Platform Cooperativism Consortium

INSTITUTE FOR THE COOPERATIVE DIGITAL ECONOMY

INCUBATING NEW NARRATIVES IN THE SOLIDARITY ECONOMY THROUGH SOCIAL TECHNOLOGY: LESSONS FROM THE CHASQUI PROJECT

A Report by

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About the Institute for Digital Cooperative Economy (ICDE)

The Institute conducts cross-disciplinary research about the emerging cooperative digital economy, which is relatively uncharted territory in anthropology, political science, sociology, history, law, and economics. This rapidly expanding field is also inextricably linked to labor and cooperative studies. This work is concerned with finance, entrepreneurship, and organizational studies in business schools. Governance and corporate structure are critical subjects in law schools. The Institute's mission, in recognition of existing research gaps, is to provide applied and theoretical knowledge, education, and policy analysis.

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Introduction

Argentina has a rich history of fostering Social, Solidarity, and Popular Economy initiatives, ranging from the cooperative movement and worker-recuperated enterprises to informal socio-economic cooperation practices. According to Pastore (2014), the Social and Solidarity Economy (SSE) is a set of practices and organizations based on associative and solidarity principles. This heterogeneous set is essentially defined in opposition to the capitalist economy. The most traditional forms of SSE are cooperatives and mutuals, but there are also a variety of diverse activities, spaces, and ventures that constitute the so-called New Social Economy. Coraggio's postulation (2011, 2017) asserts that the Social Economy comprises a set of transformative economic practices, which share a common denominator: the transition from an economic system organized around capital accumulation to one that expands the reproduction of life. This field encompasses a range of experiences aimed at building differential modes of production, distribution, marketing, and consumption of products and services. Among these initiatives is the cooperative technology sector, which has existed for nearly 20 years.

During the studied period, after the 2001 crisis, policies promoting socio-labor inclusion through cooperativism were introduced. Additionally, the number of public universities increased, along with training, research, and outreach programs in Social and Solidarity Economy. Public universities played a key role in these policies.

The Chasqui Project was conceived at the National University of Quilmes (Argentina) in 2014, preceding the adoption of concepts such as platform cooperatives in the region. Chasqui is an e-commerce platform designed to sell products from the social, solidarity, and popular economy, primarily grocery products.

The case study presented in this report illustrates a unique integration of these elements: an incubation process led by a public university in alliance with the cooperative technology sector and the grassroots organizations in the food sector. Furthermore, it incorporates the impetus and production logics of the free software movement, in coordination with public policies promoting cooperativism and food sovereignty. From a technological perspective, it translates the organizational practices of the social and solidarity economy—such as collectively organized consumption and production modes—into functional and operational terms. Furthermore, it is both developed and maintained by local software cooperatives from the Argentine Federation of Worker Cooperatives in Innovation and Knowledge (FACTTIC).

The objective of this report is to analyze this case in order to extract insights and organize the challenges of platform cooperativism from and for the Latin American context.

The report is organized as follows. First, the theoretical perspective and the methodology strategy are outlined. Next, the main characteristics of Chasqui are described. Then, the Social Incubation Program at the National University of Quilmes and FACTTIC are addressed to explain the inception and development of Chasqui. After that, Chasqui's trajectory as a project and a platform is explored by breaking it down into three phases: Chasqui without code, Chasqui 1.0, and Chasqui 2.0.

Finally, the report concludes by summarizing and discussing the key findings aiming to contribute to the strengthening of cooperative platforms in the region.

Theoretical and Methodological Approach

Technology is frequently associated with objects, particularly electronic or cutting-edge devices. However, when examining technology through a radical constructivist perspective in Science and Technology Studies (STS) it can be seen as a multifaceted concept (Callon, 1998, Hughes,1987, Latour, 1998, Pinch and Bijker, 2013, Winner,1988). It encompasses not only product technologies or artifacts (e.g., pants, plates, cell phones), but also process technologies (e.g., the Fordist production line, protocols for vaccine development, or cake recipes) and organizational technologies (e.g., the representative democratic system, cooperatives, or FIFA).

Thomas and Santos (2016) define technologies as combinations of a diversity of technological, practical, customary, ancestral and scientific knowledge that have been singularly treated to be transformed into inputs for the design of artifacts and systems.

Moreover, defining technology in this way implies recognizing the inseparable link between the technological and the social dimension. There is no dichotomy between society and technology; rather, we are socio-technical beings. Societies are technologically configured, just as technologies are socially constructed and utilized. All technologies are social, and all technologies are human, regardless of how "inhuman" they may seem (Thomas, 2010: 36). Within this framework, systems of production, distribution, commercialization, and consumption can be understood as process technologies for accessing markets. Identifying, describing, and analyzing the heterogeneous elements in these circuits and the challenges they face will help "open the black box" of these processes, revealing the complex relationships and dimensions obscured by the artifact-centric view. This approach facilitates

the analysis of trajectories, dynamics, and socio-technical alliances that shape and sustain innovation processes and technological change (Pinch and Bijker, 2013, Callon, 1998, Latour, 1998, Winner,1988 and Hughes,1987).

To explore the relationship between the state and innovation, the findings of Mazzucato (2013) will be employed. The author challenges the traditional view of the public sector as merely correcting market failures and highlights its role in funding pioneering research, much of which has laid the foundation for key technological advancements such as the Internet and biotechnology. According to Mazzucato, state investments have been crucial in creating new markets and driving innovation, necessitating proper recognition and compensation for the public sector's contribution to economic growth. The aim is to contribute to the discourse on innovation by proposing a holistic approach that transcends the dichotomy between socio-political transformation and socio-technical adaptation.

The methodology design is based on a participatory action research approach (Ander-Egg, 2003). The investigation keeps formal research techniques characteristic of a qualitative case study, incorporating participant observation, semi-structured interviews, and documentary analysis. Additionally, at various stages, direct participation in the development and implementation of the initiative was undertaken in different roles.

Within this framework, complementary participatory and concise approaches were integrated, including debates, workshops, and public presentations aimed at providing feedback for both the research process and the implementation of Chasqui. It is important to note that this approach requires significant effort in terms of reflexivity (Palaganas et al., 2017), ensuring an operational distance from the experience as well as incorporating mechanisms for research process supervision. At the same time, this immersive level of engagement provides privileged access to information and allows for the alignment of research with social needs.

What Is Chasqui?

Chasqui is an e-commerce platform designed to sell products from the social, solidarity, and popular economy, mostly grocery products.

It originated at the National University of Quilmes with the aim of developing management and e-commerce tools that enhance short solidarity marketing circuits. The project was born from the need of certain trading organizations to take a technology leap in their process of solidarity intermediation. These organizations bring Social Solidarity and Popular

Social Economy products from their production areas to urban consumption centers. In this regard, Chasqui platform aims at the technical strengthening of these socioeconomic circuits connecting processes of value addition with social needs.

