Social Innovation Policies: A Way Through Consolidating Emerging Innovation Infrastructures

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ABSTRACT

In this article, a set of emerging innovation structures is analyzed in the light of key elements for constructing an innovation policy infrastructure, as proposed by the Bureau of European Policy Advisers (BEPA), is used to assess whether this set forms an structure that is an efficient public policy mechanism for promoting social innovation. Guadalajara Metropolitan Area (GMA), located in the state of Jalisco, Mexico, is assessed. The paper attempts to answer the question: Does the emerging innovation structure constitute public policy best practices to generate social innovation in the GMA? The results of a review of several social innovation projects forming an emerging structure over five years show that this is not the case. Furthermore, none of projects survived, mainly because they lacked evaluation tools and systematic mechanisms to secure funding.

*Key Words***:** Social innovation, emerging innovation structure, public policies, Guadalajara Metropolitan Area.

Introduction

The GMA has been recognized by entrepreneurs, research institutes and international companies as a private sector innovation and technology promoter and developer through events such as *Epicentro, Campus Party*, *Reto Zapopan* and *Talent Land*. This is in part due to public policies implemented by municipal and state governments. Such policies promote an emerging innovation structure and have close relationships with innovation communities, universities and businesses.

The core concept of "emerging innovation structure" is defined as the totality of the platforms that offer human, financial, and material resources for innovation through such activities as events, workshops, hackerspaces and bootcamps to systematically promote activities that encourage the creation of social innovation projects and enable possibilities for new relationship patterns among inhabitants of a city or region. They thus open possibilities for better innovation dynamics in a city or region (Silva-Flores, 2017). Other researchers who have contributed to this topic include Star and Ruhleder (1996), Caraminha Matos and Afsarmanesh (2008) and Cervantes (2013).

In 2014, research and consulting work began with funding from the National Council of Science and Technology (CONACYT), aimed at generating a conceptual framework to support applied study of the emerging social innovation projects and innovation structure in the state of Jalisco. With this work as a foundation, this article explores how to answer whether these

projects and the emerging innovation structure constitute the best public policy practices for helping generate social innovation in the GMA.

The article examines social innovation initiatives developed in the GMA between 2014 and 2019 with the aim of identifying supportive factors and explores whether there is a relationship with other emerging innovation structures that together allow the design of public policies that promote social innovation development in the region.

The concept of emerging innovation structure defined above was explored for this article in innovation festivals, innovation promoting events, innovation workshops, hackerspace and bootcamps that allowed identification of the social context for innovation policies, proposals and their relations.

The subjects of analysis are projects building the framework for an innovation structure. Structure opens possibilities for synergy between projects or between social innovation policies. The projects are identified, along with their human, cultural, financial and material resources.

Under this practical-theoretical framework, a qualitative research approach is used to consider innovation projects and diverging, consensus and tension points, according to the criteria developed by Bureau of European Policy Advisers (BEPA) for promoting social innovation policies and analyzing emergent structure (BEPA, 2014).

The Bureau of European Policy Advisers gives strategic and policy advice to the European Commission on issues relevant to the policies making and to the future of the European Union. (BEPA, 2012) Currently it is known as the European Political Strategy Centre.

Core Concepts

Three core concepts were used to construct and analyze the framework for this article: social innovation, innovation projects and structure and social innovation policies.

Social Innovation
Social constructivism as outlined in the work of Bijker, Hughes and Pinch (1987) questioned Schumpeter's (1969) perspective on innovation. Bijker, Hughes and Pinch offered a different view of the relationship between technology and economy, and a different understanding of innovation dynamics. They analyzed the contents of technological knowledge and innovation as social processes and as the results of a series of heterogenous relationships. Using their perspective, open innovation (Chesbrough, 2005), and social innovation (Mumford, 2002; Mulgan, 2006) are two social phenomena whose social creative processes are needed to solve social problems.

From the social development perspective, *innovation* refers to a social construction resulting from social interactions that promote transformation, development and articulation of social capacities. It focusses on human and social factors as the main mechanisms and actors in

models for social development (Tuomi, 2002; OECD/European Communities, 2005; Moulaert et.al. 2013).

Social innovation is a process for adopting new ways that reconfigure social relations to respond to social problems. This creates opportunities for positive social change, for example, through initiatives generating inclusion, well-being and empowerment of citizens.

