Collaborative Networks for local Innovation

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This document is a collaborative innovation effort between InnovaAP and The Trust for The Americas foundation for promoting high added-value disruptive territorial dynamics for the integral development of Costa Rican cantons.

The purpose of the project of "collaborative networks for local innovation" is the generation of collaborative networks between local stakeholders for the solution of public problems at 12 Costa Rican cantons, by providing training and creating collaborative work opportunities between local stakeholders, public institutions and the private sector.

In an increasingly complex scenario, with problems requiring more resources and solutions that are more creative, interaction between stakeholders has become an alternative to the centralized practices for the generation of public policies implemented by the State. In this sense, through these new development paradigms, emphasis is made on the role of public organizations as facilitating stakeholders rather than simply stakeholders involved in the process, and the leading role is granted to those stakeholders who are closer to the topic under discussion.

At territorial level, the organization of stakeholders becomes a high priority, since proximity to people is greater and, consequently, the effects of public initiatives are more direct. As a result, this document develops a methodology for the generation of these stakeholder networks which contribute to territorial development and the improvement of the dynamics between public organizations and local stakeholders.

Collaborative Networks for local Innovation

introduction

A collaborative network is a group in which different stakeholders converge and become integrated for purposes of coordinating actions in order to achieve a common goal. In these collaborative networks, each participant is aware of its role and knows the collective and individual relevance of keeping active both the relations and such network. Listening to and sharing knowledge from each area is essential for building a project, but this may only be done through the proactivity of the members of the network.

The methodology of collaborative networks actually provides practical guidance, through three large areas involving the steps to be followed for establishing a solid collaborative network and, subsequently, the actions to be taken in order that such network may transcend.

This methodology considers that there must be a central organization responsible for leading the initial process of creating the network; in the case of Costa Rica, municipalities will be responsible thereof. Moreover, these are responsible for raising a general problem to be dealt with in order to subsequently define those stakeholders related to such problem. Thereafter, the identified stakeholders will be responsible for identifying a specific problem to be dealt with in order to subsequently suggest possible solutions, which will be captured in the conception of an action plan.

Once the action plan has been created, there is a phase for the definition of connections and mobilizations which shows some of the steps to be followed for keeping the network active and constantly growing.

stage 0

Preparation for the process and gathering of information

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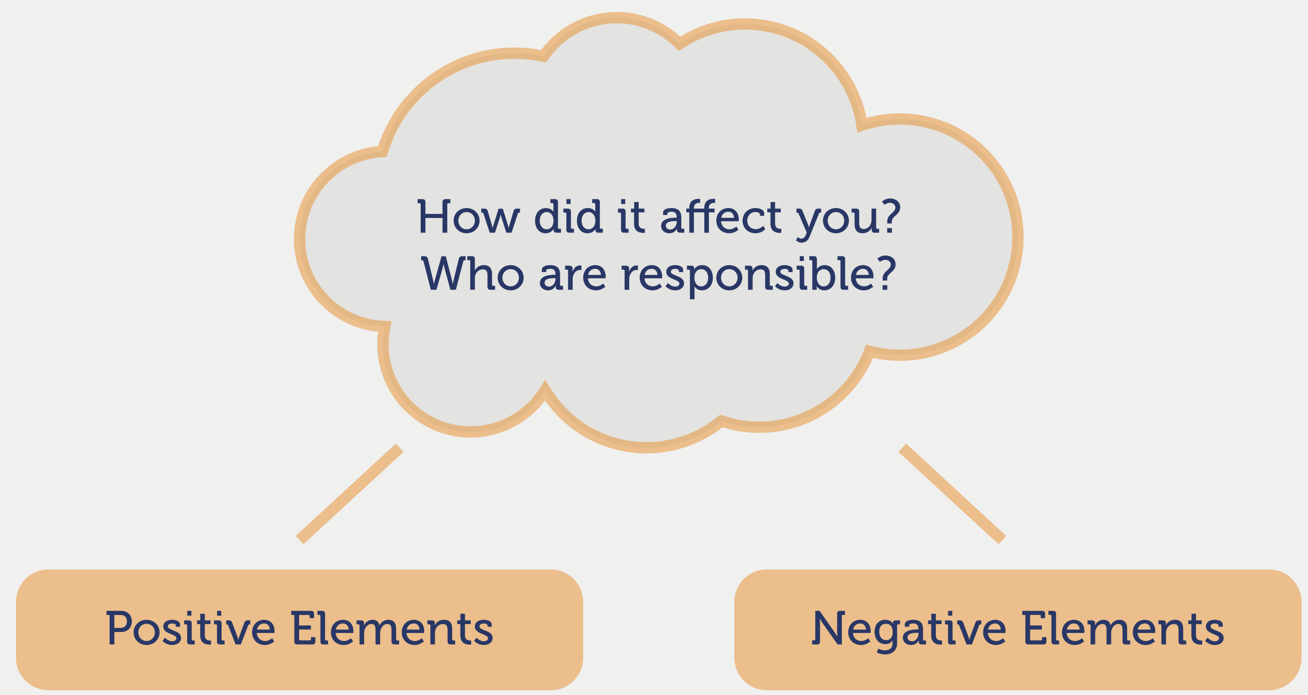
The purposes of the stage 0 or preliminary stage of this methodology is gathering initial information by observing the behavior of people for identifying topics of public interest. The first step is identifying stories from groups of people or stories from a specific user individual.

The goal of classifying stories is to develop a first approach to the social reality from the point of view of people. These stories are actual experiences, experienced by people, compiled in a small paragraph of no more than one half page. This text must at least answer the following questions: Which has been the main experience, whether negative or positive, that I have seen in my personal reality that relates the most to a matter of public interest? How has it affected me? Who are responsible for this situation? and How could we change or improve this situation?

For these purposes, it is recommended the use of technological tools, such as online and social media surveys or public surveys at public spaces, schools, churches and other organizations that gather a significant number of people. The following tool is a template for making user stories:

Have you had any experience with any public situation or problem? Which?



Describe your story as follows:

As a role, I need or require description of the reason or expected result, in order to description of the situation.

Example:

As an educator, I would like that the roads leading to the school were in good conditions in order that there are no accidents involving children.

Prepared by the author based on the Scrum Body of Knowledge Guide (2017).

And the following is an adaptation for working with children:

Draw any current situation of the place where you live that makes you feel happy or sad:

User Story Template for children

Moreover, the following tool is provided for preparing an online form which allows gathering more information for complementing user stories.

Information Gatherer

In your community, you feel bad when:

In your community, you feel good when:

Three problems of your community are:

Specifically, which public services may be improved in your community?

Quality of the service

	Never	Almost never	Almost always	Always
The treatment by the personnel providing the service is appropriate?	☐	☐	☐	☐
The waiting time for being attended is appropriate?	☐	☐	☐	☐
At the end, are you satisfied with the attention or use of the service?	☐	☐	☐	☐

Describe an experience with the use of any public service of the area

Online survey tool.

