Innovation and Labs from the Public Administration perspective. The Case of Catalonia

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Two key questions for governments

- The new responses to the great economic, social and environmental challenges necessarily require changes in behaviour at both individual and societal scale, and new forms of collaboration among public administrations, companies, universities and civil society.

1. How can the Public Administration become a driver of social and system change?

2. How can governments encourage universities, technology and research centres, companies, the education system and civil society to become actively engaged in innovation aimed at responding to societal challenges?
The linear fallacy: the route from innovation to scaling and systems change is far away from being linear.

The development of a product or service innovation in many cases is just the beginning of a process of generating impact.

Innovation usually hits barriers to change and creates systemic policy resistance.

Other interventions are required to prepare the system to support innovation (changing procurement frameworks, regulatory rules, convincing the key stakeholders with powers of veto, increasing the legitimacy of the need for the innovation and therefore influence changes in policy, etc.)

Maximising the possibilities for innovations to overcome the barriers to change and make an impact at scale requires a “hacker mentality”: finding the counterpoints to the barriers to change and creating ways to circumvent them.
“Think like a system, act like an entrepreneur”

Source: https://www.thersa.org/discover/publications-and-articles/reports/from-design-thinking-to-system-change
Pilot actions promoted by the Catalan Government

- Promoting innovative projects by local authorities in collaboration with R&I actors and other actors in the territory to develop and implement new solutions to local social challenges (PECT).

- Promoting procurement of public innovation (PPI) to develop and implement new solutions to social challenges through new processes and services.

- Promoting the articulation of a network for social, digital and collaborative innovation in Catalonia (Catlabs network) as a way to advance towards a universal innovation system adapted to the Internet era (a “Collaboratory”).

- Codesigning and testing new processes and methodologies to address complex social priorities that require a collective impact approach (public administrations, R&I actors, companies and civil society).

- Developing and implementing monitoring and evaluation systems focused on collective learning (besides accountability) and on impact in dynamic and complex environments.
PECT: local challenge-driven social innovation projects

- Many of the local projects are creating a lab or are collaborating with existing labs. Some of the labs are public (at universities, municipalities and so on), others are private companies or non-profit organisations.

- The Government is helping to articulate a network of labs (Catlabs) and to visualise how labs can contribute to collaborative innovation by developing new solutions and policies to address territorial social challenges.
**PECT Segarra & Garrigues**

- **Challenge.** To retain and attract population to the territory by promoting a sustainable model of agriculture. Accelerating the process of transformation to irrigation of agricultural farms in the territory, reorienting agricultural enterprises towards production with high added value that is more efficient in its use of water.

- **Stakeholders.** Local authorities, research centres, universities, non-profits, companies (producers, agri-industry and support providers).

- **Pilot projects.** Developing new farming systems with vertical cooperation between producers and the agri-industry in introducing new crops with high added value and experimenting with new technologies on demonstration pilots to improve water management efficiency with regard to these crops.

- **Methodology.** Organisation of stakeholders in the territory into innovation labs to identify common challenges, share knowledge and generate knowledge, align efforts and develop collaborative innovations in response to challenges in the territory.

- **Impact.** Dissemination and transfer actions focused on the results from the pilot projects in the reference territory (a rural area of 1,050 km², 345,827 inhabitants, 71 municipalities) with the goal of generating economic and social value in a sustainable way.
PECT Industrial Vallès

- **Challenge.** To increase the economic and social value of knowledge generated and available in the territory by developing innovations that respond to the needs of the business system and people.

- **Stakeholders:** Local authorities, technology centres, hospitals, universities, companies, civil society.

- **Pilot projects:**
  - Technological surveillance and observatory on technologies, trends and ideas.
  - Labs and meeting spaces to share knowledge and develop and test collaborative innovations that respond to the challenges of companies (digitisation and others) and people in the territory (active ageing and others).
  - Using digital tools to structure knowledge and capacities available in the territory.

- **Methodology:** Identification, design, implementation and monitoring of collaborative actions among different agents in the territory that contribute to meeting the challenge.

- **Impact:** Aligning strategies and enhancing networks of collaboration between stakeholders in the territory, and improving competitiveness and the quality of life of people in a highly industrial territory with a total area of 105.1 km², 283,403 inhabitants and 4 municipalities.
An example of a challenge-driven collaborative project

☐ **Challenges:**
- Social and employment integration of young people at high risk of social exclusion.
- To give new value to obsolete mobile devices belonging to the Government of Catalonia.


