public opinion with different techniques and different ways. Codesign assumes a deep cultural change at all layers of the organizations. The transformation must begin front the individual that becomes aware of his potential and gradually it opens up to the entire organization transforming itself.The shift is not immediate, it is a slow transformation that teaches the individual to act as one with the system. Like a perfect fusion between thought and action as Hillman says. It is the strength, the commitment towards greater things that starts from the individual and beam to the whole. From my personal way of seeing things and thinking, in this way start the transformation.

It is from the deep awareness of myself that I can understand and change: Mindell's Innerwork Peter Senge's Personal mastery Otto Scharmer's Sensing. TAT TVAM ASI by Nisargadatta Maharaj. So, where does the transformation begin? From my abilities, from my superpowers. Each of us has gifts, but you have the special one: your super ability that make you unique and inimitable. You are on this earth for it. What others recognize in you, and which you can put at the service of others. It is what Ken Robinson calls The Element, which makes you shine in work as in life. SYPartners with Ideo work on superpowers as empathy, energy, being the cultural compass or problem solver. Surely you have one that shines more than the others. You have to start from that to get in touch with others and start the collaboration!

If everyone is aware of his superpower and exercises it well, the team is able of working in harmony as an Ensemble. They can improvise by relying on each other. The team is able to find its own Blue Ocean, collaborating fluidly, actively and responsibly towards a common goal. As in Aikido it is able of exploiting resistance in its favor. But no change is possible without an enlightened leadership and a strong endorsement from the top. We need the awareness of the whole system, or we risk to fail. There is no secret sauce, but some actions and skills that can facilitate collaboration and internal change.

Collaboration requires a deep strategy.
Codesign is not workshops, it is not post it or canvas.
It is strategy, that define the objectives of codesign: who to involve, when, how, why. Identify organizational boundaries, culture and levels of engagement. Who are the people? How used are they to collaborating? How do we involve them first? During? What do we give back between one workshop and another? How do we bring them on board? How do we train them? How do we measure involvement during the steps? How dare can we? Should we be more tigers, fireworks, or emotions?

Listening is different from hearing.
Active listening means moving from passive to an exploratory logic: Becoming explorers of possible worlds (Marianella Sclavi). Today we listen less, we are distracted by everything, slaves to the tyranny of the visual. But we must learn to listen to each other again, without assumptions, without thinking about what to answer. Just listening and thinking the reasons of the other. Listening asks for silence, it asks for space, it asks to wear someone else's shoes and make their story your own. Only in this way can empathy develop and the space necessary for the future to emerge. Collaboration requires concreteness of thought. To empathize you need to see, understand and then have space for artifacts, for visual thinking, for the tools that allow you to give shape to ideas.

Visualization allows critical thinking, to identify the bias, limits and critical issues of your ideas.
For this reason, we use canvas, post it, colors, posters, and each time we identify suitable and practical spaces to work together. Collaboration asks for lightness and playfulness. Play allows to explore new solutions in a safe and controlled way, without consequence or judgement. Play is freedom, opens to creative confidence and thinking out of the box. Playfulness fights the rigidity and the hierarchical structure of the organizations. It makes everything real, it's optimistic and fun. It is freedom and co-liberation of doing and being. Collaboration asks for sacred time. During production time it is necessary to alternate team time. These are important moments in which time is suspended to dedicate ourselves as a group.

They can be important moments such as celebrating a milestone but also small everyday moments such as a coffee or ordering lunch together, it gives breath and space to each other. Creating these protected moments makes it easier to support people during the most stressful phases of projects. Teams don't collaborate by themselves. Codesign must be design and need the role of the facilitator. Facilitation is a job and an expertise. Motivate: From the rousing opening statement to the closing words of cheer, he ignites a fire. Lead: he knows the steps of the process; the group will execute from beginning to end and carefully guide the participants through each steps. Ask: she/he listen carefully to the discussion and quickly analyze comments to formulate questions that help guide a productive group discussion and challenge the group when appropriate. Questions in design need to be powerful. Direct questions in codesign don't activate the necessary energy and vision. Powerful questions zoom in and zoom out the reality and allow to imagine the future.

An example?

What the system should do? It is not a power question. What do you see emerging from our discussion? This is a powerful question that opens the perspective. Collaboration is no longer a choice. In an uncertain future increasingly stratified interests and values, that's why we need to collaborate it and do it well.

Using everything we have with the resources we have. Do it where and when is possible because becomes all at once and forever. Because as Margareth Mead, faous etnographer, reminds us: Never doubt that a small group of thoughtful committed individuals can change the world. In fact, it's the only thing that ever has.

The Education of Public Designer

Authors

Gianni Sinni
Associate Professor at the Iuav University of Venice

Biography

He is Associate Professor of Communication Design at the Iuav University of Venice. He is founder of the Lcd communication studio in Florence and a member of the User-Lab research laboratory. His research concerns communication design applied to social innovation and complex information in the field of public utility. He was a consultant to the Minister for Technological Innovation and to the Digital Transformation Team for the 'Repubblica Digitale' project. He was a member of Agid's Steering Committee for the definition of the 'Design Guidelines for the PA Web'.

Keywords: Design for Public Sector, Public communication, Digital Transformation, Design Guidelines, Public Designer

Abstract

This study explores an experience of collaboration between university design courses and Italian public administrations. Public administrations acknowledge the importance of design in effective communication, and the university system responds with specific training for future designers. The expansion of public digital services has highlighted the crucial role of design, starting from user experience and interface design. Ethical and inclusive design is also increasingly encouraged by the European Union. The described project experimented with a visual narrative model to support change related to digital transformation in the public sector. Using the method of data storytelling, students' work highlighted design strategies and support tools. The results were published and shared in open-source mode, promoting the strategic value of design in the public sector and opening up to further collaborations.

This text aims to trace the experience of an unusual collaboration that, in recent years, has connected, with various degrees of interaction, several workshops of the Master's degree course in design at the Iuav University of Venice with central public administrations and public bodies, including the Department for Digital Transformation of the Presidenza del Consiglio, the Designers Italia platform, the Ministry of Infrastructure, and the inter-university consortium Cineca.

The reason for this convergence of interests can be summarized in the growing awareness on the part of public administrations of the need to have the tools that design offers to build effective communication methods and, on the part of the university educational system, to respond to this need by promoting specific training for future designers in the field of public communication.

In the last two decades, the increasing development of public digital services has confronted the public sector with new challenges in which the contribution of design, and communication design in particular, becomes crucial both in terms of experience (UX) and interface (UI) design, and in terms of understanding and modeling complex interaction ecosystems.

It is from this perspective that we can grasp the calls for ethical and inclusive design coming from the European Union, based on the Charter of Fundamental Rights of the European Union. Definitions such as "ethical by design" and "privacy by design" encourage a conscious design approach where designers are asked to responsibly avoid, for example, the use of dark patterns or extensive extraction of users' personal data. In doing so, the designer assumes a role that we could define as an enabler or gatekeeper, implying the introduction, from the early stages, of design principles that refer to sustainability, equity, and fairness.

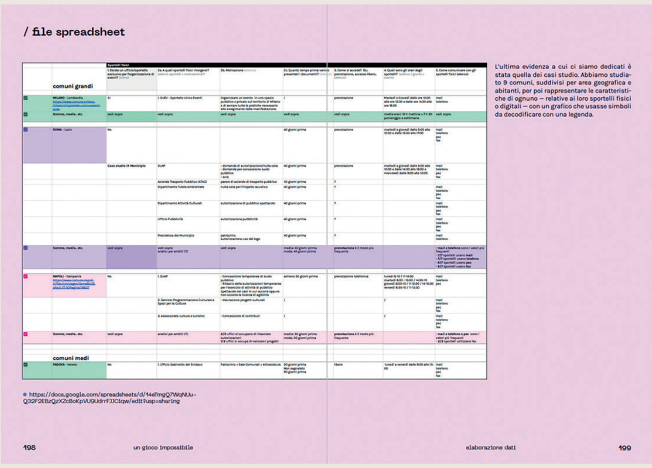
On the other hand, public projects are a context that communication design has the duty to oversee, if only for the sake of respecting the tradition of ethical design that has characterized the discipline, from public utility graphics to design for social innovation (Resnick, 2019). Pursuing this goal means renewing the shared intentions that characterized the collaboration between the public sector and design in a perspective that we could define today as "public utility 2.0".

It is in this context that the demands of design have also begun to find space within the Italian public administration. Perhaps it is with the definition of the Design Guidelines for PA websites, within the Italia Login project, that the term design was first welcomed into the field of public communication in 2015, recognizing its contribution. The subsequent establishment of the Designers Italia platform, the first reference point for the design of digital public services developed by the Digital Transformation Team (now Department), has definitively consolidated, at least at a central level, the presence of a design garrison within the Italian public administration.

It is therefore no coincidence that it was with the Department for Digital Transformation that the Iuav University of Venice established a first collaboration in 2021 aimed at experimenting with a visual narrative model to support, within the public sector, the reasons for change in the context of digital transformation (Sinni et al., 2024). The project's objective, which involved students in three successive workshops, was to investigate the context of public administration services, addressing the issue not from a historical or legislative perspective, but from a sociological, ethnographic, and ontological level with the realization of data storytelling (Dykes, 2020; Feigenbaum & Alamalhodaei, 2020), a narrative developed through infographics and data visualization, to highlight the context, critical issues, and design prospects of the main areas of public services.

The project also aimed to verify how the narrative approach could be an effective tool for addressing resistance to change within complex organizations such as those represented by the public sector, characterized by a classic VUCA (volatility, uncertainty, complexity, and ambiguity) context and where concerns and resistance to change sometimes take on strongly emotional and non-rational dynamics (Nelson & Stolterman, 2012, pp. 19-21).

The design tools allowed students to identify representative patterns for the design of change strategies and to experiment with resources and tools to support digital transformation in public organizations. The visual presentation of the investigations carried out on ecosystems, archetypes, touchpoints, as well as recurring patterns in different public services, thus constituted the original content of a series of publications, the *Atlas of Digital Transformation of PA* and the *Vademecum*, and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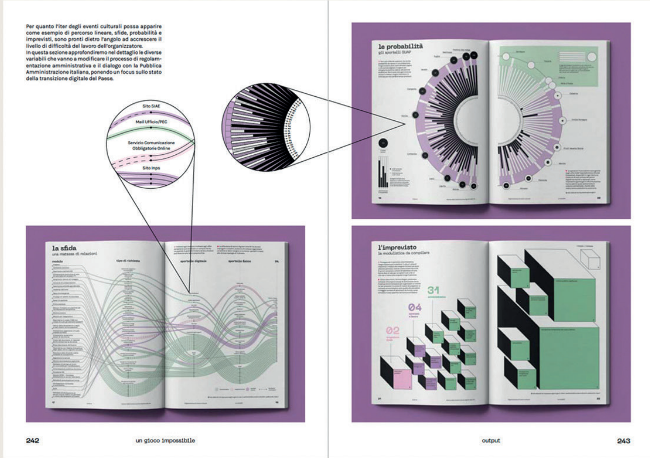
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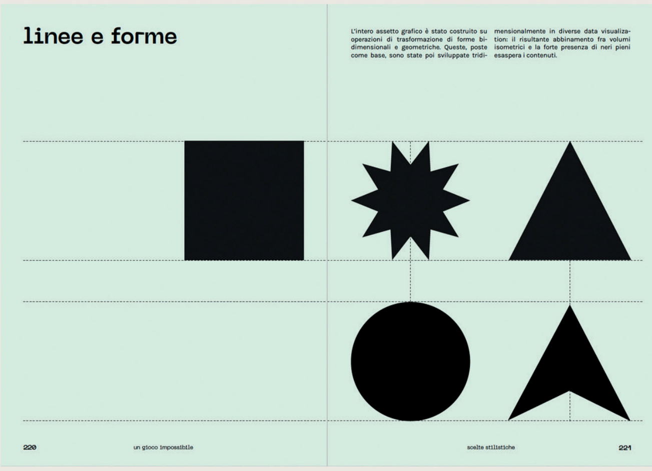
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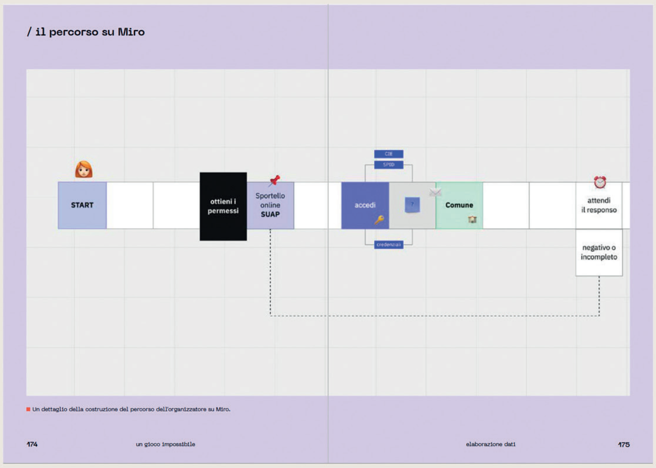
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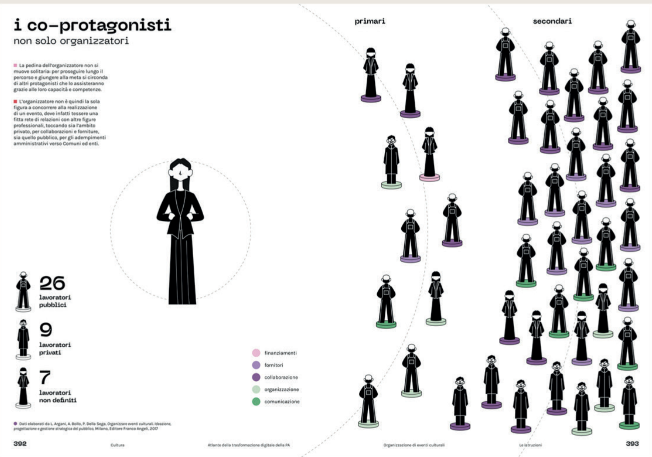
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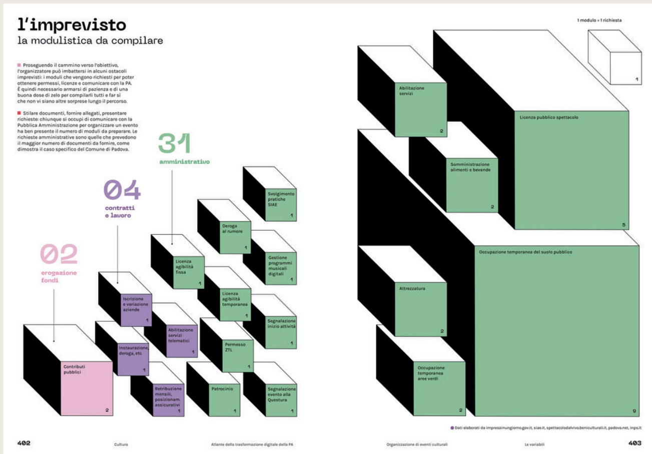
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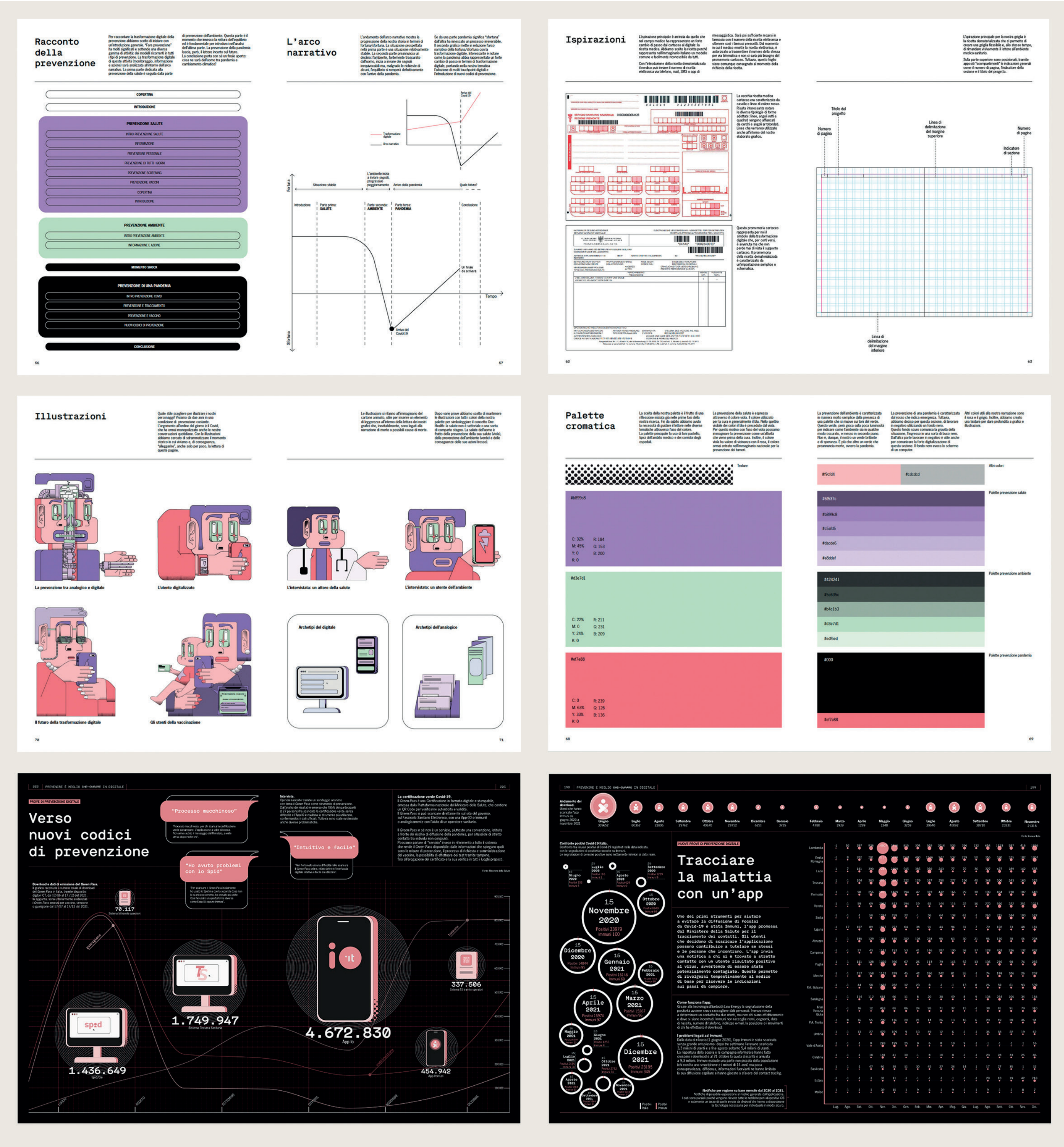

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Ispirazioni
Illustrazioni
Palette cromatica
Verso nuovi codici di prevenzione
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Tracciare la malattia con un'app

in collaboration with Cineca, the *Galactic Guide to the University*, which were made freely available with a consistent choice for open-source sharing.

