EMPATIA

ENABLING MULTICHANNEL PARTICIPATION THROUGH ICT ADAPTATIONS

JULY 2018

FINAL REPORT
EMPATIA
Enabling Multichannel PArticipation Through ICT Adaptations

Political alienation continues to be a pressing issue for contemporary democracies. Digital social innovations (DSIs) are often put forward as solutions for engaging citizens in politics and enhancing the legitimacy of political decision-making. However, there is limited evidence concerning the transformative impact of such solutions for reducing citizens’ discontent with politics, and whether such innovations can engage beyond an elite of citizens’ that is already active in traditional politics.

Most current DSIs adopt a technology driven approach, which is often not coherently adapted to local conditions. Even when managers are willing to involve local civil society organizations and citizens in the design of DSIs, existing platform with pre-set models hinder the possibilities of co-design. On top of such issue, DSIs that promote the participatory construction of public policies with citizens rarely offer a full monitoring cycle - that encompass both the participatory processes with the citizens and the subsequent administrative procedures to implement them. Thus, the current generation of participatory innovations is “stiff”, does not empower co-design, and often promise more than it can deliver, whilst rarely dedicating the required attention to communicate on the progress status, or reasons for delays, of projects’ implementation.

To solve these problems, the EMPATIA project primary objective was to design and test a new highly flexible digital platform to support a large variety of participatory processes, integrate pre-existing technologies, promoting co-design and better monitoring capabilities.
The action main achievements

1 EMPATIA project has developed a new platform and validated it in many different contexts (+30). Cities, NGOs, and a national government used the EMPATIA platform to co-design a variety of participatory systems that integrate both online and offline channels of engagement. The vast majority of these implementations are continuing beyond the life of the EMPATIA project. Overall more than 55,000 users have participated for a significant amount of time (+5 minutes) in processes supported by the EMPATIA platform, providing more than 3,000 ideas/proposals, casting more than 55,000 votes both in person, kiosks, e-voting, and via SMS.

2 The EMPATIA platform allows for extreme flexibility, easy integration with pre-existing technology and includes an advanced monitoring and transparency suite. The platform promotes co-design, with a focus on adapting to local conditions, including pre-existing technologies, and allows entities to promote better accountability. Simply looking at the variety of the four primary pilots of EMPATIA we can see the vast difference of each process design.

+30 Implementations

City participatory systems
- Milan (IT)*, Pavia (IT), Cornzano (IT), Monza (IT), Lisbon 2017* & 2018 (PT), Cascais 2017 & 2018 (PT), Condeixa 2017* & 2018 (PT), Lagoa (PT), Torredonjimeno (ES), Casares (ES), Conil de la Frontera (ES), Cananea (MEX), Říčany* (CZ), Wuppertal* (DE)

National level participatory systems
- Portugal Youth Participatory Budgeting (cycle 2017, and ongoing 2018 cycle)

Research
- International Observatory on Participatory Democracy crowdsourcing (Global), National Association of Mozambican Municipalities mapping crowdsourcing (Mozambique)

Figure 2: Overview of the action
EMPATIA’s research

Yet the EMPATIA project was not just about creating a platform, but also a research project that developed a set of novel participatory processes, lessons for practitioners, and a unique dataset combining the knowledge learned from the four main pilot countries (Portugal, Germany, Czech Republic and Italy). EMPATIA has produced 17 publications before the dataset had been collected leveraging just the theoretical contributions of the project, now that the data collection is completed we expect to directly publish other 4 and collaborate with other scholars generating other 9, for a total of 30 publications.

The research developed by the EMPATIA project has collected behavioural data and demographic data of more than 27000 participants, out of more than 33000 visitors in our four primary pilots. Visitors could explore the participatory process by simply providing their email, but in order to become active participants they had to answer a few demographic questions and provide additional information that varied in each pilot. On top of this the project has managed to deploy a dual survey design, before and after the four main city pilots (Milan, Wuppertal, Říčany, and Lisbon) collecting more than 15000 questionnaires. The preliminary analysis\(^1\) conducted on this unprecedented comparative cross-national research generated some important and concrete lessons. In particular, EMPATIA’s research shows that:

---

\(^1\) The pilots were deployed the last year of the project and the data collection continued after the end of the project itself. What we present here are just the first and most important results we can draw from our research design using just our data. The dataset is designed to be integrated with secondary data and explore numerous other research questions. The data will fuel research for the next five years.
These two results confirm conjectures developed by practitioners and academic theories\(^2\) with concrete data, and a combination of qualitative and quantitative analysis. To our knowledge rarely research projects have managed to collect primary data on participatory processes in such a large-scale international comparison. Hence, it is likely that the insights we can gather from the EMPATIA datasets will fuel the field of participatory democracy for years to come.

EMPATIA research has been a pioneer in setting up foundation for future research on the policy impact of participatory processes, by collecting detailed and geolocated data on each project proposed in each participatory process and creating an open source database that can be integrated with other source of data. The latter represents a crucial step forward towards the systematization of the research of participatory processes in Europe. EMPATIA has paved the way for an open source, European level, dataset of participatory democracy processes. Academic members of the project are combining this dataset with data generated by members of the Science and Ethics Advisory Board of EMPATIA (SEAB) preparing additional publications that will be coproduced.