☐ **Pilot project:**
- Reuse of Government of Catalonia mobile devices that formerly thrown away.
- Digital training and education programme for young people at high risk of social exclusion by Third Sector organisations engaged in mobile device recycling and reuse.
- Social and employment integration programme for these young people.
- Search for new uses for obsolete mobile devices in Third Sector organisations.

☐ **Methodology:** DUI (doing, using, interacting) methodologies-

☐ **Impact:** Good practice in showing that a holistic, collaborative, challenge-driven approach to designing public policy can generate innovative actions with greater social impact in which everyone benefits (best social value for public money).
PPI for municipal selective waste collection

- **Challenge**: to change the current trend in municipal selective waste collection in Catalonia and move towards the targets set at European level (common targets).

- **Stakeholders**: Catalan Government (Waste Agency), municipalities, R&I agents, companies, civil society.

- **Pilot projects**: In collaboration with companies and R&I agents and civil society, municipalities define and implement new solutions for municipal waste selective collection that contribute to the common targets (through innovative public procurement).

- **Methodology**:
  - Analysis and definition of the regional challenge.
  - Analysis and consultations with different stakeholders to define possible solutions to be tested by pilots, and the targets to be achieved.
  - Competitive call for municipalities to implement pilot projects that contribute to the common targets.
  - Centralised monitoring and evaluation system to compare the outcomes of the different pilots and to identify the most effective measures to contribute to the common targets.

- **Impact**: Implementation of the outcomes in selective waste collection policies in Catalonia.

A similar project in health: Health Ministry competitive calls for pilot projects to be implemented by hospitals to contribute to common health targets.
PPI for sustainable road surfaces (I)

**Challenges:**

- Application of more sustainable materials and technologies in the design, production, construction and maintenance of road surfaces in order to generate new added value on top of their basic function of ensuring road safety.
- Improving the tender process to get best value for money.

**Stakeholders:** Ministry of Territory and Sustainability, R&I agents and companies.

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<th>Procurement model based on control of provider</th>
<th>New procurement model based on collaboration and risk sharing with provider</th>
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<td>• Two tenders and two different providers for drafting and executing the project.</td>
<td>• A single tender for the project, often awarded to a joint venture. As a result, activities that do not add value to the service, variability and the term of execution of the contract are reduced.</td>
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<td>• Model for relations with the provider based on &quot;contract management&quot; and focused on &quot;reception&quot; of the services procured.</td>
<td>• Model for relations with the provider based on collaboration and risk sharing in the project design and execution, and continuous improvement.</td>
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<td>• Work methods based on the execution of transactions and ex-post evaluations.</td>
<td>• “Lean” work methodologies with review, evaluation and continuous improvement processes in which the Administration and providers collaborate.</td>
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<td>• Contract aimed at establishing guarantees and penalty mechanisms in cases of breach.</td>
<td>• Preventive identification of risks and joint identification and management of mitigation actions.</td>
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<td>• Tender award based on the most advantageous financial proposal (price).</td>
<td>• Tender awarded based on the value of the procurement, with great weight given to innovation, the capacity for continuous improvement of the service and savings generated throughout the life cycle.</td>
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PPI for sustainable road surfaces (II)

☐ **Methodology:**

- Incentive of additional budget for the promotion unit.
- Technical support to the promotion unit in the design, implementation and monitoring of the innovation project, to overcome bureaucratic and administrative barriers and to promote collaborative innovation between administrative units, with R&I agents and with companies.

☐ **Impact:** Adoption of new technologies by companies to accomplish Administration requirements. More value for public money through the adoption of more efficient administrative processes and strategic public procurement.
The Catlabs network: advancing towards a collaboratory

- Building an innovation system open to all citizens with a structure of three levels, similar to the structure of European healthcare systems.


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European universal healthcare systems
Covering 100% of population

Collaboratories:
A universal innovation system at different levels

- Specialised hospitals
- Intermediate clinics
- Primary health centres
- Highly specialised and research labs of excellence
- Intermediate advanced labs
- Network of citizen labs

European Commission’s vision of a Lab: a universal innovation and science virtual environment functioning as a Lab, in which businesses, academia, public administration and citizens and civil society work together to design, develop and implement innovative and appropriate solutions to complex societal challenges.
Testing collective impact approaches

**Complex social problem:** no one actor alone can solve the problem, there are gaps and silos in the system, there is lack of coordination among actors, there is a need for new policies or significant policy change, there is a need for innovation or new solutions.

