# SERVDES 2023

**Entanglements and Flows**Service Encounters and
Meanings

**Conference** Proceedings

Rio de Janeiro, Brazil 11-14th July 2023

Editors: Carla Cipolla, Claudia Mont'Alvão, Larissa Farias, Manuela Quaresma



# The ServDes.2023

# Conference in Rio de Janeiro



Image of the opening session

For the first time in Latin America, ServDes.2023 invited participants to reflect on a central question: What does serving mean?

The call for submissions asked service design researchers to explore emerging themes, such as the situation of workers in the service sector, the difference between service and servitude, decolonial and pluriversal approaches, the feminist perspective, human and non-human relations in service processes, new economic models, informal services, and the role of technology in these issues, among others. These issues intersect with crucial questions for service design practices and theories in Brazil.



Although we maintained the usual structure of ServDes conferences (with keynote speakers, technical sections, discussion rounds, and workshops) and the presence of established names in our academic community, we intended to diversify where possible, inviting unusual or unexpected participants in service design conferences. We included design researchers from other topics and representatives of different worldviews, practices and communities who could teach us new ways of serving and thinking about services. As examples, we sought to build a bridge with Africa, a continent closely related to Brazilian history, and a non-governmental organisation developing a new way of acting for human rights in Brazil. We also explored bodily dimensions, engaging and activating our bodies through dance and theatre workshops.

When choosing suppliers for coffee breaks, we provided participants with a gastronomic experience rooted in Rio's culture. Some examples were Globo biscuits, mate, and churros. At the opening cocktail and conference dinner, we took participants to a party filled with Brazilian music, where we could dance together and celebrate the meeting of our academic community and its guests.

ServDes.2023 was an in-person conference with 200 participants from 23 countries, 80% of whom attended a ServDes conference for the first time. Most participants were academics (around 45%), but there was balanced participation between representatives from the business sector, consultancies, and students (approximately 15% each) and some representatives from the public sector. One of the conference's co-chairs was a representative of a service design consultancy, together with two representatives from academia.

We want to thank the entire team for designing and delivering the ServDes.2023 conference and all participants and attendees for this extraordinary moment. Obrigado!

Far from providing ready-made answers or models, ServDes. 2023 intended to create a moment to reflect on and celebrate the transformative meaning of serving. The content presented in these proceedings reflects how the service design community responded to this invitation.

Let's continue the conversation!

Carla Cipolla | Manuela Quaresma | Luis Alt



# Entanglements and Flows Service Encounters and Meanings

Alternative worldviews and valorisation of local knowledge and practices increasingly question how service innovators and researchers consider the intersections among nature, culture, and society. Aspects such as otherness, justice, spirituality, vulnerability, or improvisation, among others, are redefining service encounters and ecosystems. Discussions of human-nonhuman relations are challenging user-centred design approaches.

These processes explicitly or implicitly question service research and practices regarding the focus of its activities: services.

What (how, who or when) is a service?

It has been a learning process that includes academic and non-academic knowledge and highlights contrasts between alternative and mainstream practices, which may increasingly lead to new theoretical developments and political consequences.

Service designers and innovators may use their skills to hear multiple voices and ideas, get entangled in their localities and navigate unexpected flows to evidence new service meanings.

ServDes.2023 aims to explore new perspectives on these continually reframed questions and their consequences on service design theory and practices.

Rio de Janeiro is the location of ServDes.2023. The city is economically driven by the service sector, composed of formally designed service provisions and a meshwork of informal, imprecise, improvised, unacknowledged services. Different social groups and workers collide or dialogue in various public or private spaces. This location offers immersive experiences on multiple aspects of the service phenomena, supporting the conference's central theme.

# ServDes.2023

# **Entanglements and Flows**Service Encounters and Meanings

# **Editors**

Carla Cipolla Claudia Mont'Alvão Larissa Farias Manuela Quaresma

# **Proceedings design**

Letícia Albrecht Louise Mangia Matheus Ventura

### **Publisher**

Linköping University Electronic Press Conference Proceedings, No. 203

DOI: https://doi.org/10.3384/ecp203

ISBN: 978-91-8075-476-7 ISSN: 1650-3686

eISSN: 1650-3740 Linköping, Sweden, 2023

# Federal University of Rio de Janeiro

**Production Engineering Programme** 

# Pontifical Catholic University of Rio de Janeiro

Department of Arts & Design

Livework São Paulo

# **Conference chairs**

Carla Cipolla Manuela Quaresma Luis Alt

# **Branding**

Luiz Machado Terra Fensterseifer

### Communication

Ingrid Bico Matheus Ventura

### **Executive**

Amanda Xavier

# **Financing**

Tharcisio Fontainha

### **Food**

Ellen Gonzalez

# **Graphic design**

Alana Maganha Carol Soares

# **Infrastructure**

Roberta Portas

# Innovation

Bruno Santos

# **Papers**

Claudia Mont'Alvão

### **People**

Ana Paula Maiato

# Registration

Raquel Cordeiro

### Review

Carlo Franzato Gustavo Barreto Larissa Farias

# Signage

Evelyn Grumach

### **Support**

Gabriel Orsi Letícia Albrecht

# Website

Louise Mangia Nayara Sardella Rafael Ortman

# **Advisory committee**

Claudio Pinhanez Cynthia Malaguti Ezio Manzini Fernando Secomandi Lara de Sousa Penin Teresa Franqueira

# **Conference dates**

11-14th July 2023

# Contact

servdes2023.org info@servdes2023.org

### **Conference archive**

servdes.org





# Gratitude

# **Sponsors | Supporters | Partners**

















We would like to express our gratitude to everyone who made this conference possible: chairs, committee members, volunteers, authors, students, sponsors, partners, supporters, workers, and all participants!

# **Sponsors**

Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) and Fundação Carlos Chagas de Amparo à Pesquisa do Estado do Rio de Janeiro (Faperj), for funding the conference.