Innovation Projects and Infrastruture
Creation of innovation policies, funding and projects, that together form an innovation structure, is possible through collaboration between local governments, universities, civil society organizations and other social agents; for example, when a common action plan that explores the challenges to innovation was conceived by foundations, conglomerates, the private sector, governments, universities and social agents (Ondátegui, 2008). Some basic elements affect the way that actors relate within an emerging innovation structure:

a) Communication and collaboration patterns due to growing use of social media and information technology tools.

b) Growth of entrepreneurial initiatives with new frameworks and sustainable practices.

c) Social capital and emergent innovation practices.

According to Kako (2013), an emerging innovation structure supports innovation ecosystem dynamics. A structure is centered on social capital and innovation pull (Boshma and Frenken, 2011).

Social Innovation Policies
In a favorable ecosystem, public policies promoting social innovation need to be integrated. These public policies are governance instruments and require adequate financing mechanisms adapted to social innovation. The policies should also be congruent with the emerging innovation structure.

A goal of this research was to generate methodologies; for that, we identified good practices of social innovate on projects. According to BEPA (2014), the presence of a dominant bureaucratic culture, or the existence of conflicting objectives among an ecosystem's actors can turn into two of the main obstacles for innovation.

In this context, the key objective of social innovation policies is to identify those obstacles and to provide ecosystem agents with the necessary resources to deal with them. BEPA (2014) considers four types of resources to generate a fertile social innovation ecosystem: digital technology, financial resources, collaboration spaces and evaluation instruments.

- *Digital technology* is one of the most effective mechanisms used to communicate and socialize, allowing mobilization and organization of volunteers' work to produce public goods, which adapt perfectly to social innovators' needs and characteristics.

- *Financial resources* provide access to different scales of financing ranging from small amounts for experiments and pilot tests to public investments for bigger projects.

- *Collaboration spaces.* Given the mobilization of talent, the main asset created in social innovation initiatives is social collaboration (Silva-Flores, 2017), which require physical locations and other instruments, spaces for creating and growing social innovation projects, tools for exchanging and evaluating technical information, and good practices.

- *Evaluation instruments.* In order to develop useful evaluation tools, further scientific research is needed regarding the conditions for the success of social innovation policies, in order to develop methodologies and metrics that evaluate the results and encourage expansion of the most effective initiatives.

According to BEPA (2014), these four elements constitute good practices for generating public policies that support social innovation. The elements are analyzed for the GMA's emerging innovation structure in terms of their configuration and capacity to promote social innovation.

Methodology

A case study methodology was used, to allow understanding of a contemporary phenomenon in its context (Yin, 2009), to reveal the emergent character of the object of study, the emerging innovation structure, and to facilitate interpretation.

The analysis describes the emerging innovation structure in terms of its configuration, the way projects operate, and the four elements proposed by BEPA (2014), digital technology, financial resources, collaboration spaces, and evaluation instruments. The BEPA elements of analysis were chosen because they represent good practices for generating efficient social innovation policies.

Data collection and systematization were inspired by the Miles & Huberman (1994) analysis model, using techniques that identify a continuing process of documentation and data analysis. Data analysis tested the hypothesis that promotion and support mechanisms for social innovation in the state of Jalisco are motivating emerging innovation structure development.

First, the hypothesis was evaluated with the results of semi-structured interviews and subjective impressions. The results included analyses of spontaneous expressions in response to open-ended questions (Flick, 2007). Second, the analyses were contrasted with direct observations by the interviewers, who gathered firsthand information at specific events and times for a series of projects. This allowed us to understand the community perspective and the subjectivity of social behavior in real life (Flick, 2007). Third, a document analysis was conducted: written and visual communications were studied systematically and objectively to ascertain what information people produced on the context and period. The results of the three types of research were then compared (Yin, 2009).

Two key time periods were examined, the first one between May 2014 and November 2016 and the second in early 2019. During the first period, event descriptions were prepared through observation of two innovation festivals, two bootcamps, two Startup Weekend Mega (SWM), two MIT Enterprise Forums, 12 community reunions and 72 interviews with ecosystem actors.

The second key period in early 2019 occurred as a follow up and an actualization exercise that led to this document. Innovation events examined included *Talent Land*, *Epicentro, Reto Zapopan* and community meetings. The information gathered in the two periods was compared with the BEPA proposal to determine whether the GMA emerging innovation structure, promoted by the government at several levels (national, state, municipal) corresponded to the best social innovation policy practices as identified by BEPA.

