

# Strategies of Design for Social Innovation and Design Activism in the Promotion of Positive Social Capital During the COVID-19 Pandemic in Brazil

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# ABSTRACT

This case study aimed at mapping initiatives of social innovation that have promoted positive social capital during the COVID-19 pandemic in Brazil. To this end, information about the actions and their developers were collected online and further described using the forms "Light Format" and "In-Depth Format", from the toolkit developed by the Design for Social Innovation and Sustainability (DESIS) Network. In addition, interviews with the people involved in the projects were carried out in order to obtain further details. From the promising cases mapped, 15 were selected and categorized according to their field, coverage area and target. Finally, the initiatives were assessed based on the concepts of design for social innovation (Manzini, 2008) and design activism (Fuad Luke, 2009; Thorpe, 2012). The analysis showed that whether the actions proposed had the design framework conceptions as a theoretical basis or not, the projects indeed adopted design strategies to reach their goals, leading to positive impact in the social, economic and environmental areas and thus promoted positive social capital.

*Keywords:* Design for Sustainability, Design for Social Innovation, Design Activism.

# INTRODUCTION

The course of the COVID-19 pandemic in Brazil, as in many other countries, has been catastrophic. The country is among those where fewer tests per million habitants are carried out (Ritchie, 2020) and also one of the few where the central government is against physical distancing and quarantine measures to contain the spread of the virus. According to the World Health Organization (WHO), without proper testing, contact tracing and isolation of confirmed cases, the disease can spread quickly and cause societal and economic disruption in addition to shocks in the health and social care systems (WHO, 2020a). In this sense, studies based on the 1918 flu pandemic have shown that the faster and the stronger is the response from the government, the better is the economic recovery (Dizikes, 2020).

For developing countries, the novel coronavirus (SARS-CoV-2) poses extra challenges. In Brazil, approximately ¼ of the population was living below the poverty threshold in 2018, according to reports released by IBGE, the Brazilian official statistics institute (Neves, 2019). Since housing and sanitation had already been far from the ideal prior to COVID-19, the simplest of the recommended precaution against the virus—i.e., washing the hands—is hindered even more (WHO, 2020b). Furthermore, aid actions from the central government

towards the population have been scarce during this time (Schymura, 2020; UOL, 2020). Hence, the sum of these factors leads the country to become the new global epicenter of the pandemic (Gamba, 2020).

Despite the critical scenario, signs of solidarity have also arisen in Brazil. Some companies have arranged coordinated actions to support small businesses as well as to facilitate fundraising for poor communities (Labs, 2020); some of these actions can in fact be described as social innovation initiatives. Therefore, the goal of this paper is to map which of them can be classified as social innovation initiatives according to the description forms "Light Format" and "In-Depth Format" from the toolkit developed by the Design for Social Innovation and Sustainability (DESIS) and details obtained from the projects' developers. The assessment of the initiatives was based on the concepts of design for social innovation (Manzini, 2008; Thorpe, 2012) and design activism. The analysis also took into consideration the cases whose actions were replicable to other contexts or not.

# 1. DESIGN FOR SOCIAL INNOVATION AND DESIGN ACTIVISM IN THE PROMOTION OF POSITIVE SOCIAL CAPITAL

When it comes to sustainability and promotion of sustainable lifestyles, designers have been, historically and to this day, more part of the problem than the solution of such matters (Papanek, 1973; Dormer, 1990; Manzini, 2008). Nonetheless, with a paradigm shift, this area can contribute for sustainable development, by applying the three pillars of sustainability— environmental, economic and social ones. They must be indissociable, focusing on fulfilling "the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987 p.41).

Developing ideas for design and designers to effectively contribute in such a complex scenario is not a simple task. In fact, it would be likely impossible for someone, being this person a designer or not, to find a solution alone. Therefore, the best and feasible ideas will often come from distributed and team work, especially when considering that the problems themselves vary among countries according to their development rate, among innumerous other factors (Cardoso, 2016).