The Laboratory's activity went through various phases of research and content development. A first phase involved desk research on regulations and available literature together with the census of available datasets, a starting point for the qualitative research conducted in the field with an extensive corpus of interviews. In the subsequent phase of data processing, various narrative tools of service design and user research were used: from ecosystem mapping to empathy maps, from user's journeys to scenarios (Stickdorn et al., 2018; Stickdorn & Schneider, 2012). Special attention was paid to defining recurring patterns and corresponding archetypal figures, including collective ones such as communities and organizations. Finally, there followed a phase of conceptualization and visual presentation of the collected information following the formula of data storytelling, a visual narrative based on data rather than a simple presentation of data. The construction of the visual narrative required students to effectively combine three key elements of design: data, visualization, and plot.

The method developed in the experiment was subsequently presented in a series of events both in the design and public administration fields, while dissemination meetings were addressed to decision-makers in the public sector to promote the strategic value of design as an agent of change. This experimentation constituted the first case history of the new section of Designers Italia dedicated to "Teaching design for the PA". A positive sign of the interest developed by this particular articulation of visual storytelling can be seen in the request from other central administrations to activate further collaborations, which are currently ongoing, thus making operational an integration, long-awaited, between design universities and the public sector.

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Images

Figure 1: Camilla Cappellaro, Sarah Maglio, Giorgia Pierobon, Davide Pronterà, Giulia Sacco. Preparation materials for the Atlas of Digital Transformation of PA, Iuav University of Venice, 2022.

Figure 2: Stefania Capuzzo, Andrea Corsi, Marta De Feo, Bea Angela Jaron, Miriana Mancini, Lorenzo Ravagnan. Preparation materials for the Atlas of Digital Transformation of PA, Iuav University of Venice, 2022.

Sirio: How Collaboration Enabled Innovation

A short story about the creation of a design system, from scratch, in a complex Public Administration context

Authors

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Biography

With over 10 years of management experience, he is an expert in experience & product design, with a focus on DesignOps. His career started at Bitmama, moving on to strategic roles at Vodafone and YOOX Net a Porter. In the latter he managed the digital flagship stores of more than 30 prestigious global luxury brands. He now leads the user-centered transformation of INPS, involving over 45 million users. He created the Sirio design system (ADI Design Index 2022, IF Design Award 2023) and led the digital rebranding of INPS.

Keywords: Community, Cooperation, Dialogue, Responsibility, Ethics

Abstract

Sirio is the new design system developed by INPS, Italy's National Institute for Social Security. This article presents the story of how this design system was created from scratch within the context of a large and complex Public Administration.

Rather than discussing the technical aspects of the design system, this talk focuses on the organizational and managerial perspectives. It emphasizes how collaboration was crucial for innovation throughout the development process.

Additionally, the article introduces the simple interest-alignment framework, which helps identify scenarios where collaboration is more or less easily applicable.

Key Figures of INPS

To understand the scope and complexity of the Sirio project, it is essential to consider some key figures about INPS. The organization serves a substantial portion of the Italian population, with a total user base of approximately 42 million people. This large user base reflects the significant role INPS plays in the daily lives of Italians.

INPS manages an impressive array of digital services, approximately 450 in total, supported by over 2500 applications. These services are available to the public, businesses, and intermediaries, highlighting the extensive and varied nature of the organization's digital offerings.

The INPS website receives around 800 million visits per year, indicating the high level of engagement and reliance on these digital services. Additionally, the call centers handle 32 million contacts annually, further emphasizing the volume of interactions managed by the organization.

These figures underscore the complexity of INPS's digital ecosystem and the challenges involved in creating a cohesive and efficient design system like Sirio.

Internal Sponsorship from Top Management

The success of the Sirio design system was significantly bolstered by strong internal sponsorship from INPS's top management. Recognizing the critical importance of user experience, top management embedded this priority within the organization's strategic framework.

As highlighted in the ICT Strategic Plan for 2022-2023, INPS emphasizes delivering a user experience that is simple, effective, and recommendable. The strategic plan states, "In this digital transformation process, it's crucial that services hold clear value for the user, by delivering an experience (and not just a service) that is simple, effective, and thus recommendable. Therefore, a decisive acceleration in simplifying the overall user experience and improving the inclusivity of services is needed, so that they can be used from any device, without any prior knowledge on the part of the citizens, in full compliance with the norms concerning accessibility."

Furthermore, the strategic guidelines to the Department of Communication for 2024 reinforce the commitment to user experience. The guidelines mandate that the Communication Department ensures that the user experience meets user expectations by providing guidance and support to standardize and enhance the quality of both physical and digital interactions. As stated, "User Experience Compliance: The Communication Department should ensure that the user experience increasingly meets their expectations, by providing guidance and support to the departments to standardize and enhance the quality of both physical and digital interactions."

These directives from top management underscore the organization's commitment to improving user experience across all platforms, which was a pivotal factor in the successful implementation of the Sirio design system.

Long-Term Goal for UX in INPS

The long-term goal for user experience (UX) at INPS is both ambitious and comprehensive, and is summarized as follows:

- Establish a centralized Experience Design function, synergized with a Governance and Design Ops framework.
- This unified strategy aims to deliver effective, efficient, and cohesive digital presence.
- The objective is to provide a seamless, multichannel user experience across all institutional touchpoints, while also facilitating the ongoing evolution of stakeholder mindset and skills.

In summary, the long-term UX goal at INPS is to create a user-centric organization through a centralized and cohesive design strategy, ultimately enhancing the overall digital experience for all users.

The problem

3 Critical User Experience Issues

The project encountered three primary issues related to user experience (Ux) that necessitated immediate attention and resolution:

- Diverse Digital Services: INPS offers over 400 different digital services, each with its own unique

UX/UI design patterns and user journeys. This diversity leads to inconsistencies and a fragmented user experience. The scale of the challenge is immense, as these services cater to a user base of 42 million people, with the INPS website receiving approximately 2 million visits daily.

- Lack of UX Governance: There was a complete absence of centralized visual and usability standards across the various services. This lack of governance prevented the identification of usability issues, the propagation of best practices, and the dissemination of improvements. Without centralized control, it was challenging to maintain a consistent and high-quality user experience across all digital touchpoints.

- No UX Strategy: The organization lacked a unified UX strategy, resulting in no shared concept of user value to guide the optimization of user experiences. Without a strategic framework, efforts to improve UX were uncoordinated and failed to address the users' needs effectively.

The Major Challenge

One of the most significant challenges faced in the development of the Sirio design system was the independent structure of INPS's business units. Each Business Unit (BU) was responsible for their digital products from end to end. This resulted in numerous silos operating in isolation, each with its own processes, tools, and practices.

Complicating matters further, each BU worked with specific external companies. These external partners often pushed for the use of particular technologies and platforms, maintained control over UX/UI practices, and focused on evolving their own legacy systems. This approach led to a lack of consistency across the organization's digital products, making it difficult to implement unified UX standards and practices.

This segregation and the resulting inconsistencies presented a significant obstacle to creating a seamless and cohesive user experience. The challenge was to align these units and their external partners towards a common UX vision and framework, essential for the success of the Sirio design system.

How to solve the problem

UX Strategy: The Big Picture

Addressing the challenges at INPS required a comprehensive UX strategy that started with understanding the big picture and formulating a detailed plan focused on user value. The initial step was to develop a strategy centered around the concept of user value, prioritizing activities according to this shared vision.

User Value

The primary question guiding the strategy is: what does it mean to improve user experience, and how can this be measured and prioritized? By defining what user value means, INPS is able to prioritize actions that would most significantly enhance the user experience.

Governance

Establishing a centralized governance structure is essential. This means creating a framework for centralized control and supervision over all UX activities. Centralized governance ensures that UX improvements were consistent and aligned with the overall strategy.

Process

A clear process should be defined to guide the design of new digital products. This process includes specifying the phases, blueprints, and tools to be used. The goal is to ensure quality and consistency in the design and development of digital services.

Tools

The strategy incorporates several key tools:

- User Research: Gathering user insights is fundamental. This involves conducting comprehensive user research to understand user needs and behaviors.

- Foundations: Establishing core elements such as a brand manual, design system, and content guidelines is crucial for ensuring usability and consistency across all services.

- Value Measurement: To close the loop, it is necessary to have metrics and KPIs to measure the impact of UX improvements. This involves assessing whether the changes delivered the intended value to the users.

<table>
<tr><td>STRATEGY</td><td colspan="3">USER VALUE
What does it mean to improve user experience? How to maximise it? What's the vision?

Goal: Prioritize activities according to a shared concept of value for the end user</td></tr>
<tr><td rowspan="2">ENABLERS</td><td colspan="3">GOVERNANCE
How to enforce standards and best practices adoption? How to stay on track?

Goal: Exercise centralized control and supervision over all activities related to user experience to ensure process & tools are used and kept up to date</td></tr>
<tr><td colspan="3">PROCESS
How should a digital product/service be designed?

Goal: Define phases, blueprints & tools to be used for product/service design to ensure quality and consistency</td></tr>
<tr><td>TOOLS</td><td>USER RESEARCH
What tools and strategies should be used to get user data?

Goal: Gater user insights, validate design</td><td>FOUNDATIONS
(Brand manual, Design system, Writing guidelines)

Which standards should be used?

Goal: Ensure quality, usability & consistency</td><td>VALUE MEASUREMENT
Which metrics and KPIs? How to measure them?

Goal: Close the loop: did we delivery Value for the user?</td></tr>
</table>

Starting from a position of no prior user experience framework and under tight time constraints, the team decided to start with:

1. Establishing a clear vision
2. The development of the design system

Given the tight time constraints, the team chose to start with implementing only these two key elements from the comprehensive UX strategy: establishing a clear vision and developing the design system.
By focusing on these foundational aspects first, the team laid a strong groundwork that would support further UX improvements.

Establishing a clear vision ensured alignment and direction for the project, while the design system provided consistency and efficiency in the design process. These steps were prioritized to address immediate needs, with the understanding that other elements of the broader UX strategy would be tackled subsequently.

Collaboration to overcome resistance

3 Resistances to Overcome

Implementing the Sirio design system required overcoming significant resistance within INPS. Three primary obstacles were identified:

- **Siloed Culture:** Each service or touchpoint had been developed in isolation, leading to a fragmented approach. There was a lack of inter-silo communication, common processes, and shared standards among different teams and projects. This segregation hindered the creation of a cohesive user experience.

- **Previous Failed Attempts:** Numerous previous efforts to create UI kits, web kits, and design libraries had been made by various business units. However, these attempts failed to gain broader adoption and were often utilized by only one or a few teams. The pervasive sentiment was one of

skepticism, encapsulated in the attitude of "You aren't going to make it; we already tried."

- Complexity of the Tech Vendor Ecosystem: INPS's technological vendor ecosystem is vast, involving hundreds of different interlocutors. Each vendor employed different technologies and often aimed to sell custom products, which added layers of complexity to the project. Coordinating these diverse vendors and aligning their efforts towards a unified design system was a significant challenge.

These resistances underscored the necessity for a collaborative approach to drive the successful implementation of the Sirio design system.

1. Overcoming Siloed Culture

The first challenge was addressing the deeply entrenched siloed culture within INPS. To overcome this, a community of practice was established, forming a virtual team known as "UX@INPS" under the initiative "Progettare per il Cittadino". The primary goal was to break down silos and collaboratively build a unified vision, mission, and set of key values.

Key strategies included:

- Involving Key Stakeholders: Individuals from the most relevant silos were brought together. Participants were chosen based on their impact on user experience and the importance of the services they provided.

- Securing Top Management Support: Obtaining sponsorship from top management was crucial. Their backing helped to legitimize the initiative and provided the necessary authority to drive change.

- Engaging Frontline Staff: Complete endorsement from frontline staff, those directly involved in daily operations, was vital. Their involvement ensured that practical insights and hands-on experience were incorporated into the project.

This approach fostered a collaborative environment, facilitating the integration of diverse perspectives and ensuring that the initiative was rooted in practical, user-centric values.

2. Addressing Previous Failures

The second major challenge was overcoming the negative sentiment stemming from previous failed attempts to standardize UX practices. To tackle this, it was crucial to involve people from the outset and foster a sense of collective responsibility.

Key strategies included:

- Early and Inclusive Involvement: From day one, individuals were brought on board to ensure that everyone felt a sense of ownership and responsibility towards the project. This collective involvement helped to mitigate the burden of past failures.

- Reversing the Top-Down Approach: Instead of the traditional top-down directive where top management would impose solutions, a collaborative approach was adopted. This method encouraged all stakeholders to work together under the mantra, "Let's build this together." This shift in approach helped to build trust and engagement among the participants.

- Focusing on Long-Term Vision and User Value: Emphasis was placed on the long-term vision and the value for the user, which provided a clear and motivating goal for all involved.

- Leveraging Previous Attempts: Rather than starting from scratch, the project began by collecting and analyzing previous failed attempts. This strategy ensured that past efforts were not wasted but instead served as a foundation to build upon, learning from earlier mistakes to inform better practices.

By addressing these previous failures in a collaborative and inclusive manner, the project was able to build momentum and foster a more positive and proactive attitude towards achieving its goals.

3. Managing the Complexity of the Tech Vendor Ecosystem

The final major challenge was navigating the complexity of the extensive tech vendor ecosystem. Each business unit worked with different providers, often leading to competition and conflicting interests.

Key strategies included:

- Engaging Frontline Personnel: The solution was to engage frontline people from the various vendors, such as designers and front-end developers. These individuals are invaluable since they share a common goal with the users—they wanted the product to work effectively.

- Aligning Goals: By bringing these designers and developers together, even if they were part of different (and competing) vendors, it was possible to align their efforts towards a unified objective. Both users and designers aimed for a functional and effective product, creating a natural synergy.

- Fostering Collaboration Over Competition: This collaborative approach helped to mitigate the competitive tensions between different vendors. Instead of fighting against each other, the vendors' frontline personnel were united in their efforts to enhance the user experience.

By focusing on the shared goals of frontline workers and users, it was possible to overcome the complexities posed by the diverse vendor landscape, ensuring a more cohesive and effective approach to developing the Sirio design system.