Results: Emerging Innovation Structure Configuration

The emerging innovation structure is configured as scenes that widen social innovation frontiers (Silva-Flores, 2017). In figure 1. these scenes are presented as different type of events.

The innovation structure is outlined in Figure 1. Private and community structures and projects are identified and paired with a promoting actor or project. The configuration of the innovation structure is presented according to promoting actor in the following typology: governments, communities, universities and the private sector. Actors promoting innovation such as Hackers & Founders influenced the social capital of the structure, the type of activities and the projects adopted in the top left part of Figure 1.

All structures sponsor events and/or working spaces that offer social, cultural, financial and material resources in support of activities aimed at creating innovation projects. Figure 1 displays structural interactions, and opens the possibility of analyzing collaboration, knowledge, and financial relations of the social innovation projects.

Collaboration is an indication of promotion and consolidation of social innovation projects. Although four typologies are recognized, only the community and government structures are analyzed, due to their potential to orientate and generate integral and consolidating strategies for public policies.

The promoting actors sponsor events and spaces that offer resources and support innovative project creation.

Main Community and Private Sector Sponsors of Innovation Projects
In the first period of observation, an emerging innovation structure in the GMA was being promoted by the following communities: Hackers & Founders, MakersGDL, Jalisco State Innovation, Science and Technology Office (SICyT in Spanish) and the recently created Planning and Citizen Participation Office (Secretaría de Planeación y Participación Ciudadana del Estado de Jalisco). The latter had proposed a series of what meetings, talks, conversations on civic challenges, led by the organization "Codeando Mexico" to promote a "government with a new governance model, based on transparency, collaboration, participation and an accountability culture" (Coordinación de Estrategia Digital Nacional, 2014) through innovation.

Figure 1: Configuration of an Emerging Innovation Structure in GMA
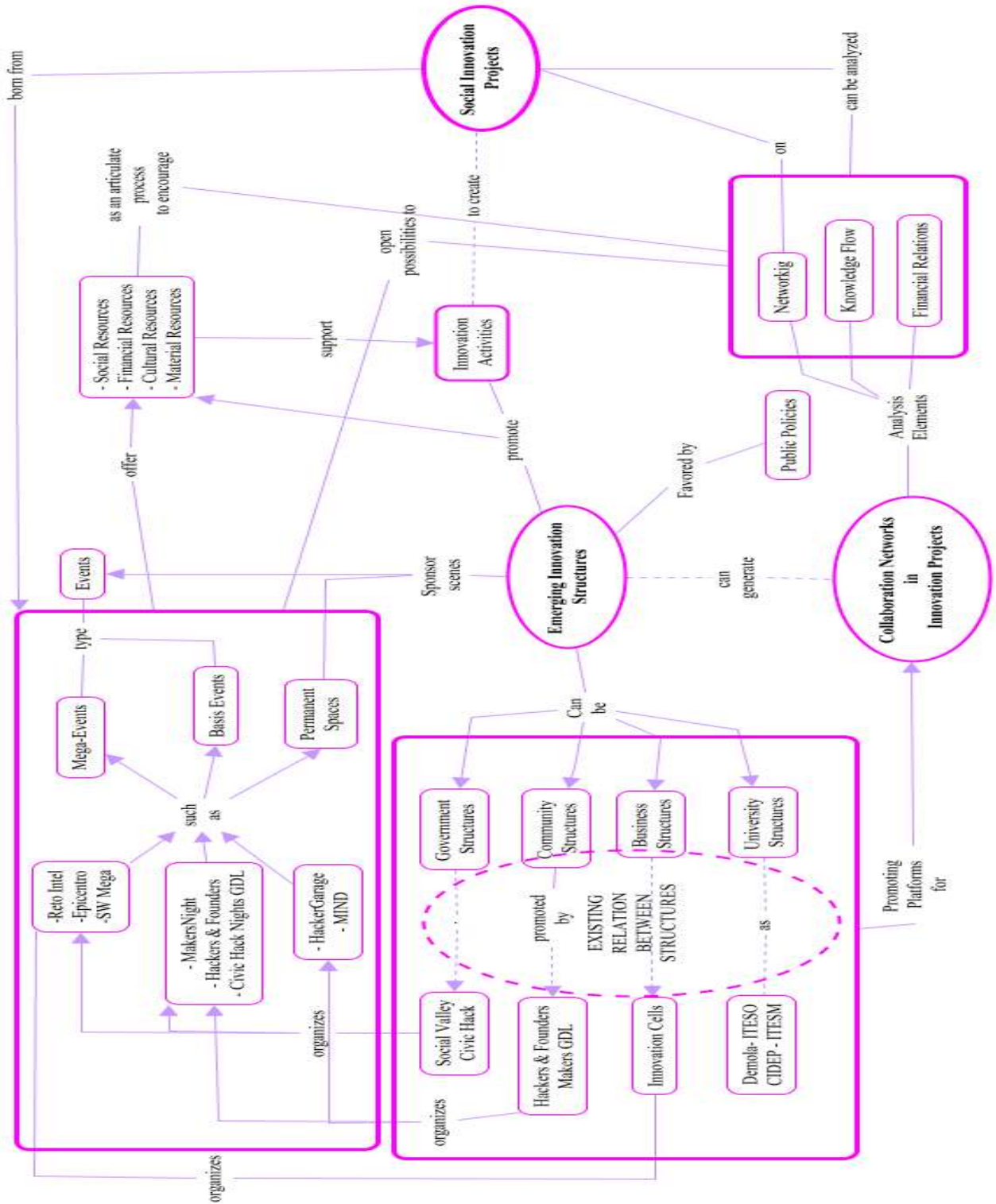
Source: Silva-Flores' elaboration, 2017