Over time, designers have started to realize and understand the potential of their field of work in terms of effective transformations. Since their practices are often responsible for either suggesting or setting new lifestyles and values, thus generating societal changes, they have actively sought to balance social, economic and environmental aspects of sustainability in their projects. Although the concepts of sustainability and activism were yet to be defined, early moves had already envisaged such efforts. One of the first initiatives was fostered by the Arts and Crafts movement, which started around 1850 with the aim of claiming better working conditions and wages as well as raising awareness about industrial pollution (Fuad-Luke, 2009). The force of movements such as this one is still spreading and, nowadays, there is probably no school of design worldwide that does not assert minimally the importance of sustainable practices.

In the last decades, the aim for sustainability has become an imperative, as the negative impacts of the contemporary urge for production and consumerism become more evident every year. Consequences such as natural disasters, ascent inequalities, local diseases, epidemics and pandemics challenge people in new and complex ways. Fortunately, human beings are natural problem solvers. Now more than ever, the benefits of the globalized world

allow for solutions that had been developed for one particular context to be replicated elsewhere (Manzini, 2015), which is consistent with the Manzini's definition of design for social innovation: "creative recombination of existing assets (...) which aim to achieve socially recognized goals in a new way" (Manzini, 2015, p. 11). In other words, design for social innovation lies on new products, services and models that meet social needs through collaboration and therefore bridge social relationships (Murray, 2010).

In addition to design for social innovation, the authors understand sustainability and better life conditions as goals pursued by the design activism. Activism, by definition, is "the use of direct and noticeable action to achieve a result, usually a political or social one" (Cambridge, 2020). Although activism can also be regressive (Thorpe, 2012), the lens of this article will focus on analyzing the promotion of positive social capital through initiatives that adopted strategies of both design for social innovation and design activism during the COVID-19 emergency context in Brazil. More specifically, this article will address real cases that facilitated collective action, thus generating reciprocity between individuals and communities and, somehow, encouraging civic engagement (Fuad-Luke, 2009).

According to Thorpe (2012), there are some methods among the general activist methods and tactics that are likely applicable as methods for the design activism. The main differences between the conventional and the design-related ones lie on their propositional characteristics—proposing instead of opposing—and their duration. The methods are essentially related with the type of work developed, such as organizing, services, advocacy, mobilization, and solidarity. While organizing is to work within communities, for instance, in design activism this method is described as the use of co-design and other participatory, selfdesign, or design-enabling processes. Services provide facilities and training, whereas in design it is mostly related to humanitarian design of structures and services. Advocacy is about working on behalf of others, regardless of their involvement; in design activism, it is generally conducted in order to advocate for those that cannot do it for themselves, such as nature and ecosystems. Mobilization is the most ephemeral and conventional method, through which elements of protest, competition and temporary structures<sup>1</sup> are used. Finally, the solidarity method refers to engaging in cultural discourse by making use of critical design, critical architecture, and fundraising (Thorpe, 2012 p. 163).

Tactics are the means to achieve the intended goals. They can be conventional or designrelated. Thorpe (2012) presents a list with twelve design activist tactics and their descriptions, ranging from artifacts (protest, service and demonstration), to communication, connection, rating system, competition, exhibitions, research and critique, event, conventional, and social exchange. The tactics, which addressed the closest the mapping of this study, are listed on Table 1. They grounded the choice of the materials and methods protocol used for the analysis of the initiatives.

Table 1: Design activist tactics

Tactic	Description			
Service artifact	Service structure, system, product, space, place, plan or graphic: humanitarian aid to victims, for example, of war, disaster, poverty. Some groups are victims of their environments, for example, disabled people.			
Demonstration artifact	Demonstration structure, system, product, space, place, plan or graphic: a better alternative to the status quo typically seen as a positive, if imperfect effort <sup>2</sup> , a model that others can use.			
Connection	Linkages such as doorways, gateways, borders, bridges or view corridors, attempts to make physical or visual links that often repair, restore, signify or enrich social and environmental conditions			

Tactic	Description
Social exchange	Links among people, consultation/stakeholder input, self-build, co-design: efforts to make social connections, and weave social fabric, hinging on specific relationships (as opposed to general ideas of "community").