EMPATIA’s overall impact

EMPATIA had multiple impact on the participatory sector, i.e. the growing community of public and private providers of participatory services.

### Commercial
From a commercial standpoint, the EMPATIA platform, its individual components (e.g. the rpg EMPAVILLE), and the participatory methodologies developed during the project are being exploited by each partner of the Consortium in different ways. The consortium commercial partners are offering training and digital services to a number of cities, some that started using their services during, some after EMPATIA.

### Academic
Academic partners have secured additional grants and are consulting for the World Bank, the Russian government and regional governments (Tuscany, Scotland and the community of Madrid). We hope in fact that EMPATIA could be adopted by a regional government that offers services to smaller and poorer municipalities that cannot hire commercial developers. Pursuing this goal, EMPATIA has developed a native multitenant feature that no platform had before the beginning of our project.

### Technology Exchange
One of the most important impacts of EMPATIA has been the promotion of knowledge exchange among providers of participatory platforms. Before EMPATIA, no platform offered an advanced monitoring suite that allowed to analyse both the ideation and implementation phase of a participatory process, now such suite has become a standard. Similarly, many platforms are starting to develop a multitenant version that would allow a high-level body to manage/assist many lower-level bodies with participatory processes, such as a large city and its districts.

### Process diffusion
EMPATIA impacted the countries hosting pilots. The introduction of a new model of participatory budgeting in Germany by the Wuppertal pilot is now being replicated by other cities with the help of our German partner. Similarly, the participatory system deployed in Lisbon has been copied and adopted in two other cities after the end of EMPATIA. Italy is witnessing a revival of interest in participatory processes, thanks to Milan example and other applications of EMPATIA in smaller cities. Lastly in the Czech Republic the number of participatory budgeting processes has increased from the one promoted by EMPATIA, to twenty-nine, of which eleven are supported by the EMPATIA partner.

The last element of the EMPATIA project was the construction and dissemination of a new language to understand and analyse complex participatory systems, that combine multiple online and offline participatory processes. The interest in the new EMPATIA framework, the so called systemic approach to democratic innovations, from several academics’ centres, international organizations, and practitioners, led to invitations of the EMPATIA team to explain its approach in more than 120 public events at no cost for the European Union. The estimated savings for the project has been calculated in approximately 111,000 euros. The result of this enormous dissemination effort has been the diffusion and systematization among practitioners, of a new standardized language that promotes faster knowledge exchange and better international coordination. This dissemination activity is continuing beyond the end of the project due to the interest of the practitioners and academic community in EMPATIA.
In the rest of this document, after briefly describing the consortium, we will analyse each of three impacts of EMPATIA in more detail:

- Impact on technology
- Impact on the participatory sector
- Impact on knowledge.

Then we will conclude offering five guidelines that distil the EMPATIA project knowledge to promote the next generation of participatory systems.
The EMPATIA Consortium

The EMPATIA project has been carried out between January 2016 and March 2018 by a multidisciplinary consortium composed by experts on participatory processes (Center for Social Study – CES), experts on ICT integration (OneSource), experts on civic networks (University of Milan), experts on e-voting and digital surveys (D21), experts on evaluating DSI’s impact (CES, Universities of Brunel and Bradford) and implementers of participatory processes in diverse communities (ZebraLog, InLoco, and D21). The consortium was also supported by a Scientific and Ethical Advisory Board composed by scholars of a variety of disciplines, practitioners and a number of international communities of scholarship (Participedia) and practice (International Observatory on Participatory Democracy).
1. IMPACT ON TECHNOLOGY

We designed the EMPATIA platform to enable the possibility of co-design, overcome existing challenges of “canned” participatory platforms and promote higher quality participatory practices.

Some of the EMPATIA Platform key achievements are:

More specifically the platform has been conceived to support not only the delivery of single participatory process, but as a tool to manage complex participatory systems where various kind of consultations and channels of engagement are combined.

The platform is designed to integrate easily with other technologies and natively supports a Software as a Service Model (SaaS) that would allow a region or a municipality to offer the platform to cities and smaller districts.

EMPATIA contains a number of sensors and an analytic suite that generate data that can be easily downloaded and visualized. However, EMPATIA include also a strong set of privacy features and natively support an anonymization system to protect the data of users.

EMPATIA also developed a variety of co-design processes and a roleplaying game specifically designed to support capacity building of city staff. EMPAVILLE uses the EMPATIA platform to simulate how to implement a participatory budgeting process via the platform and explores some design issues such as different voting mechanisms and data problems.
Lastly, EMPATIA developed software solutions for tablets, mobile devices, as well as stand-alone hardware kiosks to support the hybridization of participatory processes.

A quick overview some of the most important details of EMPATIA’s solutions is presented next.

1.1. Platform architecture: flexibility & modularity

The EMPATIA platform has a modular architecture including 7 independent components, each one covering a different set of requirements for the design and management of a broad range of digital and hybrid participatory processes.