Once User Stories have been gathered, the next step is classifying the information obtained into positive stories and negative stories. Priority is then given to those having greater repetition of common topics in order to define the most relevant general topics to be initially addressed by the network.

stage 1

Identification of stakeholders and conception of the initial network.

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After completing the previous or preliminary stage, the first stage of this methodology seeks developing an introductory analysis of the identified topics, as well as the participants or stakeholders involved. For such purposes, two main processes are recommended: conception of the core group and definition of the relationships between stakeholders.

The objective of this stage is identifying the stakeholders involved or related to the topics of interest, as well as developing an analysis of the relationships to be established between such stakeholders in order to create a collaborative network that allows addressing the identified topics.

01.02. Conception of the core group and definition of work topics.

The core group is the integration of a set of leading individuals within their community, or related sectors, having the ability to address different identified problems or topics in an interdisciplinary manner. This group is integrated, first of all, by the municipality and has the purpose of leading the process for creating the Collaborative Network for Local Innovation.

Ideally, this group will be integrated by a maximum number of 7 individuals, representatives from different sectors and public officials who may lead the process. Likewise, it must be integrated by at least 4 individuals who represent the civil society, whether as members of development associations, cantonal unions or neighborhood associations, in order that these individuals show the specific needs and represent the interests of their communities.

The core group shall be responsible for establishing alliances and making the network grow in order to solve specific problems. Moreover, it shall coordinate the meetings and other activities which may defined. For these purposes, it shall prepare action plans together with the other stakeholders in order to have a more effective intervention upon addressing the identified problems.

Call methods and the cantonal meeting for electing representatives:

In order to elect the individuals who will integrate the core group, we recommend some means for making such calls, which must always be implemented openly with all sectors, whether the civil society, public sector or private sector.

Moreover, it is important to understand that the municipality has a facilitating or leading role in this first stage and, therefore, this institution shall be responsible for notifying the general population regarding the initiative and shall call for the involvement of the representatives from the different sectors. Some of the recommended means for making the abovementioned calls are provided below.

Civil Society:

The municipality must make an announcement informing people about the project and the call, through the local media of preference, i.e. that which is more appropriate for the reality of the canton and which may reach a largest number of people. Some media may include: local newspapers, social media, radio, posters, among others. In addition, the municipality may communicate with the representatives of groups organized by the civil society, such as development associations, cantonal unions or neighborhood associations, for purposes of informing them about the project and consult them regarding their availability and interest in collaborating in the core group of the network. It is important to classify that, if the number of individuals willing to represent the civil society in the core group is larger than the minimum required number, an open election meeting must be held in order that candidates may express their interest and explain how they may contribute to the network, in addition to providing information on other aspects, such as their experience, topics of interest and any other matter, in order that the meeting may carry out the voting. This open election may be done through different means, from a posting in the social media of each candidate to a meeting held at a specific place of the community. Such place must be set upon taking into consideration the reality of the canton and the availability of transportation means in order that the stakeholders may travel to such place.

Public Sector – Private Sector:

In order to call for the involvement of the public sector and the private sector, the municipality must provide information about the initiative through the main local media and, additionally, if it had any contact with the representatives of these sectors, it may directly communicate with them in order to consult them regarding their availability and willingness or interest of people in being part of the initiative.

In the event that the number of representatives of the population willing to be part of the core group exceeds the required number, the ideal scenario would be that people who are part of a same sector define, together with the municipality, who shall represent them in the core group.

Likewise, during the call process, it must be taken into consideration that there is a desired profile for the individuals who shall integrate the network and, specifically, the core group. Preferably, members of the group should be proactive individuals who have the ability of communicating assertively; community leaders with great desires of achieving both personal and local growth, having the ability to work in teams; individuals who feel empathy for the realities of their communities, who have enough time available, willingness and conviction of transforming specific realities through unity, turning simple ideas into concrete realities.

Expected result: creation of the core group of the Collaborative Network for Local Innovation.

1.1.1. Definition of topics.

The Municipality, as the entity responsible for leading the local development process, must raise a general topic to be dealt with according to the information obtained during Stage 0, i.e. based on the information obtained through the user stories. Some general topics which may be addressed and regarding which the goals of the network could be delimited are: public safety, employment, road system, among others.
The process for defining such topic must be participatory and must be carried out jointly with the stakeholders identified for integrating the core group of the Collaborative Network for Local Innovation.

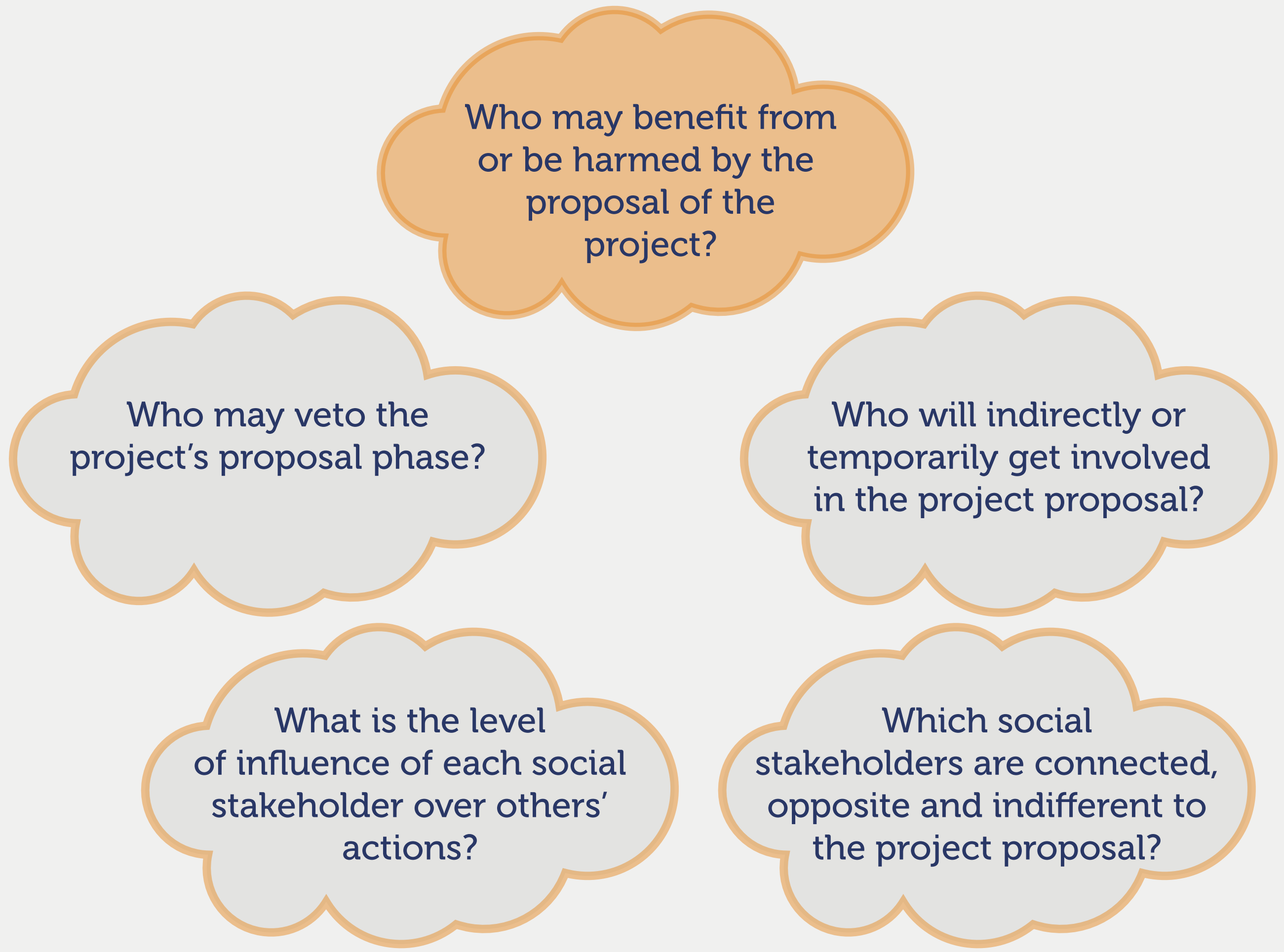
Expected result: Definition of a topic of public interest.

