Πάντειον Πανεπιστήμιο Κοινωνικών & Πολιτικών Επιστημών

Panteion University of Social and Political Sciences

TECHNO-SOCIAL INNOVATION

IN THE COLLABORATIVE ECONOMY

WORKSHOP PROCEEDINGS

Deliverable 8.

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Ελληνικό Ίδρυμα Έρευνας & Καινοτομίας

Table of Contents

Executive Summary

On May 25, 2024, the workshop on "Techno-social Innovation and the Collaborative Economy" was held at Panteion University, featuring members from the case studies of Tzoumakers and Open Food Network as well as from like-minded organisations such as Τροφή.Lab, and OpenLab Athens. The event, which lasted from 11:00 am to 2:00 pm, facilitated a dynamic exchange of ideas among presenters and participants, enhancing the dissemination of research outcomes and fostering dialogue with other organizations and cooperatives.

Petros Kartsimadakis, representing Open Food Network/Τροφή.Lab, discussed their initiative to develop resilient urban food systems through open and horizontal governance, eliminating intermediaries, and promoting sustainable urban gardens. This project emphasizes digital commons and alternative governance models.

Nikiforos Tsiouris from Tzoumakers presented their cosmolocalism project, funded by Horizon Europe. This project integrates open-source software and hardware in makerspaces to create innovative production methods. The Tzoumakers makerspace exemplifies the "Design Global - Manufacture Local" approach, highlighting the importance of community building alongside technical innovation.

Grigoris Tsardanidis from OpenLab Athens showcased their interdisciplinary projects, which focus on collaborative and participatory design. OpenLab Athens partners with municipalities to implement innovative solutions in urban space, education, and nutrition.

The workshop concluded with Vangelis Papadimitropoulos, the principal investigator of the project, who outlined the aims and outcomes of "Techno-social Innovation and the Collaborative Economy". He emphasized the role of open technologies and peer-to-peer production in fostering a collaborative economy, exploring models like digital commons, open cooperativism, and Distributed Autonomous Organizations (DAOs).
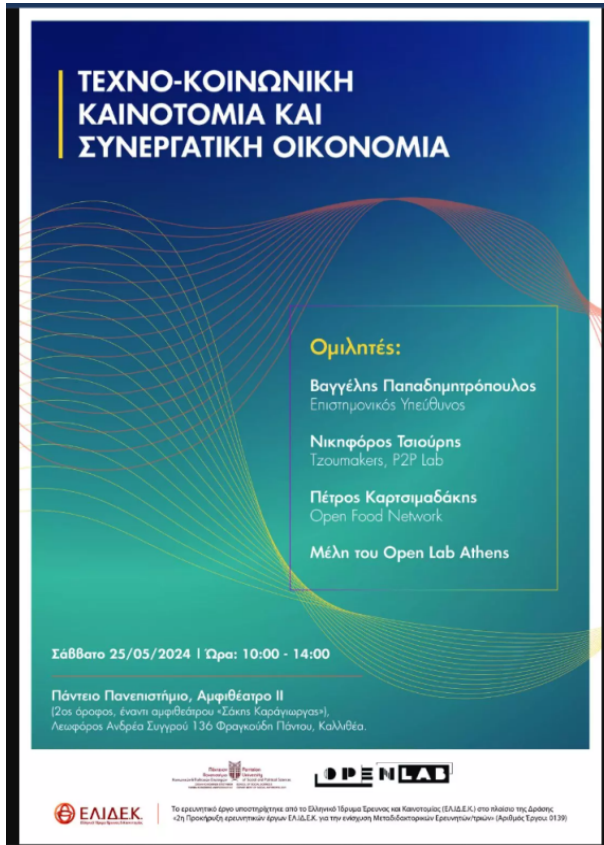
Introduction

On Saturday, 25 of May 2024 the workshop for the dissemination of the research outcomes of the project "Techno-social innovation and the collaborative economy" took place in Panteion University's Amphitheater II.

In the workshop members of three organizations participated, namely Nikiforos Tsiouris (Tzoumakers, P2PLab); Petros Kartsimadakis (Open Food Network and Τροφή.Lab) and Grigoris Tsardanidis (OpenLab Athens). The workshop took place from 11:00 am until 14:00 pm, generated a fruitful discussion along the presenters and the audience and succeeded not only in dispersing the research outcomes of the project but in opening up a dialogue with other organizations and cooperatives regarding the schemes of the research.