The overall architecture, and each of its components, has been designed to be scalable, and redundant to support fault tolerance and different deployment models. Key aspects considered for the components and the general EMPATIA’s architecture include the support of different deployment models: all-in-one deployment (e.g. deployment in a single server); cloud deployment (e.g. public clouds like Amazon web services, Windows Azure, Openstack, others); and virtualization based on VMware, Xen Citrix and docker containers.

1.2. Platform architecture: APIs

The technological solutions developed are conceived to work as “standalone”, but also to interact (through their Application Programming Interfaces – APIs) with other software already in place that can complement, or substitute, components and features even if available also in the EMPATIA platform. Such an approach proved able to expand the potential for its adaptability and replicability. Consistently with this line of action, EMPATIA maximized its
open approach by releasing all the knowledge and the code generated under an open and free framework, in public repositories.

A typical example of the capacity of EMPATIA to integrate with pre-existing local solutions via API is the participatory system we developed in Lisbon. Lisbon, before EMPATIA, had three separate portals for Open Data (Lisboa Aberta), Participatory Budgeting (Lisboa Eu Participo), and an issue reporting software similar to fix my street (Na Minha Rua LX). EMPATIA built a unique portal that integrates all these services together with two new services co-designed with the city: a continuous ideation platform inspired by the model in Reykjavik (LisBOAideia), and a debate platform (Lisboa em Debate). EMPATIA built an integrated login system.

Figure 6 – The Lisbon Participatory System
1.3. Platform architecture: EMPATIA as a Service

EMPATIA was designed to enable Software as a Service (SaaS), called EMPATIA as a Service (EMPATIAaaS). As a result, EMPATIA’s platform allows multi-tenancy models: under a unique installation is possible to host different Entities (i.e. municipalities or other authorities responsible for the process) and for each entity different processes, relying on the same functionalities and feeding the same database.

Figure 7 – EMPATIAaaS multi-tenancy pilots overview

1.4. Platform architecture: privacy, monitoring, and transparency

In addition to the components dedicated to support the interactions between users/participants, a strong effort has been put on the development of an integrated Analytics component that allows the analysis and automated generation of statistics (with different data visualization options) considering diverse parameters such as: the number of votes per gender, per age, per town or borough, per profession, per level of education, among others. This component provides to the process-managers the information necessary to define calibrated engagement campaigns, starting from an accurate picture of the quantity and quality of participation in previous cycles. For example, the EMPATIA project using this set of monitoring tools uncovered that almost half of participants of the ideation phase do not participate in the voting phase, and that while women constitute a majority of voters, they are still a minority among those that propose ideas.

Figure 8: EMPATIA analytics examples
All the data collected via the EMPATIA platform can be downloaded in a variety of open formats to fulfil the objective of promoting transparency. The data is anonymized in order to protect the personal data of participants collected throughout the process.

![Empatia Platform](image)

**Figure 9 – EMPATIA open data functionality**

### 1.5. Platform architecture: AGPL license

The EMPATIA platform has been released under an AGPL license in different mechanisms, like Dockers, virtual machines, and through installation scripts that automates the deployment of the platform. The latest version of the code is available on https://github.com/EMPATIA. The APIs of the components have been released as well, with the objective to stimulate a community of developers and to promote the integration with inter-operable software tools. In this way, we aim to expand the range of components and features available in the platform, adding new solutions to improve the quality of e-deliberation, the management of community of users, and other ancillary services that can improve the overall quality of the digital democratic innovations.

### 1.6. EMPATIA solutions: innovative processes to support co-design

EMPATIA pioneered a set of co-design processes in each pilot to support the platform. For example, in the city of Lisbon we developed an agile procedure to prototype design changes to the participatory platform via design thinking conducted in collaboration with city staff, politicians and academics. Wuppertal instead started with an entire day of co-design involving citizens, representatives of civil society organizations and city staff members to identify the entire architecture of the city participatory system and to discuss for the first time which part of the process should be implemented online and which part should remain offline or should be hybrid.

EMPATIA also built a role-playing game specifically designed to promote capacity building among city managers and city staff on different design choices (e.g.; voting mechanisms). This role-playing game called EMPAVILLE (i.e. “the city of EMPATIA”) has been one of the serendipitous successes of the EMPATIA project.
Initially, EMPAVILLE was conceived just as a testing space during the construction of EMPATIA platform, but soon it became an independent deliverable, tested in different languages in about 35 different international training environments, and in several schools in partner countries. Most importantly EMPAVILLE has been and is a key enabler for exploitation opportunities. Most of our extra pilots have occurred thanks to the interest generated by an EMPAVILLE session. Some of our partners (CES, Unimi, D21, and OneSource) and even some other providers of participatory services such as BiPart in Italy, are providing standalone training services based on the EMPAVILLE module.
EMPAVILLE is a playful training tool that promotes reflection on the design of participatory processes via direct experience and learning by doing. In its structure, EMPAVILLE mimics the flow of a hybrid (i.e. online and offline) participatory budgeting with a particular focus on login, voting, and data visualization. Each participant plays the role (i.e. character) of a resident or a worker of EMPAVILLE with pre-set objectives designed to simulate the typical conflicts of a modern city (e.g. social polarization, asymmetric distribution of equipment, and lack of basic infrastructures). It represents a guided experience that starts with small groups’ discussion on the problems of the city, followed by a phase of project proposals, a voting session, and an evidence-based analysis of results.