Note: Additional info and sources if adapted from another document. Adapted from Wolff and Amaral (2016).

The identification of the cases followed Manzini's (2008) principles, and further descriptions were obtained by fulfilling the forms "Light Format" and "In-Depth Format", from the toolkit developed by the Design for Social Innovation and Sustainability (DESIS).

The first stage was mapping several promising cases developed and operated because of the pandemic situation. At first, the research was based on cases reported by the local press or shared on social media, which caused a bias towards Parana region, where the authors live. Due to WHO's and local governments' recommendations to stay at home, in-person visits and interviews, indicated by the DESIS toolkit, were impossible; therefore, the authors decided to expand the investigation to other Brazilian states and also internationally through snowball technique, since the mapping was being performed remotely by digital means. Besides that, cases were also gathered using combined search strings such as 'COVID-19' and 'social projects' or 'innovative projects' or 'mitigating impact' and a temporal filter on Google to assure the initiatives were from mid-March 2020 on.

The next step consisted in analyzing each case separately, having their descriptions completed in the "Light Format" form; then, a pre-assessment of the case was done based on four indicators:

- 1. Presents a new way of organizing daily life;
- 2. Offers social benefits;
- 3. Offers environmental benefits; and
- 4. Is replicable in other contexts.

If the case fulfilled all the criteria items, it was eligible for further assessment, according to Manzini (2008).

The promising cases collected were categorized in a list which consisted of all the data obtained about them, including contact information of the person (or group) responsible. The initiatives presenting a substantial amount of data, and whose developer was contactable for a follow-up interview, were selected. The interviews aimed at gathering more information to properly understand how the innovative actions work, what their social, environmental and economic benefits are, and whom they favor. One of the interview's outputs is a flowchart of the actions' operation.

After that, each case had its "In-Depth Format" form from the DESIS Network toolkit filled and the data collected in the interviews were arranged in a design for social innovation framework. In addition, the strategies concerning design activism, intentionally or not intentionally adopted, were listed. In order to compare the cases and check for similarities and differences among them, the inputs are presented on the following sections of results and discussion.

#### 2. RESULTS

After filling the "Light Format" form, fifteen different cases presenting a wide variety of actions within many work fields and distinctive coverage areas were selected, being the Brazilian ones prioritized. From the fifteen cases, five operate locally, four have a state-wide coverage, four are able to develop actions nationally, and only two work internationally. Table 2 and 3 show the details.

Table 2: Number of initiatives by coverage area

Coverage area	Range	Number of promising initiatives
Local	The initiatives take place in a specific neighborhood, city or small region, mainly due to physical aspects or logistics.	5
State	The initiatives range state wide, connecting two or more cities of the same state.	4
National	The initiatives present characteristics that allow them to operate in different regions of the country. Language and other logistic demands can be limiting factors for their expansion.	4
International	The initiatives take place mostly online, connecting people and ideas without demands of physical interaction or logistics.	2