In this report we outline the presentations of participants and record the most important aspects of the discussion that followed.

Open Food Network/Τροφή.Lab

The first presenter in our workshop was Petros Kartsimadakis, representing Open Food Network and Τροφή.Lab (Papadimitropoulos and Malamidis, 2023). His presentation focused on his team's initiative to create resilient urban food systems. The project's goals are both political and sustainable: they aim to address contemporary food supply chain issues through alternative supply solutions characterized by open and horizontal governance, eliminating the need for intermediaries (Ostrom, 1990). Additionally, they strive to cultivate urban gardens, promoting a more sustainable and eco-friendly urban landscape.
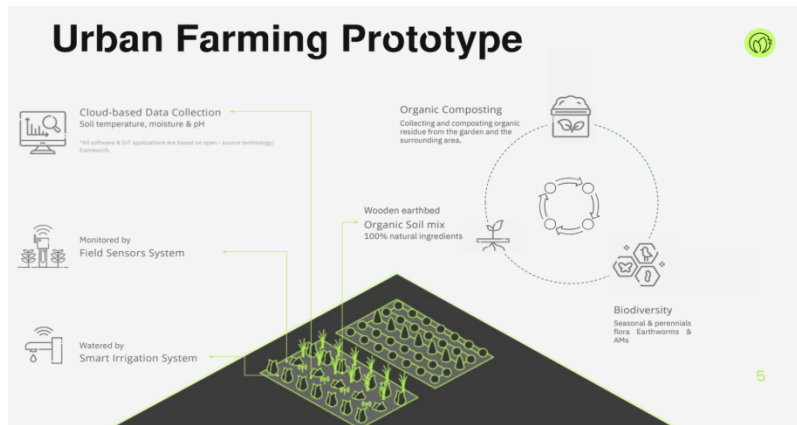
Their project is built on the principles of digital commons and alternative governance models. They develop open-source technological tools and platforms, facilitating a digital marketplace that directly connects producers and consumers without intermediary entities. By making their knowledge, code, pledge, and brand openly accessible, they position their project as a global commons. The most intriguing aspect of Petros's presentation was the practical application of their theoretical governance model.

Petros demonstrated images of their urban gardens while presenting us their urban farming prototype. Their prototype consists not only from materialistic elements such as soil, seeds etc., but from cloud and digital services as well, all put together in order to achieve the before-mentioned goals. Τροφή.Lab, as Petros highlighted, utilizes certain open-source cloud-based data collection technologies in order to calculate and estimate the soil temperature, the moisture or the pH of the plants. Moreover they use sensors with open source software in order to monitor the plants' growing phases while at the same time the keep an eye out for the biodiversity, the wooden earthbed and the composting of organic residue. All these take place on the rooftops of urban buildings or other urban spaces.

Another goal of their initiative, as Petros explained, is for the Τροφή.Lab community to generate income from their organic products. This income is then reinvested into governing the community and creating additional urban garden spaces. While they have made significant progress towards this goal, achieving full self-sufficiency remains a work in progress. Nonetheless, they have demonstrated considerable potential in transforming urban spaces into areas of organic biodiversity and sustainable farming. Furthermore, their efforts illustrate the viability of alternative governance models and economic systems for communities worldwide.
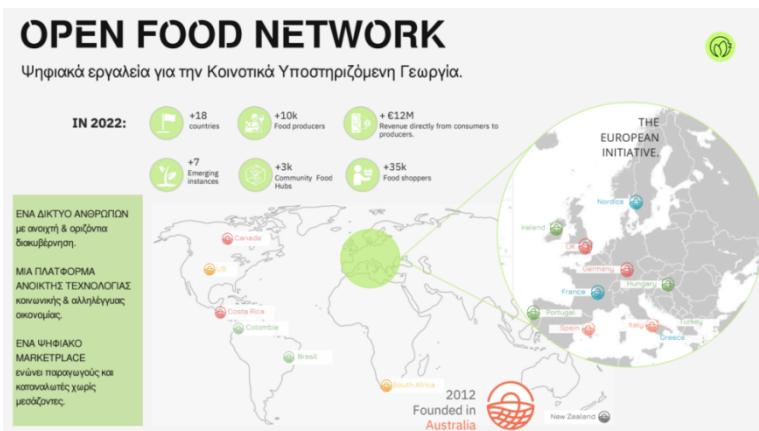
The second presenter at the workshop was Nikiforos Tsiouris, representing Tzoumakers and P2PLab in Kalentzi, Ioannina. He introduced the Tzoumakers initiative, a small-scale makerspace dedicated to producing agricultural tools, grounded in the values and principles of the digital commons (Bollier and Helfrich, 2012; 2015).