The key pedagogic approach of EMPAVILLE is to teach users via the experience of conflict and failures. The game generates on purpose conflict and failure to highlight hidden pitfalls of participatory processes. For example, we employ a confederate who, disguised among the participants, tries to influence the multi-voting system, and the fact that projects have to satisfy a budget constraint to pass a cheap, but extremely controversial project. EMPAVILLE has also a second version, developed for high schools, that is more cooperative and focuses more on constructing together a project and civic learning.
1.7. A hybrid ecosystem, mobile, tablet and kiosks

In order to promote inclusion of citizens with limited access to technology, the consortium developed five voting devices/kiosks to support in-person deliberative sessions. This technology is based on open hardware and promotes seamless integration of face to face events in the EMPATIA platform. A key objective of this technology is to reduce the organizational costs of face to face events, simplifying the review of projects, the collection of comments, feedbacks and votes.

**Vote Kiosk**
Connects to an HDMI monitor/TV that allows citizens to read proposals and vote on them.

**Touch Kiosk**
This kiosk is used to promote the voting of citizens in PB processes and also do demonstrate the easiness of voting.

*Figure 12: Kiosks & Frugal Technologies*
Additionally, during the usage of kiosks, we quickly realized that even in Europe there are still many locations with limited internet coverage, thus the most recent versions of EMPATIA kiosks adopt frugal solutions generating their own Wi-Fi signal via raspberry pie to collect data locally in a secure way that then can be uploaded in the EMPATIA platform.

**Tablet Kiosk**

Developed as an approach to simplify the citizens’ engagement in the vote events and avoid traditional vote queues and decrease the vote time required.

**Remote Kiosk**

Android application that uses a simple and intuitive interface to allow citizens to browse proposals and vote.

**Ballot Kiosk**

This kiosk includes a traditional printed ballot alike interface, plus buttons to record the voting preferences and a small touch screen display with status information.
1.8. Platform architecture

The EMPATIA Platform culminate in a web interface that considers three types of spaces: User, Manager and Administrator.

**USER**

The User space is a generic area where the user of the platform (i.e. a citizen), depending of the activated configurations, can access to all information of the entity (for example a city participatory system) via the public web site and/or via the available tools. To access some information or participate it needs to register in the platform and provide all the required information by the entity.

The EMPATIA Platform is provided with a default template that implements a user space with all features available and can be used as the basis of a new template.

**Manager**

The Manager space allow managers to control an entity and all their content and participation processes. Thus, the manager is able to access to the backend of the platform and depending on the configurations activated by the entity’s administrator, the manager has the control of participation tools such as ideation processes, polls, vote events, kiosks and can manage the content associated with the entity such as sites, menus, news, events and pages; as well as the users that are associated with an entity.

**Administrator**

The Administrator space is where the administrator has access to every component in the platform, its role is to monitor all the entities and to perform general configurations. As such, the admin is able to manage entities and their configurations, the languages, the time zones, the countries, the type of votes, the customization of PADs, the authentication methods and management of layouts, among other features.
1.9. Participation tools

EMPATIA is a flexible and dynamic tool that is able to adapt to any participation process. We highlight 6 of the most used participation tools that are supported by the platform:

<table>
<thead>
<tr>
<th>Participation tool</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participatory budgeting</td>
<td>Participatory Budgeting is a democratic process in which community members directly decide how to spend part of a public budget. Participatory budgeting (PB) represents one of the most successful civic innovations of the last quarter-century. PB is a family of participatory processes with many variations.</td>
</tr>
<tr>
<td>Continuous ideation</td>
<td>Continuous ideation processes allow citizens to submit ideas to a municipality at any time. These processes are different from participatory processes, such as PB, that have a fixed cycle. The participants are invited to rank the top ideas, in turn, reducing the amount of time required to filter feasible ideas by the municipality.</td>
</tr>
<tr>
<td>Vote Events</td>
<td>Supports any needs for a vote process. Supports many different type of vote methods (likes, negative, multi, budget, etc.), integrates in-person tools and anonymous paper ballot, and integrates with vote kiosks.</td>
</tr>
<tr>
<td>Consultations &amp; Debates</td>
<td>Consultations are part of municipal tasks and EMPATIA supports an extensive array of consultation features to accommodate a municipal or community needs like moderation, positive and negative comments, like/dislike, report abuse.</td>
</tr>
<tr>
<td>Issue reporting</td>
<td>Tool that allows citizens to report problems in the public space of their municipality.</td>
</tr>
<tr>
<td>Integrated participation portal</td>
<td>Participation portal that integrates all participation tools available and integrates third party software (e.g. authentication and user participation, single-sign-on; aggregation, correlation and analytics of all participation data).</td>
</tr>
</tbody>
</table>
2. IMPACT ON THE PARTICIPATORY SECTOR

The EMPATIA project has been pushing collective rethinking of the relation between ICTs and its role in engaging citizens in public decision-making via 5 types of interventions: implementing pilots; cooperating & competing with other providers of participatory services; promoting the growth of EMPATIA partners’ business; and disseminating knowledge.