# Coppe/UFRJ

To all the Coppe (and Coppetec Foundation) community involved, our heartfelt thanks for the time and willingness to help.

## DAD/PUC-Rio

To the members of DAD, our gratitude for the support, presence, and assistance in the use of the building.

# **Livework Academy**

To the Livework Academy staff and alumni, our appreciation for the creative ideas for innovative experiences at the conference.

# **Supporters**

Sorvetes Hoba, Vinhos de Combate, and Companhia dos Fermentados, for providing us with delicious desserts and beverages.

PAINCS LEMENAS

E CAL COOKERS SHO

# Gratitude

# International Committee | Reviewers | Volunteers

### **International Committee**

Carla Cipolla
Daniela Sangiorgi
Janne-Valtteri Nisula
Jeanette Blomberg
Lia Patricio
Nicola Morelli
Satu Miettinen
Simon Clatworthy
Stefan Holmlid
Stefano Maffei
Yoko Akama
Yong Se Kim

### ServDes.2023 Volunteers

Alana Maganha Aline Paulino de Brito Ana Luísa Fernandes Ana Paula Maiato Carol Soares Clarissa Dapper Eliza Kronemberger Ellen Gonzalez Gabriel Orsi Gustavo Barreto Ingrid Bico Larissa Farias Letícia Albrecht Louise Mangia Mateus Espanha Matheus Ventura Nayara Sardella Raquel Cordeiro

### Reviwers

Adriane Shibata, Ahmed Ansari, Alexandra Crosby, Alok Nandi, Amalia de Goetzen, Amanda Xavier, Amresh Panigrahi, Andre Ribeiro, Andy Polaine, Angus Donald Campbell, Bridget Malcolm, Cameron Tonkinwise, Carlo Franzato, Chiara del Gaudio, Cinthia Ruiz, Claudia Garduno, Cláudia Mont'alvão, Claudio Pinhanez, Cyntia Malaguti, Daniela Sangiorgi, Eduardo Staszowski, Emanuela Silveira, Emily Wright, Fang Zhong, Fernando Secomandi, Filipe Campelo, Francesco Mazzarella, Frederick van Amstel, Geke van Dijk, Gheysa Caroline Prado, Gisele Rauly Murphy, Gloria Gomez, Ida Telalbasic, Ilya Fridman, Ingrid Mulder, Isadora Burmeister Dickie, Iva Halacheva, Jairo da Costa Jr, Johan Blomkvist, Joon Sang Baek, Josina Vink, Jucelia Salete Giacomini, Jung-Joo Lee, Justin Barrie, Karine Freire, Katarina Wetter Edman, Leonardo Castillo, Libby Heasman, Liliane Iten Chaves, Lisiane Librelotto, Louise St. Pierre, Luca Simeone, Lucy Fraser, Marcelle Candido, Marcelo Gitirana Gomes Ferreira, Márcia Bergmann, Márcia Regina Diehl, Margherita Pillan, Mariano Ramirez, Marta Corubolo, Martina Caic, Marzia Mortati, Massimo Menichinelli, Mel Edwards, Miaosen Gong, Miso Kim, Naotake Fukushima, Nicola Morelli, Patrícia Gomes, Paulo Cesar Ferroli, Ralitsa Debrah, Ravi Mahamuni, Rebecca Anne Price, Richie Moalosi, Rita Engler, Sabrina Scuri, Satu Miettinen, Shana Agid, Soumitri Varadarajan, Spyros Bofylatos, Stefana Broadbent, Sylvan Lobo, Teresa Franqueira, Tharcisio Fontainha, Troy McGee, Valerie Carr, Vanessa Rodrigues, Viktor Bedo, Yang Huan, Yoko Akama, Yu Eun, and Zoe Sofoulis.



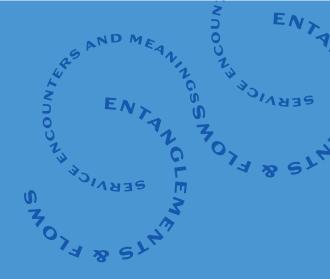


26

# **Board of contents**

Social innovation, localities and transformative processes

27	Papers
359	Workshops
376	Student Forum
378	Services, business and social economy
379	Papers
566	Workshops
586	Student Forum
595	Reimagining work: service or servitude
596	Papers
800	Workshops
814	Student Forum
817	Services and relationships: humans, beyond and below
818	Papers
1166	Workshops
1170	Student Forum
1178	Services, technologies, and futures
1179	Papers
1452	Workshops
1468	Student Forum
1475	Services between and beyond worlds
1476	Papers
1547	Workshops
1547 1558	Workshops Student Forum
	·
1558	Student Forum
1558 <b>1563</b>	Student Forum  Services for Emergency: disasters, war, refugees, pandemic
1558 <b>1563</b> 1564	Student Forum  Services for Emergency: disasters, war, refugees, pandemic Papers
1558 <b>1563</b> 1564 1744	Student Forum  Services for Emergency: disasters, war, refugees, pandemic Papers  Workshops
1558 1563 1564 1744 1749	Student Forum  Services for Emergency: disasters, war, refugees, pandemic Papers Workshops Student Forum



# Social innovation, localities and transformative processes

Social innovation processes may reveal the emergence of new service ideas, or services may be designed to support local transformative processes. These changing processes may be referred to and impact neighbourhoods or cities. This situated dimension may include new service encounters and new local ecosystems, which may be supported or hindered by digital technologies and platforms.