Community Activities

Activities driven by community organizations can be divided into two types: events and mega events. In the event category, regular activities were held, such as monthly community meetings, contests, demonstration (demos) day, lectures and workshops. Monthly community meetings are highlighted for their frequency and the Startup Weekend Mega (SWM) is described as a mega event.

Monthly meetings

Monthly meetings driven systematically and permanently by the community members, by entrepreneurs, reinforce the technological communities' movement in GMA innovation ecosystem. The most consolidated ones are Hackers Founders since 2011, MakersGDL since February 2014 (initiating the so-called Makers Nights which take place the first Tuesday of every month), and Civic Hack meetings since March 2015 (driven by Codeando Guadalajara in collaboration with the government office SICyT, the second Tuesday of every month). All these communities gather in the HackerGarage[1]. Since its beginning in 2014, Social Valley members decided to gather once a month in different public places, such as cafes, restaurants, universities, and collaborators offices, and published its event agenda on their web sites and social media. At the end of 2017, however, they stopped having regular meetings.

During the meetings activities occur regularly in three stages, with slight variations, as follows:

First, for approximately 30-45 minutes, a specific subject is presented by a specialist, and this is the main topic of the evening. It is presented in a lecture scheme followed by questions and answers, or as a workshop. Usually the attendees show great interest in the topic and have a proactive attitude.

Second, for 10 to 20 minutes, a series of three-minute presentations are done to share new business ideas. They are contacted ahead of time by the organization team to offer a space to share their project, using a technique called Pitch, that in a non-technical manner to present ideas for problem solving, with an emphasis on its differentials in order to attract collaborators. The Pitch is inspired by Silicon Valley practices and Babson University's (Babson University, 2014). Most of the time, however, the pitches do not offer concrete solutions to specific problems, so collaboration is inhibited.

Third, for the last 45 to 60 minutes, attendees network in an informal environment. This is a more natural act, driven by a premise of trust and collaboration, so the participants seem more open to starting conversations with new people seeking new ideas and collaborators.

For example, an innovator can approach in a more informal way an investor that might be willing to start a relation to fund its idea or project.

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[1] The HackerGarage is a coworking place in the western part of Guadalajara Municipality

Community Mega Events

The purpose of a mega event is to develop a project idea. An example of this is the Startup Weekend Mega (SMW) is organized by Startup Weekend in alliance with the main communities, Hackers & Founders, Startup Weekend Community, Startup Essentials Bootcamp y Escena Web, SICyT, 500 Startups Mexico, Lightcone, GAIN, Agave Lab and local universities.

Attendees and volunteers are typically 22 to 30 years old and are usually college students, from upper middle-income families. Over 80% are male. Like similar other events, this event has a three-part structure, welcome, development and closure. The three parts are described below.