The Collaboration Team

The success of the Sirio design system was driven by a dedicated and collaborative team. This team comprised approximately 30 members, including both internal staff and external contributors, working together to achieve a unified goal.

Key elements of the collaboration team included:

- Interviews and Engagement: A significant number of interviews were conducted with internal teams and external contractors to gather diverse insights and perspectives. This comprehensive engagement ensured that the team had a thorough understanding of the existing challenges and potential solutions.

- Mapping Pre-existing Content: The team mapped out 12 pre-existing content clusters. This mapping was crucial for understanding the current state of digital services and identifying areas for improvement.

- Team Composition: The collaboration team consisted of around 30 members, blending internal expertise with external contributions. This mix of perspectives and skills was essential for addressing the complex challenges of the project.

- Co-design Workshops: Over the course of the project, more than 10 co-design workshops were held. These workshops facilitated active collaboration and brainstorming, allowing the team to co-create solutions and refine their approach collectively.

By fostering a collaborative environment and leveraging the combined strengths of internal and external team members, the project was able to navigate the complexities and drive the successful implementation of the Sirio design system.

The Collaborative Process

The development of the Sirio design system followed a structured and iterative collaborative process, divided into several design sprints. Each sprint focused on a specific aspect of the design system, such as typography. The process involved multiple phases, each with distinct activities and team compositions:

- Research Phase: A small dedicated team of designers (3-6 members) conducted stakeholder interviews, field studies, and benchmarks to gather insights.

- Workshop Phase: A core team (10-15 members), comprising individuals from different silos, participated in workshops to make shared decisions based on the research findings.

- Design Phase: The design team (3-6 members) then moved into the design phase, where they produced the necessary design assets.

- Design Review Phase: The extended team, involving over 30 stakeholders, reviewed the designs. This phase was crucial for validating the design, collecting feedback, and ensuring all internal stakeholders were aligned.

- Refine Phase: The design team (3-6 members) refined the design based on feedback from the

review phase, ensuring all necessary adjustments were made.

- Delivery Phase: Finally, the extended team (30+ members) conducted the final showcase and obtained signoff, completing the sprint.

This iterative process, characterized by extensive collaboration and multiple feedback loops, ensured that each component of the Sirio design system was thoroughly vetted and refined. By involving a diverse group of stakeholders at each stage, the process maintained a high level of engagement and alignment, which was critical for the project's success.

Define a long term vision

The long-term vision for the Sirio project, and for User Experience in general, was developed collaboratively, as the **founding stone of the project**, engaging individuals from various silos and business units. This inclusive approach resulted in a vision that was both ambitious and meaningful.

Vision

The vision for Inps's UX was to **"craft digital solutions that elevate citizens' quality of life."** This vision aimed to inspire and motivate everyone involved in the project, helping them to see beyond their daily tasks and understand the broader impact of their work on improving the lives of citizens.

Mission

Aligned with this vision, the mission was clear: **"Providing citizens with all the essential information and services they actually need for their social protection, eliminating unnecessary complexity, through a digital platform that is simple, accessible, and continuously optimized to meet their needs."**

By defining this vision and mission, the UX@INPS team ensured that every aspect of the design system contributed to a more user-friendly and effective digital experience for all citizens. This holistic approach was crucial for maintaining focus and alignment throughout the project's development.

Building a Design System

After establishing the long-term vision and mission, the next step was to build the design system. The design system for Sirio was meticulously crafted to include comprehensive guidelines and resources to ensure consistency and quality across all digital products and services of INPS.

The design system was composed of two main parts: Guidelines and Resources.

Guidelines

The guidelines encompassed principles and documentation essential for maintaining uniformity and clarity. These included:

- Style Guide: Detailed standards for visual elements such as typography, color palettes, and overall design aesthetics.
- UI Guide: Best practices and guidelines for user interface design, ensuring a cohesive look and feel across all applications.
- Content Guide: Guidelines for writing simple, accessible, and user-friendly content, ensuring that all information provided is clear and easily understood by users.

Resources

The resource section included practical tools and components for designers and developers:

- Component Library: A repository of reusable design components that developers can utilize to maintain consistency and efficiency in their work.
- Developer Toolkits: Comprehensive toolkits to support developers in implementing the design system effectively.

These elements of the design system are hosted on a dedicated website, www.inps.design, which serves as a central hub for all related content. This platform provides easy access to components, typography, color palettes, and all necessary guidelines, ensuring that everyone involved in the project can readily find and utilize the resources they need.

About collaboration

What Helped and What Didn't

The development and implementation of the Sirio design system involved significant collaboration, with both successes and challenges along the way.

What Helped

- Clear Need for a Standard: Everyone at INPS recognized the need for a unified standard due to the diversity of the 500 services, each with different interfaces and user experiences. This universal acknowledgment facilitated the acceptance and support for the project.

- No Ownership Conflict: The project encountered no ownership conflicts because it was a new initiative. As there were no pre-existing owners who wanted to claim the activity, it progressed smoothly without significant internal political struggles. This allowed the project to be viewed as a collective responsibility rather than being driven by individual agendas.

- Unified Goal: The collaboration effort was driven by a shared vision of improving user experience across all services. This common objective helped unify the different teams and stakeholders involved in the project.

What Didn't Help

- Loss of Control: Introducing a standardized design system led to resistance as individuals and teams began to feel a loss of control over their work. This resistance stemmed from the fear that standardization would limit their autonomy and flexibility.

- Initial Lack of Understanding: There was a general lack of understanding about what a design system entailed. This gap in knowledge required additional efforts to educate and align everyone on the purpose and benefits of the system.

- Resistance to Change: As with any significant change, there was inherent resistance from those who were accustomed to the old ways of working. Overcoming this resistance required continuous communication, training, and demonstrating the value of the new system.

The Cost of Collaboration

Collaboration, while essential for the successful implementation of the Sirio design system, comes with significant costs. These costs can impact the efficiency and agility of a project.

Time-Consuming Reviews

Collaboration involves numerous reviews with large groups, which are inherently time-consuming. Ensuring that all stakeholders are aligned and have had their input requires extensive meetings and discussions, slowing down the decision-making process.

Loss of Control

When decisions are made collaboratively, individual control is often sacrificed. Teams must commit to collective decisions, which means once a decision is made, it cannot be easily changed by any single person. This collective approach can hinder agility, as changing direction becomes more complicated and time-consuming.

Difficulty in Steering

Aligning a large group of people towards a common goal makes steering the project more challenging. With many voices and opinions to consider, reaching consensus can be difficult, and making swift adjustments to the project's direction becomes less feasible.

Is Collaboration a Silver Bullet?

The provocative title of this section invites readers to explore the complexities of collaboration in organizational settings, particularly when implementing large-scale systems like the Sirio design system at INPS. Collaboration is often heralded as a universal solution to various business challenges, but is it truly a "silver bullet"? This section delves into this question by introducing a conceptual framework that assesses the effectiveness of collaborative efforts based on two critical dimensions: interest and alignment.

Introducing the Interest-Alignment Framework

The "Interest-Alignment" framework serves as a tool to evaluate the potential success of collaborative initiatives. It is represented by a matrix with two axes: 'Interest', which measures the enthusiasm and engagement of stakeholders towards the project, and 'Alignment', which assesses the degree to which stakeholders' goals and methods are synchronized.

To better understand the dynamics of collaboration within the "Interest-Alignment" framework, it's essential to explore each quadrant's specific characteristics and the challenges they present. Here's how varying levels of stakeholder interest and alignment impact the feasibility and complexity of collaborative efforts:

- **Ideal Quadrant (High Alignment, Low Interest):** In this quadrant, the high alignment indicates that all stakeholders agree on the necessity and direction of the project, which simplifies decision-making and strategy implementation. The low interest suggests minimal internal competition for ownership of the project, reducing the likelihood of conflicts and power struggles. This scenario is considered ideal because it ensures smooth collaboration without resistance from within the organization.

- **Easy Quadrant (Low Alignment, Low Interest):** This configuration is labeled "easy" not because the situation is ideal, but because the obstacles are manageable. Low alignment means that although stakeholders do not initially agree on the project's goals or methods, this is a flexible starting point that can be improved through alignment efforts. Low interest also implies that there are no strong internal rivalries or resistance, making it easier to foster agreement and increase engagement gradually.

- **Hard Quadrant (High Alignment, High Interest):** Although stakeholders agree on the goals (high alignment), the high interest creates a competitive environment where multiple parties may vie for control and recognition. This competition can hinder collaborative efforts as individuals or groups may undermine each other to ensure their own ideas prevail or to gain leadership of the project. This scenario makes collaboration challenging due to internal conflicts and jealousy.

- **Very Hard Quadrant (Low Alignment, High Interest):** This is the most difficult scenario for collaboration. High interest means many stakeholders want to be involved and possibly lead, which fuels competition. However, the low alignment indicates a lack of consensus on how to proceed, leading to conflict and inefficiency. Collaboration is nearly impossible without significant efforts to both forge alignment and manage competitive tensions.

This framework illustrates that the effectiveness of collaboration is not guaranteed and depends significantly on the underlying dynamics of stakeholder interest and alignment. Each quadrant presents unique challenges and requires specific strategies to optimize the collaborative efforts. By understanding and addressing these dimensions, organizations can better manage collaborative projects and increase their chances of success.During the development of the SIRIO design system, the project benefited from being in the "happy" quadrant **(High Alignment, Low Interest)**, where cooperation was relatively easy. The high alignment indicated that all stakeholders agreed on the necessity and direction of the project, which simplified decision-making and strategy implementation. This consensus ensured that everyone was on the same page regarding project goals and methods, reducing friction and facilitating smooth progress. Additionally, the low interest suggested minimal internal competition for ownership of the project. Since there were no pre-existing owners vying for control, the likelihood of conflicts and power struggles was significantly reduced. This ideal scenario allowed the team to focus on collaboration and innovation without resistance, ensuring the successful development of the SIRIO design system.

The Sad Truth About Collaboration

The "Interest-Alignment" framework reveals important realities about the nature of collaboration, particularly in complex organizational settings like the development of the Sirio design system at INPS. Here are some key insights derived from this analysis:

- **Optimal Conditions for Collaboration: Effective collaboration is most likely to occur when there is high alignment on goals and priorities among all participants, and when competition for ownership is low.** This environment fosters a cooperative atmosphere where all efforts are synergistically directed towards common objectives without the distractions of internal rivalries.

- **Challenges with Competition:** While it is feasible to work towards improving alignment among stakeholders through communication and

consensus-building, reducing competition can be significantly more challenging. Competitive tensions often stem from deeply ingrained organizational structures and individual ambitions, which are not easily adjustable.

- **Considerations for Difficult Quadrants:** Operating in the "hard" or "very hard" quadrants—where there is either high competition and high alignment, or high competition and low alignment—can make collaboration particularly strenuous. In these scenarios, the costs of collaboration, in terms of time and resources spent managing conflicts and striving for consensus, may outweigh the benefits. This suggests a need for careful evaluation of the collaboration strategy in such environments to ensure that the effort expended is justified by the results achieved.

These points underscore the nuanced and sometimes inconvenient truths about collaborative efforts in large-scale projects. They highlight the importance of strategically managing both the alignment and the competitive dynamics within the group to enhance the efficacy of collaborative endeavors.

Lasting Impact of the Sirio Design System

The Sirio design system at INPS has yielded significant benefits that extend beyond the usual advantages of such frameworks. These include cost savings, enhanced user experience quality, and facilitated continuous improvement. Here's a detailed look at the enduring impacts that Sirio has achieved:

Consistent User Experience: Sirio has successfully standardized the user experience across numerous INPS services and touchpoints, including the main website Inps.it, its native applications, and over 35 digital services. This consistency ensures that users encounter a uniform interface, which simplifies navigation and improves overall service satisfaction.

- **Revolutionizing Brand Identity:** The introduction of Sirio coincided with INPS's 125th anniversary, a milestone that was marked by a significant rebranding effort. Uniquely, the rebranding was driven by the design system itself, a reversal of the common practice where brand identity precedes system design. By starting with the design system, INPS adopted a bottom-up approach, crafting a new 'digital-first' brand identity that is modern, accessible, and user-centric.

- **Enhanced Collaboration:** The development and implementation of Sirio have fostered improved collaboration within INPS. By standardizing design and interaction principles, internal teams and an extensive network of contractors now operate with a common understanding and set of tools. This regular collaboration has not only streamlined processes but also enhanced the quality of outputs, as diverse teams contribute seamlessly to the organization's digital transformation.

Achievements and Recognition:

The deployment and evolution of the Sirio design system have been marked by significant achievements and industry recognition:

Robust Implementation: Since its inception, there have been 8 major releases of the Sirio design system, contributing to the development of more than 35 digital services in addition to the institutional portal and native app. This extensive application underscores Sirio's versatility and adaptability across different platforms and user needs.

- **Component Development:** Approximately 1100 components have been created within the Sirio framework, which have been instrumental in providing scalable and reusable solutions for various user interfaces across the organization.

- **Collaborative Effort:** Over 25 companies have been involved in the design and utilization of the Sirio design system, highlighting its broad acceptance and integration within the professional community.

- **User Impact:** To date, Sirio has directly impacted over 10 million users, with a potential reach of 45 million. This significant user base reflects Sirio's effectiveness in enhancing user interactions across INPS's digital offerings.

- **Awards and Honors:** Sirio's excellence in design and implementation has been recognized with several prestigious awards, including a Silver at

the Gov Design Awards in 2022, inclusion in the ADI Design Index 2022, and an IF Design Award in 2023. These accolades affirm the system's quality and impact in the field of design and public service.

These achievements demonstrate that Sirio is not just a tool for improving individual user interactions but a strategic asset that has transformed how INPS approaches digital service delivery and brand identity. The system's introduction has set a precedent for future initiatives, indicating that profound organizational change is possible with thoughtful design and collaborative effort.

Main Takeaways

As we reflect on the journey of the Sirio design system at INPS, several key lessons emerge that underscore the complexities and requirements for successfully implementing such transformative projects. These insights not only highlight the potential of collaborative efforts but also the careful planning and adaptation needed to navigate the challenges inherent in large-scale organizational changes.

1. Overcoming Resistance Through Collaboration

The path to deploying Sirio was laden with obstacles, such as entrenched siloed cultures, a history of unsuccessful attempts, and a complex ecosystem of teams and vendors. A collaborative approach proved essential, serving as the key to unlocking the potential of Sirio by harmonizing efforts and aligning diverse stakeholder groups.

2. Valuable Collaborative Tools Identified

The experience gained from Sirio has highlighted several tools that have been particularly effective in fostering collaboration:

- Community of Practice: Establishing a shared vision within a community of practice helped in aligning diverse teams and external contributors towards common goals.

- Balanced Team Dynamics: Utilizing large teams for workshops and reviews to gain wide-ranging insights and smaller teams for focused production tasks ensured efficiency and thoroughness in execution.

- Utilizing Existing Foundations: Leveraging pre-existing resources and foundations enabled a smoother transition and integration of the new system, avoiding the pitfalls of starting from scratch.

3. The Challenges of Collaboration

Despite the benefits, collaboration is not without its challenges. When alignment on goals is low and competition for control is high, the effort and resources required for collaborative processes can outweigh the benefits. This scenario demands a strategic reassessment to either enhance alignment or manage competitive dynamics more effectively.

In conclusion, the development and implementation of the Sirio design system illustrate the transformative power of well-executed collaboration, integrated with strategic use of community practices and adaptive team management. These takeaways not only serve as a roadmap for future projects within INPS but also offer valuable insights for any organization looking to undertake similar comprehensive and collaborative transformations.

Data as Commons:
The Power and Impact of Open Data

Authors

Maurizio Napolitano
Bruno Kessler Foundation

Biography

Technologist at the Bruno Kessler Foundation and Head of the Digital Commons Lab. He focuses on developing policies, actions and software related to open data, a key theme in cities and data. In his spare time, he engages in civic hacking and creating maps for smart cities, a mix of technology, data and community engagement that drives his career.

Keywords: Data Commons, Transparency, Collaboration, Participation, Data Literacy

Abstract

In the digital age, the idea of data as commons underscores the importance of making data accessible, transparent, and usable for everyone. Using a pizza metaphor – from ingredients (data) to the final dish (knowledge) – the text highlights how the ability to turn data into understanding depends on those who can collect, process, and present it. While access to data was once limited, the 2009 Open Government Initiative marked a turning point, promoting transparency, participation, and collaboration.

Examples such as Open Parlamento, Monithon, civic data projects on urban spaces, and humanitarian mapping through OpenStreetMap show how open data can improve accountability, challenge misconceptions, and support community action. Yet data literacy remains essential to avoid misinterpretation. Treating data as a common resource can help build a more informed, engaged, and empowered society.