# SOSpesa – Neighbourhood solidarity networks for the recovery, distribution, and valorisation of food surplus.

Davide Fassi, Anna Meroni<sup>1</sup>
davide.fassi@polimi.it, anna.meroni@polimi.it <sup>1</sup>
Politecnico di Milano, Design Department, Italy

# **Abstract**

This paper presents and discusses the redesign of a charity activity, implemented in a neighbourhood of the city of Milan, into an innovative service called 'SOSpesa'. By creating, activating and experimenting a network of local actors to achieve a solidarity aim against food poverty, SOSpesa also implements a strategy to fight food waste and support local shops. Acting on a neighbourhood scale, it leverages the local context as a strength of the service, exploiting the networks already existing in the specific context of NoLo, the 'North of Loreto' area of the city. The paper illustrates the initiative's ongoing transformation from charitable action to structured service, working carefully not to distort its spirit and bottom-up commitment, and with the intention to frame it into a replicability strategy.

Keywords: neighbourhood networks, food surpluses, local shops, disadvantaged people, charity service.

# 1. Food poverty: a phenomenon also rooted in high-income countries

# 1.1 The global context

Pandemics in 2020, climate change and the conflict between Russia and Ukraine in 2022, in addition to the already manifest fragilities in the global food system, are causing, also in Europe, severe limitations for many people in their access to good, safe, and even sufficient food.

The 2022 'Sixth Assessment Report. Impacts, Adaptation and Vulnerability' of the Intergovernmental Panel on Climate Change – IPCC (the United Nations body for assessing the science related to climate change) clearly state that "The global food



system is failing to address food insecurity and malnutrition in an environmentally sustainable way." (IPCC, 2022 – p. 48). The impacts of climate change on food systems affect everyone everywhere yet, summed up to the economic downturn and the global competition to for critical resources, increase worldwide the vulnerability of some groups, such as women, elderly and children in low-income households, minority groups, low-income workers, and also young people.

According to the 2022 report issued by the Italian charity organisation CARITAS (CARITAS, 2022), in 2021, approximately 5.6 millions of 'absolute poor' (people who cannot afford essential goods and services) are estimated in Italy (1.4 millions of whom were children) on a total population of less than 60 millions, thus the 10%. Compared to 2020, there is a 7.7% increase in the number of beneficiaries supported by CARITAS. What scares the most is that these beneficiaries are not always new poor but also people who oscillate between in and out of need, being "working poor", that is poor workers. In fact, one in four people that is at risk of poverty and social exclusion (i.e. already having economic problems) could at any moment slip into a worse situation of poverty. Both men (50.9%) and women (49.1%) ask for help, while the incidence of foreigners is growing year on year, reaching 55%. Moreover: between 2019 and 2021, the incidence of poverty increased more than the average for: i) households with at least 4 persons, ii) with a reference person aged between 35 and 55, iii) households of foreigners and those with one income from work, iv) and people of 50-60 year-old who have not yet earned the right to a pension (ibidem).

If we focus on food poverty, we see that, in high-income contexts such as Europe, it does not only mean being hungry and undernourished, but also not having access to sufficient food that is of good quality and provides the nutrients necessary for physical well-being on a stable basis. According to the Food and Agriculture Organisation of the United Nations, the high cost of healthy diets coupled with income inequality put healthy diets out of reach for around 3 billion people in the world, the 40% (FAO, 2021): "Globally, the world is not on track to achieve targets for any of the nutrition indicators by 2030" (FAO, 2021 – p. 6). Higher domestic food price inflation, higher retail prices, reduction of the purchasing power of safe and nutritious food in sufficient quantities affect the quality rather than the quantity of the diet: fresh, nutritious food is less accessible to the so-called urban poor, who therefore tend to buy and consume packaged food – which is less healthy – in greater quantities.

FAO (2021) in this regard proposes six pathways for the transformation of food systems to improve people's nutrition, make diets accessible economically and physically and thus achieve food security: 1) Integrating humanitarian, development and peacebuilding policies in conflict-affected areas; 2) Scaling up climate resilience across food systems; 3) Strengthening resilience of the most vulnerable to economic





adversity; 4) Intervening along the food supply chains to lower the cost of nutritious foods; 5) Tackling poverty and structural inequalities, ensuring interventions are propoor and inclusive; 6) Strengthening food environments and changing consumer behaviour to promote dietary patterns with positive impacts on human health and the environment.

# 1.2 The Italian context

In Italy, food poverty, despite not very evident, is a structural phenomenon that the pandemic exacerbated and highlighted. According to a study of 2015 (Rovati & Pesenti, 2015),14 out of 100 families do not have access to a balanced diet with protein at least every 2 days. The situation is worsened today, which is testified by the number of people who have applied for food aid every year, from 2015 to 2020: in fact, the food of FEAD aid (Fund for European Aid to the Most Deprived) has been distributed to between 2 and 2.8 million people (Ministero del Lavoro e delle Politiche Sociali, 2021). This aid is provided by private social organisations such as Caritas Ambrosiana, Banco Alimentare and the Croce Rossa Italiana and takes the form of meals provided in canteens and the distribution of food parcels and points cards to be used in social emporiums or at home.

Italy is not suffering food shortage, but economic emergency instead, for absolute poor and people at risk of poverty that are both increasing in number. Food surplus is instead an issue: it amounts to 5.6 million tonnes per year (16.8% of annual food consumption) (Qubì, 2020) – yet there is difficulty for many families to access food that guarantees a nutritious and adequate diet.

The restrictions in place during the pandemic period such as the lockdown have increased the category of the working poor, individuals who oscillate between in and out of need: people that, at best, have seen their income reduced by at least a quarter (CENSIS & Confcooperative, 2020), which are estimated in the 33% of the Italians.

# 1.3 Milan: An Italian economic engine facing food poverty

Although Milan has always been defined as the economic engine and locomotive of Italy, some of its population faces a condition of food insecurity. In 2021, Banco Alimentare (https://www.bancoalimentare.it/it) recorded 1.669.000 people assisted in Milan and its province, and 126,600 tons of food saved from waste.