2.1. Direct intervention: implementing pilots

EMPATIA implemented four primary pilots in the city of Lisbon (PT), Milan (IT), Wuppertal (DE) and Říčany (CZ). Over 33000 people have been involved in the primary pilots, and more than 600 proposals have been collected through the EMPATIA platform adaptations. On top of these four primary pilots the platform was used in a number of other instances, the number is greater than 30 at the moment of this writing and growing, including small city consultations, research projects and even national level participatory processes. The Portugal’s Youth Participatory Budgeting (OPJP) process is the most notable extra pilot deployed by EMPATIA. OPJP is one of the first, if not the first, national level participatory budgeting process in the world. This pilot represents an important pilot-experience of scaling-up beyond the municipal and regional levels.

<table>
<thead>
<tr>
<th>Inhabitants</th>
<th>Lisbon</th>
<th>Milan</th>
<th>Říčany</th>
<th>Wuppertal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>1855</td>
<td>27606</td>
<td>1022</td>
<td>3324</td>
<td>33807</td>
</tr>
<tr>
<td>Proposals collected</td>
<td>172</td>
<td>242</td>
<td>19</td>
<td>241</td>
<td>674</td>
</tr>
</tbody>
</table>

Figure 13: Participants in the primary pilots
Overall, the +30 cases of use of EMPATIA platform have promoted a new wave of participatory processes in various countries. In their diversity, all the pilots and the added experiences facilitated intense discussions in the respective municipalities about new paths and models of participation, and (digital) social innovation. By showing in ‘real life’ settings how social democratic innovations can be conducted with the help of ICTs, scepticisms against participation proved to be reduced. Thus, EMPATIA also set the grounds for even further innovation, increasing support among representatives and municipal staff. The following are the main impact of the EMPATIA project pilots:

First integrated participatory platform in Europe

EMPATIA introduced one of the first participatory system platform in Europe. By that we mean an integrated platform with a unique login that gives access to multiple participatory processes. This approach is now spreading across Portugal, Spain and France. Cities like Madrid, Paris, and Barcelona have added proto-integrated portals that showcase all their participatory processes but still lack an integrated login. At the time of writing this report, the Lisbon pilot still remains one of the most advanced examples of integration of multiple participatory processes in a single system.

First participatory budgeting monitoring platform

EMPATIA introduced the first monitoring platform for participatory budgeting in Europe in the Milan pilot, and now most platforms have developed a similar component. In Italy the pilot of Milan has won the ForumPA Prize (Premio PA Sostenibile) and has reinvigorated the interest in participatory budgeting with cities such as Turin and Rome, introducing new digital participatory processes.

Figure 14: Summary of the Action
2.2. Promoting new business & collaborations

The project consortium was among the beneficiaries of the multiple products and outcomes of EMPATIA project. The flourishing of new business opportunities and academic projects for partners is one the clearest results of the project.

Academics partners are capitalizing on the unique data generated by research opportunities enabled by the project, constructing new partnership with the objective of academic publishing. For example, the Brazilian project INCT “Democracy and Democratization of Communication” (coordinated by UFMG in Brazil) is collaborating with the academic team of EMPATIA to write a new book “Systemic Approach to Democracy” related to multichannel participatory systems. We did two book conference seminars, one in Brazil and one in Portugal, and we are planning a third in Chile for January 2019. Academic partners have also built new projects that have generated new funding. For example, some members of the EMPATIA SEAB won a US grant to test e-deliberation solutions designed within EMPATIA (https://www.scholio.net/). EMPATIA CES Team have joined other CES researchers and secured funding to develop a new Horizon 2020 project: URBINAT -Urban Innovative and Inclusive Nature, which received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 776783 (https://www.ces.uc.pt/pt/investigacao/projetos-financiados/urbinat). URBINAT applies some of the ideas developed in EMPATIA to regeneration and integration of deprived districts in urban development through innovative Nature-Based Solutions.

The commercial partners in the project (Zebralog, D21, OneSource, and Inloco) have benefited with a hands-on experience on the designing and implementation of multichannel participatory processes, enabled by the complementary expertise.
of other consortium partners. Through the pilots, the commercial partners benefited from the extended methodological knowledge, brought from the academic partners such as CES. The multichannel framework had not been previously realised or planned for by these organisations, prior to the EMPATIA project. Other examples of expertise acquired include the implementation of monitoring cycles (Milan), the “common good check”, which was implemented in Wuppertal.

Among the most notable collaborations of the project is the one initiated with the Russian Government in 2018. Giovanni Allegretti (CES) and Nelson Dias (inLoco) are collaborating with the Ministry of Finance of the Russian Federation in a knowledge exchange project co-sponsored by the World Bank. This project started with a series of seminars that brought together Russian bureaucrats to explore EU best practices including EMPATIA pilots in Cascais, Milan, and Lisbon. Allegretti and Dias have used the knowledge developed in EMPATIA to build a training class for public managers that will be deployed in multiple cities during the course of 2018 and 2019 including: Moscow, San Petersburg and cities in the Sachalin and Yakutia regions. This is the most relevant example of training activities that all the members of the consortium are providing in their own country and network.