1.1.2. Relational stakeholders.

Once the topic has been identified, the creation of the primary social stakeholder[1] mapping may begin. Based on the "Stakeholder Mapping Methodology" ("Metodología del Mapeo de Actores") created by Castellón, L; Hernández, O and Montero, C. (2016), a sequence of logical steps and questions is obtained which allows identified the individuals, groups and organizations interested in establishing collaborative networks.

[1] Social stakeholder refers to an individual or entity that has something to win or lose as a result of a specific intervention, i.e. stakeholders affected or which may affect the development of activities through the possession of information, resources, experiences and power for influencing the actions of others (Tapella, 2007, cited in Castellón, L. et al., 2006)"

Some guide questions that should be made at the time of beginning the process are:



The above questions are provided for guidance purposes and may be changed and adapted to the needs of the topic to be solved. The purpose of such questions is classifying stakeholders in order to identify potential alliances or limitations.

Nevertheless, it is recommended to make a classification of stakeholders according to their role and their possible degree of involvement based on, at least, the following categories:

Key Stakeholders: these are stakeholders that may cocreate together with the project and may be directly involved in the initiative (core group) since they belong to organizations that have the capacity and supplies for solving the problem or, otherwise, that are directly affected by the problem. In this sense, identification must be focused on stakeholders that have the power to eventually stop the initiative.

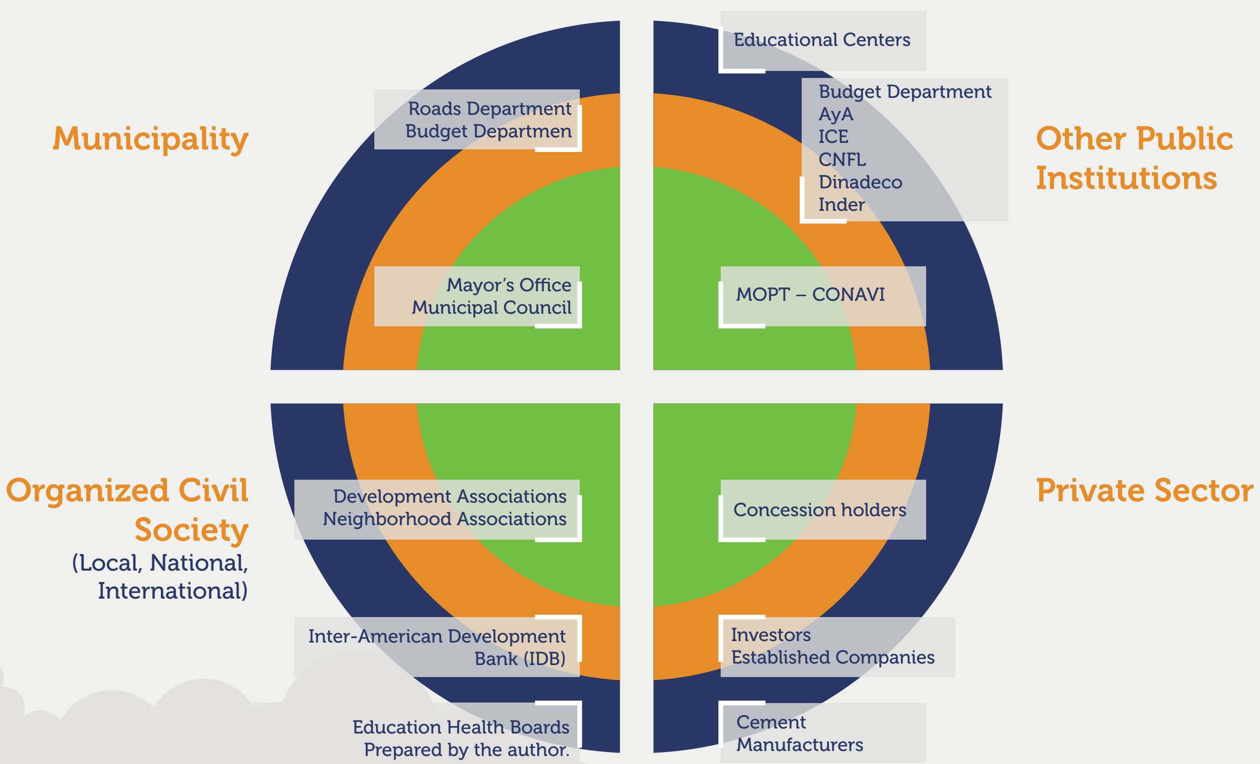
Primary Stakeholders: stakeholders that may contribute to the procurement of resources, whether social, financial or informative.

Secondary Stakeholders: these are stakeholders that will be directly affected by the initiative and which could have the power to promote or stop the initiative depending on the manner in which they are affected.

For purposes of greater clarification, stakeholders may also be classified according to their nature (municipality, private sector, civil society and other public institutions), such as shown in Figure 4.

In the next example, the topic relates to the improvement of the cantonal road system, in which the identified stakeholders for integrating the core group are: the Road Management Technical Unit (UTGV, for its initials in Spanish), the Municipal Council, the Ministry of Public Work and Transport (MOPT, for its initials in Spanish), concession holders, representatives of development associations and neighborhood associations of the area. This topic will continue to be used as an example throughout this document.