A survey conducted by Actionaid in 2021 (Actionaid 2021) reports that the solidarity organisations they focused on registered a 95% increase in requests for food assistance and the number of individuals and families who needed food aid almost doubled. The report shows also that food poverty predominantly involves women (81% of respondents), since they are usually in charge of household organisation,





cooking, shopping, family, and children: it is mainly they who skip meals or give up food to feed their children. More in general, local data mirror the national ones.

Policies adopted by the city of Mian in the last years are a legacy of the Milano Expo 2015, which theme was "Feeding the planet" and which launched the "Milan Food Policy": a policy instrument, jointly promoted by the City of Milan and Fondazione Cariplo, that supports the government of the city in its efforts to make the local food system sustainable (Food Policy Milano, 2021). This Policy coordinates and provides an umbrella to several food initiatives, services and strategies, form both private and public bodies that experiment with sustainable models of production, processing, distribution and collection of food, delivered also to alleviate food poverty.

They can take different forms, like shopping vouchers, food parcels from 'food banks', solidarity canteens, emporiums and shops, whose driving forces are often the main partners of the Milanese Food Policy, first and foremost the Cariplo Foundation, which supports and contributes to the activities of many organisations such as Ricetta QuBì, Banco Alimentare, Caritas Ambrosiana, IBVA (Istituto Beata Vergine Addolorata), the Italian Red Cross and Recup, to mention a few. Food Policy works to facilitate their networking to be more effective in action, regardless of the differences in initiatives.

Within this framework and following the principles of Milan Food Policy of ensuring healthy food for all, combating waste, and supporting and promoting scientific research in the agri-food field, 'Spesa Sospesa Nolo' was established in March 2020, a grassroots charity action set up in the NoLo district during the first pandemic lockdown by a group of citizens willing to help needy people in the same area.

# 2. 'Spesa Sospesa NoLo': a charity action to help people in need, created in an active neighbourhood from an old tradition.

The NoLo (North of Loreto) neighbourhood in Milan is at the centre of a transformation process fuelled by the area's deep-rooted associational fabric, by the active role of the NoLo Social District (a social street of 11,000 members), and by a momentum of caring for the common good. The Covid-19 pandemic accentuated the poverty of some, highlighting how it is a two-speed neighbourhood polarising between richer and poorer areas, and how there is a need for fair access to food. It has also highlighted how neighbourhood food shops suffered from logistical (delivery and take-away) and reception (limited space utilisation) shortcomings that necessitate their rethinking and process optimization. The irregularity of food flows (restaurants, small shops, etc.) and demand have also generated surpluses whose





recovery and redistribution have suffered from the operational difficulties under strict sanitary regulations and limited personnel.

At the same time, the pandemic raised awareness on the importance of the neighbourhood networks built through the pro-activity of inhabitants, such as the several ones that were, and are, very lively in NoLo (Camocini and Fassi, 2017; Fassi and Manzini, 2021). In this fertile neighbourhood, the 'Spesa Sospesa' project was born from the initiative of Alberto Andreetto, a young interaction designer who wanted to help another family in the neighbourhood that was in financial difficulty due to the pandemic. Through a post in the Nolo Social District Facebook group, he expressed this intention to provide help and, as a response, many people offered to donate money to help families in need. Andreetto then created a Google form with three options: "I need food", "I want to bring a grocery shopping to someone" or "I just want to contribute to a grocery shopping", with the aim of creating matches between donors and applicants. The aim of the initiative was not so much to help on an economic level as on a social level. The form was then published on the NoLo Social District: in a fortnight, it received thousands of responses. Considering this reaction, a platform was created with a website: this made it possible to filter requests by postcode, restricting the area of intervention to the NoLo district and surrounding areas, and facilitated the creation of matches. As a result, matches were created between more than 250 people, some of whom even lived in the same building, and a total of 8000 euros worth of food was purchased. Donations were made via the platform, then people who volunteered via the site bought and distributed the food to those who requested it.

'Spesa Sospesa', that can be translated as "suspended food-shopping", borrowed its principle from an old Italian solidarity practice, which originated in Naples in the first half of the 20th century: the 'caffè sospeso', that can be translated as the "suspended coffee". It is a cup of coffee paid by a customer in a café for the benefit of another one that will come later and that cannot afford to order it. Following this spirit of solidarity and empathy, several initiatives flourished in Italy (Rossi at al, 2021, Cattivelli 2021) during the pandemic, adopting this naming although the operating principle was technically different from the 'caffè sospeso'. This was, in fact, the case of 'Spesa Sospesa'.

With the end of the lockdown, in June 2020, the project came to a standstill until it was taken over by the Polimi DESIS Lab of the Politecnico di Milano, an Off Campus living lab opened by the Department of Design in the Municipal indoor market of NoLo. The Radio NoLo association, there located too, supported the initiative. The takeover implied the implementation of some changes to make the initiative more inclusive and sustainable. Changes were triggered by questions that helped rethinking it:





- 1. How might we guarantee fair access to quality and quantity food of to the people in need, even temporarily, in the NoLo district?
- 2. How might we ensure the post-pandemic recovery of small-scale retail shops, such as neighbourhood groceries, and local actors?
- 3. How might we contribute to educating the neighbourhood's dwellers on the fight against food poverty?

Accordingly, 'Spesa Sospesa', since September 2020 has transformed into a solidarity service run by a network of neighbourhood actors, managing the recovery, distribution, and valorisation of food, this including the surplus and unsold one. Since then, project's objectives are not limited to the fair, continuous and balanced supply of food to the disadvantaged neighbourhood population but include the funding to neighbourhood shops, while involving them in a fight against food waste and poverty, as a short-range solidarity network. In this new configuration, the service integrates the support to the poor with the one to the local shops, at neighbourhood scale.