Chasqui enables self-managed and associative groups to create and administer their own online stores. The platform has three components: the administration panel for selling organizations, the digital stores of each seller, and the portal where all the stores are displayed and information about the proposal is provided. One of the main differentials of Chasqui is that it allows collective purchases and the creation of node systems. These features give technological support to consumption organization practices that provide identity and sustainability to the trading systems, generating a sense of belonging and reducing operating costs. In addition, it has a system of seals (tags) that highlight the characteristics of the products, production processes and types of organization.

The first version of the Chasqui platform was launched in 2018 after three years of collaborative development involving technology cooperatives, public universities, marketing cooperatives, local producers, and consumers within a socio-technical framework. As a result of the COVID-19 pandemic, Chasqui experienced significant growth in transaction volume. In 2022, a second, technically enhanced version was released.

Currently, the platform operates 31 active stores across various provinces: 13 in Buenos Aires, four in Córdoba, three in Neuquén, one in Río Negro, one in Chubut, and two in Entre Ríos. However, at the moment of writing this report, due to Argentina's summer recess, 28 stores are temporarily closed and are expected to reopen in March, bringing the total number of operational stores to 59. Additionally, 33 stores are in the process of development, though some may face interruptions in their integration into the platform.

From its inception, Chasqui has been characterized as a multi-stakeholder project, with various organizations and institutions contributing to its construction, technological development, and implementation. To fully understand its structure, it is essential to examine the university program that initially provided the framework and support for the project.

Active Stores

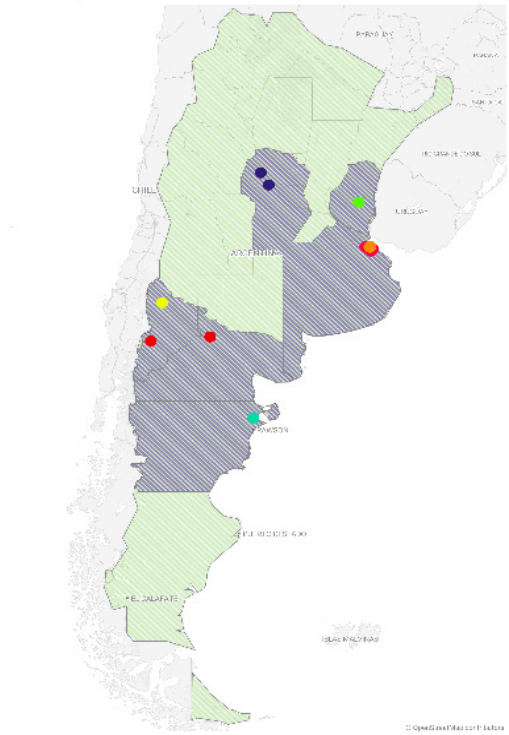


Figure 1: Author's elaboration.

Active and Suspended Stores

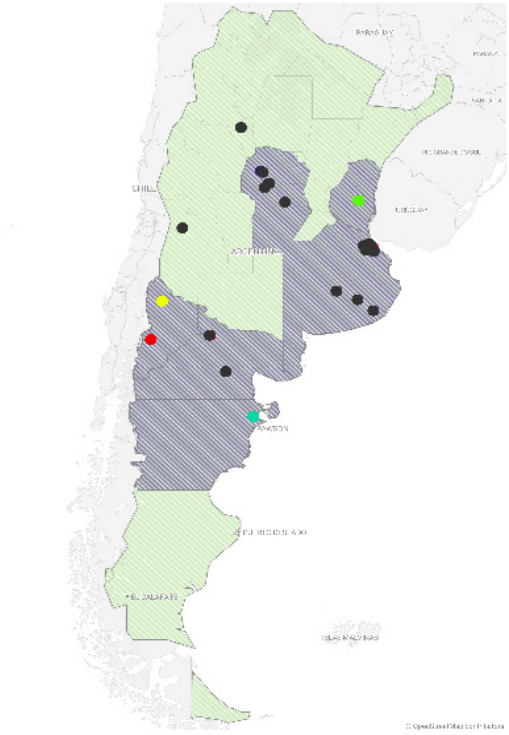


Figure 2: Author's elaboration.

The Social Incubation University Program

The Province of Buenos Aires, Argentina's largest and most populous province, covers approximately 307,571 square kilometers (equivalent to around 30.7 million city blocks). With a population of over 17 million people, it accounts for nearly 40% of the country's total population. The province plays a crucial role in Argentina's economy, significantly contributing to agriculture, industry, and services, with a strong presence in agribusiness, automotive manufacturing, and petrochemicals. However, despite its economic importance, poverty remains a pressing issue, particularly in the Greater Buenos Aires metropolitan area, where a significant portion of the population experiences precarious living conditions, informal employment, and limited access to essential services.

In recent decades, Greater Buenos Aires has been a key site for the creation of new universities. Between 1989 and 2015, 16 universities were established in this region (Otero, Corica & Merbilhaá, 2018). Including pre-existing institutions, there are now over 20 higher education institutions, where the majority of students are the first in their families to attend university.

During the 2005–2014 period, many of these universities collaborated with social inclusion policies, promoting labor integration through the establishment of cooperatives (Kasparian, 2014) and developing training programs in Social Economy and cooperativism. The National University of Quilmes played a leading role in many of these initiatives (Altschuler & Muñoz Cancela, 2016, p. 134). At the end of 2013, the Social Incubation University Program (PUIS) was established at this university, introducing an innovative approach to incubation processes within the Social and Solidarity Economy.

The PUIS proposes a different approach from the traditional model, which primarily focuses on the incubation of enterprises or businesses. Instead, PUIS introduces the concept of "process incubation," aimed at contributing to the creation and strengthening of strategic socioeconomic networks and experiences through innovation projects. PUIS consists of University Incubators for the Social Economy, organized by thematic areas and composed of interdisciplinary and multi-actor teams, including faculty members, students, graduates, government institutions, and first- and second-tier SSE organizations. These incubators aim to foster associative and solidarity-based processes of economic valorization, learning, and socio-technical development.

From an organizational perspective, the program introduced two key innovations that significantly altered the dynamics of collaboration among the involved actors. First, PUIS

functioned as an institutional framework that integrated not only individuals (faculty members, students, graduates, etc.) but also projects from different institutions, including extension initiatives, academic programs, and administrative units from both UNQ and other institutions. This facilitated collaboration and shared agendas, thereby enhancing the relative impact of each initiative. Over the years, this structure has encouraged the continuous reassessment of the objectives of these spaces to promote greater complementarity and mutual reinforcement.

Second, the PUIS call for proposals redefined the role of social organizations within the working dynamics. These organizations are not treated as mere beneficiaries of the incubators' activities; instead, they are active participants in the negotiation table, where thematic agendas are developed, priorities are set, and methodological approaches are defined. Of course, multi-actor network collaboration is not an invention of the program; rather, PUIS's contribution lies in providing a framework that consistently fosters the institutionalization of these practices beyond individual affinities, alliances, or specific intentions.