- 5 conditions for successful collective impact initiatives:
  - **A common agenda:** stakeholders share a vision for change that includes a common understanding of the problem and a joint approach to solving it through agreed-upon actions.
  - **Shared measurement system:** collecting data and measuring results consistently across all participants ensures that efforts remain aligned and participants hold each other accountable. It is essential to drive joint learning and improvement.
  - **Mutually reinforcing activities:** stakeholders’ activities are differentiated while still being coordinated through a mutually reinforcing action plan.
  - **Consistent and open communication** across the many players, to build trust, assure mutual objectives, and create common motivation.
  - **Backbone support:** an organisation with dedicated staff and specific skills provides support to coordinate all participating organisations.

We are at an early phase: working on methodology and training and on developing pilot projects in collaboration with universities, local administrations and labs (Catlabs network).

More about the collective impact approach: collectiveimpactforum.org
Collective impact feasibility framework

1. Which specific social problem should we focus on in this community?
   - Assess the specific social problem you want to address by selecting the social problem that allows you to...dramatically improve social outcomes...take advantage of recent changes in the landscape (e.g., policy changes)...urgently respond to a community need.
   - Select social problem to focus on.

2. Are there multiple actors in the system who can influence this social problem?
   - If yes, consider collaborative approach to solve social problem.
   - If no, consider programmatic solution and/or capacity building.

3. If yes, is collective impact the most appropriate solution for solving this social problem in this community?
   - Is the system fragmented, disconnected, and broken?
     - If no, consider a programmatic solution.
   - If yes, do multiple sectors need to work together to address the issue?
     - In complex problems,...no one sector alone can solve the problem,...there are gaps and silos in the system,...there is lack of coordination among actors,...there is a need for new policies or significant policy change,...there is need for innovation or new solutions.
   - Are the majority of end-users in that system affected by this social problem?

4. If yes, is this community ready for cross-sector collaboration?
   - Are there influential champions who can provide local leadership?
     - If no, focus on recruiting local champions who are passionate about the issue.
   - Do financial resources exist to support collaboration for at least 12 months?
     - If no, focus on building new resources or realigning current resources to support a collaborative effort.
   - Is there a history of collaboration in the local community?
     - If no, support efforts that build relationships and trust between local stakeholders over time.
   - Is there urgency for change on this issue?
     - If no, work with local champions to bring visibility to the issue over time.

Source: collectiveimpactforum.org
Monitoring and evaluation

- The availability of Open Data, Big Data and Thick Data and their smart use through digital and visualisation tools is a necessary complement to labs and experimentation in public policies.

- A challenge for Government is how to develop and implement dynamic monitoring and evaluation systems focused on learning how complex systems (real life) work, moving away from “linear narratives” and providing new evidences to inspire new public policies.

Open Data, Big Data, Thick Data and digital tools offer a new paradigm full of new possibilities for gathering relevant information, visualising networks and generating new evidence and opportunities to create social value through innovation.
Some key ingredients for a successful recipe

- A political mandate and a conceptual shared framework to mobilise interests, resources and capabilities around issues that can lead to sustained change.

- Government units promoting systemic change, with technical staff and budget, to help drivers of change (inside and outside government) to overcome obstacles.

- Designing new solutions with a systems thinking approach.

- Skills and competences in the public administration: drivers of change, connectors, facilitators, bureaucracy hackers…

- Availability of spaces for collaborative innovation and experimentation.

- Common methodologies, training and tools for collective innovation and transformation initiatives (public administration, companies, R&I agents and civil society)

- Changing the focus of monitoring and evaluation: accountability shift from achieving predetermined results in a predetermined plan to demonstrating the capacity to achieve results in dynamic environments.

- Smart use of Open Data, Big Data and Thick Data, and digital tools to visualise new evidences about social change and to generate new narratives to inspire new public policies.
Some concluding thoughts

“If I had an hour to solve a problem, I’d spend 55 minutes thinking about the problem and five minutes thinking about solutions”.

Source: Josep Ramos Rocarols and Raül Camañas (http://www.lavanguardia.com/)