Stakeholder Diagram



Prepared by the author.
Symbology: Red: Key Stakeholders;
Green: Primary Stakeholders;
Blue; Secondary Stakeholders:

Prepared by the author

Key stakeholders · Primary stakeholders · Secondary stakeholders

Expected result: Classification of stakeholders of the core group.

1.1.3. First Approach

The purpose of this first approach is gathering the individuals that will be part of the network at a physical space.

Prior to the Activity: prepare the logistics of the event in the activity.

- Presentation of all participants through an activity in which they identify their interests, preferences, organization that they represent, participation role and topics of interest.
- Presentation of the results of the public survey or general topics defined in phase 1, i.e. "why are we gathered here?"
- Expectations of the network, i.e. what is their dream regarding the topic.
- Expectations of the group's work in the solution of the problem.
- Identification of other stakeholders related to the problem.
- Closing activity.
- After the activity.
- Definition of relationships between stakeholders.

Expected result:

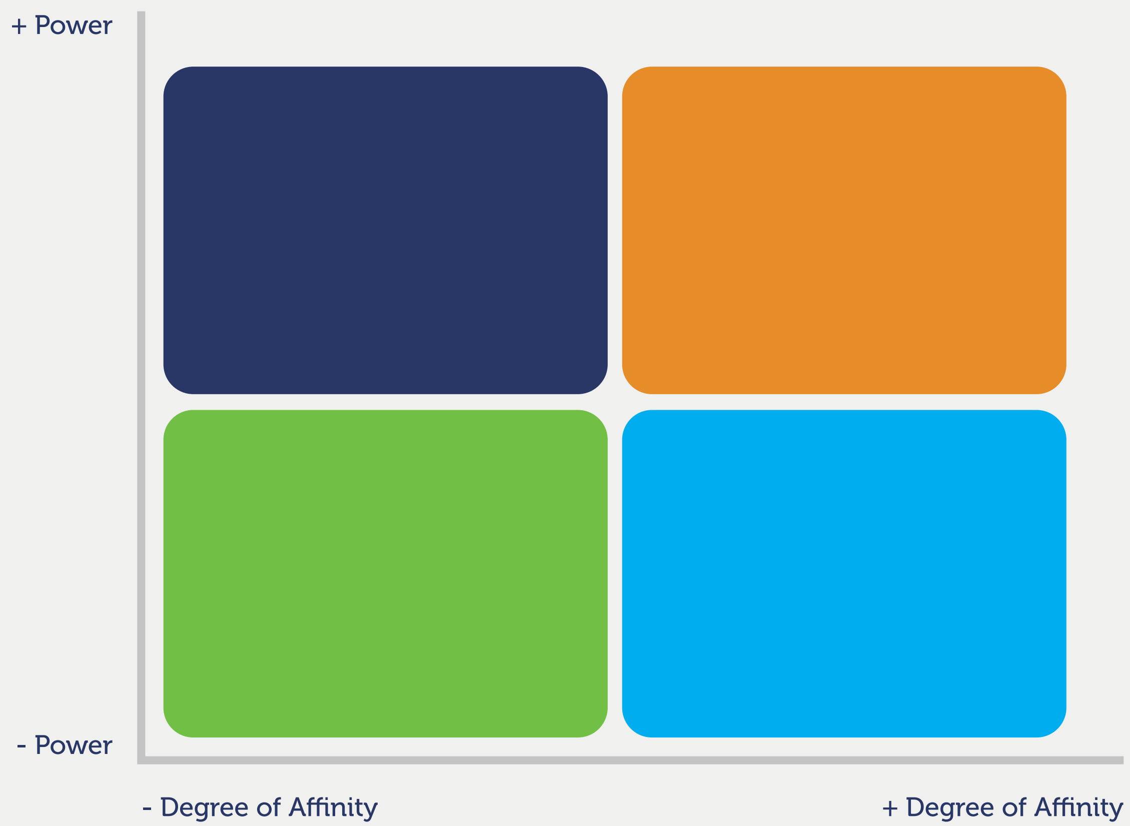
1. Bringing together the future members of the network.
2. Presenting the goal of creating collaborative networks.
3. Explaining the steps to be taken during the next meeting.

0132. Definition of relationships between stakeholders.

In order to define the relationships between stakeholders, it is important to develop a process in which the identified key stakeholders participate. Once this group has been established, a meeting must be scheduled in order that stakeholders identify the relationships between them and the other stakeholders involved, both primary and secondary.

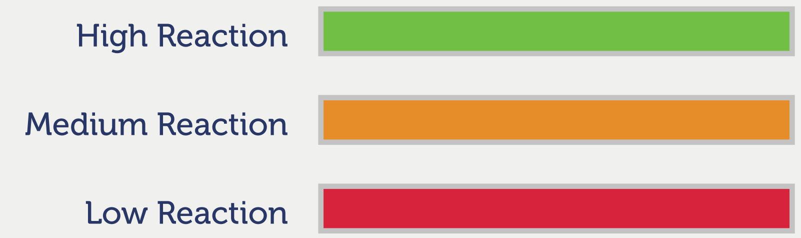
For these purposes, it will be initially implemented the sociodrama method, in which stakeholders are first placed according to their level of power regarding the problem and then according to their degree of affinity. Graphically, it may be visualized as follows:

Diagram of relationships



Prepared by the author based on Alberich, T. et al., (2009).

Subsequently, stakeholders will discuss about the relationships expressed by each of them in the group and will reach a consensus in order to write down such relationships in a flipchart, which shall have the following classification:



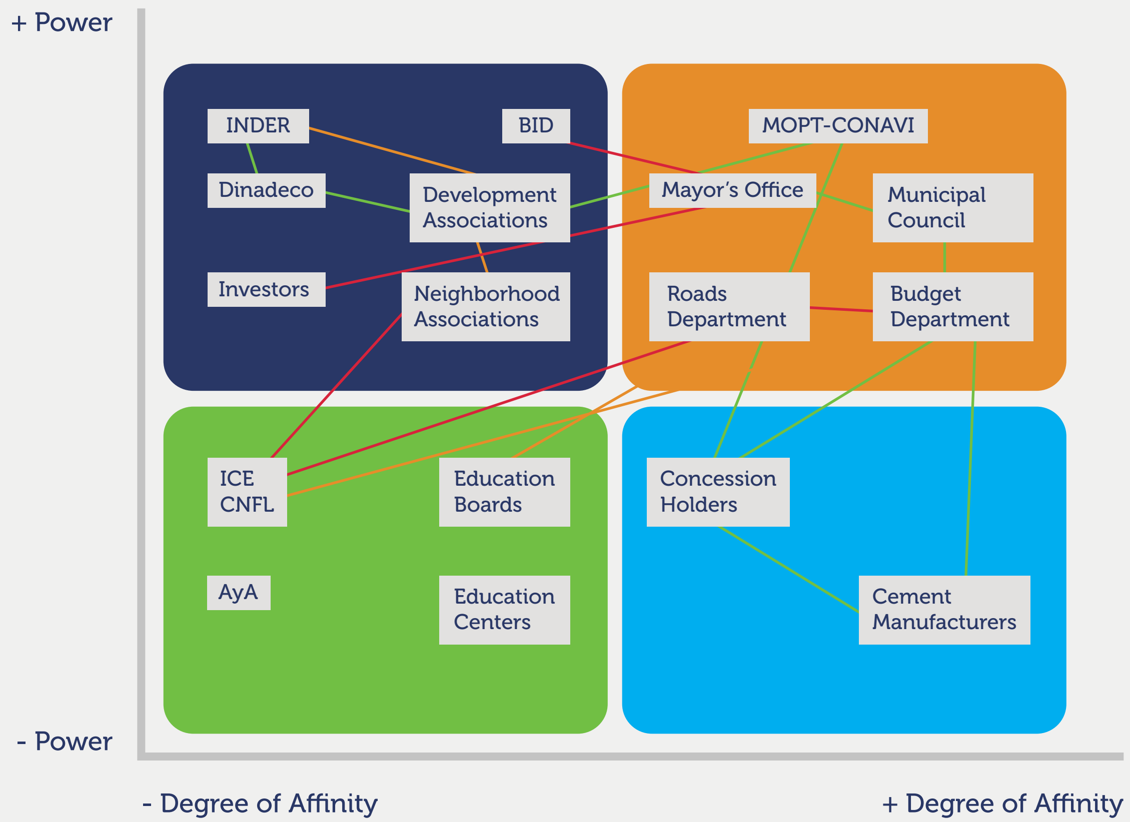
Prepared by the author based on Alberich, T. et al., (2009).

A high relationship is characterized by a situation of collaboration and cocreation, including the presence of direct dependence. Stakeholders that have a strong relationship between them must procure, even more in these cases, to keep a good communication.

A medium relationship is that in which stakeholders collaborate in specific moments without strictly depending on these for carrying out the actions. They may work jointly in specific areas; usually, this is the most common type of relationship.

A low relationship is that in which stakeholders are somehow distant in terms of collaboration. There is little communication during the project and their working areas are distant from each other. Despite of having low relationships, there is a possibility for indirect relationship, therefore, it must be taken into consideration for the overall perspective of the analysis.

Example of Diagram of Relationships



Prepared by the author based on Alberich, T. et al., (2009).

This example shows that the MOPT, the Mayor's Office, the Municipal Council, the Roads Department and Budget Department are the organizations or agencies having greater power and degree of affinity, having therefore stronger relationships between each other. This would strengthen the implementation of any solution.

stage 2

Public innovtion labs for the solution of public problems.

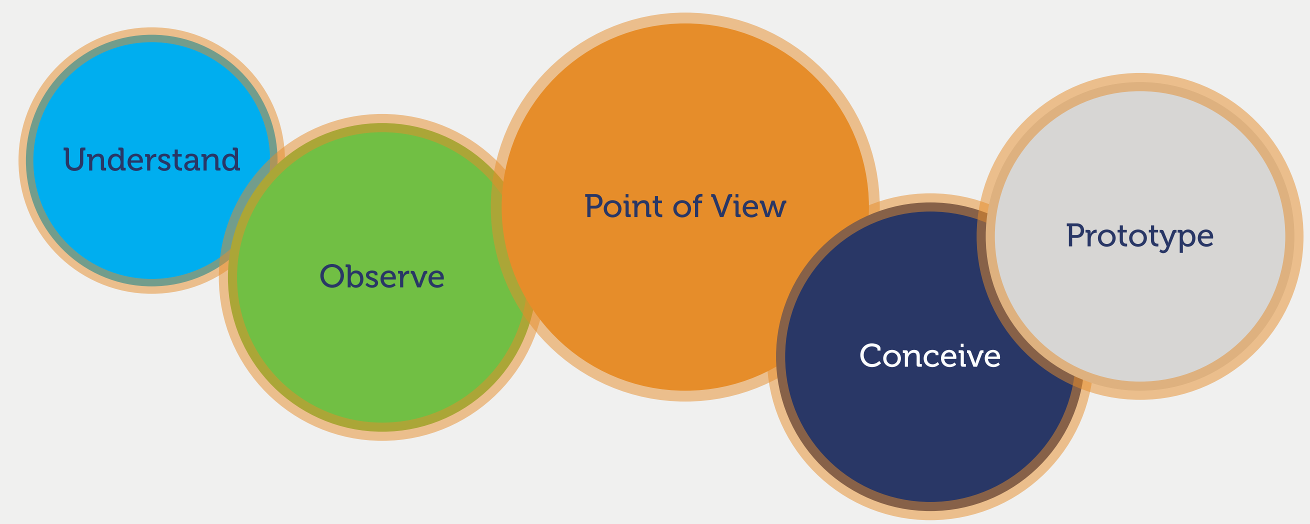
Collaborative Networks for local Innovation

The second stage of this methodology includes from the definition of a problem to the conception of solution proposals in a participatory manner and through methodologies based on cocreation and public collaboration.

The research is based on the approach of Participatory Action Research as a model for research processes of territorial realities. This model is based on research for generating solutions and social stakeholders are the central entities of the process (Colmenares, A., 2012; Martí, J., no date available)

Once the general topics and stakeholders involved in such areas have been identified, it is necessary to identify a series of specific problems to be worked on through the Innovation Lab method. These problems may have been already outlined during previous sessions; however, it is necessary to specifically define them in terms of depth, scopes and solutions.

Based on swift methodologies, such as the Value Proposition Canvas, GovLab Academy and Design Thinking of the Institute of Design of Stanford, the problem identification process suggested for working is based on five stages: understanding the problem, observing, defining the point of view, conceiving a solution and preparing a proposal prototype.



PHASE 2.1. Presentation and definition of working groups.

Once the Innovation Workshop has begun, the working group must be divided into small subgroups which will work on topics of their interest or area of knowledge. In this phase of the workshop, groups should not exceed 7 persons in order that there is a better management of groups and greater expression of ideas internally.

PHASE 2.2. Understanding the problem.

The main objective of this phase is achieving an initial identification of the problem, being therefore necessary a clear definition of the related topic and its components from the very beginning. The initial delimitation of the problem is useful for guiding the empathy process and data search to be subsequently carried out; as a result, it is necessary that the definition be as clear and simple as possible.

The suggested tool for this phase is the Gap Analysis, which is intended for identifying current problem conditions, the ideal condition of the society without such problem and, consequently, the gap or specific problem of the community.