One of the eight incubators approved in the first stage of the program was the Social Technologies Incubator, where the Chasqui Project began to take shape (Muñoz Cancela, 2024). One of the coordinators of this incubator was a representative from the Argentine Federation of Worker Cooperatives in Innovation and Knowledge (FACTTIC). This brings us to the next key actor.

FACTTIC and the Power of Intercooperation

The Argentine Federation of Worker Cooperatives in Technology, Innovation, and Knowledge is a secondary-level organization that brings together more than forty worker cooperatives in the technology sector.

FACTTIC was founded in 2012 by nine cooperatives. Their goal was to collaborate, achieve greater scale, and develop technical and commercial capacities through association. This initiative was inspired by the collaborative spirit of the Free Software movement, to which most of the founding members belonged.

Currently, FACTTIC has more than eleven working groups. The most relevant ones are: Intercooperative Work Flow, a group created for sharing and developing business opportunities; Training, that contains workshops aimed technical knowledge updates; UnderDeconstruction, a cross-cutting area to promote gender equity within the federation;

Platform Cooperatives, a team dedicated to sharing experience and supporting these initiatives at the local and regional level. However, any group may cease to function, or a new one may emerge, depending on the changing interests and needs of its participants.

Figure 3: Author's elaboration

Figure 4: Author's elaboration

As in its beginnings, the primary thread connecting these working groups remains job

creation, followed by the strengthening of the cooperative movement. A key element in understanding the dynamics of FACTTIC is intercooperation.

As is well known, "cooperation between cooperatives" is the sixth of the seven cooperative principles. According to the International Cooperative Alliance (ICA), "Cooperatives serve their members more effectively and strengthen the cooperative movement by working with local, national, regional, and international structures." The particular way in which this federation exercises this principle may be crucial in understanding the organization's long-term sustainability.

In the federation's daily operations, intercooperation means sharing potential work opportunities that arrive either at the federation itself or at one of its member cooperatives. It can also involve jointly applying for grants or even developing cross-hiring strategies for services. These complementary and recurring dynamics strengthen cooperatives in multiple ways.

From an economic perspective, intercooperation facilitates revenue generation both locally and internationally, helping to mitigate the impact of recurrent local economic crises. In terms of training, these initiatives often act as "toy projects," where young cooperatives or less experienced professionals can develop their skills in a structured and supportive setting. More experienced members from other cooperatives serve as mentors, ensuring knowledge transfer. At an organizational level, this model enables cooperatives to contribute energy and expertise to large projects without requiring all necessary skills in-house. This flexibility allows cooperatives to determine their growth pace and technical specialization without succumbing to the pressure of a "grow or go bust" mindset in the competitive ICT sector.

Thus, intercooperative work arrangements are not merely economic exchanges; they also serve as spaces for training and organizational strengthening. Each project fosters mentorship processes for cooperatives with less experience in specific technologies or project types. The outcomes of intercooperative projects are reflected not only in the revenues received by each cooperative but also in the technical, methodological, and political training of the participants. Furthermore, these initiatives reinforce trust and a sense of interdependence among member cooperatives.

By revisiting the federation's objectives and understanding this operational model, it appears that FACTTIC has found in intercooperation a mechanism to fulfill its primary goal—job creation—while simultaneously reinforcing its secondary objective—the

promotion of technological cooperativism. This feedback loop proves to be highly impactful, both in cases of success and in situations where complications or failures occur.

According to Dimarco and Vannini (2024), who are founding members of the organization, the relationship between Facttic and public universities is indissoluble. Many of the cooperatives within the Federation emerged, either directly or indirectly, from these academic environments. The authors also emphasize the importance of preserving initiatives such as the Social Technologies Incubator, where Facttic has held a position on the coordination team since its inception.

Furthermore, they highlight that their participation in this incubator over the years has not only allowed for reflection but also facilitated direct engagement with the role of the university within informational capitalism. It has also provided an opportunity to critically examine how public universities conceptualize students' professional integration, aiming to challenge and reshape the traditional triad of education, research, and community outreach.

The following section explores the trajectory of the Social Technologies Incubator, illustrating the various roles it has assumed throughout the development process of the Chasqui platform up to the present day.

What Makes Chasqui, Chasqui?

The reconstruction of Chasqui's trajectory allows for a better understanding of the process that gave rise to the platform as well as the main elements that stand out as insightful.

For analytical purposes, three key phases can be identified: Chasqui without code, Chasqui 1.0 and Chasqui 2.0.

The first stage corresponds to the birth of the project. During this phase, key decisions are made that strongly shape the platform's future development. From a perspective not informed by socio-technical insights, this moment might appear paradoxical. However, a detailed analysis of this stage allows us to assert that Chasqui, even without code, became a powerful technology for mobilizing resources and efforts, as well as strengthening the network necessary for transitioning to the second phase.

The second phase, starting in 2018, which we will call Chasqui 1.0, builds upon both the strengths and limitations of the network established in the first phase. The leap forward

comes with the decision to focus on three interrelated components: a mechanism for promoting technological cooperativism, an open-source software project with educational purposes, and an initial version of a commercial platform. It can be said that Chasqui is all three of these technologies at once—and yet none of them individually.

The third and final phase, spanning from 2020 to 2024, was triggered by a technological leap, further accelerated by the COVID-19 pandemic. This phase solidified and stabilized the platform, significantly expanding its territorial reach and transaction volume.

Chasqui Without Code

The trajectory of Chasqui begins long before the platform's launch. This stage, however, reveals many of the debates and definitions that shaped the software development and the project as a whole.

In early 2014, the seven incubators of the newly established social incubation program began forming their teams. This process was supported by more than 10 years of experience in the field of Social and Solidarity Economy at the University of Quilmes. As mentioned earlier, PUIS faced the challenge of consolidating teams that brought together social economy organizations, faculty, students, and volunteers in a sustained and organic way. This construction took different forms in each incubator.

The Social Technologies Incubator and the Economy, Markets, and Finance Incubator began working together with organizations dedicated to marketing ESS products. Their goal was to develop strategies to strengthen these value chains and expand market access. This initiative had a precedent, including the management of social and solidarity economy fairs held within the university. These fairs offered microcredits and a local currency to encourage exchanges.

The demand for technology came from two sources. On one side, from representatives of marketing cooperatives who buy products from other cooperatives, grassroots organizations, or family agriculture, and then sell them in large consumption centers. On the other side, there was a demand from the Economy, Markets, and Finance Incubator, which had been developing similar activities to the marketing cooperatives, specifically creating nodes for selling agroecological bundles.

Based on these demands, and following two years of sustained work, a series of decisions were made that defined the project's identity.

At the beginning of the project, during the early stages of the incubator, some FACTTIC cooperatives provided advice on the different tools available for managing commercialization, focusing on open-source software tools. This initial information led to a reorganization of the expectations of the participating organizations regarding the immediate and low-cost acquisition of a technological tool to address multiple needs.

At the same time, the incubator team realized the need to survey and systematize the existing commercialization practices of the Social and Solidarity Economy, as well as to assess the existence (or lack thereof) of appropriate technologies for these practices. The process prompted extensive discussions on what and how to promote Social Economy initiatives, who the communication was directed to, and how to multiply it while remaining consistent with the sociopolitical perspective of its message.