Tzoumakers

Tzoumakers, as Nikiforos explained, is an initiative realized through the "cosmolocalism" project of P2PLab, funded by Horizon Europe. Cosmolocalism, as a theoretical framework, integrates open-source software with hardware in makerspaces to establish a novel mode of production, coupled with innovative technical artifacts. It embodies the "Design Global - Manufacture Local" approach, where intangible elements (software, knowledge, design) are shared globally online, while tangible elements (hardware) remain local (Kostakis et al., 2015; Papadimitropoulos, 2023).

Nikiforos showcased the Tzoumakers makerspace, where the principles of cosmolocalism come to life. Tzoumakers is not only a hub for innovation and tool production but also a space for community building, where the commons imply practices of commoning. The concept of the commons here encompasses a resource, the community, and the norms surrounding it (Bollier & Helfrich, 2019). Specifically, within the makerspace, Tzoumakers produces agricultural tools based on digital commons. This means that the blueprints of their technical artifacts are open for anyone to access and adapt, while the products created are shared within the community. To date, they have developed 13 original tools and

machines for local use. Additionally, they have fostered new social ties, partnerships, and friendships among both local and non-local individuals. They have organized over 30 open educational events, and through the operation of Tzoumakers, local KALO organizations have been either established or strengthened. Lastly, Tzoumakers' events have attracted audiences from around the world.
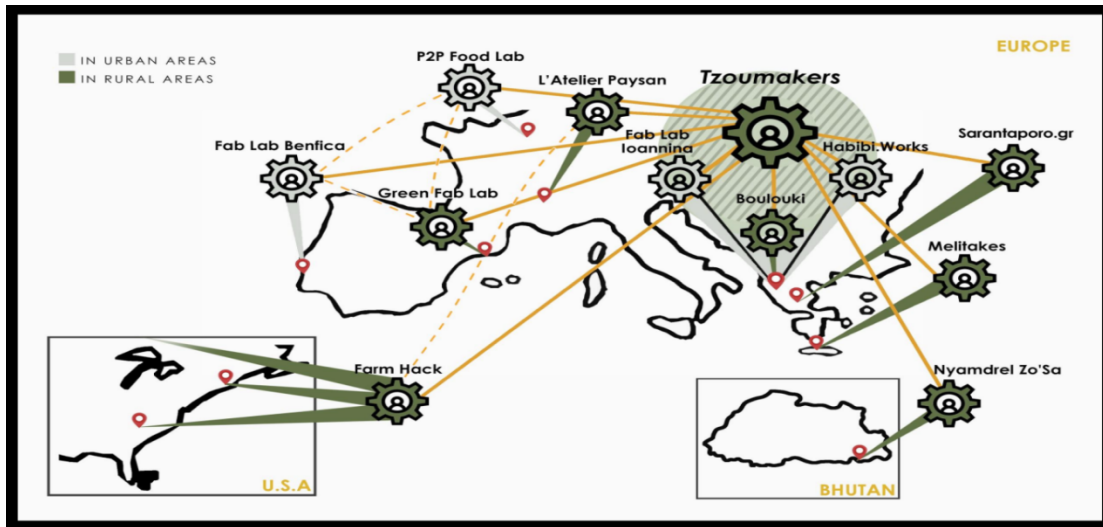
Last but not least, Nikiforos highlighted that the tools Tzoumakers create are not abstract or retrieved of the communities' needs. In order to begin the production of an artifact, local farmers gather at the makerspace and discuss needs and ways to satisfy them. Then, all participants attempt to design the technical agricultural tools which will fit the needs of the locals, have a small economic cost for the community, be resistant and easily repaired. Tzoumakers introduce a new kind of innovation, a new governance model and a new kind of organizational patterns for technology creation.