In the context of the digital age, the concept of "data as commons" has gained significant importance. While the term "open data" is often used. Here we prefer to use "commons" because it more accurately highlights a reality to which we must pay increasing attention in our everyday digital lives.

Commons refer to resources accessible to everyone, fostering collaboration and shared use.
To understand the importance of data, we will use a metaphor related to food, specifically pizza, from its creation to its consumption.

We divide this process into four stages: data, information, presentation, and knowledge.

In our metaphor, data are the basic ingredients (flour, water, oil...): those without which it is impossible to create a pizza.

Information is the way these "data" are processed, while presentation is how everything is displayed (e.g., the arrangement of ingredients) to stimulate appetite. Here, the skills of the pizzaiolo (pizza maker) are central in knowing how to handle the ingredients and present them (corresponding to data visualization). However, what remains at the end of this process is an empty plate with few traces of what was the final product but also its main goal, which, in the case of data, is to create knowledge.

This highlights that while the need for knowledge is central to everyone, the ability to extract it from data is strongly tied to those who can manage, understand, and process the data (it is a long supply chain). In the past, the people capable of having a complete vision of this supply chain were few; they were particularly domain experts who, in addition to the finished product (the pizza), also wanted access to the data (the ingredients) to increase, verify, or produce knowledge.

An amazing example come from this sentence, where Cesare Battisti – the author – in the preface "Il Trentino" – a book about the geography and society of his region – wrote "I could have certainly done more, especially regarding the statistical aspects, however, in our country both private and non-profit organizations show reluctance relying on public domain for data, information and content".

And, as absurd as it may seem, it took more than a century before the importance of data access became a widely recognized and felt necessity.
The absolute most important contribution, however, that made it possible to break out of the niche of domain experts was with Barack Obama in 2009 who, in his memorandum of understanding using the words "transparency and open government" launched a policy that saw the opening up of data.

The journey is still long, but its effects are commonplace. The open government policy is guided by three key words: transparency, participation, and collaboration.
The role of data is seen as crucial, primarily for the concept of transparency, but it is thanks to this that all actions related to participation and collaboration can be triggered. Making data available to anyone for any purpose is not only strictly related to the theme of public administration, but it is the social value that ensues which we like to highlight.
We do this with some very simple and effective examples.

Starting with transparency, the first project that absolutely must be mentioned is "Open Parlamento" (open parliament): a website with a long history where anyone can view the metrics (the data) of the activities of politicians involved in the Italian parliament.

From the site, you can learn not only the classic details such as the party affiliation or the represented region, but also all the parliamentary interventions: from attendance to votes and proposed laws, as well as comparison parameters with parties and politicians.

The example of Open Parlamento falls under the good practice of the three keywords of open government: transparency. Regarding participation and collaboration, one of the most interesting projects is Monithon: a platform where the community can verify the data of the European social cohesion funds. Here, reports are collected from people who verify if the money has been spent well.

The case of *Monithon* (a neologism for "monitoring marathon") is therefore one of the most successful examples of the open government theme. However, data can also create even more powerful actions, such as helping to overcome perceptions.

An example of this comes from the story *Repubblica Popolare di Bolzano* by Matteo Moretti. In 2014, one of the local newspapers in the city reported an invasion of Chinese people, even suggesting the creation of a Chinatown. Moretti, acknowledging this perception, began collecting data and conducting interviews, eventually explaining that the invasion was non-existent and fueled by the emergence of more commercial activities managed by Chinese people.

A fascinating website, composed of well-explained data and striking video interviews, which then leads the reader to significantly increase their awareness of the issue. Similarly, in New York, the SidewalkWidths NYC project was born, where a civic hacker, starting from the polygons that describe the sidewalks, calculated their width and generated an interactive map to visualize them according to a five-level classification.

The same project was later replicated by the author for Italy, using the same data released by public administrations. This project showed significant coverage (about half of the Italian regions) and also shifted the debate towards the importance of critical infrastructures.

He also replicated a project from Ottawa, creating the website Bici Stressate dal Traffico, which highlights the perceived level of insecurity that a cyclist feels when traveling on all Italian roads. The algorithm extracts data from OpenStreetMap – the collaborative project for collecting open geographic data on an international scale – and from there calculates the level of perception in relation to the road's architecture and how it is positioned within the street graph.cture for pedestrian mobility, which is crucial in cities.

As an innovation laboratory, countless applications revolve around the project: from data collection in the most diverse ways to data reuse (as seen earlier in the case of cyclists' stress perception). One of the most successful scenarios is in humanitarian aid: when a place in the world is hit by a natural disaster, the non-profit organization HOT (Humanitarian OpenStreetMap Team) intervenes by inviting the community to collect useful data for the purpose. Most often, this involves tracing buildings and/or roads from satellite images. The coordination takes place through a platform where individual tasks are defined.

Many people around the world contribute daily to collecting this data, to the point that mapping initiatives often arise. One such initiative was organized by Marco Minghini in Milan with over 200 children: the task was to trace buildings in Swaziland. It was an old task where the work to be completed was in the peripheral areas.

An initiative that was completed with great success and enthusiasm. However, the story doesn't end there. A few months later, Marco attended the State of the Map conference (the international conference of OSM users) and met Davey. The latter works for an NGO in Swaziland. As soon as he heard "Swaziland," Marco immediately recounted his mapping experience, and Davey responded with a big hug, saying, "You don't know! I was completing that task alone because my job in Swaziland was to identify where to build bridges to allow children from villages to reach schools, and the work you did saved me a lot of time."

And this is yet another aspect of data as a common good: the enormous potential to generate serendipity.
Despite the benefits, challenges remain. Data literacy is crucial to ensure that data is correctly interpreted and used. Misrepresentation of data, whether intentional or due to lack of understanding, can lead to misinformation. It is essential to educate people on how to read and use data effectively. As we move forward, fostering a culture of data literacy, transparency, and collaboration will be vital. By treating data as a common resource, we can create a more informed, engaged, and empowered society.

In conclusion, the concept of data as commons emphasizes the importance of accessibility, collaboration, and transparency. Through various projects and initiatives, we can see the transformative power of open data in action. Only by continuing to advocate for open data and fostering community engagement, we can unlock the full potential of this valuable resource.

Sete Festival: Water is the Relationship

Authors

Emanuele Lapiana
oSuonoMio - Founder

Biography

Entrepreneur and sound artist with a long history in the world of sound and communication. After experiences in music and the distribution industry, he founded oSuonoMio, a sound communication agency and podcast production house. He is creator of Sete Festival, Sonoro Fruscio park, SENSO card game and more.

Keywords: Interaction, Activism, Politics, Entertainment, Climate Change and Water Scarcity

Abstract

Sete is the first Italian festival dedicated to the water emergency, inaugurated in Rovereto in July 2023. Initially born as a narrative podcast on issues related to the water crisis, such as climate change, migration and consumerism, the project gained great appreciation and recognition, leading to the creation of the festival. Through the podcast, a network of activists, scientists, politicians and artists developed, united by the need to promote an inclusive social dialogue on water. The festival, held on 8–9 July 2023, took shape in a central park in Rovereto, involving broad sectors of the citizenry through interactive activities such as talks, round tables, games and workshops. The audience was divided into different categories, including children, teenagers, experts and influencers, with specific activities for each group. Initiatives such as the "water sommelier quiz" and the first symbolic water strike, in collaboration with the municipality of Rovereto, stimulated reflection on the importance of water and local water resources. The 2024 edition saw further growth, both in terms of participation and national awareness, with prominent guests. Several long-term projects were born thanks to the festival, such as "water data gamification," a collaboration between students, designers and academics. Sete Festival is now preparing for its third edition, with new awareness of the importance of cooperation and civic awareness.

Sete is the first festival in Italy on the water emergency in Rovereto. Initially, it started as a fictional podcast on complex and controversial issues related to the water emergency, such as climate change, migration, consumerism and, inevitably, the capitalist system. The podcast received excellent feedback, being selected as one of the best at the ilPod award (in short, the Oscars of the Italian podcasting).

The podcast's content curation process allowed us to meet activists, researchers, scientists, politicians, artists, and citizens, consolidating a proper network of experts and concerned people. As the exchanges and the network grew, we found that the need for social and political dialogue without prejudice and deception was a recurring theme. Not all activists are extremists, just as not all companies are insensitive to climate change issues.

If we look at the sectors that make up our society from a perspective of interdependence, it becomes evident how economic, social, political, and cultural issues are all linked to water, like communicating vessels. This relationship of interdependence has become even more apparent and fragile in the wake of the COVID-19 emergency. Water is the only thing that unites all sectors of society; water is a relationship in its pure state.

Based on these reflections and premises, the Sete Festival was born. Its first edition was held on 8–9 July 2023 in Rovereto (Trento), in a beautiful park in the city centre near the MART (Museum of Contemporary Art). A place open to all citizens, in a green oasis where we involve as many social partners and representatives as possible. Through various communication channels such as talks, round tables, and activities such as games and workshops, we stimulated the exchange of ideas and discussions, also contemplating forms of conflict and stratagems for their mitigation so that each participant could find an entry point suited to his or her own sensitivity, knowledge, and intensity.

The identified target audiences were mainly clustered into seven categories: 1) children, 2) adolescents, 3) citizens, 4) concerned people, 5) experts, 6) scientists, and 7) influencers. Based on these categories, specific activities were planned for their involvement, as well as the exchange of expertise and connections between the different audiences.

For example, a talk between some young activists from the Last Generation and Extinction Rebellion and MART curator Denis Isaia, who belongs to the category of the so-called boomers, was activated. A meeting revealed how global issues such as climate and water emergencies override clichés and stereotypes, as well as generations.

The Water Sommelier Quiz made several citizens reflect on the stereotype that water is tasteless and colourless. It raised awareness of Rovereto tap water quality and contributed to a greater understanding of consumption and one's habits. In this regard, a collaboration with the Municipality of Rovereto was also activated regarding citizen involvement and awareness, which made the first Water Strike in its history possible. For 10 minutes, the water supply was interrupted in all public administration facilities. It is a symbolic action that aims to stimulate critical reflection on the importance of a commodity we take for granted and requires more outstanding care. The Sete Festival is an event for everyone, where children and adults can experience and play while learning. Above all, it would not have been possible without the collaboration and cooperation of a network of volunteers who, in different capacities (administrators, politicians, activists, scientists, researchers, experts, supporters), made the event possible, united by a common concern: the water emergency.

More than 12 months after the Sete Festival 2023, initial reflections can be drawn on its impact on the population and participants. First, the Sete Festival was replicated in 2024, and we are working on the 2025 edition. The 2024 edition witnessed greater civic participation and benefitted from a broader national prominence, with prominent national relevance guests such as botanist Stefano Mancuso, influencer Entropy for Life, comedian Fabio Celenza, Doctors without Borders, politician and activist Giovanni Mori, and many others.

Various short- and long-term impacts resulted from the project, one example of which was the Water Data Gamification installation, which came about thanks to the WUD 2023. Sara Doetsch, a student on the Master's degree course in Eco-Social Design at the Free University of Bozen-Bolzano, was particularly impressed by the talk about the Sete Festival 2023, going so far as to volunteer for the next edition as a designer. In parallel, Matteo Moretti, who participated at the Sete Festival 2023 as a

speaker, was again involved in designing an informative installation on water consumption citizen's behaviour. Inevitably, they collaborated, creating a project that made water both the subject and object of interaction, involving adults and children through participatory data physicalisation (Moretti & Mattozzi, 2020).

We are working on the 2025 edition: in our third year, we have solidified the Festival's original vision. It is essential to engage the most diverse and seemingly distant sectors of society: businesses, activists, artists, administrators, researchers, and institutions. When they come together at the same table, they can generate a collective thought far beyond what one might expect.

The goal for 2025 is to extend the Festival's organizational network and to become even more incisive on the ground on a 'physical' level. We do not yet know in what form, but we are thinking about it; thought must also become action. We shall see! :)

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Knock on WUD - The Evolution of WUDRome
Bridging Connections and Cultivating Design Excellence

Authors

Carlo Frinolli
Dynamo / Caffeina

Biography

Head of Design at Dynamo (@Caffeina), with over 20 years of experience in strategic design. Founder of NOIS3 and creator of WUDRome since 2014, Italy's leading event on usability, he has contributed to the growth of the design community. His mission: to transform design into a strategic tool for innovation. Always curious, with strong opinions, but in the end, the answer is 42.

Keywords: Community, UX/Service Design, Workshops, Diversity & Inclusion, Innovation

Abstract

WUDRome, initiated in 2014 by NOIS3 co-founders Imke Bähr and Carlo Frinolli, has matured beyond a mere conference to a pivotal hub for design innovation. Starting in a revived venue near Fiumicino airport, adorned in WUDRome's vibrant yellow and black, the event has symbolized creativity and potential.

The hands-on approach ensured each aspect – from venue design to workshop content – mirrored WUDRome's identity and ethos of innovation, community, and excellence. Annually attracting roughly 300 participants on average, WUDRome emphasized impactful learning and active engagement in societal role discussions through design. Workshops advocated for functional, accessible designs over mere aesthetics, enriching Italian design dialogue. Esteemed speakers, including Vitaly Friedman and Simona Maschi, alongside influential women like Dee Scarano, Maura Gancitano, and Rosana Ardila, have shared diverse insights, enhancing our community's design practice. Local and global voices, from Vincenzo Di Maria to Microsoft's Anat Katz-Arotchas, bridged local expertise and worldwide trends. Each edition explored themes like sustainability and digital impacts, creatively reinterpreted to maintain relevance and inspire innovation. As WUDRome evolves, it remains a beacon for designers, continually pushing creative boundaries and addressing ethical design challenges.

In 2014, Imke Bähr and I, as co-founders of NOIS3, a pioneering UX and Service Design studio, embarked on a mission to foster a robust design community in Rome with the launch of WUDRome.

Our objective was dual-purpose: not only to connect and learn from leading figures in the design world but also to enhance the visibility and influence of NOIS3 within this vibrant community. Over the years, WUDRome has grown to be more than just a conference: it has become a vital nexus for innovation and professional growth in design.

Fig. 2014-1

The Venue as a Statement of Transformation

Our journey began in an abandoned space near Fiumicino airport, which we transformed into a lively hub for design discussions. Adorned with the dynamic yellow and black of our brand, this venue symbolized the reawakening of a dormant space and the ignition of creative potential.

Hosting the first five editions of WUDRome, it served as a physical manifestation of our commitment to revitalizing and reimagining how and where design communities can thrive.

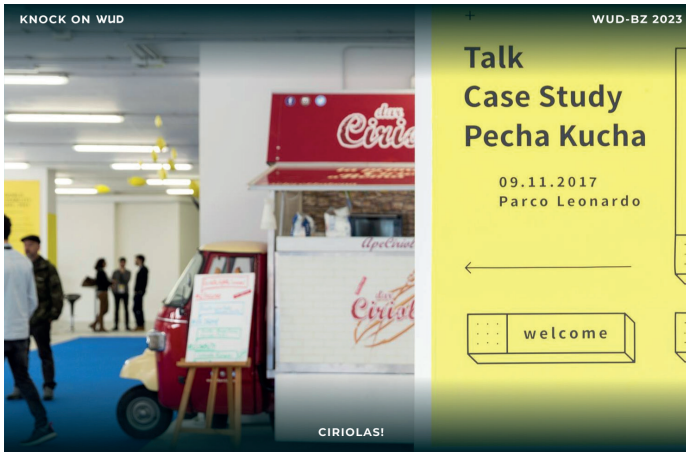


Fig. 2017-4

In all the prepandemic editions, together with our team @ NOIS3, we prided ourselves on our hands-on approach to organizing WUDRome, ensuring that every single aspect of the conference was meticulously planned and executed. Our team's dedication to creating a holistic experience meant that from the moment attendees stepped into the venue, every detail – from the design of the space, the color schemes, and the layout, to the selection of speakers, the content of the workshops, and even the catering – was in perfect alignment with the WUDRome brand and our overarching vision.

This consistency was crucial in providing a seamless and immersive experience that not only reflected our identity as a design studio but also reinforced the principles of innovation, community, and excellence that WUDRome stands for. This attention to detail ensured that every element of the conference contributed to a cohesive narrative, making each edition of WUDRome a definitive expression of our commitment to pushing the boundaries of design.

Establishing a Premier Design Gathering

Each year, WUDRome attracted an average of 300 – mostly returning – attendees, a testament to its growing significance and appeal. Our meticulous curation of content – free from superficial commercial pitches – ensured that each session delivered substantial, impactful learning experiences. This commitment to quality helped us build a platform where designers were not only spectators but active participants in a broader dialogue about the role and impact of design in society.