At this stage, based on the systematization of the survey conducted, three key conclusions were reached. First, ESS marketing organizations needed technologies that support specific practices, such as collective purchasing and consumption node systems. Second, the need extended beyond just software. Organizations required associated services to ensure adjustments, updates, and improvements—not only to the software itself but also to organizational practices. In other words, it was essential to provide both products and processes throughout the commercialization cycle to guarantee long-term sustainability. Finally, it was strategic to strengthen and highlight the role of organized consumption practices that sustain the ESS. These practices not only support the sector but also challenge traditional market dynamics.

After identifying the systemic needs of the ESS marketing circuits involved and evaluating the available solutions, the decision was made to develop new technologies.

Identifying these practices and recognizing their importance in the sustainability of the economic circuit and the participants' idiosyncrasies complicated the diagnosis of the ongoing situation and required acknowledging that electronic purchasing artifacts that could not support these practices were inadequate. In this regard, information technologies, as a collective device, deepened its agency over the group of involved actors, encouraging exchange, discussion, and the construction of agreements. This organizational leap allowed monodisciplinary perspectives to give way to more complex visions that simultaneously involved multiple dimensions. This dynamic facilitated the exchange of knowledge on programming and ESS commercialization practices. From this point onward, the tasks and activities of the group focused on developing a technology that was named CHASQUI.

A Chasqui was an Incan messenger who ran long distances to deliver messages, goods, or important information across the vast Inca Empire. They used a relay system, passing messages or quipus (knotted cords used for record-keeping) to the next runner at designated stations. Chasquis played a crucial role in maintaining communication across the empire's extensive road network.

In the context of the Chasqui Project, the name likely symbolizes fast, reliable, and community-driven communication and distribution, aligning with the project's cooperative and technological goals.

Chasqui Platform 1.0

Entering its third year, the Chasqui Project was structured around three interconnected dimensions: the Free Software Project, the Technological Cooperation Promotion Mechanism, and the Technological Platform.

A Free Software Project

At this stage, the platform began to take shape. Following previous definitions, it was designed as a free software platform under a GPL3 license, developed from scratch, and structured to reflect the practices of participating initiatives. The GNU General Public License version 3 (GPL-3.0) is a copyleft license that ensures software freedom by requiring that any derivative work or redistribution remains under the same license. It grants users the rights to use, modify, and distribute the software, but with the condition that source code must be made available when distributing modified versions. Unlike permissive licenses, such as MIT or GPL-2.0, GPL-3.0 includes clauses to prevent tivoization[1] (restrictions on modified software in hardware), strengthen compatibility with other free software licenses, and address patent-related issues. It ensures that software remains free and open, even when incorporated into larger projects, making it a fundamental license in the open-source ecosystem.

It established collaborations with the University of Quilmes' Technical Degrees in Computer Programming, integrating students' final projects and theses into the platform's development. This initiative was highly valued by the academic teams, as it not only increased graduation rates but also fostered the development of "soft skills" that were not adequately addressed in traditional academic training.

Mechanism for Promoting Technological Cooperation

This initiative involved visits to various institutions, awareness-raising workshops—such as COOPOLIS[2] game sessions—and the cooperative organization of the platform's development team. Notably, by the end of this period, 90% of participants involved in the platform's development had engaged with the cooperative technology sector. Most of them were students, but also professors and volunteers were added. All of them got connected to FACTTIC, either by joining existing cooperatives or creating new entities. A notable example is the worker cooperative Código Libre, which was formed by students, professors, and graduates from the project. Initially, its primary focus was providing services related to Chasqui.

Photo Credit: Newspaper Tiempo Argentino

The Platform

Based on the information gathered, the platform was structured around three core components:

- **An administration panel for selling organizations**, enabling product publication, label assignment, inventory management, and facilitating home delivery logistics.
- **A digital store for each venture**, which could be independently shared with the public.

- **A central portal**, displaying all stores and relevant information about the project itself.

The Chasqui platform, like any other platform, allows you to enter the stores and make purchases individually. But not only that. One of Chasqui's key differentiators is its support for collective purchasing and node systems. These features provide technological infrastructure for organizational consumption practices, which were already deeply rooted in the participating organizations and aligned with the broader community-based traditions of the Social and Solidarity Economy .

Therefore, the types of consumption that each seller can enable on the platform are:

Individual purchasing: allows individuals to buy products, make payments, and coordinate either pickup or home delivery.

Collective purchasing: allows individuals to coordinate joint purchases using a shared cart. This approach is particularly useful for workplaces, families, or communities with established trust networks. By aggregating orders, this method reduces logistics costs, minimizes environmental impact, and fosters a shift from individual to community-oriented consumption. In collective purchases, the participants, location, and coordinators may vary with each transaction.

Nodes function differently. They are stable community or domestic spaces that regularly manage product purchases, payments, and pickups for a specific group of people. Chasqui adopted this model from Mercado Territorial, an initiative focused on distributing agroecological fruit and vegetable baskets.

Node systems were central to this initiative because they allowed for logistics management from producers' farms to collection centers, handling at least 10 baskets per delivery (Arnaiz et al., 2022). These circuits reduce geographical distance and the number of intermediaries between production and consumption. Additionally, they aim to ensure that a portion of working families' food supply comes from cooperative producers and family farming, improving farmers' income while facilitating access to healthier food for consumers.Anyone interested can contact the nearest node and start purchasing as part of the group. The node coordinator plays a key role and often participates in Mercado Territorial's annual assemblies as well as Chasqui's decision-making spaces to propose improvements or modifications to platform features.

Both organized consumption modalities—collective purchasing and nodes—play a crucial role in shaping the identity and sustainability of trading systems. They reinforce a sense of belonging among participants while simultaneously reducing operational costs.

Another significant feature of the platform was the creation of a **seal system (tags)** to highlight product characteristics, production processes, and organizational types. This initiative emerged as a response to the rejection of the conventional star-rating system commonly found on e-commerce platforms. Discussions within the incubator sessions led to concrete proposals, with the consensus that star ratings promote competition between products while obscuring critical aspects of production, such as precarious labor conditions. To counteract this, a visual and communication system was designed, initially referred to as "medals" and later renamed "seals." These seals resulted from a participatory process to create icons representing key product attributes (e.g., agroecological, recyclable, artisanal) and production models (e.g., family business, cooperative, social enterprise, worker-recovered factory). The seals serve as a tool for consumers to establish criteria for their purchasing decisions, emphasizing the values embedded in products and producer groups.

Towards the end of this period, the increasing visibility of the Chasqui Project attracted interest from government entities, who saw potential in the platform's tools. The possibility of significant funding triggered movement on multiple levels. Internally, disputes arose within the incubator program over the allocation of potential funds. Additionally, previously disengaged areas of the University of Quilmes began to take notice, leading to renewed debates concerning project management, governance, and scalability.