Since then, 'Spesa Sospesa' has been packing 20 basic food bags prepared and distributed every Friday afternoon by Polimi Off Campus' volunteers (professors, doctoral students and trainees). Bags consist of food products purchased at a reduced price from the Municipal Market in Viale Monza, where Off Campus is located and the operations take place. Local shops, associated in MEMO 54, guarantee fruit and vegetables, bread and fresh pasta, a choice of meat or cheese and cold cuts. Food bags are then supplemented with packed products not available in the market, and so bought from large retailers: flour, rice and dried pasta. Funding comes from donations collected in the neighbourhood. 'Spesa Sospesa' manages to meet the food requirements of most of the people requesting food, including those with food intolerances and with halal or vegetarian diet. From 2020 to 2022, it distributed more than 1600 food bags (Fig.1).





Figure 1. 'Spesa Sospesa'

# 3. From charity activism to a service solution

The redesign of the activity by the Politecnico di Milano's living lab "Off Campus NoLo", from a grassroots initiative to a permanent and weekly service co-produced with the food shops of the municipal market and local organisations, has brought to an evolution of the service that evidenced different opportunities of improvement. The university intervention, building upon a social activism initiative, has secured it by developing an early-stage social innovation and connecting it more structurally with social actors, with the ultimate goal to scale it out, up and deep (Moore, et al. 2015). The action of 'design activism' initiated by the NoLo inhabitant has been made more structured and visible, so becoming also more effective as a 'provocative artefact' into people's perception, invite active engagement and offer new ways of seeing and living the neighbourhood (Markussen, 2011). To become a stable and sustainable practice, however, after months of experimentation with the new solution, it became clear that further technical and technological structural improvements, a larger





network, a better definition of the service offering and some adaptations to cope with regulations were needed. Ultimately, experimentation with civil servants and civic organisations would have been necessary to test changes in the regulatory framework, as it happens in many cases of social innovation (Meroni, 2019).

The opportunity for a further evolution was provided by the Polisocial Award, the yearly applied-research grant funded by the corporate social responsibility of Politecnico di Milano. The living lab "Off Campus NoLo" was, indeed, already an initiative of this programme, which is creating a citywide network of likewise labs to support local communities design solutions for their wellbeing. The Polisocial Award invites the several university departments to work together in multidisciplinary projects. In 2021 the award theme was "Equity and recovery": the authors of this paper, which are from to the Department of Design, together with colleagues of the Department of Management Engineering (DIG) and the Department of Electronics, Information and Bioengineering (DEIB) applied with a research project called "SOSpesa – equity and recovery around the corner". The project has been awarded with 100k euros to improve the existent solution throughout 15 months of work (March 2022-June 2023), thus providing for the second evolution of the initiative.

# 3.1 Goals and expected results

Building on the existing 'Spesa sospesa', 'SOSpesa' aims to researching, organizing, testing and prototyping a network model of neighbourhood actors operating in the food sector both as food suppliers, distributors, and solidarity agents. The research process consists of: 1) researching existing service delivery models that support the fight against food poverty; 2) mapping the locations, information and flows of food surplus to implement neighbourhood-based circular economy solutions, to ensure fair access to food and implement neighbourhood-based economic recovery solutions; 3) building a conceptual classification of organisational and operational models of redistribution to foster adoption in different contexts; 4) identifying the conditions for the economic sustainability of the solution in the long term and its replicability in other territorial contexts; 5) redesigning and testing the solution accordingly.

Compared to the first redesign, therefore, this one has a much broader scope and integrates different disciplinary competences (from management to IT), in order to achieve a robust service that can guarantee the supply of food to a larger number of vulnerable people and families, utilising surpluses and unsold food as much as possible and strengthening the economy of neighbourhood shops. It is also investigated whether the service could be innovated by the adoption of artificial intelligence and machine learning-based technologies for real-time analysis of collected data and efficient management of the food supply.





The work is still ongoing and so the results in terms of a new service configuration: however, the purpose of this article is to illustrate and discuss a methodology for moving, progressively, from an activist initiative to a service with more than just a charitable purpose. The wider range of expected results include:

- 1) the classification of different models of surplus valorisation for social purposes in NoLo and the analysis of their effectiveness to create a Network of Neighbourhood Actors (NNA) that support initiatives and organisations committed to fighting poverty and food waste through the re-marketing of surplus, expiring products and urban agriculture production. This networking action can be regarded as a way of *infrastructuring* social innovation (Hillgren et al. 2011, Seravalli and Eriksen 2017).
- 2) the development of an organizational model for economic sustainability of 'SOSpesa' in the medium to long term, combined with an activity model of the actors to guarantee a strong legacy of the project. A B2B digital platform will be designed to serve as a repository of the stocks and flows of food: this will facilitate the collection of data from the direct beneficiaries to better plan the weeks through monitoring and data analysis. It will also make it possible to consider the replicability of the model in other neighbourhoods for both charity and economic recovery of local food shops. This action of organisational and technological redesign can be regarded as a technical scaling (Meroni et al, 2017), and will need further research.
- 3) the activation of a network of volunteers that run the service. Thanks to the established practice of 'Spesa Sospesa NoLo' and the actors participating in the Qubì network, the project 'SOSpesa' can already take advantage of a proactive social fabric. This action of societal engagement can be seen as a move in the direction of cultural scaling, so to ground the service in the neighbourhood.

# 3.2 The process of redesign

An outline of the ongoing process is useful to understand the specific methodology adopted in this second, deeper, redesign of the service. It started with 2 subsequent activities: desk/field research, and co-design workshops.

**Research**. The research phase surveyed and catalogued national and international best practices operating in the fight against food poverty and in the reduction of surplus food waste. Services were identified for benchmarking and clustered according to variables considered useful for the following design: territorial





dimension, type of product conferred, number of stakeholders, number of beneficiaries, etc. At the same time, the researchers of the Department of Management Engineering mapped the territorial organizations of the NoLo district that provide services comparable to 'SOSpesa' and the neighbourhood shops that could potentially be included in the food supplier network. The organisations were catalogued with the same indicators as the international best practices and were analysed through in-depth interviews. The shops were identified on the basis of a maximum distance of 500m from the delivery hub (which can be covered on foot or by bicycle in a short time) and of their product category, favouring mini-markets, delicatessens, bars, restaurants, butcher shops, greengrocers. In an initial survey, 6 shops were identified within the P.I.NoLo association, which gather 12 commercial entities of the neighbourhood, to which questionnaires were submitted to collect information on: type of unsold product, participation in similar services, method of stocking the warehouse, frequency and quantity of unsold goods, interest in participating in the service.