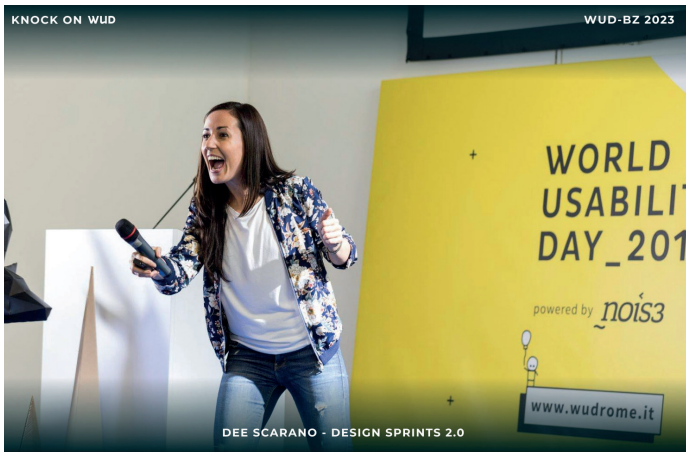


Fig. 2018-4

In line with this vision, WUDRome hosted a variety of workshops designed to foster greater awareness and cultivate a richer design culture in Italy. These workshops were not only technical skill-building sessions but also forums for discussing the philosophical and practical implications of design in everyday life. A major focus of our workshops was to advocate for a shift from merely creating aesthetically pleasing user interfaces to designing truly effective and usable experiences. We emphasized the importance of functionality, accessibility, and inclusivity, advocating for designs that serve all people, not just a select few. This approach has helped elevate the conversation around design in Italy, pushing for a more thoughtful and impactful practice that values substance over style and prioritizes the user's experience above all. Through these educational and transformative sessions, WUDRome has played a pivotal role in shaping a more sophisticated and conscious design landscape across the nation.

A Roster of Esteemed Contributors

The caliber of speakers at WUDRome has been a cornerstone of its success. From the inception, figures like Vitaly Friedman set the bar high, providing attendees with invaluable insights into user experience and web usability. In the latest edition, instead, insightful figures such as Simona Maschi from the Copenhagen Institute of Interaction Design, have shared their expertise, enriching our community's understanding and practice of design.

One aspect of WUDRome that we take particular pride in is our commitment to diversity and inclusion, especially in promoting the voices of insightful women who are leading the way in design and technology. Over the years, we've been honored to host a remarkable roster of women who have shared their vision and expertise, significantly enriching the dialogue at our conferences. Notable among them is Simona Maschi, whose con-

Fig. 2018-6

Fig. 2019-5

Fig. 2019-7

tributions to interaction design have been profoundly influential.

Dee Scarano, who was the Training Lead at AJ&Smart during her involvement with WUDRome, brought a dynamic perspective on design thinking and innovation. Rosana Ardila, as the UX Lead at Mozilla, shared valuable insights into creating user-focused web environments. Anat Katz-Arotchas, now a part of Microsoft, and Ruth kikin-Gil, also at Microsoft, have both provided our attendees with perspectives on integrating ethical considerations and accessibility into product design.

In healthcare, Daniela Petrillo, at the time a Service Designer in a healthcare-related facility, offered an in-depth look at how design principles are applied in critical, life-impacting environments to improve patient experiences and outcomes. Maria Rosanna Fossati's expertise in prosthetic design brought to light the intersection of technology and human needs, enhancing our understanding of user-centered design in sensitive applications.

Charlotte Davies, then at the BBC, and Katie Arnolds, one of the minds behind the design case study for homeoffice.gov.uk, both provided unique insights into how large organizations harness design to serve complex and diverse populations effectively. Last but not least, we explored philosophy topics with the Italian Philosopher Maura Gancitano, from the publishing company TLON.

These women, among others, have not only shared their expertise but have also inspired a generation of designers to think more broadly about the role of design in society. Their contributions have underscored the importance of diversity in design thinking and have been instrumental in broadening the horizons of our community at WUDRome.

Moreover, WUDRome has been honored to host speakers from some of the world's leading tech and design-centric organizations, including Mozilla, Microsoft, Google, and Philips. These presentations have offered our audience a rare glimpse into the cutting-edge practices and innovations shaping global design landscapes.

Local Voices, Global Resonance

In addition to international figures, WUDRome has spotlighted influential Italian designers such as Vincenzo Di Maria, whose work in community-centered design has

been transformative. Stefano Bussolon, known for his psychological insights into user experience, and Raffaella Roviglioni, whose research has deeply influenced design education, have also graced our stage. Together with the thought-provoking visions from Jacopo Romei, and his visions on Contract Negotiations, or Guido Martini about UX Dark Patterns, these speakers underscored the rich diversity of thought and practice within the Italian design community, bridging local expertise and global trends.

Expanding the Dialogue on Design

Each edition of WUDRome has explored themes that are at the forefront of the design industry. From sustainability and ethical design to the implications of digital technologies on human behavior, our conferences have consistently reflected the evolving challenges and opportunities in design. This thematic variety not only keeps our content fresh and relevant but also pushes all participants to consider the broader implications of their work.

While the yearly theme of WUDRome is selected by the UXPA, our team at NOIS3 has always embraced this guidance with a creative twist, ensuring we present these topics in unique and insightful ways. This approach allows us to delve deeper into each theme, uncovering angles that are far from banal and often overlooked. By reinterpreting these themes through our unique lens, we challenge both ourselves and our attendees to think outside the conventional boundaries of design discourse. This method fosters a richer, more engaging experience at our conferences, sparking conversations that drive innovation and push the field of design forward. Through this creative reinterpretation, WUDRome not only adheres to global discussions but also sets trends and offers new perspectives that resonate well beyond our sessions.

Looking Forward: The Future of WUDRome

As we look to the future, WUDRome remains dedicated to its original goals of education, connection, and innovation. The format and themes may evolve with the times, but the essence of WUDRome will continue to inspire and engage the design community. We are committed to exploring new ideas and approaches that will keep pushing the boundaries of what design can accomplish. Stay tuned as we continue to innovate and adapt, ensuring that WUDRome remains a beacon for both aspiring and established designers. The journey of connecting, learning, and innovating together is far from over. With each new edition, we recommit to a future where design not only solves aesthetic and functional challenges but also addresses the pressing social and ethical questions of our time.

Thank you for being an integral part of this evolving story. As we move forward, WUDRome will continue to be a space where creativity thrives and where every member of our community can find inspiration and a sense of belonging. Join us as we forge ahead, shaping the future of design with every conversation, workshop, and panel discussion. WUDRome is here to stay, and together, we will define the next chapters of this extraordinary venture.

Social Collaboration

Authors **Davide Falzone, Silva Rotelli**
Piano B Social Design

Biography Collective of artists, designers and teachers who bring social innovation projects to life through art and inclusive design workshops for collective well-being, interpersonal relationships, cultures and generations with innovative impact. Provides art direction for the Volontarius Group to talk about social work, facilitate dialogue, and create experimental multimedia communication products between analog and digital.

Keywords: Social Design, Inclusivity, Community Engagement, Art & Multimedia, Impact

Abstract

How can the role of the Designer be activated to meet the needs of the collectivity? What impact can the discipline of Design have in the social sphere? The talk addresses these questions by presenting case studies and projects implemented by PianoB Social Design in the South Tyrolean territory, bringing back experiences, approaches, and results.

The Bridge. A Citizen Science Project to Bridge the Gap between Science and Society

Authors

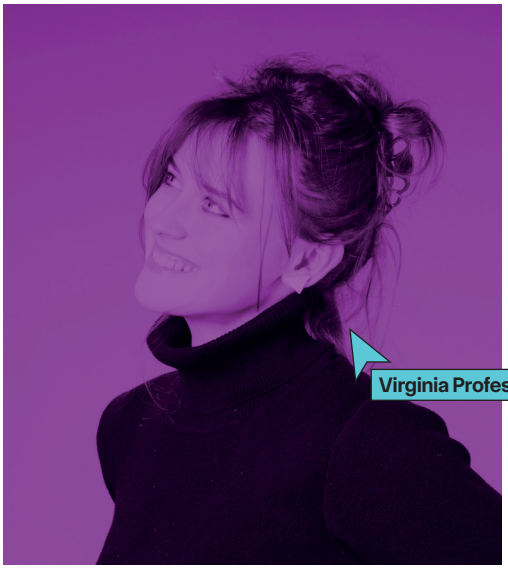
Lisa Bachmann
Master in Eco-Social Design - Free University of Bozen-Bolzano
Advanced Quality Engineer at Intercable Automotive Solutions

Virginia Professione
Master in Eco-Social Design - Free University of Bozen-Bolzano
Research Assistant at the Free University of Bozen-Bolzano

Biography

Lisa Bachmann is an Industrial Designer and currently employed as Advanced Quality Engineer in the automotive sector.

Virginia Professione is an Industrial Designer. She oversaw the exhibition of the “Long Night of Research event” at UniBZ. They both completed the Master degree in Eco-Social Design at Free University of Bozen-Bolzano.



Keywords: Citizen Science, River Ecosystem, Transdisciplinarity, Co-Design, Scientific Dissemination

Abstract

This paper delves into the potential of eco-social design to connect science with society through Citizen Science initiatives. Focused on a case study in Emilia-Romagna, Italy, it examines challenges in environmental monitoring and community engagement. Emphasizing the crucial need for effective communication between experts and the public, the thesis, *The Bridge*, aims to enhance understanding by leveraging design to democratize scientific education and promote participatory science. Using a transdisciplinary approach, it develops innovative water monitoring methods utilizing macroinvertebrates as indicators. The project underscores the importance of tailored strategies, collaboration, and agile methodologies in eco-social projects, reflecting on lessons learned and broader implications for sustainability and community resilience. Employing an interdisciplinary approach, the thesis project *The Bridge* integrates participatory design methods, training sessions, and co-design to create an inclusive Citizen Science initiative. The project addresses bottom-up approaches, identifying citizen needs and suitable engagement strategies. Through transdisciplinary collaboration, it aims to foster a democratic culture where scientific knowledge is openly shared and accessible to all stakeholders. The project discusses the importance of tailored approaches, emphasizing the significance of understanding local contexts and engaging communities in addressing environmental challenges.

Introduction

In today's world, there is a growing disconnect between science and society, leading to a lack of trust in scientific communication. Citizen Science offers a transformative approach to bridge this gap by involving the public in scientific research. This paper explores how integrating Citizen Science with Eco-Social Design can enhance river ecosystems. By empowering citizens to participate in scientific data collection, this collaborative model aims to increase public engagement, promote environmental stewardship, and support informed decision-making.

The principal research question of the thesis project is:
"How can Design become a medium of cultural change, empowering citizens by facilitating and democratizing scientific education?"

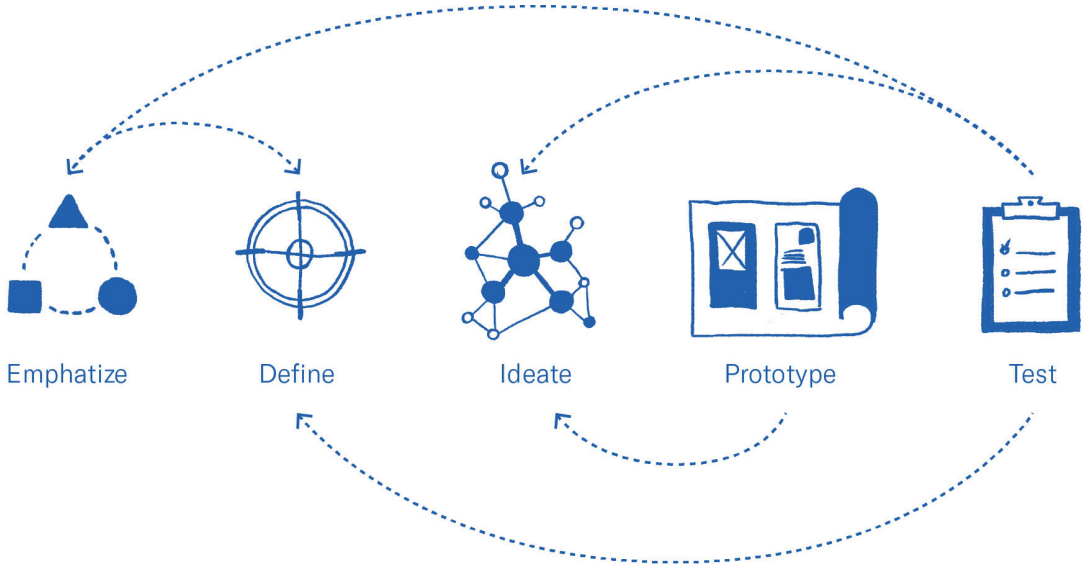


Fig. 1

Citizen Science & Design Thinking

Citizen Science involves the public in scientific work in collaboration with professionals, aligning well with design thinking principles. Known for its human-centric problem-solving approach, the methodology provides innovative methods to address complex environmental issues. By merging Citizen Science with design thinking methodologies, stakeholders can co-create solutions that emphasize environmental sustainability and social equity (Fig. 1).

A bottom-up approach is crucial in maintaining consistency in data gathering from citizens. Citizen Science is an impactful way to tackle environmental issues by involving the public in scientific research. Rick Bonney (2009) defined Citizen Science as "a research technique that takes advantage of the help of members of the

public to collect scientific data", highlighting the validity of the gathered data. Citizen Science projects are gaining importance and acknowledgement internationally in addressing environmental challenges and issues. The UN describes Citizen Science as one of the main tools to adapt to reach the Sustainable Development Goals of their Agenda 2030 (United Nations, 2015), tackling diverse eco-social goals that have to be reached by the involved countries.

Benefits of Citizen Science in Monitoring River Ecosystems

Integrating Citizen Science in river ecosystem monitoring provides numerous advantages. Engaging citizens in data collection allows researchers to gain valuable insights into ecosystem health and dynamics. Additionally, Citizen Science projects raise public awareness, enhance environmental education, and facilitate the spread of scientific knowledge. Through participatory methods, citizens become active participants in conservation efforts, contributing to the preservation of river ecosystems (Fig. 2).

Fig. 2

Tailored Approaches in Citizen Science

The core of Citizen Science projects lies in engaging and involving citizens in scientific research, which has endowed this approach with significant recognition and popularity from the international scientific community. Tailored approaches, which customize the design process to meet participants' specific needs, interests, and capacities, are essential. This inclusivity fosters participation by acknowledging diverse experiences and motivations. As Hecker et al. (2018) emphasize, aligning project objectives with participants' values enhances personal relevance and commitment. Shirk et al. (2012) advocate for integrating participant-centric design principles, aligning with participants' skills and preferences, which leads to more effective and impactful outcomes. Tonkinwise (2019) underscores that successful design is contextually sensitive, meeting the community's specific needs and involving them in the design process (Fig. 3).

Fig. 3

Training format

The San Lazzaro Project aims to monitor the quality of river ecosystems in the Idice and Zena rivers by assessing macroinvertebrate populations (Fig. 4). By gathering data on the presence or absence of diverse macroinvertebrates, this monitoring activity will complement the existing parameters such as nitrates,

Fig. 4

phosphates, turbidity, river characteristics, E. Coli, and riparian vegetation. Including macroinvertebrate monitoring will provide a more comprehensive and detailed understanding of the health of the river ecosystem. Citizen Science plays a significant role in this project, as it allows for the active participation of local communities in scientific research. The project is proof of the collaborative efforts made to connect with various associations in San Lazzaro, who are working together to implement Citizen Science initiatives. The training format follows a structured process consisting of three main stages: training, monitoring process with data collection, verifying data quality through the experts including the following processing to gather results.

A Co-Design toolkit

Our co-design with researchers resulted in a scientifically valued toolkit for monitoring macroinvertebrates in river courses, still in use in diverse universities and Citizen Science associations. Macroinvertebrates were chosen for their effectiveness as indicators of water conditions, given their widespread presence, ease of sampling, and varying sensitivity to pollution (Stark et al., 2001). Their presence accurately reflects water quality, making them ideal for engaging citizens in a Citizen Science project (Fig. 5).