Chasqui 2.0

This third phase was marked by significant changes in project management and its consolidation. These developments can be categorized into three key areas: governance, the platform, and its scope.

Governance

Project management underwent a significant transformation. As visibility and resources increased, university authorities became more engaged. Coordination improved among incubators specializing in communication, economics, and technology, with stronger leadership from both the incubation program and the social economy department.

The project's new, more prominent position within the university, combined with the

visibility gained from its launch and adoption by commercialization initiatives, secured new financial resources. At the same time, it expanded and redefined the platform's network.

Conversely, the influence of free software activism declined, and ties with the Department of Science and Technology weakened. The focus shifted toward strengthening the platform as a tool for territorial development strategies. Meanwhile, FACTTIC consolidated its role as a software provider through the cooperative WOW. Unlike previous initiatives that emerged in the earlier stage, WOW had greater experience and better technical resources to support the platform's evolving needs.

As part of this new approach, previously proposed decentralized or collegial governance models were abandoned. Decisions on expanding the number of stores on Chasqui were placed solely in the hands of the university team. Similarly, business models based on sales commissions or subscription fees were rejected. Instead, the platform would be sustained by university resources and remain free of charge for both sellers and consumers.

The (New) Platform

By 2020, the platform was already in use by several organizations when the COVID-19 pandemic began. In Argentina, preventive isolation measures led to widespread adoption of digital platforms for personal and family supply needs. Chasqui experienced rapid growth, revealing its technical limitations.

In response, a new governance structure was introduced, along with the creation of the Digital Transformation Incubator, replacing the original Social Technologies Incubator that had initiated the project. This restructuring strengthened collaboration with FACTTIC cooperatives (Errecalde & Katz, 2022). Additionally, the WOW cooperative joined the initiative, contributing to Chasqui's continuous improvement.

According to project leaders, a deep technological migration was deemed necessary. In 2022, Chasqui was redeveloped using the open-source platform Vendure, specifically version 2.0.

Vendure 2.0 is an open-source eCommerce platform designed for flexibility and extensibility across various business models. This version introduces a more powerful and user-friendly administrative interface with advanced data customization and filtering capabilities. It also integrates APIs for multi-vendor marketplace development, optimizing order, shipping, and payment management across multiple sellers. Furthermore, inventory management

has been enhanced, supporting multiple stock locations and multi-currency handling per channel, facilitating international expansion.

Regarding licensing, Vendure 2.0 operates under the MIT License, a widely used permissive free software license. This license allows users to use, modify, and distribute the software with minimal restrictions, provided the original copyright and permission notice remain intact. Unlike copyleft licenses such as the GPL, it does not require modifications or derivative works to be open-source, permitting integration into proprietary projects. A key feature of the MIT License is its disclaimer of warranties and liabilities, stating that the software is provided "as is" without guarantees of performance or suitability. Its simplicity and flexibility have contributed to its widespread adoption in both open-source and commercial software development.

Scope

In the early stages of Chasqui 1.0, usage was limited to one commercial cooperative—which had been part of the project since its inception—and two university-driven commercialization initiatives promoted by public universities. These were Mercado Territorial from the National University of Quilmes and Consuma Dignidad, an initiative from the National University of Central Buenos Aires (UNICEN).

Starting in 2020, the platform experienced steady growth. In addition to the boost from the pandemic, expansion strategies were implemented, including partnerships with government agencies and the creation of tutorials to facilitate adoption. Another key factor was the consolidation of a stable technical team, coordinated between the WOW cooperative and a communication team working in collaboration with the Incubation Program.

With access to updated database information after the latest data migration, we can now analyze the platform's operational dynamics in this most recent period.

Regarding revenue, the platform started the first half of 2022 with a turnover of USD 97,000 and reached USD 317,000 in the first half of 2024. This represents more than a threefold increase in just a year and a half, despite an unfavorable macroeconomic context[3].

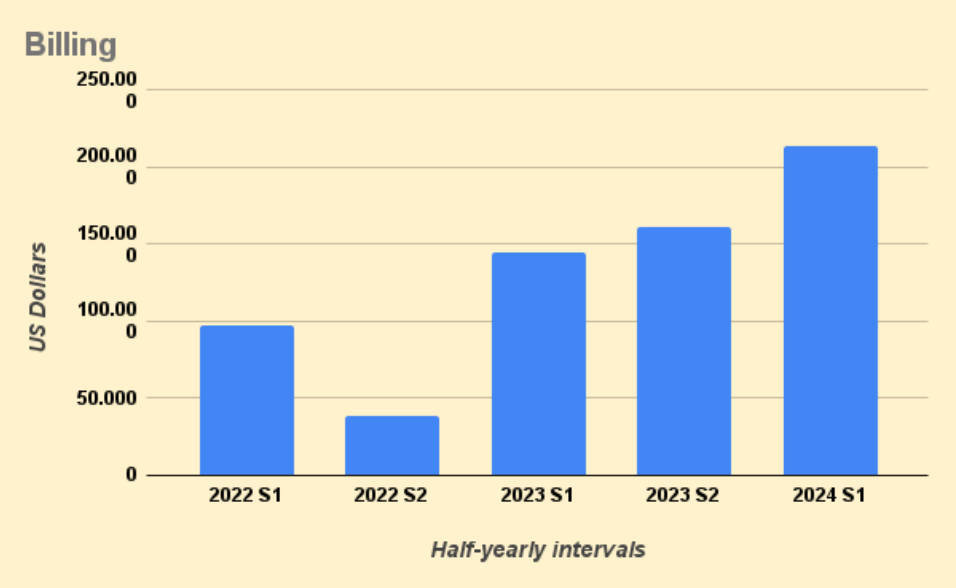


Figure 5: Author's elaboration

In relation to the number of orders, growth has been sustained in the period examined

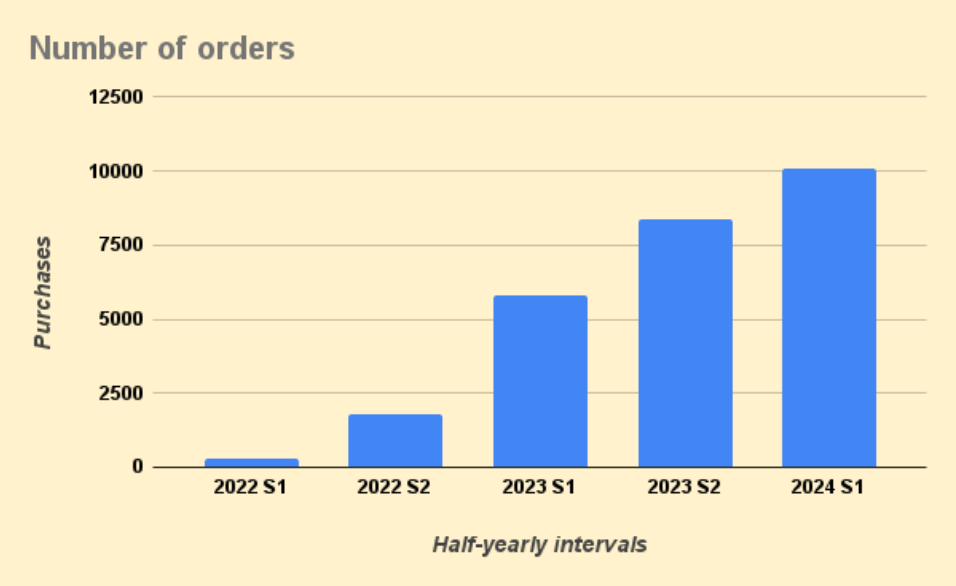


Figure 6: Author's elaboration

The number of stores on the platform has also shown an upward trend, though with some fluctuations. Our analysis suggests that these variations are linked to campaigns encouraging

producers to create stores.