With respect Germany, the successful implementation of the new model of participatory budgeting in Wuppertal has generated a lot of interest by the media as well as other municipalities which in turn has created new business opportunities for Zebralog. For example, Zebralog worked together with the city of Bonn to adapt their current PB platform (www.bonn-macht-mit.de) to the requirements of a budget based PB model similar to the Wuppertal model. Zebralog also expects further business opportunities in the future since it broadened its business portfolio due to EMPATIA, now incorporating new methods like the 'common good check' as well as the overall model of multichannel PB with a preset budget.

In Italy the municipality of Milan has contracted Fondazione Rete Civica Milano (FRCM), the foundation affiliated with the University of Milan that supported the implementation of EMPATIA, to continue the technical support of participatory budgeting in Milan. A number of smaller municipalities, after having observed the Milan pilot, are asking FRCM to provide its consultant service and training on a variety of participatory platforms. Moreover, FRCM is using EMPAVILLE to promote civic learning in multiple schools.

In Portugal OneSource has started exploiting the EMPATIA Platform, providing technical services in the field of citizens’ participation in Portugal and worldwide. Currently OneSource has established commercial relations with: Lisbon municipality (Portugal); Cascais municipality (Portugal); the Portuguese National Youth Government body (Portugal); Freguesia de Penha (Portugal); CoGlobal NGO (Spain); and BiPart NGO (Italy). Additionally, the city of Lisbon has directly contracted Nelson Dias, from InLoco, to support the optimization of its participatory system. And the model of participatory system promoted by EMPATIA for the first time in Lisbon is now being adapted in at least two other cities, Cascais and Funchal. Lastly InLoco continues its thriving activity of promoting participatory processes via the network of participatory cities in Portugal now further empowered by having access to a dedicated digital platform and new knowledge.

Lastly, prior to the launch of EMPATIA, no municipality in Czech Republic had ever conducted a citywide PB. Today, 29 Czech cities have launched participatory budgeting, and lessons from EMPATIA are being directly applied in 13 of them through the involvement of D21. The “moment zero” of multichannel participation in Czech cities was the arrival of international experts from the EMPATIA consortium to the city of Říčany in September 2016. This intensive workshop on
best practices in PB gave the mayor’s team the capacities and confidence needed to launch the country’s first-ever citywide participatory budget. D21 then hosted national participation conferences in the spring and fall of 2017 which highlighted the EMPATIA project and the EU’s role in the growing wave of participatory democracy; more than a dozen mayors and councils launched processes in the months that followed, and school-based PBs have been launched in more than 40 schools. In addition, more than 20 Czech cities now have “participation coordinators”, many of whom have been trained directly by D21 in best practices learned from EMPATIA. For Czech mayors now looking to innovate in their approach to citizen engagement, the question of participatory budgeting is not “if” but “when,” and EMPATIA has provided the template on how to manage participation successfully.
2.3. Cooperating with competitors

The EMPATIA consortium engaged providers of participatory services, both private and public, in a constant dialogue. This dialogue promoted significant knowledge exchange. For example, the EMPATIA team cooperated and is cooperating with Consul and Decidim, the platforms of Madrid and Barcelona. The first versions of Consul and Decidim, for instance, did not have any monitoring component nor any multi-tenant component. More recent versions have developed the monitoring component and both platforms are now exploring ways to add multi-tenant capabilities. Commercial providers of digital platforms have also benefit from exchanges with EMPATIA project. Commercial providers such as the Italian BiPart, the Portuguese providers Wiremaze and Libertrium, the US based Participatory Budgeting Project and the Canadian PlaceSpeak have all participated in EMPATIA webinars, trainings and simulations. The public and collaborative approach of the EMPATIA consortium, inviting competitors to trainings and discussions, created profitable knowledge exchange. Looking retrospectively to this process, we can assert that such spaces were useful for empowering those providers in refining their products and broaden the scope of their action beyond the provision of technological services. Today, these organizations are able to provide more adaptable and modular tools, unlike the stiff and deterministic “technology-driven” participatory models available two years ago. The clearest example of such a change is the software component for monitoring the so-called “second cycle” of participatory budgeting (the implementation of the co-decided priorities for public budget). This component was not provided (nor did it exist) by any of these organisations until 2016, and – from 2017 – it became a common standard module.

2.4. Disseminating knowledge

Dissemination strategies played a key role in raising the quality and intensity of knowledge exchange, while at the same time increasing EMPATIA’s visibility among the political, academic, and developers’ communities. Through several dissemination events and the diffusion of the free platform, the consortium aimed at creating opportunities for increasing awareness about limits and opportunities of the use of ICTs for multichannel systems of participation. This was also an opportunity to gather ideas about new requirements for features and components, which could be of future interest for different contexts where experiments of multichannel participatory processes are taking place.