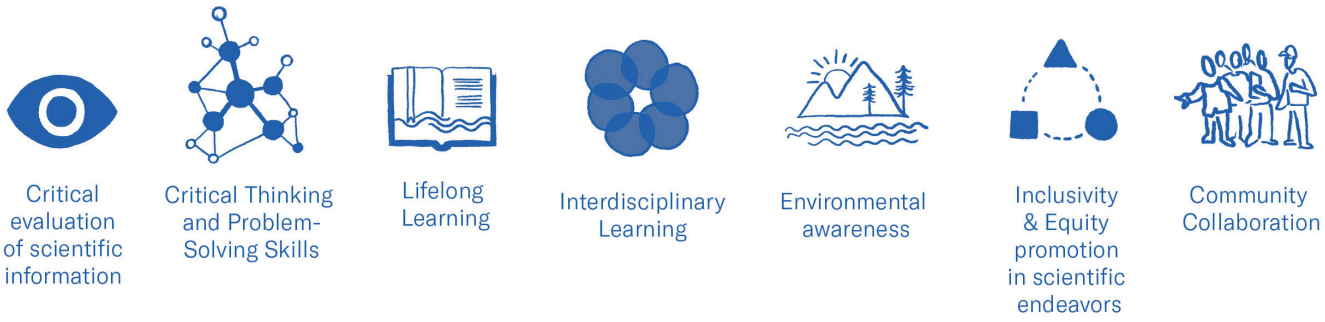


Fig. 5

Fig. 6

Collaboration with experts provided essential insights into the ecological and environmental significance of these organisms. Inspired by the famous methods Fresh Water Watch and various scientific identification keys, the toolkit underwent multiple iterations, incorporating feedback from Scientist and citizen scientists to enhance accessibility and relevance (Fig. 6).

The final toolkit includes validated worksheets and models, infographics to aid understanding, and emphasizes skill and knowledge development through practical experience.

The toolkit includes two types of field cards for data recording, a generic and a specific dichotomous key for

macroinvertebrate identification, and additional materials for expert supervision during initial monitoring sessions. The waterproof design ensures longevity and suitability for repeated use, essential for releasing macroinvertebrates back into the river after monitoring (Fig. 7).

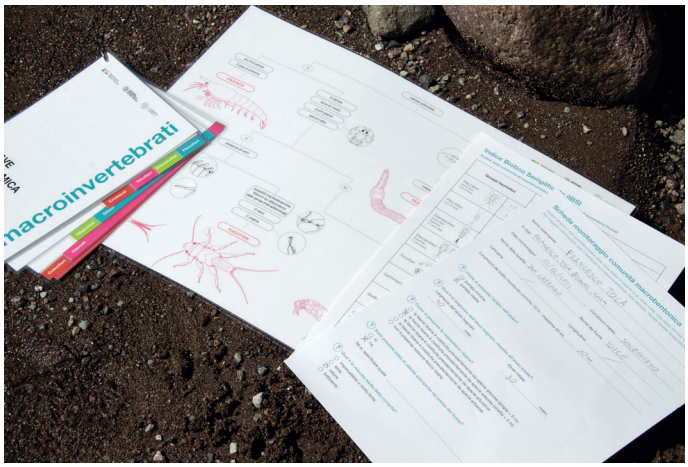


Fig. 7

Alongside the co-design process, we developed the entire communication strategy for the toolkit, making it freely accessible online to anyone interested. To enhance the scientific validity and appeal of the project, we also redesigned the visual communication of the Osservatorio di Citizen Science website, including its visual identity and the organization of information and graphic style.

The Osservatorio di Citizen Science involves experts (river ecologists, HCI specialists, and designers), citizens (who bring their knowledge and skills of the territory, as well as specific input concerning their profession or passion - such as law or manual skills), and institutions (schools of the area, municipality, university). The next step the group is working on is the connection with the ARPA of the Emilia-Romagna region and offering them the data gathered from the Citizen Science activities to facilitate and augment the impact of the projects.

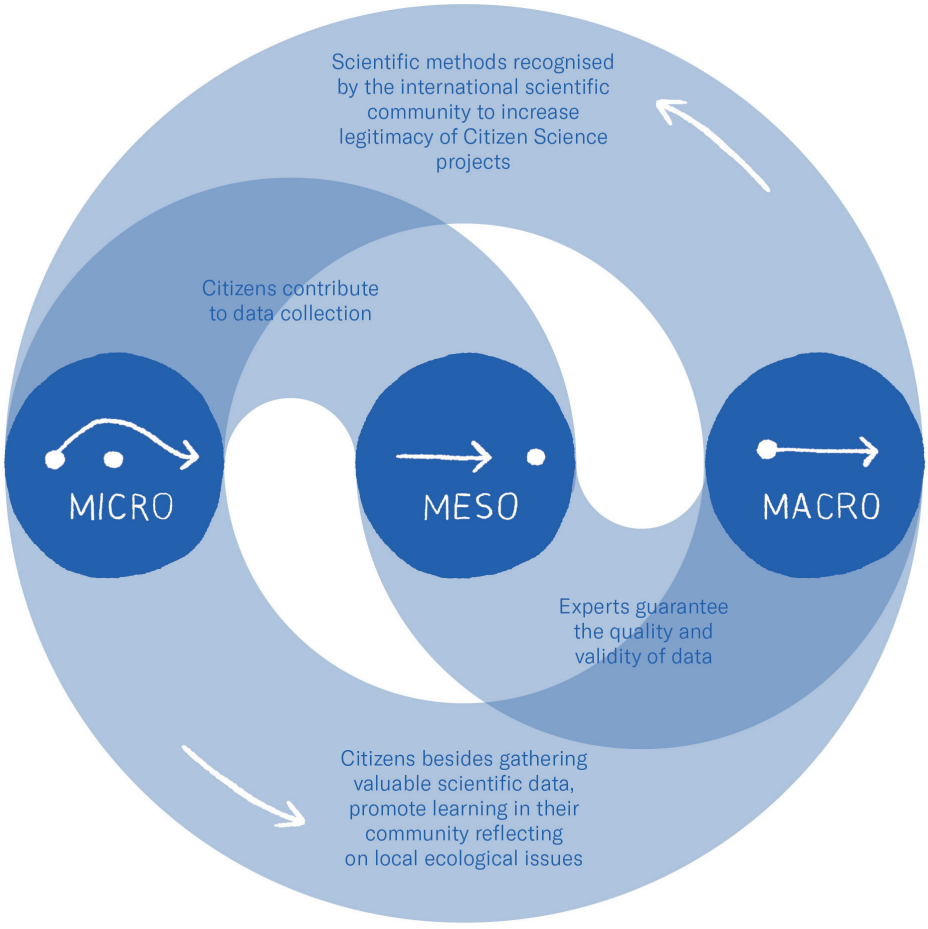


Fig. 8

Scientific Validity

Scientific validity and recognition of data collected by citizens are cornerstones of the Citizen Science method. Simplifying scientific methods for citizen accessibility while maintaining scientific integrity is crucial (Gumiero, 2022). Experts validate and analyze the data collected by citizens, ensuring its accuracy and reliability. As Oscarson and Calhoun (2007) note, data collected by citizen scientists can be comparable to those collected by trained experts. Educating policymakers about Citizen Science's validity and credibility is necessary to increase project legitimacy and impact (Fig. 8).

Trumbull et al. (2000) state: "[...] with thoughtful study design and under the right circumstances, citizen science can work on a massive scale, generating high-quality data that lead to reliable, valid scientific outcomes as well as unexpected insights and innovations" (as cited in Wiggins & Crowston, 2018, p. 1). Besides gathering valuable scientific data, citizen scientists also actively promote transformative learning in their community whilst reflecting on local ecological issues they want to address (Folke et al., 2009).

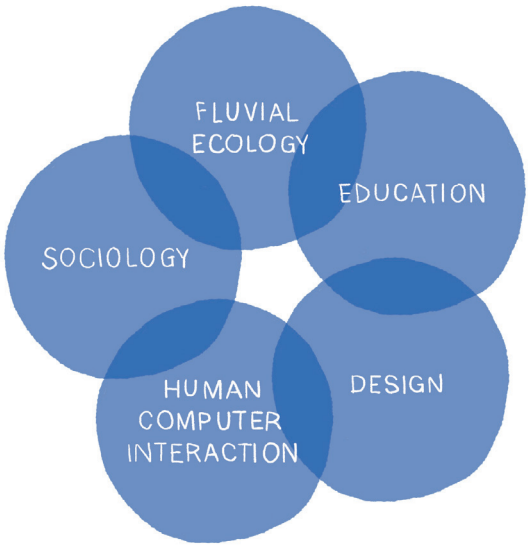


Fig. 9

Transdisciplinarity & Co-Design

Transdisciplinarity is at the core of Citizen Science, serving as a foundational principle that underpins the collaboration between scientific experts, citizens, and various institutions or entities. Within the context of Citizen Science projects, transdisciplinary collaboration is essential for several reasons. Firstly, the development of these projects requires input from a diverse range of experts representing different sectors. Given the complexity of environmental issues tackled by Citizen Science initiatives, such collaboration draws upon insights from disciplines such as biology, ecology, social sciences, technology, psychology, and design (Fig. 9).

Moreover, by bringing together scientists, policy-makers, citizens, and non-governmental organizations, this collaborative approach promotes the exchange of knowledge and fosters a holistic understanding of environmental challenges. In parallel, co-design emerges as a participatory approach that complements transdisciplinary collaboration within Citizen Science projects. Co-design emphasizes the active involvement of diverse stakeholders, including citizens, scientists, and designers, in the design process (Fig. 10).

Fig. 10

This participatory model fosters collaborative decision-making, ensuring that the resulting projects are relevant, effective, and impactful. By empowering stakeholders to contribute to the design and implementation of Citizen Science initiatives, co-design enhances their sense of ownership and responsibility, thereby promoting meaningful engagement and long-term sustainability.

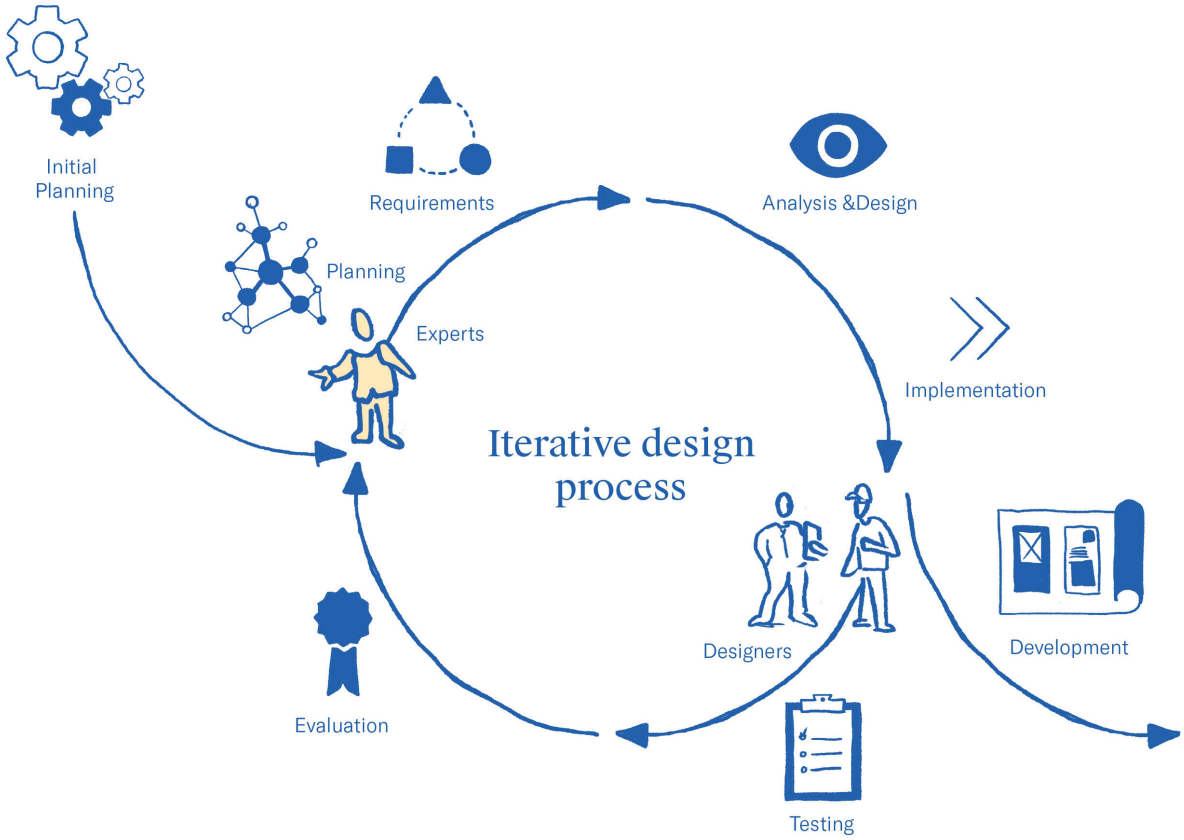


Fig. 11

Citizens play a pivotal role in co-design processes, as they possess valuable insights and expertise related to their local environments. Through active participation in project development, citizens become co-creators, shaping activities that align with their interests and priorities. Furthermore, their feedback during the testing phase informs iterative improvements to methodologies, ultimately enhancing the quality and validity of data collected through Citizen Science efforts (Fig. 11).

Magalhães et al. (2022) underscore the significance of participatory and co-design methodologies in bridging the gap between Citizen Science projects and their target audiences. By bringing together interdisciplinary groups and facilitating problem-solving processes, these methodologies foster innovation and enhance communication strategies within Citizen Science initiatives.

Through transdisciplinary collaboration and co-design, Citizen Science not only amplifies its impact on environmental challenges but also strengthens the connections between science, society, and policy.

Fig. 12

Methodology Testing

Evaluating participatory methodologies in Citizen Science projects was a key focus of this research. Co-designing communication strategies with academia, policymakers, and societal experts fostered ownership and shared responsibility among stakeholders. The iterative process of designing and testing prototypes allowed for continuous refinement based on stakeholder feedback. Probes, toolkits, and prototypes facilitated active stakeholder participation and engagement, ensuring a user-centred approach (Fig. 12).

The overarching objective was to scrutinize the credibility and efficacy of Citizen Science methodologies while identifying avenues for future refinement. Integral to the employed research methodologies was the iterative process of designing and testing prototypes (Fig. 13).

Fig. 13

This iterative model enabled stakeholders to contribute feedback and collaborate in refining research methodologies, data collection tools, and project designs, ultimately enhancing effectiveness and responsiveness to participant needs. Furthermore, the study emphasized the significance of probes, toolkits, and prototypes as essential components in co-designing processes, aligning with principles outlined by Sanders and Stappers (2008). These design tools served as tangible artefacts for communication and collaboration, eliciting valuable insights and maintaining a user-centred approach throughout the project. In consonance with the concept of co-creation, the thesis underscored the importance of fostering knowledge exchange and mutual learning between scientists and citizens.

Challenges and Opportunities

While Citizen Science in river ecosystems offers significant opportunities, it also faces challenges. Ensuring data quality and standardization, fostering collaboration among diverse stakeholders, and addressing scientific literacy issues are key challenges to address. However, by utilizing design strategies such as visual communication and interactive platforms, these challenges can be transformed into opportunities for meaningful engagement and knowledge dissemination.

Conclusion

In conclusion, integrating Citizen Science with Eco-Social Design provides a promising approach to addressing environmental challenges in river ecosystems. By fostering collaboration among designers, scientists, policymakers, and the public, this method promotes sustainable water management practices, enhances public engagement, and drives cultural change. Through innovative design interventions, we can empower citizens to actively participate in ecological conservation and create a more informed and engaged society. The findings highlight the importance of transdisciplinary collaboration and adaptive methodologies in addressing eco-social challenges and fostering a sustainable future. *The Bridge* project demonstrates the critical role of Eco-Social Design in enhancing scientific communication and public engagement in Citizen Science, ultimately contributing to environmental sustainability and community resilience.

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Index Images

With the People, for the People.
Why We Should Involve the Users in UX Design

Authors

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Biography

Stefano Bussolon is a Psychologist and Psychotherapist and has a Ph.D. in Cognitive Science; he is an adjoint professor in Human-Computer Interaction at the University of Trento and works as a freelance UX designer in Italy, specializing in user research, participatory information architecture, responsive interaction design, and usability testing. He has worked with clients in various industries: banks, insurance and financial services, tourism, transportation, and government organizations. He believes UX is about satisfying users' motivations and stakeholders' goals.