Experience has shown that when organizations operate at very small scales, the platform does not provide sufficient benefits. As a result, after a period of trial, some choose to discontinue their participation.

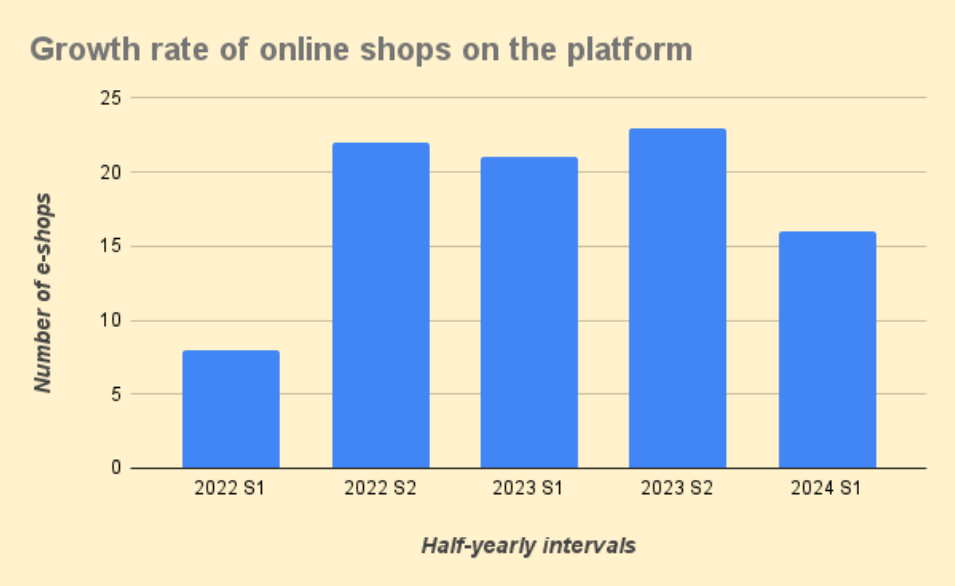


Figure 7: Author's elaboration

Social Technologies and New Value Logics

Renato Dagnino defines social technologies as those emerging from participatory and collaborative processes aimed at addressing concrete community needs, prioritizing inclusion and the democratization of knowledge (Dagnino, 2004). These technologies are not solely focused on technical efficiency but also consider social impact and the empowerment of the actors involved. In this sense, social technologies contrast with conventional market-driven technologies, as they seek to strengthen local economies and promote more equitable forms of organization.

Analyzing Chasqui through this lens, we can argue that it qualifies as a social technology because it emerges from a co-creation process involving universities, cooperatives, and productive organizations, aligning with the participatory principle central to Dagnino's definition. Additionally, it strengthens solidarity economies by promoting alternative commercialization circuits and contributing to the economic autonomy of producers. However, one could also argue that Chasqui does not fully meet the criteria of a social technology, as it does not entirely guarantee user self-management. While it

facilitates collective commercialization, it may not distribute platform control in a strictly horizontal manner among all participants, as required by the most rigorous definitions of cooperative platforms.

Beyond its classification as a social technology, Chasqui's trajectory can also be analyzed through the concepts of defetishization and refetishization, as proposed by Carenzo, particularly in relation to the creation of economic and social value within the Social and Solidarity Economy ecosystem. In its early stages, Chasqui acted as a mechanism of defetishization by making technology's functions more transparent and adapting them to the needs of SSE practices. Just as Carenzo describes in the case of waste pickers transforming discarded materials into marketable goods, Chasqui challenges the dominant logic of a market controlled by large corporations and capitalist platforms, where cooperative and self-managed enterprise products are often rendered invisible or considered "alternative." By incorporating these products into digital commercial circuits, Chasqui reclaims their real value as consumer goods rather than mere marginal products.

At the same time, Chasqui is not merely a marketplace; it also creates new narratives and meanings around the products it promotes, linking them to values of solidarity, self-management, and fair trade. In this way, the platform becomes a symbolic space of refetishization, where products acquire a new significance—not just as commodities, but as expressions of a collectively built alternative economy. Moreover, the articulation between universities, cooperative technology sectors (such as FACTTIC), and self-managed enterprises strengthens the collective identity of these actors, providing them with greater visibility and legitimacy in the digital market.

In conclusion, Chasqui applies these concepts by transforming SSE products from "invisible" to economically valuable goods (defetishization) while reinforcing their meaning within a network of solidarity economy actors (refetishization). In doing so, it not only meets many of the criteria for a social technology but also plays an active role in reshaping economic perceptions within the SSE ecosystem, promoting an alternative to the traditional capitalist market.

Lessons

Up to this point, we have reconstructed the trajectory of the Chasqui project, focusing on the cleavages that redefine problem-solution relationships. Our objective has been to deepen the understanding of self-organization processes, capacity building, and the transformation of practices within the defined system. The project exhibits key characteristics of a social technology: it addresses a social problem or need, fosters the socio-political and economic inclusion of historically marginalized actors, involves a collective production process where problems and solutions emerge through highly horizontal negotiations, and promotes the equitable distribution of benefits, goods, and knowledge.

The growth of Chasqui demonstrates the impact that technological innovations can have on the social and solidarity economy when developed through collaborative processes involving universities, technological cooperatives, and productive organizations. In its early stages, the platform had a limited reach, serving only a few university initiatives and cooperative marketplaces. However, from 2020 onward, it experienced sustained growth. This expansion was driven by various factors, including the context of the pandemic, the strengthening of the technical and communication teams, and the implementation of outreach and support strategies for new users.

The evolution of revenue indicates that technology can enhance solidarity-based commercial circuits even in adverse macroeconomic conditions. However, fluctuations in the number of active stores reflect that not all organizations find the platform viable, suggesting the need for clearer criteria for user onboarding and retention.

Furthermore, the inter-cooperation promoted by FACTTIC emerges as a key element in the project's sustainability. As emphasized by the International Cooperative Alliance, collaboration between cooperatives not only strengthens the sector but also enables a more equitable distribution of knowledge and resources. The participation of universities, through the incubation of processes, also proves to be fundamental, providing an institutional framework that ensures the continuity of innovation beyond political or economic contingencies.

It could be stated that the process incubator device was successful in overcoming several recurring limitations in this type of project, particularly: lack of coordination between sectors, monodisciplinary approaches, and limited economic and technical resources.