The following steps must be followed for making this analysis:

2.2.1. Make a Group Discussion

Between the members of the subgroups. In a flipchart, cards or newsprint, have a brainstorm on the following questions:

What is the actual condition of my problem/space/community?

What is the color or discomfort its causes on me?

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Example: Cantonal road system in bad conditions

Brainstorming

Bad conditions of the cantonal road system.

01. There are too many potholes.
02. Vehicles cannot pass through such roads.
03. More money is spent in spare parts.
04. There are no sidewalks, which is unsafe.
05. There is no pedestrian safety.
06. There is nothing for children to walk on.

2.2.2. Subsequently, a small drawing is made which visually represents the results from group discussions.

2.2.3. Thereafter, such as in step "a", the following questions are answered:

What would be the ideal condition of the society without such problem?
How would you feel if the problem did not exist?

2.2.4. Subsequently, a small drawing is made which visually represents the results from group discussions.

2.2.5. Finally, both images are compared and the groups identity the gap existing between the current condition and the ideal condition of the community. This gap corresponds to the problem. This problem must be written down in a short and accurate statement.

Problem Statement:

The bad condition of roads in canton "X" and lack of spaces for pedestrian use.

This exercise is an initial definition of the problem; therefore, it must not exceed X minutes. The problem will be discussed more thoroughly during subsequent phases.

Exercise

Estimated time: 30 minutes
Necessary resources: colored pencils, cards, flipcharts or newsprint.
Expected result: definition of the problem.

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PHASE 2.3. OBSERVATION.

The second stage of the Lab consists in the observation of the causes, intensity, frequency and data existing on the problem. This approach will provide a panoramic viewpoint regarding most of the aspects of the problem.

The first tool to be used at this point is the "5 Whys". This tool allows discovering the elements of the problem by establishing the cause-effect relationship. For these purposes, the problem must be progressively questioned until generating information on the 5 root causes of the problem.

The following steps must be following for implementing this tool:

2.3.1. The Why? question must be added to the problem statement, as well as five times successively to each of the answers, such as shown in the following example:

Why are the roads and sidewalks in bad conditions?

Because no maintenance has been made for many years.

Why?

Because the Municipality has no enough resources for the repairs.

Why?

Because citizens do not pay their taxes.

Why?

Discontent regarding the condition of roads.

Why?

Because it damages their vehicles and causes accidents

2.3.2. Subsequently, with data obtained from the Internet, researches, data provided by the Municipality, a research will be made on the specific evidence of the problem in order to answer the following questions:

What is the intensity of the problem in comparison to other problems?
How many people are affected?

The second tool to be implemented at this point is the Cartography or Socio-spatial Heatmap of the problem since, when working at a local space, it is necessary to locate problems in time and space. Georeferencing the problems allows locating the most important focal points, their intensity and correlation with other factors. As a result, the following questions are answers:

In which places is the problem more visible?

The steps for making a socio-spatial heatmap are:

2.3.3. Have available paper sheets with the map of the community or the map of the canton, in black and white preferably. Otherwise, give a newsprint to the group in order to draw an outline of the space to be analyzed.

2.3.4. Locate the different spaces of the territory in which the problem is present with a circle which size will depend on the group's perception of the intensity of the problem at that specific space.

Location of the Problem

Low intensity Medium intensity High intensity

Exercise

Estimated time: 40 minutes
Necessary resources: Necessary resources: white paper sheets, pencils, black and white copies of the map of the location or newsprint in order that group members may draw.
Expected result: causes of the problem and geolocation.

PHASE 2.4. Defining the point of view.

In this phase, the group identifies the profile of the main affected parties of the problem, those persons who are affected the most and who suffer the consequences of the problem with greater intensity. In other words, there is an empathy process and comprehension of the scopes of the problem from the point of view of the affected persons.

The tools to be used in this phase are: Empathy Map and the Value Proposition Canvas.

2.4.1. Empathy Map

This tool helps us understand our user/person in depth by investigating his/her closest environment, vision and needs from the point of view of the user. The elements of this tool are:

2.4.1.1. Identify the profile of the affected person (put a face, name, age, work).

In this step, it is necessary to take a paper sheet and creatively draw or outline the affected person.

2.4.1.2. In the Empathy Map template, the group must answer, by consensus, the following questions about the affected person:

What does he/she say and do? What does he/she see? What does he/she think? What does he/she hear? What are his/her fears? What would be his/her benefits if the problem did not exist?

Prepared by the author.

In the case of the example of the bad conditions of the Cantonal Road System, the tool could generate the following answers:

- **What does he/she think and feel?** Lack of safety, possible collisions due to the bad conditions, concern about pedestrian children, etc.
- **What does he/she say or do?** He/she complains through the social media, speaks with his/her community about the problem, appears before the Development Association, etc.
- **What are his/her fears?** Deaths of his/her relatives in the road, collisions, deaths of his/her pets due to the recklessness of drivers while driving in such roads in bad conditions.
- **What would be his/her benefits if the problem did not exist?** Savings in the costs for maintaining his/her vehicle, more confidence at the time of driving through the road.

2.4.2. Value Proposition Canvas

The main pains and gains of the identified user may be identified through this tool, as well as the possible works to be done in order to solve the person's situation.

The steps for this tool are:

2.4.2.1. Identify the main pains of the person and write them down in the corresponding space of the worksheet.

2.4.2.2. Explain what are his/her expectations or desires regarding both his/her life situation and the problem he/she is dealing with, and write them down in the corresponding space.

2.4.2.3. Identify what should be done for solving the problem.

Prepared by Ramirez D. and Nuñez A., 2017, for InnovaAP.

In this specific case:
Pains: extra payments for repairing his/her vehicle, depreciation of his/her property, drop in sales of businesses due to a decrease in vehicle traffic.
Expectations: that the problem is solved quickly, that the solution brings economic benefits, that he/she may feel safe when walking back home.
Works to be done: organize the community, exert pressure before public institutions, etc.

Exercise

Estimated time: 30 minutes
Necessary resources: White paper sheets with an empathy map template and value proposition canvas.
Expected result: Point of view of citizens regarding the problem, its causes, effects and potential solution areas.

PHASE 2.5. Conception.

Once the point of view of the affected person in the problems has been identified in depth, the next phase is generating ideas for the solution.

In this phase, the group will make the initial conception of potential solutions that will generate value to the community. This is a creative and participatory process at its maximum level; therefore, the group must generate as many ideas as possible even if these may seem ridiculous at the beginning.

The use of the Value Proposition Canvas tool is required for this phase.

2.5.1. Value Proposition Canvas

The first step in this phase is having a brainstorm in writing in which each group member may contribute solution ideas based on the premise that the organization has all required technologies and resources, i.e. it has no limitations.

After the brainstorming, an exercise is made in which the best solution alternative is chosen according to the following steps:

A) Solution of greater value for the user.
B) Reliefs that it will provide to the pains of users.
C) Which are the stimulators of this solution?