Keywords: UX Research, User-Centered Design, UX Strategy, Innovation, Sustainability

Abstract

Involving users in UX research activities is crucial for several reasons. It has a strategic value, as it reduces the risk of developing a product or service that has no market. It helps in understanding and eliciting the users' needs, thereby reducing the risk of creating something that no one wants to use. Usability testing ensures that the product is developed with minimal usability and accessibility flaws. UX research fosters innovation by interacting with individuals with differing perspectives, enhancing cognitive flexibility and boosting creativity. It allows to connect with individuals outside the stakeholders and colleagues bubble, to gain insights into their experiences and understand their perspectives. UX research activities can increase the creativity of a design team by collecting unexpected and diverse experiences from participants, facilitating cognitive flexibility. It can have a positive ethical impact, increasing the environmental, social, and economic sustainability of a product or service. Doing the wrong thing (not meeting users' needs) is socially, economically, and environmentally unsustainable. Lastly, UX research is also enjoyable as it involves talking with people, listening to them, and trying to understand their perspective.

UX Research: why is it important?

User research is the process of understanding user behaviors, needs, and motivations through various qualitative and quantitative methods such as interviews, surveys, and usability testing. It helps in creating user-centered designs and improving the overall user experience.

User research is crucial from a strategic point of view because, by understanding the target audience, companies can design solutions that are not only usable but also highly desirable, leading to increased user satisfaction and loyalty. It helps in identifying market opportunities and potential areas for innovation, ensuring that the product development is aligned with user expectations and business goals.

Despite its importance, this activity is often neglected. In the following sections I'm going to explain its role in defining strategies, reducing market risks, creating products and services that matter, reducing the probability of failure, promoting innovation and sustainability.

Strategic Advantages

The first reason is about strategy; involving users reduces the risk of developing a product or service that has no market. Involving users early on is a strategic move that can save time, money, and resources by ensuring we're doing the right thing and we are doing the thing right.

User research reduces market risk by providing valuable insights into user needs, preferences, and behaviors, allowing companies to develop products and services that are more likely to succeed in the market.

By understanding the target audience, businesses can make informed decisions and minimize the risk of investing in products or services that may not resonate with users. By understanding user needs through research, we reduce the risk of creating products that no one wants or needs.

User research helps us to do the right thing: exploring and eliciting the users' needs we can reduce the risk of developing something that no one wants to use.

Usability testing helps us to do the thing right, reducing the risk of releasing something that has usability and accessibility flaws. Usability testing helps us refine our products to be more accessible and user-friendly, reducing potential flaws.

UX Research reduces the risks of failure

What happens when a product is developed without focusing on the needs of the users, but following a technology driven approach or the desiderata of the shareolders? In this section I will show you four different products. Three of them failed in a spectacular way, the last is struggling in gaining traction. What they have in common is that all of them were a technological solution searching for a need.

Amazon Fire Phone

The Amazon Fire Phone was a smartphone developed by Amazon, first released in July 2014. It was notable for its unique features such as Dynamic Perspective, which used four front-facing cameras and sensors to track the user's movements and provide a 3D-like experience on the screen. The phone also integrated tightly with Amazon's services, featuring Firefly technology that could recognize objects, text, and sounds, providing relevant information or the ability to purchase recognized items directly from Amazon.

Despite these innovations, the Fire Phone was a failure. It received mixed reviews, with criticism focusing on its limited app ecosystem compared to Android and iOS, and the perception that its features were more gimmicky than practical. Sales were disappointing, and Amazon discontinued the Fire Phone in August 2015, just over a year after its launch (OpenAI 2024).

Its failure exemplifies the pitfalls of a development strategy overly dominated by executive vision, specifically that of CEO Jeff Bezos, rather than user-centered design principles. This leader-centric approach neglected extensive user research, which might have highlighted the limited practical appeal of these features and the device's misalignment with consumer expectations. A more user-focused approach could have potentially mitigated these issues by aligning the product's design more closely with market needs and consumer usability, thereby reducing the risk of failure.

> In essence, we were not building the phone for the customer – we were building it for Jeff,' says one source. With Bezos managing every critical decision, teams began second-guessing themselves trying to anticipate how he would react. (Carr, 2015)

We can call it CEO or boss centered design.

Google Glass

Google Glass, developed by Google X and launched in 2013, is a wearable technology that integrates a computer into eyeglass frames. It features a display, camera, touchpad, battery, and microphone, enabling functions like photo taking, video calls, and GPS navigation through voice commands. Despite initial excitement, the device faced criticism over privacy, safety, and social etiquette, and Google discontinued the consumer version but continued to develop it for specialized applications, primarily in the enterprise sector, such as manufacturing and healthcare.

Some sources suggests Google lost approximately $400 million on Google Glass (PerplexityAI 2024).

The failure of Google Glass underscores the critical importance of conducting extensive user research, especially when launching highly innovative products. Google Glass's lack of alignment with consumer needs and contexts of use resulted from insufficient understanding of potential users' lifestyles, concerns, and expectations. The lack of clear use cases and the privacy issues raised by its features further alienated potential users, demonstrating that innovative technology alone is not enough to guarantee market success.

As stated in a couple of posts about their failure, the Google Glass is a good example of a technological solution searching for a need.

> There wasn't any usual or practical usage of this product. Therefore, it doesn't bring any major benefits to the customers. (Srivastava, 2022)

> One of the problems with Glass was it arrived with great fanfare, but most of us were not sure how we could use the product. (Reynolds, 2015)

The Google Glass has two basic functions: to quickly capture images and to have a feed of useful information from the internet a glance away. What are the most practical daily uses for these features? None.

Google messengers

What do Google Talk, Google Voice, Google Wave, Google Plus, Google Hangouts, Google Allo, and Google Duo have in common? All these apps were meant to function as communication apps and platforms, and all of them are currently dead (CNBCTV18, 2022).

This is what happens when you try to innovate for the sake of innovation. Google's approach to developing so many communication apps illustrates a pattern of innovation-driven development rather than user-centric design. Each of these platforms was introduced with the intention of revolutionizing how people communicate, yet all have since been discontinued. This frequent introduction and subsequent abandonment of communication tools could suggest a focus on innovation for innovation's sake, without sufficient grounding in actual user needs and preferences.

The Metaverse

Meta Platforms Inc. has invested more than $13 billion in its metaverse-related efforts, with ongoing investments expected to increase over time. IT is still too early to call it a failure, but for sure, by now, it is underperforming: Horizon Worlds, the biggest Meta social VR app, is currently experiencing a decline in its user base, with only 200,000 monthly users, a significant decrease from the 300,000 users reported in February 2022.

Many of Meta's virtual spaces are all but ghost towns, with reports alleging that even Meta's own employees are reluctant to spend time inside them.

In examining the slower-than-expected adoption of virtual reality (VR) and the metaverse, it becomes evident that these technologies may represent solutions in search of a problem. Despite the enthusiasm and substantial investments from major tech companies, the practical application and necessity of VR for the average consumer remain limited, and the high costs associated with VR hardware and the need for high-performance computing further deter widespread adoption.

User experience issues, including discomfort and motion sickness, further underscore the limitations of VR as a mainstream solution. These physical side effects and some technological limitations significantly diminish the user-friendly appeal of VR, making it less accessible and appealing to the general public.

VR and the metaverse hold potential in specific applications, byt their current state reflects a technology that is more about exploring possibilities than addressing existing user needs.

Not just the big ones: startup failures

Amazon, Google, Meta are big and rich enough to survive to those big fiascos. Startups usually do not have the resources to survive a failure. The success rate of startups varies by industry, region, and economic conditions, but a commonly cited statistic is that about 90% of startups fail within the first five years (Kotashev, 2025). This high failure rate can be attributed to various factors including lack of market demand, financial mismanagement, poor business model, and ineffective marketing or customer reach.

Lack of market demand (lack of product-market fit) is often cited as the primary reason startups fail because it strikes at the very core of any business venture: the need for its product or service. Many startups begin with an innovative idea but, if the founders have not adequately researched and validated the market need for their offering, they may find that there is little to no actual customer demand for it. This miscalculation can lead to significant issues, such as overproduction, misallocated resources, and ultimately, financial losses that the startup cannot recover from.

> By neglecting to research customer needs before commencing their engineering efforts, they ended up wasting valuable time and capital on an MVP that was likely to miss its mark ... Bias for action is typical of entrepreneurs, who often are champing at the bit to get started. And engineers love to build. So, when you have entrepreneurs who are also engineers, their impulse is often to build and launch their product as fast as they can. (Eisenmann, 2021)

If you create something that has no real use, does not solve any problem for the users, you are headed to failure. Adequate UX research can significantly reduce the risk of startup failure due to lack of market demand, helping startups gain insights into what potential customers truly want and need, allowing them to tailor their products or services more effectively to meet those demands.

By conducting thorough research, startups can validate their product concepts before fully committing to development, potentially saving significant amounts of time and resources that might otherwise be wasted on products with little market demand. It also helps in refining the product features according to user preferences, which can enhance user satisfaction and increase adoption rates. Moreover, continuous UX research throughout the product development cycle can keep the product aligned with changing customer needs and preferences, thereby sustaining its relevance in the market.

UX Research fosters innovation

A second reason to do user research is that it forster creativity and innovation.

Amabile and Pratt (2016) define creativity as the production of novel and useful ideas by an individual or small group of individuals working together; innovation, as the successful implementation of creative ideas within an organization. Usefulness can be evaluated and tested by user research. But user reseach can also increase the novelty of our ideas.

Different perspectives

Interacting with individuals who possess differing point of views, and making a effort to take their perspective, can enhance your cognitive flexibility and, consequently, boost your creativity (Hoever et al., 2012).

When people are exposed to experiences that break their mental schemes and mental models, they become more creative because this enhances their cognitive flexibility (Ritter et al. 2012). Engaging with diverse perspectives during user research can lead to unexpected insights. We can see user research as the best way to enlarge our teams with people with different perspectives.

Cognitive Flexibility and Creativity

One of the most important effects of user research is to falsify the assumptions, the biases, the cognitive models and schemes of the stakeholders and the designers. Interacting with users can challenge our assumptions and enhance our problem-solving abilities.

UX research activities can increase the creativity of a design team by collecting unexpected and diverse experiences from participants, that can somehow violate our implicit cognitive schemas, fostering cognitive flexibility.

UX Research is ultimately about connecting with individuals outside the bubble of stakeholders and colleagues, in order to gain insights into their experiences and understand their perspectives. UX research connects us with real-world experiences, providing a fresh perspective beyond our team bubble.

Diverse Experiences, Creative Solutions: by embracing the unexpected, we can foster cognitive flexibility and drive innovation in our design teams.

UX Research incentivates sustainability

Conducting UX research can lead to more sustainable products that consider environmental, social, and economic factors. A participatory and community-based approach is important for sustainability because it ensures that all stakeholders are involved in decision-making, leading to more inclusive and effective solutions. This approach also nourish a sense of ownership and responsibility among community members, leading to long-term commitment to sustainable practices.

Pillars of Sustainability

The most important dimensions of sustainability are environmental, social, and economic.

- Environmental sustainability focuses on preserving and protecting natural resources and ecosystems for future generations.
- Social sustainability emphasizes promoting social equity, justice, and well-being for all individuals and communities.
- Economic sustainability involves ensuring long-term economic growth and development that is socially and environmentally responsible.

Increase the ratio

The ratio between user needs satisfaction and footprints By integrating user research into the product development process, companies can create more effective, user-centered products that not only meet the needs of their users but also contribute to sustainability.

The ethical impact of UX research becomes evident when it helps increase the ratio between user need satisfaction and the product's economic, environmental, and social footprint. This ratio is a measure of how efficiently a product meets user needs while minimizing negative impacts on the economy, environment, and society. By focusing on this ratio, UX research can guide the development of products that are not only economically viable and socially responsible but also environmentally sustainable.

By conducting thorough user research, organizations can gain a deep understanding of what users truly require, which helps in minimizing the development of unnecessary features and functionalities. This targeted approach not only meets user expectations more effectively but also reduces waste of resources, thereby decreasing the economic, environmental, and social footprints associated with the production and consumption of these products.

The Cost of Unsustainability

Doing the wrong thing (something that does not meet the users' needs) is socially, economically and environmentally unsustainable. Throwing away hundreds of millions of euros (or dollars) or creating startups that fail is the best example of something that is not sustainable.

UX Research is rewarding

One more reason to do UX research: it is fun. Talking with people, listening to them, trying to understand their perspective is a really satisfying activity. So, my recommendation is: go outside, talk to the people, take their perspective, become creative, break schemas, falsify assumptions, build better, innovative, sustainable solutions, and have fun.

Conclusion

and that government of the people,
by the people,
for the people,
shall not perish from the earth.
(Abraham Lincoln, Gettysburg Address)

The title of this talk is a reference to the Lincoln's famous speech. I wish to communicate a similar ethical attitude. Designing with the users, for the users can help us create better products and services. Better for the shareholders, better for the stakeholders, better for the users, for the environment, for the economy and for the society. And better for us as designers.

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Titillium. Iliad and Odyssey of a Collaborative Project

Authors

Luciano Perondi
Associate Professor at Iuav University of Venice

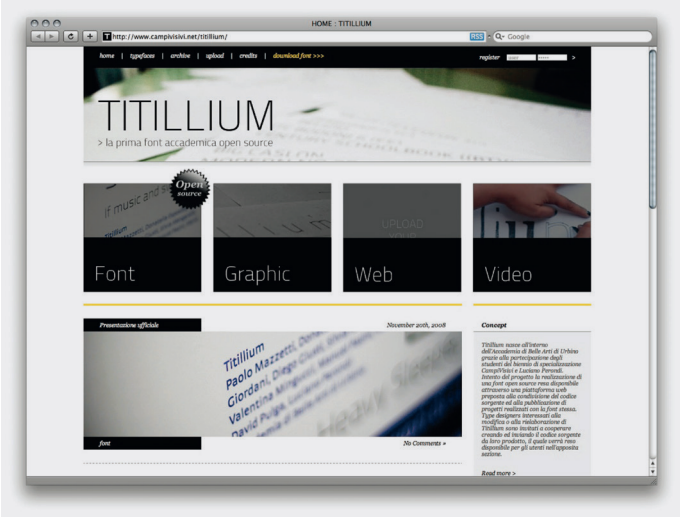
Biography

Luciano Perondi has been involved professionally in type and information design since 1998. From 2003 to 2007 he run the studio Molotro. Since 2007 to 2018 he has been tenured lecturer of “History of book” at Isia Urbino. Since 2013 to 2016 he has been the director of the same Institute. Since 2018 he is associate professor at Università Iuav di Venezia. He is partner of the cooperatives CAST and ALPACA.

Keywords: Typography, Open-Source, Collaboration, Web Design, Education

Abstract

The Titillium typeface, born in 2007–2008 within the Accademia di Belle Arti di Urbino, is the result of an educational experiment that became an international reference in collaborative type design. Conceived as a permanent workshop, the project engaged successive generations of students and faculty in developing a versatile, libre typeface that has since evolved into a professional tool adopted worldwide. Notably, Titillium was chosen by the Italian public administration as its system font, an unprecedented case of a student-driven project shaping national visual identity. Distributed under the SIL Open Font License, Titillium exemplifies how open-source models foster accessibility, innovation, and global dissemination, while paradoxically supporting the commercial type market. This contribution retraces the origins, evolution, and cultural impact of Titillium, situating it within the broader history of libre fonts and their transformative role in web design, research, and contemporary communication practices.



The Origin and Development of Titillium Typeface

The Titillium typeface is a notable example of how educational projects can yield significant contributions to the field of typography. Originating from an educational initiative launched in 2007-2008 by the Nuove Tecnologie per l'Arte program at the Accademia di Belle Arti of Urbino, Italy, the project aimed to provide students with practical experience in typography and a typeface they could use and modify in their didactic projects. The project has been conceived by Marcello Signorile and the author.

This initiative facilitated a collaborative environment where students and faculty could work together to design a versatile, free software typeface family.

The initial version of Titillium was developed through the combined efforts of students and faculty members, resulting in a typeface that included various weights and styles. The project was designed as a permanent workshop, allowing successive cohorts of students to contribute to its continuous evolution up to 2011–2012. This iterative process ensured that Titillium would not only grow in diversity and complexity but also adapt to changing design needs and technological advancements.

Titillium's design is characterized by a squarish appearance that makes it suitable for a wide range of applications, from editorial graphics to web design. Its sans-serif structure enhances versatility on web applications, while the broad array of variants available allows for its use in diverse graphic contexts.