The table below provides a characterization of the main types of events organized and co-organized by the consortium members during the EMPATIA project, as well as of spaces provided by third parties where EMPATIA members had a space to talk about the project and its results in-progress:

<table>
<thead>
<tr>
<th>Main category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization of a Workshop:</td>
<td>13</td>
</tr>
<tr>
<td>Press releases:</td>
<td>3</td>
</tr>
<tr>
<td>Non-scientific and non-peer-reviewed publications</td>
<td>33</td>
</tr>
<tr>
<td>Training sessions:</td>
<td>35</td>
</tr>
<tr>
<td>Websites:</td>
<td>8</td>
</tr>
<tr>
<td>Communication Campaigns (e.g. Radio, TV):</td>
<td>7</td>
</tr>
</tbody>
</table>
Official EMPATIA events

Over its course, EMPATIA organized 20 public dissemination events, seminars, and workshops involving more than 1,000 participants in five countries. Each national workshop provided an overview, highlighting innovations, and/or a short presentation. In many of these events, EMPATIA invited other national research projects to present their work, which were similar or complementary to issues being discussed by EMPATIA. Some workshops were organized by regional networks of local authorities interested in collaborating with EMPATIA.
Figure 16 - EMPATIA organized events attendees profile
Networking and participation to third party events

Over the duration of the project, the EMPATIA team was invited at no cost to 123 events around the world, for an estimated saving for the project of 111,000 Euros. These forums, innovation events, exhibitions, demonstrations, and other relevant activities targeted a diverse range of audiences from different backgrounds and had a crucial impact on knowledge exchange and in the diffusion of the new language introduced by the EMPATIA project. Moreover, these were important exploitation activities that will work towards EMPATIA future sustainability.

Impact on language

All the dissemination efforts, combined with the growing number of other case deployments (beyond official pilots), are having a persistent impact on practitioners and their language. For example, the collaboration with OIDP and Participedia, a crowdmapping exercise within the OIDP network, generated a persistent group of more than 50 cities interested in studying and exploring participatory systems. This group will continue its activities independently, and present in November in OIDP Meeting in Barcelona (25-27 Nov 2018). Interestingly the OIDP conference website itself has now adopted the systemic language promoted by EMPATIA in its main slogan that mention participatory ecosystems.
IOPD 2018
Direct Democracy and Citizens' Initiative. Towards an ecosystem of Inclusive Democracy
25th, 26th and 27th of November
READ MORE
3. IMPACT ON KNOWLEDGE

The EMPATIA project deployed thirty instances of the platform. These instances combine 4 primary pilots, with 24 self-funded pilots, and two research initiatives. The primary pilots, we describe in this final report, implemented four similar participatory systems that combine an ideation process, a voting process and a monitoring process.

<table>
<thead>
<tr>
<th></th>
<th>Wuppertal</th>
<th>Milan</th>
<th>Lisbon</th>
<th>Říčany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideation</td>
<td>Hybrid: large in person</td>
<td>Hybrid: around 30 events</td>
<td>Online</td>
<td>Face to Face (then ideas uploaded by city</td>
</tr>
<tr>
<td></td>
<td>event + online ideation</td>
<td>+ online ideation</td>
<td></td>
<td>officials via EMPATIA)</td>
</tr>
<tr>
<td>Voting</td>
<td>Hybrid: possibility to vote</td>
<td>Hybrid: possibility to vote</td>
<td>Online</td>
<td>Online</td>
</tr>
<tr>
<td></td>
<td>online &amp; in person</td>
<td>online &amp; in person</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring</td>
<td>Online</td>
<td>Online</td>
<td>Online</td>
<td>Online</td>
</tr>
<tr>
<td>Integration with</td>
<td></td>
<td>With OpenDCM platform</td>
<td>With 3 pre-existing platforms</td>
<td>With D21 platform</td>
</tr>
<tr>
<td>pre-existing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In Wuppertal, Milan and Říčany these systems integrated face to face channels of participation with online ones, to support a participatory budgeting process (PB). PB is a democratic process in which community members directly decide how to spend part of a public budget.

In Lisbon instead the EMPATIA project supported the city in implementing a digital continuous ideation platform (CID) and provided a new integrated portal for all technologies of participation of the city. Lisbon, before EMPATIA, had three separate portals, one for Open Data (Lisboa Aberta), one for Participatory Budgeting (Lisboa Eu Particiapo), and one for the issue reporting software similar to fix my street (Na Minha Rua LX). In this section we focus on the continuous ideation platform. A CID is a consultative process that has faster cycle than PB and every couple month generates and selects ideas to be proposed for review to the city council.
The EMPATIA consortium built a large multimethod research design and data collection system that evaluates in greater detail the impact of the four main pilots, but still collects some data on all other deployments. The project designed the data collection effort to contribute to ongoing academic research and to plant the seeds for future analysis of European participatory systems impact on public policy. Four type of data were collected:

1. Demographic data on participants collected via the login in the four primary pilots (N>27000)
2. Behavioural data on participants in all implementations of the platform, not just the four primary pilots (N>50000)
3. Data on projects and ideas proposed in all implementations of the platform, not just the four primary pilots (N>3000)
4. Survey data on participants in the four primary pilots (N>15000)

EMPATIA is committed to fulfill an open access policy regarding the data collected and processed during the project and is uploading all datasets on a dedicated data portal at https://dkan.EMPATIA-project.online. All personal data collected have been processed and anonymized according to strict ethical policies, compliant with national and local regulations, in order to ensure the maximum protection of the privacy of participants while allowing the exploitation of data, properly anonymized before their release. In this report

---

3 The limited time of this project does not allow to track the impact of policies that develop over the course of the next five years, however by recording and geolocating all ideas and projects co-decided with citizens it is possible to build a dataset that will allow in five years to conduct a policy impact analysis. A typical example of the usage of such data is the path breaking study of Aldimir Marquetti in Porto Alegre that shows the correlation between geolocation of projects and local level of service provision and welfare. Marquetti shows that participatory budgeting targets projects to the poorest sections of the city. To our Knowledge EMPATIA is the first project to build a dataset of such type that compares cities in different countries.
and in the EMPATIA deliverables we focus on the data generated in the four primary pilots.