Prepared by Ramirez D. and Nuñez A., 2017, for InnovaAP.

In this specific case, regarding the problems of the Road System, the tool could generate the following results:

Solution: develop a community organization strategy which allows raising funds for repairing the roads in bad conditions together with the Community Development Association and the Municipality.
Stimulators: the companies established at the canton are interested in contributing with resources.
Reliefs: greater road safety in the canton.

PHASE 2.6. Prototype.

The members of each working group must explain their proposal through a story, including the following elements: context of the problem, affected characters, needs and pains, solution proposal and expected result of the proposal.

The objective of this point, as conclusion of the Innovation Workshop, is that members of the group may express their solution ideas in a manner that is creative and innovative, user-friendly and captures the interest of the attendants.

Exercise

Estimated time: 40 minutes
Necessary resources: Paper sheet and pencil, computer or any other electronic device.
Expected result: Development of the solution proposal.

stage 3

Connections and mobilizations for the sustainability of initiatives.

Collaborative Networks for local Innovation

The objective of the last phase of the methodology for Collaborative Networks in local territories is showing the steps to be followed for consolidating a working network, from the formation and alliance to the implementation recommendations, as well as the creation of collaborative working plans and incentives for the sustainability of projects.

The goal of this phase is providing guidance in the search of strategies which adapt to the specific conditions of each territory rather than detailed instructions, since sustainability topics must be part of a continuous discovery process led by local stakeholders.

3.1. Formation and formalization of alliances.

Once the stakeholders have been identified and the problem(s) and approach alternatives have been delimited, the next step is establishing alliances with those persons, institutions or entities that may offer direct assistance or resources and with whom an action plan may be executed and problems may be solved. For such purposes, it is necessary to have a first communication with that with whom the alliance is sought in order to submit a request for collaboration. This made be done in person through a small meeting, not necessarily formal, with a representative of the core group. The entity or institution must be invited in this meeting to becoming part of the network in order to solve the identified problem and an explanation must be given regarding what its role will be in the network.

After the entity or institution expresses its intention to joining the network, the following matrix may be used in order to set the strategic management of the established alliances since it may be useful for identifying which alliances should be encouraged and which alliances should be dropped.

The matrix has 4 quadrants, stakeholders will be placed from left to right according to the collaboration efficiency if the costs (in time and resources) of their collaboration are highly efficient or poorly efficient, and the strategic interest of such collaboration will be placed from top to bottom, assessing if it is a key stakeholder or not and if its participation is vital due to its competence over the topic to be dealt.

Stakeholder classification matrix

Taken from Iglesias, M. & Carreras, I. (2013).

As an example, let's imagine that the intention is improving the cantonal roads and there is an alliance with the MOPT, AYA, the farmers' association of the canton and ICE. The MOPT has shown great interest in providing the necessary assistance in order to reach the objective in the short term, but there are some pipelines in the area which may be affected by the works at such cantonal roads. In turn, the main stakeholder, AYA, despite of being vital for coordinating with the MOPT the works for repairing the roads and pipelines, has not attended the meetings and has had vague communication with the core group. In turn, the farmers' association of the canton is highly interested in improving the roads since it would generate a more efficient transportation of their products, being therefore fully available to providing help. In turn, the ICE will not provide resources or assistance since it is beyond its competence.

In the previous example, the MOPT would be located in quadrant number 1 since its participation has high strategic interest and, moreover, it is willing to provide assistance, which makes its participation efficient in terms of the time and resources it will provide.

AYA is another stakeholder of vital relevance for the improvement of the roads since there are pipelines affected by the repairs and it must work in coordination with the MOPT. Since its participation is not efficient, it would be located in quadrant number 2; communicating with this stakeholder is urgently required in order to improve its participation.

In this case, the farmers' association of the canton has no strategic contribution for improving the roads, but the support of farmers may be useful for promoting the initiative, locating their participation therefore in quadrant number 3. Work may be done with them in a focused manner. The ICE would not be strategically useful nor would provide resources for improving the roads, which leaves them outside the project.

This tool must be used by the core group again once the action plan has begun with the alliances and after the first results of the joint work.

3.2. Creation of the action plan.

In order to make joint efforts which lead to the achievement of objectives established for addressing a specific problem or topic, the members of the core group must prepare an action plan or working plan. Specifically, a working plan refers to "the set of coordinated and interrelated activities intended for achieving an objective" (MIDEPLAN, 2014, p. 82).

Nevertheless, in order to set an action plan, the core group must begin by identifying, in a collaborative manner, the steps to be followed in order to achieve the established objective. For these purposes, a meeting should be held between the members of the core group and other key stakeholders related to the topic which are usually those stakeholders located in the top quadrants of the previous exercise. The purpose of such meeting shall be preparing an action plan in a collaborative manner, i.e. defining the activities to be performed in order to reach the intended result.

Based on the above, it is suggested that, as first step for preparing the plan, this meeting defines the activities that are necessary for achieving the expected result, in addition to enumerating or setting their priority, according to a logical or sequential order, i.e. which activity should be performed first and which should be performed next.

Once the actions have been identified, the meeting must appoint the directly responsible parties, i.e. the person or group that must ensure that the activity is carried out. It is important to point out that the responsible parties are not necessarily the only ones involved in an activity, since there could be a case in which it may be necessary to call different stakeholders for an activity. In this case, in addition to participating, the responsible parties shall be in charge of coordinating the activity and contribute to others' participation.

Subsequently, it will be necessary to set deadlines or periods of time for carrying out and completing each activity or task. In this point, it is very important to set realistic and coherent deadlines according to the level of complexity of each activity. Likewise, it must be clarified that setting a period of time for completing each activity, i.e. a schedule to be followed by the network, facilitates the monitoring and evaluation process in order to measure the network's progress, which, in turn, provides feedback for continuous improvement.

On the other hand, as fourth step, the necessary resources for performing each activity must be identified. Resources refer to any means, whether economic, human, material, among others, which may help in achieving a goal; in this case, they are necessary resources for carrying out each activity.

Finally, it is suggested to work on the preparation of an action plan according to each topic to be dealt with at a specific moment. In other words, defining the activities, responsible parties, deadlines and resources for addressing each specific topic or problem. However, it is advisable that the network has a general action plan in which the necessary activities are defined for keeping its proper performance.

3.2.1. Action Plan Diagram

It is recommended the use of the following template for preparing the action plan of the network:

1 Activity

2 Activity

3 Activity

4 Activity

5 Activity

6 Activity

Prepared by the author, 2018; taking as reference the elements of the working plan set by the MIDEPLAN, 2014, p. 82.

The intention of this proposal is identifying in the circular diagram the activities of the plan with one or more key words, expanding the contents in the lines available to the right. Likewise, the diagram has a space available for indicating the responsible parties and the estimated deadline for completing the activity or task. In this point, the template shows a weekly schedule according to each month.