- Welcome: A relevant member of the community or of the organization team gives a welcome speech, then a group recreational activity is done to create rapport and generate an environment of trust among the participants.

- Development: This is divided into three stages. First, selection of projects, based on a problem selected and topics of common interest (verticals). Those who want to share their innovation idea make a pitch, leading to configuration of groups (teams). Second, each team has 54 hours to develop its idea into a project. One of the most important things in this stage is the validation process, which justifies their proposal. It requires information from outside the team, secured by reviewing documents and interviewing possible users or people affected by the project. Each member of the team adds to a prototype or demo through dialog and offering their own experience. Mentors rethink or reinforce new approaches or solutions to the problem selected. Third, winning projects are selected. Each team describes its demo in a pitch derived from the solution to the problem chosen by the team. The pitches are presented to judges who evaluate the ideas and select the top three ideas of each vertical.

- Closure**:** The results of the 54-hour journeys are presented. The top three projects of each vertical from the previous round become semifinalists of the event. They compete in a final pitch round to show what they have achieved with a prototype or demo of the idea they have working on, and the solution proposed.

Government Sponsors

The state government of Jalisco has an Innovation Office, with a mandate to promote, facilitate and impulse the creation and adoption of an innovation culture (SICyt, 2013). It sponsors two major events to promote innovation, *Talentland* and *Epicentro Innovation Festival*. *Epicentro* will be the focus because sponsors social innovation in GMA and is organized by the state government through the Information Society and Knowledge Economy Direction of the Innovation, Science and Technology Office (SICyT). *Talentland* is more technological innovation-driven, that is the reason it was not of interest of this paper.

Epicentro was first held in 2014 and has continued every year since. It is the first festival mentored by the International Festival of Social Innovation (FIIS), a Chilean festival that has expanded to Argentina and Mexico. In Mexico, SICyT oversees its organization.

The first festival promoted the collaboration of municipalities with state governments, mainly Zapopan, Guadalajara, Tlaquepaque and Tonalá. These municipalities provided access to facilities such as forums, theaters and public plazas. A big fundraising effort was involved.

In an interview, Benjamin Huerta, former Director of Business and Social Innovation in the Jalisco Innovation Office, stated that the SICyT obtained 5 million pesos from the state government for *Epicentro*. This information was confirmed via the transparency office which indicated that the funds were part of the digital inclusion strategy by the Jalisco State Fund for Science and Technology, title 4441 of Support for Scientific and Technological Research of Academic Institutions, Technological Development and Innovation (FAFEF), and the Diffusion and Divulgation of Social and Technological Innovation Program 2015-1, which emphasized digital inclusion. Four million pesos were granted for the first festival and 1.1 million pesos for the second.

For meetings in July 2015, one of the SICyT organization teams was concerned that the permit for using public buildings or plazas for the concerts would not be issued, because the event was going to be celebrated under new municipal administrations, and there was a concern that this would interfere.

This situation is highlighted in this research because it shows how government structures can facilitate or block an event aimed promoting development and conflict with political interests. This suggests the high vulnerability of these structures.

Epicentro´s Configuration. Epicentro is organized like other innovation festivals in Latin America such as FiiS in Chile and Argentina, and even like Catapulta in Oaxaca, Mexico. They all organize workshops, lectures, challenges, contests and technological fairs, with national and international experts present. There are concerts and cultural activities in order to promote innovation cultures and a wellbeing society for all citizens, not only the festival participants. *Epicentro* is organized in the following categories of events:

- *Themed Lectures.* Parallel on topics such as entrepreneurship or entrepreneurial experiences, i.e. why social innovators fail, during the three days of the festival. In 2014 during the first festival, restaurants, theaters and municipal forums were selected. In 2015, 2016, 2017 and 2018, public buildings related to innovation, creativity and culture were used to speak about social innovation. Buildings such as the MIND Building (Mexico Innovation and Design Building), the Museum for Scenic Arts of Guadalajara University (MUSA), the Enrique Diaz de Leon auditorium of Guadalajara University and the Jalisco Culture Office.

- *Workshops.* These were themed by public challenges and held in places populated by young people of high affluence. In order to enable young people to participate and dialogue about solutions to social problems, since the Jalisco's government aim is to promote innovation culture through a creative, artistic and social movement, in the streets, the coffee shops, the garages, bars, and universities.