The integration of process incubation, development within a free software project, and technological cooperativism seems to have played a key role. Moreover, the high level of participation in technological cooperativism among those involved in the initial stage (90%) demonstrates the power of practice as a regulator of behavior, surpassing more traditional sensitization approaches.

The case of Chasqui reaffirms the notion that technology is not merely a collection of objects or tools but a socio-technical system that reconfigures economic and social relationships. In line with scholars such as Callon (1998) and Latour (1998), the platform is not simply software; rather, it is an organizational technology that materializes collective production and consumption practices. The positive feedback loop between technologies, practices, and subjectivity is particularly evident in relation to organized consumption practices. By the platform's first year of operation, some nodes began to expand their functions, incorporating additional activities related to their role within the platform. Due to their regular schedules (typically every 15 days), some nodes evolved into spaces for additional activities such as the exchange of products or services, fairs, discussions, and cultural

or political events. However, this evolution was not a linear process. The mere existence of a node within Mercado Territorial did not automatically generate these complementary activities, nor did the activities inherently lead to the formation of a node. Instead, a complex feedback process unfolded, intertwining preexisting dynamics and generating new ones through the periodic rhythm of order deliveries. Thinking in terms of rhythms (Iparraguirre, 2011), understood as social forms that stem from natural rhythms, the nodes—conceived as organizational technologies and strengthened by the Chasqui platform—become rhythmic catalysts for encounters. One possible interpretation of the gathered data is that this interplay of technologies, practices, and regular exchanges fosters and sustains counter-hegemonic consumption rhythms. In a context marked by digitalization, depersonalization, acceleration, and extreme individualization of consumption, the ecosystem of nodes constructs an entirely different dynamic—not by operating "outside of digital technologies," but by leveraging them. However, this process is not without tensions. One significant challenge lies in the contrasting logics between state institutions—often characterized by bureaucratic, hierarchical, and meritocratic structures—and the values and practices of Social and Solidarity Economy actors, who prioritize collective, horizontal, and democratic principles. This divergence is further reinforced by the expectation that scientific and technical institutions should provide simple solutions to complex problems. These contradictions manifest in everyday interactions, affecting communication dynamics, the recognition or dismissal of collaborative spaces, the equitable (or imbalanced) distribution of responsibilities, and the centralized or collective control over project progress. While no clear dialectical resolution to these challenges has emerged, some technologies developed within the project appear to function as tools for negotiating and addressing these issues.

Another significant tension relates to the time and effort required from participants. The project's initial problem stemmed from organizations' need to optimize time and labor amidst work overload and limited income. Paradoxically, active participation in Chasqui demands considerable effort from all involved actors to ensure the project's genuinely participatory nature. These constraints have been mitigated—though not eliminated—through strong commitment and belonging, securing complementary funding, and developing more efficient management mechanisms and strategies.

From an artifact perspective, the Casqui 1.0 software version fulfills a fundamental requirement for democratization, as it operates under an open-source license, allowing free reuse, modification, and distribution. Moreover, most of the information and materials produced during the studied period have been made publicly available and are freely accessible.

When updated to version 2.0, Chasqui stopped publishing the source code. By transitive property, we could attribute the same license as the software used as the basis for this version, MIT, but this is not explicitly stated in the project's documentation for that stage. If that were the case, it would still represent a setback in terms of freedoms.

Briefly. The GNU General Public License v3.0 (GPL-3.0) and the MIT License differ significantly in terms of freedom and restrictions. The GPL-3.0 is a copyleft license that requires derivative works to be distributed under the same license, ensuring that modifications remain open-source (Stallman, 2007). In contrast, the MIT License is permissive, allowing developers to use, modify, and distribute the code with minimal restrictions, even in proprietary software (MIT, 1988). Consequently, while GPL-3.0 prioritizes software freedom and user rights, the MIT License emphasizes flexibility and commercial adaptability.

Finally, an inherent weakness in the project relates to its medium-term sustainability, as it remains highly dependent on state funding for essential elements such as sustaining work teams, technological infrastructure, meeting spaces, and communication efforts.

In its complexity—strengths, achievements, tensions, and limitations—the Chasqui project demonstrates a tendency toward what we define as solidarity accumulation (Cruz, 2011), particularly at the symbolic and socio-technical levels. This analysis aims to contribute to the understanding of the mechanisms and strategies developed throughout this process. While the goal is not to extrapolate models or provide prescriptive solutions, it seeks to highlight the construction of socio-economic transformation possibilities through collaborations between diverse actors, academic institutions, and state agencies.

New Lines of Inquiry

Sustainability Factors: What characteristics do stores that remain active on the platform share, and what are the recurring challenges that lead others to discontinue their participation? Does Chasqui have a scalable growth model for the future? What strategies could strengthen its long-term sustainability?

Scalability and Replicability: Is it possible to adapt the Chasqui model to other sectors within the Social and Solidarity Economy or to other countries in the region?

Open-Source Software in the Platform Era: Investigating the complex relationship between open-source software and platform cooperativism. What type of software license best suits the needs of the Chasqui project?

Impact on Production and Consumption Networks: How has Chasqui transformed the organizational and commercial practices of the actors involved?

Relationship with Public Policy: What role does the state play in promoting cooperative

platforms, and what strategies could enhance their development?

International Networks: How can Chasqui integrate into international and regional networks that support platform cooperativism and the promotion of food sovereignty?

This final section highlights key areas for further research that could contribute to the long-term success and impact of Chasqui. By addressing these questions, future studies can provide valuable insights to strengthen the platform's sustainability, scalability, and alignment with cooperative values. Additionally, fostering connections with public policies and international networks will be crucial for expanding Chasqui's reach and reinforcing its role within the broader ecosystem of platform cooperativism.

Bibliography

Altschuler, B., & Muñoz Cancela, C. (2016). Desafíos de gestión. De la extensión a la formación y la incubación. El desarrollo de prácticas académico-territoriales en Economía Social y Solidaria en la Universidad Nacional de Quilmes. +E, 5(5), 128-135.

Altschuler, B., & Peletay, B. (2019). Incubación universitaria de procesos en Economía Social y Solidaria. Un estudio del PUIS-UNQ desde la IAP. Revista de Ciencias Sociales. Segunda época, 10(35), 7-27. Universidad Nacional de Quilmes.

Altschuler, B., Errecalde, S., Mendy, G., & Muñoz, C. (2021). Formación e incubación universitaria para el desarrollo de la economía social y solidaria: enfoques, estrategias y experiencias de la Universidad Nacional de Quilmes, Argentina. In C. Alvear, C. Cruz, & J. Kleba (Eds.), Engenharias e Outras Práticas Técnicas Engajadas (pp. XX-XX). EDUEPB - Editora da Universidade Estadual da Paraíba.

Ambito Financiero. (s.f.). Dólar informal histórico. https://www.ambito.com/contenidos/dolar-informal-historico.html

Ander-Egg, E. (2003). Repensando la investigación-acción-participativa.