These analyses were accompanied by a mapping (by the DEIB Department) of existing technologies and systems available for similar services to manage traceability, data entry and data storage, identifying the criticalities of existing platforms to then select innovative and suitable solutions to support 'SOSpesa'.

**Co-design.** Research was then followed by a co-design phase conducted through 3 workshops with different kinds of stakeholders: volunteers involved in the Nolo Spesa Sospesa (workshop A), researchers from the three departments involved in the research (workshop B) and a group of representatives of local associations working in the field of food poverty (workshop C).

Workshop A was conducted together with a group of students from the student association SIT (Social Innovation Team) who accompanied the researchers through these project phases using the experience of field application of design tools and methods for social innovation. The meeting, held in June 2022, lasted two hours and consisted of four parts: introduction of the research, collection of feedback on the activities carried out during the period of operation of Spesa Sospesa Nolo, identification of possible solutions for improving the service, and mapping of insights. Four volunteers attended the workshop. The tools used were a paper board divided into two parts dedicated to feedbacks on operation and proposals for improvement. The board was populated using sticky notes from which an initial set of insights useful for redefining the service was elicited.

The most substantial insights for 'SOSpesa', however, came from workshops B and C, conducted with a same tool: a 'Service Redesign Board' (Fig. 2) used in both digital and printed versions. The board was designed on purpose. It is divided into





four quadrants around a central window. The two quadrants on the left served as a positioning map where the identified best practices (technologies and solutions) were placed according to two polarities: most interesting and least interesting. The upper right quadrant served as a repository for the elements of interest identified and the lower left quadrant for a selection of the most significant ones, commented with respect to their feasibility. The four quadrants were intended as preparatory to the fifth one in the centre: an activity map divided in back and front office operations, and to the beneficiaries and stakeholders involved. Here, in fact, different insights about operations and beneficiaries were placed to provide the basis for an inductive redesign of the service, described verbatim in the centre of the quadrant.

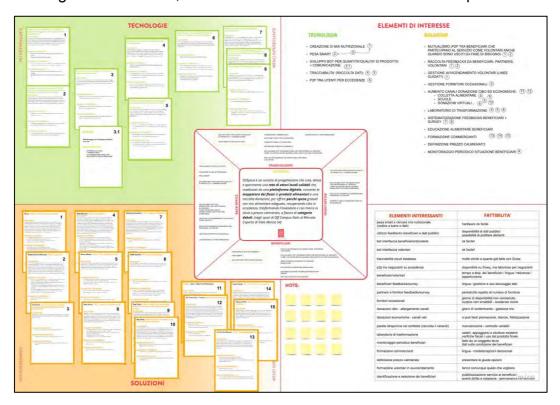


Figure 2. Service Redesign Board' used for the co-design of 'SOSpesa'

Main insights from the three co-design sessions can be then summarized as follows:

 Inputs about stakeholders: a dedicated training for suppliers is needed, with specific actions to manage occasional ones; beneficiaries might be involved in the delivery of the service according to a p2p logic, even once they finished to use it; reduced price of food has to be set out together according to different conditions; transformation labs might be set up; donation channels need to be expanded; a systematic collection of feedbacks from all stakeholder needs to





- be implemented to monitor and adjust the service over time; traceability is key and can be achieved with different technologies.
- Inputs about beneficiaries: multilingual BOT may be experimented to improve bidirectional communication; beneficiaries might become co-producer of the service; the nutrition mix must be improved also by using different technologies, for instance a 'smart weighing machine'; beneficiaries often need food education; economic situation and access to service of beneficiaries must be somehow monitored in connection to the public services; regular feedback from beneficiaries are key for the correct design of the offering; p2p solutions might be set up between the beneficiaries to manage specific situations, such as surpluses; the food provision might be integrated with job placement programs for empowerment of the beneficiaries.
- <u>Inputs about back office</u>: traceability is key and can be achieved with different technologies; volunteers must be trained and thus developing guidelines can help managing newcomers; the service have to be replaced by other solutions during vacations time when volunteers are off.
- Input about front office: multilingual BOT might be developed to better manage quality/quantity of the food in the interface with the beneficiary; beneficiaries might choose the food supply (or part of it) when collect the food bag; convivial occasions might be created to support the creation of a cohesive community.

Together, these inputs made it possible to outline a draft of the service 'SOSpesa', based on which a dedicated prototyping plan and a replicability strategy are being designed and implemented or outlined in 2023.

# 4. The new 'SOSpesa': key expected features of an innovative service

The working definition of 'SOSpesa' in Fall 2022 was the following:

"A service that creates, activates, and experiments with a network of neighbourhood solidarity actors that, aided by a digita) platform, enables the mapping of food flows and a collection of donations, to offer free food bags to people in need. Qualified by an appropriate food nutritional mix, food bags recover surplus food from the neighbourhood, transform unsold food and integrate stock goods at a reduced price. Collection and delivery take place in the spaces of Off Campus NoLo at the Mercato Coperto in Viale Monza 54."





The definition was complemented by an annotated glossary that outlines and explains the components of the system and how they work:

The network of local solidarity actors is composed of suppliers, intermediaries, donors, volunteers and beneficiaries.