In turn, the necessary resources for the development of each activity are identified in the middle of the circle. In this sense, it is recommended the use of images or drawings that represent such resources in order to show the information in a manner that is visually more attractive.

Taking into consideration the above, we provide below an example of the filled-in template taking as reference the cantonal road system problem:

1
Activity
Hold an initial meeting for analyzing the problem, as well as set the order of priority of roads.

2
Activity
Carry out the technical evaluation of the roads based on their priority, as well as estimate the repair costs.

3
Activity
Develop a presentation of the estimated budget, as well as the justification and relevance of the project.

4
Activity
Identify potential financing sources and hold negotiations.

5
Activity
Purchase the materials.

6
Activity
Carry out the repair of roads according to the predefined order of priority and available resources.

Prepared by the author, 2018; taking as reference the elements of the working plan set by the MIDEPLAN, 2014, p. 82.

It is important to point out that the number of activities will depend on each specific case, i.e. the number of activities will not be necessarily six in all cases. Therefore, if more activities were defined in a plan, it is recommended the use of a copy of the template and modify its numbering.

3.3. Strategies for the formalization of Collaborative Networks.

The basis for every stakeholder network, in terms of collaboration, is the commitment and trust generated by the participation of stakeholders. In these terms, Figueroa (2016) mentions that, in networks, trust "is not an established but a temporary declaration and is based on facts or concrete actions" (p. 110).

Therefore, in order to establish a collaborative network, the contributions of each stakeholder must be clearly delimited, placed in a specific time and space, in which each one of them decides what his/her participation will be according to his/her capacity and possibilities.

For purposes of its proper materialization, the following considerations must be taken into consideration:

- The needs of stakeholders are changeable and their opinions may change throughout the project. As a result, it is necessary to draft a document or declaration which evidences their commitments despite of any change in their opinions.
- A collaborative network is based on willingness and reciprocity; therefore, stakeholders may eventually abandon the network if they want to. It is necessary to take this into consideration within the risk management of the project.
- Persons must define what their role and contributions will be; otherwise, there could be no certainty as to the actual materialization of a possible contribution in the future.

Nevertheless, establishing a network may be subject to different levels of formality that range from open (or informal) networks to institutional networks, which are defined from an organization. Likewise, there are different tools for defining each of them.

3.3.1. Open Collaborative Networks:

These networks have a maximum open level, since their creation or management has defined that participation in such networks is completely collaborative and voluntary. All resources are provided by their different stakeholders.

Their characteristic element is that they may be led by both a formal organization or an individual, the civil society, community members, among others. These networks have no legal or organizational basis which provides the resources or governs their performance since everything is defined internally.

In order to establish this type of networks, a common understanding framework between stakeholders may be implemented. According to Figuera (2016), this framework or "game rules will determine the trust among the people of the community". Moreover, "central lines are defined for understanding how people behave and work" (p. 112).

The common understanding framework must be expressed through a document or declaration of collaboration, which may be based on the working plan or, at least, on the following elements:

- Objective of the Network.
- Main expected results.
- Minimum actions to be developed.
- Roles of stakeholders.
- Necessary resources, together with their corresponding responsible party.

It is important that each stakeholder signs this document as evidence of its commitment and willingness regarding the responsibilities undertaken inside the network.

Moreover, such commitment acts as a basis for the transparency and accountability that must exist towards people regarding the specific work to be performed in topics of public interest, which is a fundamental pillar of open collaborative networks.

3.3.2. Institutional Collaborative Networks:

On the other hand, there may be institutional collaborative networks that have greater level of formality due to their management and structure. These networks are mainly integrated by representatives of organizations or institutions from the public sector, private sector and civil society that have resources and capacity for taking public decisions on topics of interest.

However, despite of the formal nature of these networks, there may be open participation and all persons may get involved in the management of the network. The management model of these networks is their characteristic element since its organizing stakeholder is generally a public institutional stakeholder, such as a Municipality or any other local organization.

In addition, many tools may be implemented for formalizing the relationship of collaborative networks, such as: cooperation agreements, memorandum of understanding, public-private alliances and letters of intent with people.

It is important to take into consideration that the main goal of collaborative networks is establishing spaces that allow managing complex problems between organizations and people. Therefore, these tools must recognize the participation of people in any of the phases of the management of the network.

3.4. Recommendations for the implementation of networks.

How can the participation of stakeholders be ensured throughout time? How can a stakeholder network be properly managed from the collaborative point of view? These are essential and necessary questions to be made at the time of analyzing the sustainability of collaborative networks between stakeholders.

The first element to be taken into consideration es that the phases described herein represent a logical thinking design rather than rigid steps or preestablished rules. In this sense, it is advisable that the network transforms and adapts to the needs of each territory over time, according to their culture and dynamics.

The steps described herein are measured within a cyclic process in which the phases may be overlapped or modified according to the needs of a specific time or the specific circumstances of the territory.

However, it is necessary to make a series of practical recommendations which, based on case studies, have acted as incentives to sustainability or contributed to the perdurance of working networks over time.

Identification of the benefits that the project will bring to stakeholders: if people are clear about the benefits that they will directly get from the initiative, e.g. an increase in their profits due to a road improvement project, they will be more willing to keep on contributing to future initiatives. The generation of future trust becomes stronger through the visualization and disclosure of results.

Generation of coworking and networking spaces: a benefit that may apply to organizations and people in general is the creation of collaborative work spaces by the Municipality.

Economic and regulatory incentives: even though it is true that collaborative networks are based on voluntary work and the contribution of shared resources, new incentives may be conceived for the stakeholders of the network, such as priority in the administration of regulatory improvements, differentiated tax rates based on social contribution and special benefits of the future projects to be developed by the Municipality. This type of incentives has proven to be greatly efficient throughout the years in the implementation of public policies, but must be carefully implemented and taking into consideration the specific context of the territory.

Positive externalities: identifying the effects that projects may have on third parties is a way of proving the value of a project and finding new allies that contribute with more resources. In this case, for example, the project for improving the cantonal road system generates capital gains in the commercial areas that are benefited by the project. Proving these benefits to business owners may give rise to new alliances for new projects.

Service improvement commitments: every analysis and cocreation process must be accompanied by an implementation commitment undertaken by the stakeholders. In this case, the Municipality must join the processes with the commitment of making improvements to its services after the results from the innovation lab processes. A benefit of the project itself is the improvement of municipal services, which will therefore improve the quality of life and promote the development of the territory.

Democratization of knowledge and access to information: open processes require that information and knowledge are somehow transferred to the population of the respective territory. Territorial processes must allow the generation of skills within the public itself, the democratization of information and the generation of sustainable development through the efforts. The necessary strategies must be established in order that the information resulting from the process reaches the population as directly and accessible as possible.

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