Table 3: Promising initiatives, field and activities

Area/Field	Name	Actions	Coverage area
Technology - Health	Médicos de Máquinas ( <i>Machine</i> <i>Doctors</i> )	Repair of mechanical ventilators for hospitals, mostly free of charge. Altogether there are 200 volunteers working on it.	State: Paraná
Technology - Health	Atitude 3D ( <i>3D Attitude)</i>	Provide personal protective equipment (PPE) for healthcare professionals free of charge.	State: Paraná
Technology – Information	Startups vs. Covid19	Gather startups' solutions that help to directly or indirectly mitigate COVID-19 and its effects, fostering innovation and knowledge sharing.	International
Security – Violence against women	Sozinhas Não	Union of major cosmetics brands in Brazil to address gender violence through awareness and creation of a support network.	International: Latin America
Connection betweer donor and beneficiary - General	Paraná Solidário (Solidarity in Parana)	Digital application for smartphones that allows direct donation from citizens to charity programs. It works as a bridge for the donation of products such as food, clothing, furniture, appliances, animal food, and others.	State: Paraná
Connection betweer donor and beneficiary - General	Vizinho do Bem ( <i>Good</i> <i>Neighbor</i> )	Repository website where people who are willing to help and those who need help can register to offer/ask for services (classes, psychologic treatment etc.), products (food, clothes, furniture etc.), and others.	National
Connection betweer donor and beneficiary - General	em Curitiba	Repository website where people who are willing to help and those who need help can register to offer/ask for services (classes, psychologic treatment etc.), products (food, clothes, furniture etc.), and others.	Local: Curitiba – Paraná
Connection betweer donor and beneficiary - Food	1 milhão de 1 Real (1 million of 1 Real)	Crowdfunding campaign with a minimum donation amount of only R\$1,00.	Local: Curitiba and East Coast - Paraná
Connection betweer donor and beneficiary - Food	Rango Dobrado ( <i>Doubled</i> food)	Encourage people to buy an extra package of food for donation, helping other vulnerable people. The hubs of donation and collection can be anywhere.	National
Connection betweer donor and beneficiary - Food	Mesa solidária ( <i>Solidarity</i> <i>table</i> )	Promoted by grocery stores, restaurants, and other food suppliers to encourage their clients to donate packages of food and takeaway food to vulnerable people.	
Connection betweer donor and beneficiary - Food	Corona no Paredão (Corona's challenge)	Distribution of food stamps through electronic benefit transfer (debit card system) for residents of vulnerable areas over an interstate network.	National

Area/Field	Name	Actions	Coverage area
Economy - Food	Compre do Produtor ( <i>Buy from</i> <i>producer</i> )	Website and WhatsApp network connecting farmers and consumers.	Local: Guarapuava - Paraná
Economy - Food	Liga na Causa	Website to connect people in social distancing with local small business, such as restaurants, bakeries, and patisserie to help them to keep operating despite the restrictions, sometimes offering products at cost price.	Local: Curitiba - Paraná
Economy – Mapping Mapa de of business and máscaras services (Mask map)		Connect dressmakers who make masks with consumers	National
Economy – Mapping of business and services	gBem aqui ( <i>Right here</i> )	A collaborative platform with the objective of providing the population with a tool that shows which business or services are authorized to operate.	State: Paraná

Table 3 shows that almost half (7) of the mapped promising initiatives are dedicated to connecting people in need with those willing to help; four other cases tackle economic issues, and three 3 are more related to technology issues. As for the fields, cases are food-related, which evinces that this is probably one of the most prominent problems exacerbated by the pandemic situation.

Based on this scenario, the authors decided to deepen information about the following cases: Mapa de Máscaras, Rango Dobrado, Corona no Paredão, Médicos de Máquinas, and Compre do Produtor—three with national coverage, one covering the state of Paraná and one operating locally. As for the field, three of them are food-related.

The first two cases, Mapa de Máscaras (Mask map) and Rango Dobrado (Doubled food) aim at helping vulnerable people and were developed by the same company with different social partners in each case. The company is part of the B corporation system and intend to create social and environmental positive impact, by balancing profit and purpose in order to build a more inclusive and sustainable economy (BCorporation, 2020). The role of the company in the projects was to create, host, and manage their online platforms and to design their visual identity. In the case of Rango Dobrado, they have also created infographics to explain how the project's actions would work.

Mapa de Máscaras (Mask map) connects dressmakers who make masks with consumers through a nationwide digital online platform. In so doing, it creates or widens a source of income for these workers while allowing buyers to purchase different kinds of masks. The platform functions as a shop window for the masks and offers support about how to wear them. The users are responsible for the trading (sell/buy), contact, payment, and delivery actions.

Rango Dobrado (Doubled food) promotes the creation of hubs where one can buy and/or donate an extra package of food to help people in vulnerable conditions. The initiative has a digital online platform to register hubs, which can be located anywhere in the country, but actions are carried out locally. Those include raising awareness about people in need and allocation of donation boxes tagged with proper identification.