Suppliers are neighbourhood shops at a maximum distance of 1 km from the point of delivery of the shopping parcels (in this case, th Off Campus NoLo). They are small and medium-sized commercial activities (minimarkets), fresh and/or packaged food outlets, delicatessens, bars, restaurants, ice-cream parlours, online supermarkets or neighborhood-based take-away services, open-air district markets (Mercato di Via Termopili), indoor municipal markets (Mercato di Viale Monza), community gardens (Orti di Via Padova) and related experiments in hydroponic cultivation (La terra che non c'è). Therefore, supermarkets such as large-scale distribution networks are excludes since they are already part of parallel circuits with their own tried and tested operation (e.g. with the Banco Alimentare). Intermediaries are associations (parishes etc.) that facilitate relations between suppliers and beneficiaries (e.g. RECUP, P.I.Nolo, and more).

Donors are neighbours, companies, and local entities.

Volunteers are a group of neighbourhood residents and allies (researchers, volunteers from companies, students in alternating school/work, university students in extracurricular activities) who support the management and delivery of the service.

Beneficiaries are a group of vulnerable people (low-income, no-income, working poor) who receive the food packages.

The food products are procured from: the existing stock (fresh, processed or packaged) of suppliers; unsold products close to their expire date; third-party processing of surpluses from district markets; shared neighbourhood gardens; any targeted purchasing campaigns for specific products organised in cooperation with intermediaries so to make them available to 'SOSpesa' at a reduced price and/or as a donation.

The food bags consist of a basket of foodstuffs with a total market value of no less than €30. The food shopping bags are distributed at Off Campus NoLo or delivered at home on request for non-self-sufficient beneficiaries, in the number of 20 per week to cover 20 subjects from underprivileged categories in the neighbourhood. The distribution of the shopping parcels is organized through pre-packaging, and/or through self-service at a "stall", and/or with vouchers that can be spent at the suppliers within the network of local solidarity actors.





**The logistics and food management** are designed to run thanks to the experimentation of:

- a smart weighing machine that identifies the nutrients and quantity of donated/purchased food, so to check the correct food mix, ensure product traceability and implement a database of received and donated food flows;
- an application specifically developed for 'SOSpesa' that allows operators to enter all the necessary data into the online database;
- a digital platform that manages the data collected by the weighing machine and application and interacts with a bot interface (WhatsApp). This database allows to extract the history of each product and guarantee traceability.



Figure 3. On-going development of 'SOSpesa'

# 5. Reflections and directions of development of the service

The design of 'SOSpesa' is still in progress within and beyond the scope of the grant from Polisocial Award. In fact, the service is being considered seminal also in the light of another national research project that started in November 2022 and that is aimed at designing scenarios and solutions for food and nutrition sustainability, safety and security. Named "ON Foods" and funded under the National Recovery and Resilience Plan (NRRP), it focuses on alternative food systems that can help rethinking and redesigning more sustainably the food chain: the case of SOSpesa, and in particular the strategy that allowed to move from a bottom up, social activism initiative to a more structured service is of a great relevance for a general strategy toward sustainability. Thus, the lessons learned from the project SOSpesa before





prototyping the redesigned service are referred to the strategies designers have defined and adopted to develop it out of an activism initiative, in order to:

- 1. Avoid its denaturation, but make the solution evolve keeping it grassroot spirit, with motivated participation of all the actors of the network;
- 2. Keep the network committed in the medium-long term;
- 3. Engage the network beyond the specific task of 'SOSpesa' so to create the condition for other project to start;
- 4. Impact on the reduction of the food waste at the local scale;
- 5. Support not only people in need, but also local shops;
- 6. Imply technology to operate more effectively and personalize the service, without spoiling human relationships;
- 7. Contrast the chronicling of the needs of the beneficiaries, thus avoiding that the recourse to 'SOSpesa' become permanent;
- 8. Consider carefully the dignity of the beneficiaries, avoid stigma and protect their privacy in difficult times of their life;
- 9. Ground the service in the neighborhood, so that the local scale becomes its unique strength.

The first 3 points (avoid denaturation, keep the network committed in the medium long term, engage the network beyond SOSpesa) are connected to the strategy of infrastructuring the system and creating the conditions for project-based communities to flourish. With this regard, Off Campus NoLo must remain committed to operate as an 'agent' who, in a given space, can prompt action and help connect people around causes, finding room for all, ultimately help developing a sense of collective identity (Meroni 2019; Fassi and Manzini 2021).

The second block of 3 points (reduce food waste, support both people in need and local shops, humanize technology) is intrinsic in the (re)design brief of the project, and influences the choice of technologies, of activity models and of service encounters, that is the back and the front office of the service. Here, service design, with its set of established methods and tools, including the co-design approach, are a solid basis for action, complemented by the adaptation of an already tested IT platform and a structured monitoring system and data collection that need to be implemented to keep the solution on track. A proper design of these features is also at the base of the success of the service, which is intrinsically thought to scale out by replicability rather than increase in numbers (Morelli, 2015), although considering the readiness and maturity of different contexts. NoLo, in fact, has proven to be one of a kind. Yet, the service may help the public administration to revisit some strategies





against food poverty and food waste, notably through the evolution of the Milan Food Policy, by tapping on the potential of local communities.

The last 3 points (contrast chronicling of beneficiaries, consider dignity and stigma, ground the service in the neighbourhood) are finally connected to the cultural approach of SOSpesa, which aims to create a culture of solidarity, mutual help and pro-activity in all actors of the local network, including beneficiaries. It aims at empowering people while supporting them with material or economic means. The stable presence of Off Campus NoLo in the area, the continuous organization of initiatives beyond SOSpesa, the integration of other services and meeting opportunities (this including job placement, cultural events, co-design workshops), and the education of actors are design directions that the project is already exploring.

Adopting the well-known categorization of the social innovation strategies for scaling and impacting in 'scaling out, up and deep' (Moore et all, 2015), the prototyping of 'SOSpesa' has been designed to activate the local ecosystem to experiment with all of them, to achieve the purpose of generating public value while avoiding the fragmentation of the different actions.