OpenLAb Athens

The next presenter at the workshop was Grigoris Tsardanidis from OpenLab Athens, a non-profit, interdisciplinary research collective and laboratory for new technologies. He showcased several of the lab's projects and initiatives, highlighting the importance of collaboration and participatory design. OpenLab Athens collaborates with municipalities in Athens, establishing innovative approaches to various domains such as urban
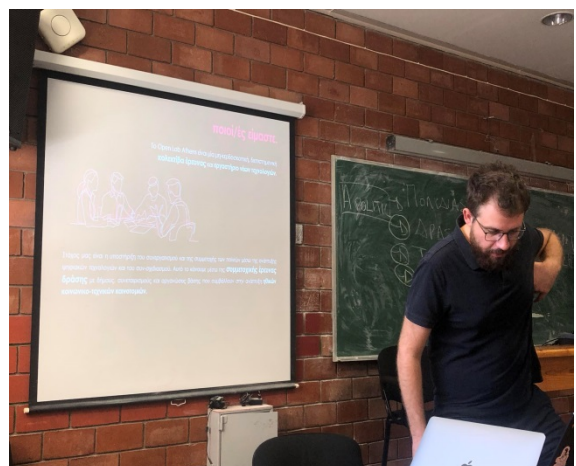
space, education, and nutrition.

In a theoretical context, OpenLab Athens addresses issues related to current methods of designing technologies and developing science. Grigoris tackled what he called "the eternal question" of technology: "participatory design for whom and with whom?". OpenLab Athens focuses on questions regarding the role of "experts," the

effective and extensive involvement of as many people as possible in the design process, the readiness of local government, and the financial instruments supporting participatory actions.

In a more practical manner, Grigoris presented a project titled "The Public Toilet of Thoughts," a physical portable infrastructure aimed at sharing experiences in public spaces through narratives of passers-by using digital media. This project was created during the Coronavirus pandemic to help people express their feelings.

Additionally, he presented several other tools developed by OpenLab Athens, such as:

- The "Game Design Machine," a participatory tool that helps design games to increase user participation and active involvement.

- The "Collective Emotional Mapping," an analog tool designed to preserve the collective memory and oral history of places and experiences, using personal experiences as a springboard for collective understanding of space and its dynamics.

- The "Co-Design Square Kit," a library of tools that can be provided to participants of an organization or commons to help them organize and advance the process of participatory governance and design they need

OpenLab Athens and Grigoris showed how participatory design and alternative governance and organization models can be effective in designing and establishing various artifacts and conditions for a more commons and inclusive future.

Research Findings

The final presenter was Vangelis Papadimitropoulos, the principal investigator of the project "Techno-social Innovation and the Collaborative Economy." He provided an overview of the project, its aims, case studies, and outcomes.
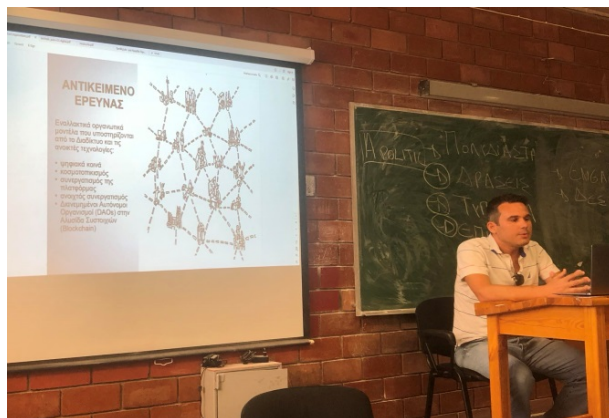

Vangelis began by outlining the project's main objectives. It focuses on alternative organizational models supported by the Internet and open technologies, such as digital commons, open cooperativism (Papadimitropoulos and Malamidis, 2024), Distributed Autonomous Organizations (DAOs) in blockchain, and others (Atzori, 2015; Birkinbine, 2020; De Filippi, 2019; De Filippi and Wright, 2018; Fuchs, 2008; Papadimitropoulos and Perperidis, 2024).

The project's central research question, as Vangelis stated, is: "What is the contribution of open technologies and peer-to-peer production on the Internet to the creation of a collaborative economy?"