Corona no Paredão (Corona's challenge) distributes food stamps through electronic benefit transfer (debit card system), which only allows the purchase of food and hygiene products by residents of vulnerable areas over an interstate network with national reach. The initiative was developed by an established social organization already familiarized with promoting cultural activities, sports training, and professional reintegration in susceptible

poor areas since 2013. Corona no Paredão's goal is to prevent hunger from increasing in these zones and to enable people to stay at home during the pandemic situation. This way, they would not need to leave their houses to look for a job or food, therefore reducing the risk of contracting and spreading the virus in their communities. The distribution of food stamps relies on the help of local leaders who know community members, who can guide and support them better.

Médicos de Máquinas (Machine Doctors) works repairing mechanical ventilators for hospitals in Paraná, mainly public ones, which are mostly free of charge. The initiative started at the Federal University of Paraná with students and professors of a specialization course in Maintenance Engineering and now comprises approximately 200 volunteers. The idea is to extend the lifecycle of this type of medical equipment, reducing the efforts to purchase or build new ones, since the pandemic situation has made it more difficult to trade products and components. The initiative is operated through various partnerships that allow access to mechanical or electronic components for equipment repair and to a shared logistics system that collects and delivers equipment to hospitals.

Compre do Produtor (Buy from producer) emerged from the suspension of market fairs that has prevented local small farmers from the Guarapuava region from having a physical space to sell their products. The initiative was planned in partnership between the Guarapuava's Secretariat of Agriculture and the Central of Associations of Small Producers. Its aim is to connect farmers and consumers through an online platform (developed in partnership with a local website agency) and a popular instant message application. The operation's characteristics limits its coverage to the Guarapuava region. The producer's association is responsible for the logistics, receiving orders and delivering products while the municipality employees manage the online platform.

#### 3. DISCUSSION

The mapping presented above allowed a comparison between the five cases, as shown in Table 4. As previously mentioned, three of them act nationwide, one statewide, and one locally. The target audience of each project varies from vulnerable people, such as in the case of Rango Dobrado (Doubled food) and Corona no Paredão (Corona's challenge), to ordinary consumers who need to be connected with local producers, as in Mapa de Máscaras (Mask map) and Compre do Produtor (Buy from producer), as well as to hospitals in need of ventilator machine repairing, which is the target audience of Médicos de Máquinas (Machine Doctors). It is worth mentioning that, due to the recommendations for social distancing, all initiatives have been carried out with the aid of some sort of online mediation.

Table 4: Case comparison

Name	Mapa de Máscaras ( <i>Map mask</i> )	Rango Dobrado ( <i>Doubled food</i> )	Corona no Paredão (Corona's challenge)	Médicos de Máquinas ( <i>Machine</i> Doctors)	Compre do Produtor ( <i>Buy from</i> <i>producer</i> )
Target audience	Ordinary consumers	Vulnerable people	Vulnerable people	Hospitals	Ordinary consumers
Innovation in daily tasks	Allow people to buy masks in nearby places via an online platform.	Allow people to donate in nearby places listed on an online platform.	Provide a food card to vulnerable families.	Make medical equipment repairs viable and free of charge for public hospitals.	Make agricultural products available for purchase on an online platform.
Social benefit	"Create	Allow people to	Food aid for	Allow more people	Promote the local

Name	Mapa de Máscaras ( <i>Map mask</i> )	Rango Dobrado ( <i>Doubled food</i> )	Corona no Paredão (Corona's challenge)	Médicos de Máquinas ( <i>Machine</i> <i>Doctors</i> )	Compre do Produtor ( <i>Buy from</i> <i>producer</i> )
	opportunities to seamstresses that need a new source of income."		socially vulnerable people.	to have access to health-related technology.	market of agriculture.
benefit	Since it is local, it decreases the impact of product transportation.	Since it is replicable and local, it decreases the impact of the product transportation.	Through an online platform and donation cards, it allows minimal logistics to decrease the impact of donation transportation.	Extending the product life cycle, reducing the amount of waste produced.	Since it is local, it decreases the impact of the product transportation.
Economic benefit	The platform is hosted by the company. There is no cost for announcing the products on the website. Consumers buy and pay directly to the dressmakers, without any fees.	users who create the hubs can reuse plastic boxes, avoiding the costs of creating them.	There are many partner companies donating money and providing the edebit card system. In addition, the social organization offers an online platform that enables personal money donations.	initiative raises	municipality, and the local producers offer their products on the website. Consumers spend
Possibility of replication in another context	Since it is a platform, it can be easily replicated.	The system is easily replicable in an organic way, through manuals.	Since it is a platform and a card donation system, it can be easily replicated.	The initiative only depends on a group of volunteers specialized in the maintenance area and can normally be replicated.	Since it is a platform, it can be easily replicated.
Classification of design activism	Connection; Service artifact.	Connection; Service artifact; Demonstration artifact; Social exchange.	Service artifact; Connection; Social exchange.	Service artifact; Demonstration artifact.	Service artifact; Connection; Socia exchange.