# **Acknowledgments**

This paper builds upon the results of a project developed thanks to the social responsibility program of the Politecnico di Milano, named Polisocial Award. Then, it elaborates them for further development thanks to the project "ONFoods" funded under the National Recovery and Resilience Plan (NRRP), Mission 4 Component 2 Investment 1.3 - Call for proposals No. 341 of 15 March 2022 of Italian Ministry of University and Research funded by the European Union - NextGenerationEU; Award Number: Project code PE00000003, Concession Decree No. 1550 of 11 October 2022 adopted by the Italian Ministry of University and Research, CUP D93C22000890001, Project title "ONFoods - Research and innovation network on food and nutrition Sustainability, Safety and Security. Working ON Foods".

Special thanks are due to the team actively working on SOSpesa besides the authors: Valentina Ferreri, Francesco Vergani, Valentina Soffientini (Politecnico di Milano); Associazione RECUP; Radio Nolo; Associazione MEMO54.





# References

- Actionaid (2021). La fame non raccontata. La prima indagine multidimensionale sulla povertà alimentare in Italia e il Covid-19. Available at (accessed on October 2022): https://www.actionaid.it/informati/pubblicazioni/la-fame-non-raccontata
- Camocini B. and Fassi D. (2017). Introduction, In Camocini B and Fassi D (eds), *In the Neighbourhood. Spatial Design and Urban Activation*. Milano: FrancoAngeli.
- CARITAS (2022). L'anello debole. Rapporto 2022 su povertà ed esclusione sociale in Italia. Edizioni Palumbi Teramo, Italy
- Cattivelli V. (2021). Social innovation and food provisioning initiatives to reduce food insecurity during the Covid-19 pandemic. *Cities*, <a href="https://doi.org/10.1016/j.cities.2022.104034">https://doi.org/10.1016/j.cities.2022.104034</a>
- CENSIS & Confcooperative (2020). Covid19. Focus CENSIS Confcooperative.

  Available at (accessed on October 2022):

  <a href="https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjgv7jV2\_b6AhULRfEDHVjEDNYQFnoECAcQAQ&url=https%3A%2F%2Fwww.confcooperativemodena.it%2Fwpcontent%2Fuploads%2F2020%2F04%2FCovid19-Focus-CensisConfcooperative.pdf&usg=AOvVaw0-7llc5UKgZFiB4efCo2jB</a>
- FAO, IFAD, UNICEF, WFP and WHO. (2021). In Brief to The State of Food Security and Nutrition in the World 2021. Transforming food systems for food security, improved nutrition and affordable healthy diets for all. Rome, FAO. https://doi.org/10.4060/cb5409en
- Fassi D. and Manzini E. (2021) Project-based communities: lessons learned from collaborative city-making experiences, *CoDesign*.
- Hillgren PA, Seravalli A and Emilson A (2011) Prototyping and infrastructuring in design for social innovation. *CoDesign*, Vol. 7, Nos. 3-4:169-183
- IPPC (2022), Sixth Assessment Report. Impacts, Adaptation and Vulnerability' of the Intergovernmental Panel on Climate Change Technical Summary. Available at (accessed on October 2022): <a href="https://www.ipcc.ch/report/sixth-assessmentreport-working-group-ii/">https://www.ipcc.ch/report/sixth-assessmentreport-working-group-ii/</a>





- Markussen, T. (2011). The Disruptive Aesthetics of Design Activism: Enacting Design Between Art and Politics. In *Proceedings of the Nordic Design Research Conference 2011*, Helsinki.
- Meroni A. (2019). Crossing the boundaries of participation, activism, paradigm change and incubation: On the edge of design for social innovation and sustainability'. Pp 76-96. In: Michel R. (Edited by), *Integrative Design. Essays and projects on design research*. Birkhauser, Basel
- Meroni A., Corubolo M. and Bartolomeo M. (2017). The Social Innovation Journey: Emerging challenges for service design for the incubation of social innovation. Pp.163-181. In: Sangiorgi D. and Prendiville A. (edited by), *Designing for Service. Key Issues and New Directions*. Bloomsbury Publishing
- Milano Food Policy (2022). Obiettivi e priorità. https://foodpolicymilano.org/obiettivi/
- Ministero del Lavoro e delle Politiche Sociali. (2021). *Programma Operativo FEAD* 2014-20. Available at (accessed on October 2022): <a href="https://www.lavoro.gov.it/temi-e-priorita/europa-e-fondi-europei/focus-on/fondodi-aiuti-europei-agli-indigenti-Fead/Documents/PO-1-FEAD-versione-5.0.pdf">https://www.lavoro.gov.it/temi-e-priorita/europa-e-fondi-europei/focus-on/fondodi-aiuti-europei-agli-indigenti-Fead/Documents/PO-1-FEAD-versione-5.0.pdf</a>
- Moore M-L, Riddell D. and Vocisano D. (2015). Scaling Out, Scaling Up, Scaling Deep: Strategies of Non-profits in Advancing Systemic Social Innovation. *The Journal of Corporate Citizenship*. No. 58, Large Systems Change: An Emerging Field of Transformation and Transitions, pp. 67-84
- Morelli N. (2015). Challenges in Designing and Scaling up Community Services. *The Design Journal.* Volume 18:2. pp 269-290.
- Rovati G. and Pesenti L. (2015). *Food Poverty, Food Bank. Aiuti alimentari e inclusione sociale*. Casa editrice Vita e Pensiero Milano, Italy
- Rossi, A.; Coscarello, M.; Biolghini, D. (2021) (Re)Commoning Food and Food Systems. The Contribution of Social Innovation from Solidarity Economy. *Agriculture*, 11, 548.
- Seravalli A and Eriksen MA (2017) Beyond collaborative services: Service Design for Sharing and Collaboration as a Matter of Commons and Infrastructuring, in





Sangiorgi D. and Prendiville A. (eds) *Designing for Service: Key Issues and New Directions*, Bloomsbury Press, London, pp. 237-250