In 2015 workshops addressed several topics related to civic innovation, user-centered design, solution-finding such as health, sustainable cities and agriculture and evaluation of health innovations, introduction to Lean Startup and robotics and innovation for children. Highly recognized public spaces in Guadalajara such as Andador Chapultepec, Enrique Diaz de Leon auditorium, the MUSA and the HackerGarage, were used for this purpose.

- *Concerts*. Famous groups participated, to generate bigger audiences. In between songs, social innovation experts motivated the participants to explore innovation activities. This festival uses music and public spaces to present social innovation concepts to the public in general.

In *Epicentro* 2014, according to figures presented in media like *La Jornada* and *El Economista*, Jaime Reyes Robles, former Secretary of SICyT, pointed out that 50 startups were created. However, in this research we found no evidence of survival of any of these 50 startups, so the results are not at all encouraging. If we compare these values to other startup survival rates after four or five years, the scenario does not get any better.

Even during its five editions (2014-2018) there is little evidence of survival of social projects, which suggests that this type of event is not the mechanism to generate social innovation initiatives or projects, which means that its scope is limited to the promotion of innovation and alliances with other actors.

Despite the fact that *Epicentro* was a festival exclusively to promote social innovation its last edition was in 2018, since that same year the *Talent Land* started in Jalisco to promote a culture of innovation focused on different profiles of society (students, entrepreneurs, women, children and companies in early stages), being the most important innovation festival promoted by the government focused on technological issues, such as: blockchain, business, developer, gamer, among others. But, in their 2019 version, they included, agro and social entrepreneurship. Which led to some extent to *Epicentro* being absorbed by *Talent Land*, which in its next 2020 version will add other social issues such as: health and tourism.

Discussion: Towards Social Innovation Public Policy

Based on the structural configuration and the follow up to the projects in the social innovation ecosystem described, public policies aiming to promote social innovation through events such as *Talentland* and *Epicentro* do not generate projects that can lead to regional development. Furthermore, considering the 2019 evidence, the consolidation of social innovation projects is almost non-existent.

This reveals an inadequate public policy logic, because the innovation processes are multidimensional (financial, political, cultural, social) and the knowledge aspects of the participants converge. Observations and interviews reveal that concentrating most of the mechanisms and resources of social innovation policies on sponsoring events is not enough. The emerging innovation structure is therefore analyzed using the four elements proposed by BEPA

(2014), digital tools, financing resources, collaboration spaces, and evaluation instruments. These elements constitute best European social innovation practices.

Digital Tools

In this first axis of analysis, it was found that use of digital tools is widely accepted. Every event sponsored by the state or municipal government, as well as the ones promoted by the communities, uses as marketing tools its websites, Facebook pages, Twitter and Instagram accounts, adding to a digital culture firmly installed in youth. This social media use enables the participants not only to be informed of the events but to establish collaboration with other members of the ecosystem.

Access to Funding

Some of the most used and recognized funding sources in GMA innovation ecosystem are the ones provided by governments. For example, *Epicentro* is tied to the Jalisco's State Fund for Science and Technology, through the Social and Technological Innovation Diffusion and Divulgation Program 2015-1. Startup Essentials Bootcamp is sponsored by the Innovation Fund (FINOVA) of the state´s Economic Office, as well as the activities organized by SICyT in the framework of *Campus Party*, *Talentland* since 2018.

There are other state funds, like the Prototype Development Program (PRODEPO), with calls for funding prototypes at non-repayable investment twice a year. The aim of this is to support projects wanting to develop new products or procedures, requiring designing, building or generating functional prototypes in their final phases before they can be launched to the market, and that can generate inventions subject to patents protection. (COECYTJAL, 2015)

Even though there was a considerable amount of financial resources available, they were not used by the entrepreneurs because they had little knowledge of the availability of funding. An example is the case of Chaik. After winning the vertical on health in the *Startup Weekend Mega*, an event of the community structure, it had been invited to participate in *Reto Zapopan* and to make use of mentoring and supporting government resources, Chaik did not develop a concrete proposal due to the lack of financial resources. In an interview with its founder, he stated that Chaik needed a large amount of money to produce the molds for the product, and, although they were semifinalists in *Reto Zapopan*, the resources did not arrive. The analysis points to another possibility—the lack of knowledge of other financing programs in the ecosystem, and the lack of articulation of the proposal. They could have applied for the PRODEPO to develop prototypes but did not know about it.