Pre-assessment of the cases in the initial mapping validated all the promising initiatives as social innovation ones: they all present original ways of organizing daily tasks (such as shopping groceries and garment, having access to food, and finding equipment maintenance services), offering social and environmental benefits. The authors could also identify a number of economic benefits and the possibility of replication in different contexts.

Regarding the design activism tactics, four of the five initiatives were described as using the connection tactic: Mapa de Máscaras (Mask map), Rango Dobrado (Doubled food), Corona no Paredão (Corona's challenge), and Compre do Produtor (Buy from producer), since they can be considered as view corridors, i.e. display windows or showcases for displaying products for consumers or as bridges to link vulnerable people to those who can help them. The service artifact tactic was identified in all the cases, once they all function as aid for victims of the COVID-19 pandemic, which can be classified as a disaster of global proportions. Two initiatives, Rango Dobrado (Doubled food) and Médicos de Máquinas (Machine Doctors), also seem to have adopted demonstration artifact as a tactic, one for being intrinsically replicable and the other for being structured in such a way that it could be used by more universities almost immediately. Finally, the social exchange tactic was related to three projects: Rango Dobrado (Doubled food), Corona no Paredão (Corona's challenge), and Compre do Produtor (Buy from producer), with more evident social fabric.

#### 4. CONCLUSION

This paper briefly presented the mapping of initiatives developed during the COVID-19 pandemic in Brazil in order to identify whether they adopted social innovation strategies to mitigate some of the social and economic damage in the current scenario. In the mapping's first stage, promising cases were surveyed and listed. Fifteen of them were later described using the DESIS "Light Format" form for pre-assessment and classification; of those, five were further investigated. In order to interpret how the initiatives operate as well as how they promote positive social capital, intentionally or not, the concepts of design for social innovation and design activism were used.

The descriptions of the projects were clear in demonstrating that they all fill one or more important social, economic, and environmental gaps left by the pandemic. The analysis showed the efforts as grounded in solidarity and coordinated group actions helping small business, freelancers, and vulnerable communities, which sustained their classification as social innovation initiatives. Design strategies, such as tactics from design activism, were identified, conferring the initiatives the potential to operate properly in the aftermath of the current scenario.

In light of the results of the present study, future studies could further investigate how conscious the initiative developers were about the use of design strategies. Furthermore, considering the DESIS protocol adopted, the authors identified further benefits regarding the mapped cases, especially economic ones which were added to the case comparison table. So they would suggest the addition of an economic benefit criterion to the pre-assessment stage, since this aspect remains understated in the protocol and needs to be sorted out in order for most cases to initiate and thrive. Machine Doctors, for instance, need partnerships with components manufacturers and transportation service providers in order to make sure the components needing fixing get to the volunteering "fixers." Regarding design, the addition could support future theoretical evaluation as a systemic thinking overviewing the whole sustainability aspects considering a new economic paradigm based on values of ethics, fairness, solidarity, cooperation, distribution and wellbeing.

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## ENDNOTE

<sup>1</sup> Temporary structures are meant to raise awareness about important social issues. For instance, the sheer amount of garbage produced by a single family could be displayed in a public space (let us say, a shopping mall) to call the people's attention to "the other side" of consumerism.

<sup>2</sup> Imperfect efforts refer to artifacts that are used for demonstration purposes before acquiring their final, polished form.

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