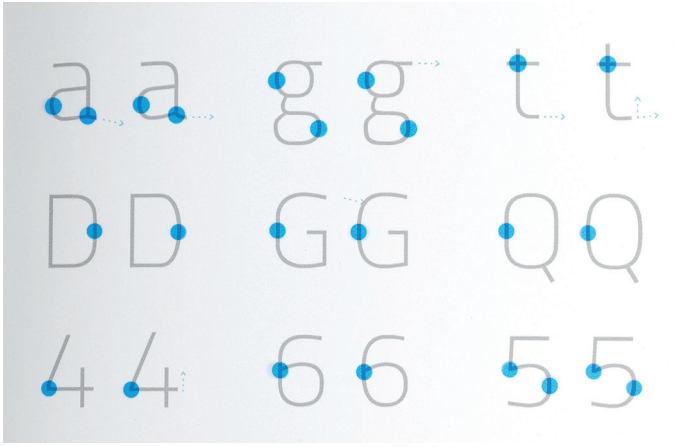
Adoption by the Italian Public Administration

One of the most significant endorsements of Titillium's utility and appeal came when the Italian public administration adopted it as a system font. This adoption, induced by Gianni Sinni for Designers Italia, underscores the typeface's functionality and alignment with government initiatives to utilize modern, accessible, and open-source tools. The choice to use Titillium in official communications highlights the importance of leveraging locally developed resources.

The use of Titillium by the Italian public administration is particularly noteworthy because it reflects how a project that began as an educational exercise can have a profound impact on national identity and public communication. There is no other similar case up today.

The Role of Open-Source Distribution

As an Open Font License project, Titillium is freely available for download and use through platforms such as Google Fonts. This accessibility has facilitated its widespread dissemination and adoption on a global scale. The OFL license of Titillium allows modifications and improvements by anyone, fostering a collaborative approach to its development and ensuring that it remains a relevant and high-quality typeface. The project can be forked, as happened for example with Cairo, the Arabic version of Titillium, or modified and re-released by the author as an improved version.



The first releases were mere work in progress, year by year the quality improved up to a professional level and its popularity increased significantly.

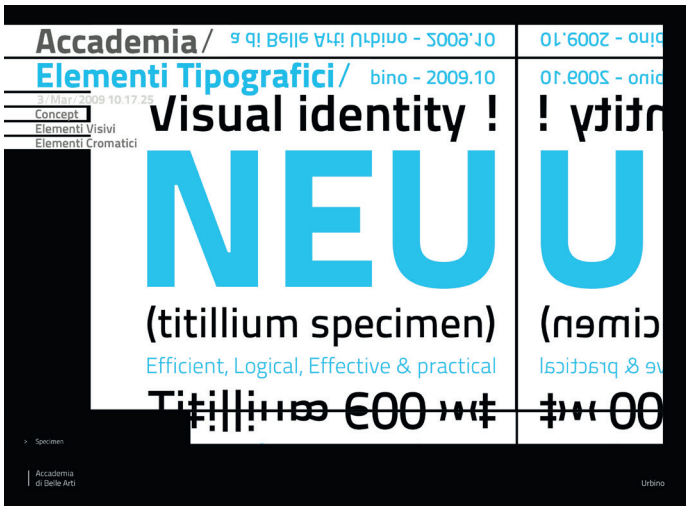
Designers and developers worldwide appreciate the typeface for its professional appearance and the ease with which it can be integrated into various projects.

Libre Fonts

Since its introduction in 2007, the SIL Open Font License (OFL) (McLendon, 2011), a validated FLOSS (Free/Libre and Open Source Software), has become widely adopted, enabling the publication of fonts under a permissive license. Originally created to support the activities of the non-profit organization SIL International, which aids linguistic communities, especially minorities, the OFL has found extensive application beyond its initial scope. It serves as an alternative to the traditional market model, offering a prestigious way to release fonts beyond simply making them free.

The OFL allows for the modification, publication, and sale of fonts if included in the software, though it prohibits the use of the original name and the direct sale of the font. Modifications must be published under a new name or submitted to the original author for incorporation into new releases. This model was first proposed in a rudimentary form by Bitstream Vera for the GNOME Foundation in 2003 and was further refined with the introduction of the SIL OFL.

Recently, other licenses such as the Apache License, the MIT License (though not specific to fonts), and the Ubuntu License have also been used for fonts. As a type designer, the author contributed to some of the first brand-related libre fonts, such as Lekton for the Isia di Urbino, in 2008, besides Titillium.



Initially met with resistance from the typographic community, the publication of libre fonts has gained acceptance, with many independent foundries and professional designers releasing high-quality libre fonts. This shift was significantly supported by Google's funding, which enabled the production of professional-grade libre fonts available on platforms like Google Fonts (Perondi, 2021).

This accessibility has introduced a significant typographic variety in web design, previously nearly absent, promoting a virtuous cycle that encourages personalization in web design and supports the commercial font market. Conversely, professional foundries now often release free fonts with limited character sets or offer trial licenses to design studios to attract potential clients. Platforms like Fontstand allow free trials of fonts for a limited time, indicating further changes and nuances in the traditional distinctions between free, retail, and free software fonts (Adebiaye, 2017).

Impact of Open Fonts on Web Design

The introduction of available open fonts, like Titillium, has significantly influenced the field of typography in web design, transforming how designers approach both the aesthetic and functional aspects of websites. Prior to the availability of open fonts, web designers were largely constrained to a limited set of web-safe fonts, which were pre-installed on most computers. This limited selection stifled creativity and led to a homogenized visual landscape on the web.

The emergence of open fonts, particularly through platforms like Google Fonts and Velvetine, revolutionized web typography. These fonts are freely accessible and can be easily integrated into websites, offering designers a vast array of typefaces to choose from. This democratization of typography has expanded creative possibilities and enabled more diverse and engaging web designs.

Standardization and Performance

The availability of open fonts has led to the development of web fonts optimized for performance, ensuring faster load times and better overall website performance. Standardization in webfont technologies, such as the widespread adoption of formats like WOFF (Web Open Font Format), has also contributed to more consistent and reliable font rendering across different browsers and devices (Dornauer, 2023).

These improvements have made it easier for designers to use open fonts without compromising on performance or user experience.

Research Implications

Font research, as emphasized by Beier (2012), underscores the importance of controlled experimentation in typography. By isolating and adjusting individual variables such as stroke weight, letter width, or spacing, researchers can more accurately determine their specific effects on legibility and reading performance. This methodical approach is crucial for developing typefaces and understanding how different typographic features may influence reading performance under various conditions. For this reason, the author, together with Leonardo Romei, developed a fork of Titillium, named TestMe, designed to include several variables ready to be tested in experiments.

Conclusion

In summary, the Titillium typeface is a significant example of how education, collaboration, and innovation can converge to create useful and accessible tools. Its adoption by the Italian public administration further validates its impact and contribution to contemporary typographic design. The broader availability of open fonts has revolutionized web design by expanding creative possibilities, enhancing performance, and democratizing access to high-quality typography, and, by paradox, enhancing the market of commercial retail fonts. This transformation has led to more engaging, inclusive, and well-performing websites, ultimately enriching the user experience on the web and the possibility of implementing visual identity on digital applications. As open fonts continue to evolve, their impact on design and communication will likely grow, fostering a more vibrant and diverse digital landscape.

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Driving Organizational Change with Co-Design

Authors

Erin Casali
VP / Senior Director of Product and Design

Biography

Erin is a VP / senior director of product and design with a passion for scaling effective and efficient product organizations behind outstanding customer-centered products. Over 17 years of experience, she has developed a multi-disciplinary, systems based approach to problems, and an uncommon mix of theoretical, holistic thinking grounded in pragmatic, goal driven execution. She cares deeply about both the people she works with, and designs for.

Keywords: Product Strategy, Systems Thinking, Customer-Centered Design

Abstract

If we look at organizations under a product lens, we have a system that grows and evolves in time, fulfilling its ultimate goal: delivering a product or service for its users. But how does this system grow? This is often left to individuals to figure it out, a lot of frameworks focus on the “ideal state” and not on the pragmatical change to get us there.

Working Together in Emergence and Emergency!

A short story about the creation of a design system, from scratch, in a complex Public Administration context

Authors

Domenico Polimeno
Unindustria Reggio Emilia - Digital Transformation Manager

Biography

Domenico “Dom” Polimeno, Digital Transformation Manager at Unindustria Reggio Emilia and a Design Ops enthusiast. His passion for Strategic Design leads him to frequent and animate design communities, his favourite way of learning. For years he has been trying to give back to startups and young designers by mentoring them on online platforms and at startup weekends. His newsletter “heydom” is an ongoing exploration into the universe of strategic design and everything that can orbit around it. Dom aspires to contribute to the growth of scale-up organisations, driving change with pragmatism and a light touch

Keywords: Community, Cooperation, Dialogue, Responsibility, Ethics

Abstract

Collaborating in Times of Emergence and Emergency explores the transformative journey of shifting from traditional in-office work environments to remote digital collaboration during the COVID-19 pandemic. The narrative underscores the adaptation required during such unprecedented times, focusing on strategic design and operational shifts within a manufacturing-focused corporation. Through firsthand experiences, the presentation details the rapid deployment of digital tools and strategies to support and enhance team communication and collaboration. This pivot addressed immediate operational challenges and instilled a resilient, innovative culture that leveraged collective efforts to navigate crises. The insights gained from this experience illuminate the potent synergy between technology and human-centric approaches in fostering effective collaboration and driving organizational change during emergencies.

Introduction

The unprecedented disruptions caused by the COVID-19 pandemic forced organizations across industries to rapidly rethink their operational frameworks. This essay explores the role of strategic design and a digital-first mindset in navigating these upheavals, particularly from the perspective of a design operations leader transitioning into a digital transformation management role within a traditionally non-design-centric environment.

Unindustria Reggio Emilia, a prominent industrial association in Northern Italy, faced unique challenges during the pandemic. Historically, the association focused on supporting and representing manufacturing businesses in the region. However, the unprecedented disruptions of the pandemic necessitated a swift and innovative response to maintain business continuity and support member companies during immense uncertainty.

The Shift to a Digital Transformation Role

In early 2020, I made a significant pivot in my career. I transitioned from a dynamic design consulting environment to a role focused on digital transformation within Unindustria Reggio Emilia. This shift marked a significant pivot, as the role demanded an acute understanding of digital technologies and a strategic design approach, in which the particular aspect needed to be given more importance traditionally within the manufacturing-centric organization. However, the convergence of these domains facilitated a unique perspective on leveraging technological tools to enhance organizational performance and agility. I started working in a new role without prior guidance and had the opportunity to shape it.

The first step was comprehensively understanding the existing operational dynamics and stakeholder needs. To achieve this understanding, I conducted extensive document analysis, meticulously studying the association's past strategies and reports and conducting interviews with association members and staff. These interviews were not just casual conversations but structured discussions that aimed to gather insights. This information-gathering process laid the groundwork for informed strategic interventions tailored to the organization's challenges. Then, I started to delve into the knowledge of the various stakeholders of the association, the technologies and the paradigm of Industry 4.0, and the industrial context of Reggio Emilia, a peculiar district in the region of Emilia Romagna with a substantial prevalence of mechatronic businesses.

Responding to the Crisis with Strategic Design

The unfolding of the pandemic in March 2020 and the necessity to transition to remote work presented unique challenges. Business continuity demanded immediate operational shifts and the rapid adaptation of digital tools. Here, the concept of organizational ambidexterity proved pivotal. This framework emphasizes the ability of organizations to balance exploiting existing capabilities with exploring new opportunities, a crucial skill set during a crisis.

Employing this concept was instrumental in crafting a responsive framework that ensured technology was an enabler rather than a barrier. Balancing daily work while exploring new ways of working and digital tools proved fundamental.

Using a Human-Centered Design (HCD) framework, I started helping the management craft a successful crisis response strategy. We began with little experiments, like giving all the association's employees a laptop, enabling them to work remotely. Imagine this: 50 individuals, accustomed to the traditional office setting, suddenly thrust into remote work. I was the guide, the only one with prior remote work experience, steering this new course. We were not just shifting workspaces; we were transforming work cultures overnight. Amid this, our team tackled interventions—4,000 in just four weeks. To give a sense of scale, that is more than half a year's work in a single month, all during the peak of lockdown uncertainty. Coordinating these efforts, avoiding redundancy, and maintaining efficiency was a colossal challenge. I devoted 300 hours to online mentoring on topics like remote working and digital tools, building a bridge of support, and giving people new points of view and new ways of doing things. This effort involved tech troubleshooting and empowering people to adapt and thrive in an unprecedented situation. Establishing clear communication channels, for example, can significantly reduce anxieties and ensure a smoother transition.

Additionally, deploying simple yet effective digital solutions, like web forms for service requests, streamlines processes and improves user experience. These interventions exemplify the real-time application of strategic design thinking in crisis management, where there are no premade solutions, only experiments with rapid iterations toward the right solutions for the moment.

Another lesson learned was the importance of establishing a practice of knowledge management and a data dictionary to create common sensemaking during the emergence. Through workshops, we defined with the area's leaders standard taxonomies and tags to give labels to our interventions and track the dynamics of the emergent problem of our associates. This activity led to a Dashboard and a weekly report to the board to grasp the situation week by week.

Amidst the chaos, we chose not to be paralyzed by fear but to navigate with vision and care. Our after-hours were spent sketching out the details of our work and the human connections behind them. It was not just for the sake of process; it was about piecing together our shared story. In mentoring moments, I connected with people drowning in new tech and uncertainty. These conversations were our stepping stones, helping us find our footing in uncharted waters. However, this journey was not solo. My colleagues' candid questions and willingness to try small experiments made all the difference. I am grateful for every problem shared and every suggestion made, as they were the genuine sparks of our progress. Sure, I brought my knowledge and experience to the table, but the collective pulse of our team's effort got us through. Only some people were ready to jump in, but those who did helped us survive and thrive. So here is to the team—their openness, their resilience. We did not just cross a bridge; we built a new way of working and understanding one another. Remember, the extra steps we take, often unseen, pave the path to collective success.

Collaborative Innovations and Cultural Transformation

Three months after the initial crisis of remote work, when a stable practice was established, the management decided to continue experimenting with digital technology and innovation. It tasked me to support a group of external consultants with an innovation project to create new services and digital opportunities for the association. I channeled my strategic design acumen to orchestrate 20 online workshops for 20 eager participants. In this digital arena, my role evolved beyond facilitation; I became a pioneer, experimenting with tools and techniques to enhance the experience for both participants and consultants. My commitment to delivering excellence meant tapping into a deep reservoir of knowledge and improvising solutions on the fly. My primary purpose was crafting a collective experience to innovate together! As we navigated this journey, a symphony of emotions played out, laughter echoed through our virtual space, and healthy conflicts arose and were resolved; I could see the excitement of doing something different, not business as usual but valuable for everyone. Thus, we had results. Our efforts culminated in a suite of 16 innovative ideas. The consultants played their part, but the spotlight shone brightest on my 20 colleagues, whose ingenuity and dedication were unmatched. Six ideas emerged victorious out of the creative forge, selected by the board to evolve from concepts to concrete services and products in use today. This journey underscored a powerful lesson: that the heart of innovation beats strongest when we embrace collective effort and let strategic knowledge guide technology's hand, not the other way around.

Conclusion

As we approach the conclusion of our journey, let us take a moment to summarize the valuable insights I have gained:

- It is imperative to foster an unwavering sense of curiosity. A fresh perspective is invaluable for those relatively new to the field. Be bold and curious, and explore new avenues of knowledge.

- It is crucial to strategize amidst the chaos. When overwhelmed by a deluge of tasks, prioritize and develop a plan to steer you through the storm. This way of work will help you identify the most efficient path to success.

- It is crucial to be proactive. If you notice something that seems amiss, take action and set an example for others.

- It is essential to value human connections.

While technology is integral, relationships are the cornerstone of progress. Foster and cherish these connections. Finally, celebrate progress. Completing tasks to the best of your abilities and within the stipulated timeframe is often more crucial than pursuing perfection. Let these lessons guide us as we continue to progress and grow together.

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This anthology collects contributions from the 2023 World Usability Day event in Bolzano. The event brought international attention to collaboration and cooperation at the centre of local debate, alongside topics such as usability, co-design and user experience. Twelve Italian and international speakers, designers from companies, the world of activism and academia, shared their reflections and projects on the transformative power and impact of collaborative and co-design practices. WUD Bolzano has been an opportunity to reflect on how these practices have helped to bridge the gaps between science and society, academia and industry, as well as between individuals, communities and society, bringing new forms of awareness and cooperation to work, relationships and everyday life.

The WUD Bolzano is organised by Letizia Bollini, professor of Communication & Interaction Design at the Faculty of Design and Art of the Free University of Bozen-Bolzano, with Chiara Facchini, user experience designer and Matteo Moretti, professor of Info-Design at the Department of Design, Architecture, and Planning at the University of Sassari/Alghero, and co-founder of Sheldon.studio specialised in data-design, in collaboration with NOI TechPark and Exeen.it a Milan-based company that promotes digital innovation in the business field.

WUD Bolzano is a side event of SFSCON 2023.

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