Arnaiz, C., Zorrozua, F. I., Niño, L., & Jurado, E. (2022). Experiencias de intermediación solidaria con nodos de consumo en el partido de Quilmes y aledaños. Otra Economía, 15(28), 184-200.

Bijker, W. (1995). Of Bicycles, Bakelites, and Bulbs: Toward a Theory of Sociotechnical Change. The MIT Press.

Bijker, W. (2005). ¿Cómo y por qué es importante la tecnología? REDES, 11(21), 19-53.

Callon, M. (1998). El proceso de construcción de la sociedad. El estudio de la tecnología como herramienta del análisis sociológico. In M. Doménech & F. Tirado (Eds.), Sociología simétrica. Ensayos sobre ciencia, tecnología y sociedad (pp. 143-170). Gedisa.

Ceverio, R., & Brieva, S. (2016). Políticas para la pequeña agricultura familiar en la Argentina: abriendo la caja negra de los canales cortos de distribución y comercialización de alimentos. In H. Thomas & G. Santos (Eds.), Tecnologías para incluir. Lenguaje Claro.

Coraggio, J. (1996). El trabajo desde la perspectiva de la economía popular. Ponencia presentada en el

Seminario sobre los impactos territoriales de la reestructuración laboral en la Argentina, San Carlos de Bariloche.

Coraggio, J. (2007). Sobre el sentido de la economía social. Economía social, acción pública y política. Editorial CICCUS.

Coraggio, J. (2011). Economía social y solidaria. El trabajo antes que el capital. Universidad Politécnica Salesiana - Flacso Ecuador.

Coraggio, J. L. (2017). Towards a new economics: concepts and experiences from Latin America. In P. North & M. S. Cato (Eds.), Towards Just and Sustainable Economies: The Social and Solidarity Economy North and South (pp. 15-36).

Cruz, A. (2011). La acumulación solidaria. Los retos de la economía asociativa bajo la mundialización del capital. Revista Estudios Cooperativos, (16), 12-37.

Dagnino, R. (2004). Tecnologia social: ferramenta para construir outra sociedade. Instituto de Pesquisa e Planejamento Urbano e Regional.

Dagnino, R. (2009). Direção a uma Teoria Crítica da Tecnologia. Tecnologia Social: Ferramenta para Construir uma Outra Sociedade (pp. 73-112). EdUNICAMP.

Dagnino, R., Brandao, F., & Novaes, H. (2004). Sobre o marco analítico-conceitual da tecnologia social. In D. Seidl & S. Santos Cabral (Eds.), Tecnologia social: uma estratégia para o desenvolvimento (pp. 65-81). Fundação Banco do Brasil.

Dziencielsky, V., & Laborda, V. (2020). El valor de la intermediación solidaria. Revista Idelcoop, (232).

Errecalde, S. M., & Katz, J. (2022). Proyecto Chasqui: Tecnologías digitales para el desarrollo y fortalecimiento de la producción popular. Otra Economía, 15(28), 98-109. https://revistas.ungs.edu.ar/index.php/otraeconomia/article/view/729

Fallacara, M. (2012). Trabajo y autogestión: aportes para pensar modos alternativos de producción, consumo y comercialización. La revista del CCC, (14/15).

Fressoli, M., Garrido, S., Picabea, F., Lalouf, A., & Fenoglio, V. (2013). Cuando las transferencias tecnológicas fracasan. Aprendizajes y limitaciones en la construcción de Tecnologías para la Inclusión

Social. Universitas Humanísticas, 76, 73-95.

Garrido, S., Lalouf, A., & Thomas, H. (2009). Resistencia y adecuación sociotécnica en los procesos de implementación de tecnologías. Los dispositivos solares en el secano de Lavalle. Asades, 15, 1-11.

Hughes, T. (2008 [1987]). La evolución de los grandes sistemas tecnológicos. In H. Thomas & A. Buch (Eds.), Actos, actores y artefactos. Sociología de la tecnología (pp. 101-146). Editorial de la UNQ.

Kasparian, D. R. (2014). Protección social y políticas de promoción del trabajo asociativo y autogestionado en la Argentina (2003-2013): el programa Argentina Trabaja.

Latour, B. (1998 [1991]). La tecnología es la sociedad hecha para que dure. In M. Doménech & F. Tirado (Eds.), Sociología simétrica. Ensayos sobre ciencia, tecnología y sociedad (pp. 109-142). Gedisa.

Massachusetts Institute of Technology (MIT). (1988). MIT License.

Mazzucato, M. (2013). The entrepreneurial state: Debunking public vs. private sector myths. Anthem Press.

Scholz, T. (2016). Platform Cooperativism: Challenging the Corporate Sharing Economy. Rosa Luxemburg Stiftung.

Stallman, R. (2007). GNU General Public License, version 3. Free Software Foundation.

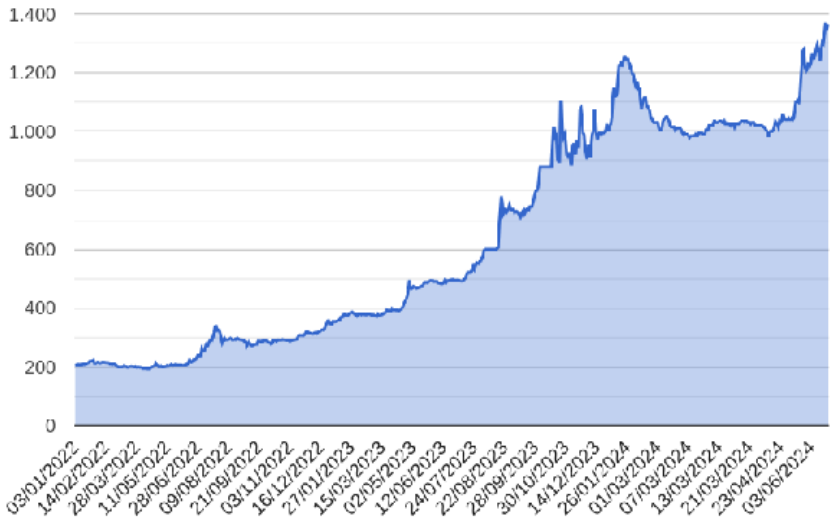
Endnotes

1 Tivoization (from TiVo) is the practice of designing hardware that incorporates software under the terms of a copyleft software license like the GNU General Public License (GNU GPL), but uses hardware restrictions or digital rights management (DRM) to prevent users from running modified versions of the software on that hardware. https://en.wikipedia.org/wiki/Tivoization

2 Coopolis is a game that teaches players about the cooperative business model. It's a game of strategy and teamwork where players work together to overcome challenges and achieve goals. https://www.youtube.com/watch?v=D48SpqyzsRk

3 This data is complementary to the growth of orders and stores, but its quantitative value must be relativized due to the stability of the currency in the period under study.

Dolar Blue quotation (parallel to the official quotation) during the period studied



Source: Ambito Financiero Newspaper https://www.ambito.com/contenidos/dolar-informal-historico.html

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