Access to financial resources through incubators and accelerators is usually done with the mediation of university and business structures, which generate the spaces, frameworks and conditions needed to manage resources in the public and private sector. Community and government structures are not usually seen as mediators for financing. This gap opens an opportunity for developing a best practice in social innovation policies.

Physical spaces and instruments for collaboration

The organizations in the emerging innovation structure of GMA stand by offering events (innovation festivals, mega events, community meetings, etc.), which are recognized for favoring

relations between different actors of the ecosystem (Silva-Flores, 2017). As stated previously, however, these spaces vary except for the monthly meetings at *HackersGarage,* and *Talentland* at ExpoGuadalajara. *Epicentro* has been held in several universities and other sites through the years as the Social Valley meetings.

These collaboration spaces in the emerging innovation structure of GMA are mechanisms for technological training and updating, which is more evident in the meetings structured as workshops (frequent in Makers Night meetings). These are therefore used to train new subjects or to update existing ones. For example, in the first reunion of MakersGDL in 2014, many of the participants were interested in learning about ARDUINOS. "I was pretty excited about coming because I don't know anything about Arduinos, and when a friend told me it was going to be a workshop and they would teach us to program one, I instantly said yes, and got my material (…)" (Makers Night participant #1.0)

"(…) The hackers' meetings are always on (such) subjects as Arduinos, technical stuff, but I think it's necessary, (…)" (Startup Weekend Mega Participant).

The previous quotes reinforce certain ideas: that one of the motivations for participating in community meetings is learning by demand and that emerging structures are mechanisms used by the participants to develop abilities for innovation, generally offering technological training and updating resources.

The knowledge generated in these spaces is key to participation in this kind of structure. As shown in the interviews and observations on these meetings, the more successful structures are community-based because they can offer learning on demand. "I come all the way from Aguascalientes[2] and try to do it every time a subject interests me. Now this 3D printing is super interesting for what I'm doing, and it is a shame that in Aguascalientes I don't have access to one (…)" (Participant in Makers Night #16).

The previous quote shows that the participant is interested in knowing about 3D printing, and that the geographic impact of this structure is extra-regional. We can see two benefits: the training offered as a resource to develop innovation abilities, but also access to physical resources such as a 3D printer that may be used when prototyping.

The emerging innovation structure is working as a collaborative system, uniting people interested in technology who come from different parts of the Metropolitan Area, different parts of Mexico, or even the world.

Evaluation tools
The most important evaluation tool needs to evaluate results and the scaling of initiatives. Methodologies and metrics need to be developed. The methodologies used in the projects are discussed below.

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[2] Aguascalientes is a state in central Mexico, a 2.5-hour drive from GMA.

As a mechanism to consolidate efforts, an analysis was done of projects created during the Startup Weekend Mega GDL 2014. The projects chosen are Red Verde, Coolturapp, Tong and Chaik. All four are examples showing that the configuration of the events facilitated the consolidation of 54 hour's work into a functional prototype and a possible startup.

A favorable factor is the working methodology inspired in the Lean Startup Method. It is designed to favour experiments (Ries, 2012) which allow the participants to make constant adjustments, thanks to its philosophy of Create-Measure-Learn.

"I am very happy to participate, not only because we won our vertical, but because I learned a lot from the evolution of the initial idea to another idea, and another, until it became something tangible" (Co-founder of Red Verde).

The quote from Red Verde's co-founder shows excitement for learning that led her to be motivated thanks to the experimentation process and recognizes how her idea evolved. In a follow up interview after the event, however, she mentioned that even though they won and had the support of *Reto Zapopan*, they could not consolidate the project due to lack time. "Every time it was harder and harder to get together, because we are all students and the university is more and more demanding (…)" (Red Verde co-founder).

This was not only the case for Red Verde, but for all the projects generated in the emerging innovation structure and studied in this paper. As of February 2019, none of them existed anymore.

The lack of consolidation of projects erased the possibility that the emerging structure extends traditional innovation patterns even if there are methodologies that help to do so. In the case of the GMA innovation ecosystem, most of the projects did not reach their conclusions, even though they had a potential social impact. This is the case for "Tong", one of the finalist projects in health's vertical of the SWM GDL 2014. It consisted of a motor controlled by the user's tongue that could be fitted to mechanical wheel chairs for quadriplegic people at a cost 50 times under market value.