To approach this question, the project focused on four case studies: P2P Lab/ Tzoumakers (Greece), Open Food Network (Australia), CoopCycle (France), and Circles UBI (Germany). These case studies illustrate instances of the collaborative economy through the use of digital and open technologies, thereby functioning as digital commons.
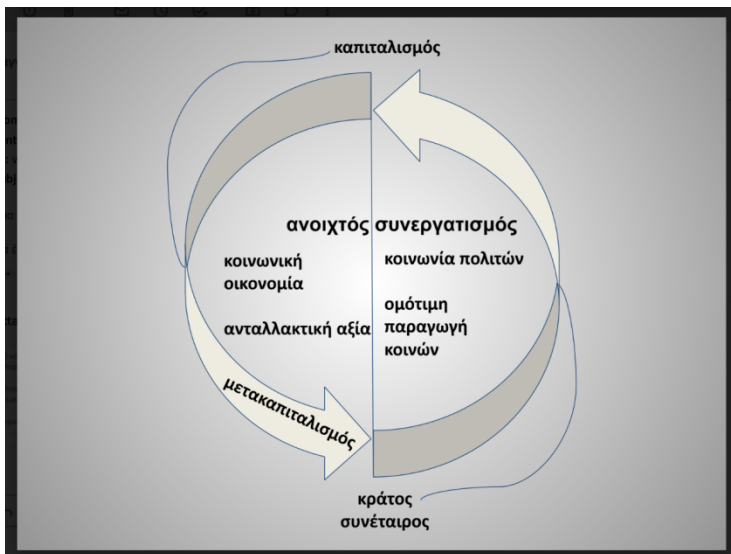

The theoretical background of the project
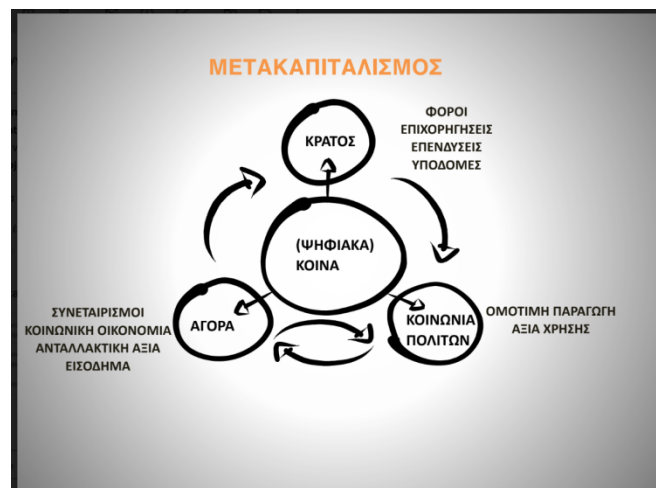
was of significant importance, as Vangelis highlighted. The project's theoretical foundations lie, on one hand, in the concept of global commons and the model of cosmolocalism, and on the other hand, in the political theory articulated by Ernesto Laclau and Chantal Mouffe regarding the discourses that constitute certain socio-political practices and organizations. Vangelis and his team attempt to identify the nodes that shape specific discourses within each case study concerning the digital commons and their political foundations.

The overarching aim of Vangelis's project is the political transformation of the current socio-political and economic regime towards a "post-capitalism of the commons" through a reallocation of values and nodes that shape current political discourses (Mason, 2015). Such a transformation, as Vangelis emphasizes, can only occur through alternative technologies, economic models, and governance models found in commons projects, ventures, and initiatives. According to Vangelis, what is needed is a shift towards a federated commons under a common chain of equivalence that transcends capitalism.

Vangelis analyzed the structure of commons-based peer production within the digital sphere (the Internet), highlighting key elements such as decentralization, self-governance, autonomy (do-ocracy), stigmergy, modularity, resource sharing, and openness (Bauwens et al., 2019). Based on these elements and values, the socio-political and economic project of Commons-Based Peer Production can be materialized. Vangelis presented numerous initiatives of open cooperativism that exemplify this model. Some advantages of open cooperativism over capitalism include the democratization of the means of production, the production of common resources, multi-stakeholder governance, redistribution of value, social innovation, sustainability, and resilience. These elements make open cooperativism a strong competitor to capitalism, with significant potential for future realization (Pazaitis et al., 2017).

In summary, Vangelis's project (and presentation) addresses the problems associated with the capitalistic imaginary, such as climate change, individualism, and economic injustices. The solution he proposes involves a political theory and economics of the

commons that can transform capitalism and politics to some degree (Papadimitropoulos, 2020).

According to Vangelis, this can be achieved by:

1. Developing sustainable cooperative business models that are more attractive and competitive than capitalist ones, offering lower costs, better wages, and improved working conditions.

2. Crafting a political narrative of open cooperativism that transcends traditional political divisions (left, center, and right) and unites various interest groups based on consensus and mutual advantage, promoting a pluralist democracy.

The workshop ended with a fruitful discussion around socio-political, economic, technical and ethical prospects for the future.

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