"Tong" presented a functioning prototype and intended to continue working on it after the event, but because of time constraints the coordination of all the members of the team was not possible and the project ended. When a team member was asked about the main obstacle to teamwork, he responded: "Time. I mean, we have the idea and an attempt at a prototype but having the constancy and tenacity to fulfill it is something that comes from inside each one of us. A lot of people have ideas, but they don't work until you can execute them. It is a wall that must be overcome some time." (A Tong member).

These cases show the complexity of consolidating efforts in the emerging innovation structure. Aspects intrinsic to the team, such as time, conviction, capacities, knowledge tenacity, constancy, and even the capability of moving towards the goal need to be considered. This is also reflected in a statement of a Coolturapp collaborator: "The most difficult thing is constant work, to have the discipline to do it."

Concerning creation of indicators, and a system to measure innovation, innovation indicators exist in Mexico, but not for social innovation. One of the existing indices is the Federative Entities Innovation Index, that measures three areas of innovation enablement. First, it considers numbers of postgraduate and middle education students, and funds for innovation. Second, it looks at private sector activities related to R&D, innovation projects and patent applications. Finally, it examines the so-called tangibles—products and services considered novelties introduced to the market—and the number of people working in these areas (Montiel-Armas, 2014). This index offers the possibility of comparing state ecosystems or the projections for the national ecosystem. It does not help, however, with the process of consolidating the innovation projects: Even with mentoring there is a lack of systematic work developing successful innovations and follow-up indicators and their systematization depends on the motivation of the entrepreneurs.

As a result, evaluation tools are a pending subject in the emerging innovation structure analyzed.

Conclusion

In this paper GMA's emerging innovation structure was analyzed in light of the elements proposed for good policy in the BEPA proposal, in order to determine whether the emerging innovation structure has been incentivized as a public policy mechanism in Jalisco, Mexico and how it relates to best social innovation policy practices. The objective was to answer the question: Does the emerging innovation structure in the GMA constitute best practices to generate social innovation?

The emerging innovation structure cannot be considered yet as a best practice to generate innovation public policies for the GMA. It still requires work related to financial resources and evaluation tools in order to be considered a system of mechanisms to generate public policies that generate social innovation.

The fieldwork conducted showed that the existing structures are serving as platforms to develop methodologies for proving, validating, demonstrating and refining solutions in manipulated environments. It is necessary to bring them to the level of concrete ideas, as suggested by BEPA, by developing financial resources and evaluation tools.

According to the findings, the efforts generated in the emerging innovation structure require better tools, relations, support and knowledge to achieve consolidation and sustainability for the social innovation projects.

However, in terms of the framework proposed by the four axes of analysis, it can be said that important work was done and also remains to be done by the Jalisco governments and the GMA municipalities, especially in Guadalajara and Zapopan municipalities. This is clearly a support for the social innovation projects in Jalisco.

Use of digital technology was highlighted as a resource better taken advantage of by the structure's participants, because it is an important tool for socialization and communication of the events.

Access to funding is necessary and would promote public policies. The financial resources exist but are mainly available for sponsoring events. There are no secure mechanisms that entrepreneurs can use to consolidate their social innovation projects.

In terms of spaces and instruments for configuring collaborative relations, the emerging innovation structure of GMA allowed the bringing together of a geographically dispersed community, that worked to build relations, with a high potential to become a more collaborative system.

Methodologies and indicators need more work. Even if there exist working methodologies, follow-up and evaluation metrics, there is not an established evaluation practice in any of the projects analyzed, nor in the structures configured.

This article adds to the work on knowledge location cities, by Camarinha-Matos and Afsarmanesh (2008) on "Collaborative Networks" and by Kakko (2013) on "Third Generation Science Parks 3GSP" in understanding the development of innovation in terms of the dynamism of a region or city, and adding to the effort to raise awareness about the relevance of promoting social innovation in emerging patterns.

Therefore, this knowledge about emerging innovation structures in GMA is relevant to state the efforts, obstacles and motivations used as a mechanism to favor social development in Jalisco, Mexico, which are clearly related to points of attention and improvement toward more effective public policies.

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