The dataset was only completed by the end of the project and therefore EMPATIA has published mostly theoretical papers in 2016, 2017, and 2018. These theoretical papers however had a significant impact on the language of scholars analysing participatory processes, introducing a new standardized vocabulary that systematize the concept of multichannel democratic innovations and participatory systems. The following graph represents the first wave of publications of EMPATIA:
Leveraging the data collected we plan to publish four additional scientific papers bringing the direct publications count to 21. These new publications will explore the two key hypotheses at the centre of the EMPATIA research design and data collection effort in the primary pilots:

**H1**
Combining online and in person channels of engagement increases the diversity of participants in an EMPATIA pilot with respect gender/age/education

**H2**
Citizens that have participated in an EMPATIA pilot should report an increase in trust in institutions and a decrease in political discontentment

Exploring these hypotheses, the EMPATIA project generated a set of lessons on inclusion and trust. The remainder part of this section focuses on these lessons, which will be the basis of our future publications. EMPATIA explored many additional secondary research questions, for a complete description of the research project see deliverable 4.2.

### 3.1. Lessons on inclusion

EMPATIA collected demographic data on participants in each of the four primary pilot via its login system. In Lisbon we collected the login data of the continuous ideation platform (CID), while in the three other pilots we collected the login data of participatory budgeting (PB). Users in all four pilots could explore the platform but could not propose ideas or vote without completing their registration via a survey that certified their identity and included demographics questions. Thus, the table below describes two types of citizens, those who had completed the advanced registration providing us data on demographics and participated in the process, and those who did not and simply explored the website.

<table>
<thead>
<tr>
<th></th>
<th>Wuppertal PB</th>
<th>Milan PB</th>
<th>Lisbon CID</th>
<th>Říčany PB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete</td>
<td>3286</td>
<td>2286</td>
<td>572</td>
<td>565</td>
</tr>
<tr>
<td>Incomplete</td>
<td>38</td>
<td>4738</td>
<td>1283</td>
<td>457</td>
</tr>
<tr>
<td>Total</td>
<td>3324</td>
<td>27606</td>
<td>1855</td>
<td>1022</td>
</tr>
</tbody>
</table>

The data required for login varied from city to city depending on the local legislation, but in all locations the data included gender, age, and education. The table below analyses the quantity of participants in each pilot in absolute terms and in percentage of the population. Moreover, the table classifies the intensity of participation in the platform in three levels, from the simplest level of engagement to the most complex: 1) participants, i.e. citizens who completed the login, 2) active, i.e. participants who interacted with the platform leaving a support, a vote or a comment, and 3) participants who spent significant time in the platform proposing a project. In terms of absolute numbers, Milan has generated the highest number of participants (more than 27000), while the continuous ideation platform in Lisbon the lowest (1855).
But the reader should keep in mind that in Lisbon more than 50000 people were participating in the PB process that was running in parallel to the CID. In relative terms, however, Říčany generates the highest percentage of participants in the local population (~7%). The latter result is not surprising, it is relatively easier to engage people in smaller cities. As expected in all pilots, we observe that engagement decreases with the more complex tasks. Very few participants propose ideas, while the majority simply vote. The following graphs compare the pilots with respect gender, age, and education.

<table>
<thead>
<tr>
<th>City</th>
<th>Population &gt;16yo</th>
<th>Participants</th>
<th>Active</th>
<th>Proposers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lisbon</td>
<td>4,23,013</td>
<td>1,855</td>
<td>812</td>
<td>117</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0,44%</td>
<td>0,19%</td>
<td>0,91%</td>
</tr>
<tr>
<td>Milan</td>
<td>1,082,866</td>
<td>276,06</td>
<td>228,88</td>
<td>242</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2,5%</td>
<td>2,1%</td>
<td>0,2%</td>
</tr>
<tr>
<td>Česky</td>
<td>12,898</td>
<td>1,022</td>
<td>1,022</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7,92%</td>
<td>7,92%</td>
<td>0,00%</td>
</tr>
<tr>
<td>Wuppertal</td>
<td>298,562</td>
<td>3,324</td>
<td>2,404</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,11%</td>
<td>0,81%</td>
<td>0,00%</td>
</tr>
</tbody>
</table>
* Note: Ričany did not include a complete data collection system, and the data shown for Milan refers just to Ideation. See the next page for the Milan data for voting.
Legend of the top two graphs compare the online and face-to-face channel of engagement in Milan. Milan implemented more than 50 face-to-face events targeting spaces used by elderly people (Markets and Libraries) achieving a very good level of inclusion of elderly.

Legend of the graph on the left: ePB=digital participatory budgeting, eCID=digital continuous ideation platform, hPB=hybrid participatory budgeting, PB=face-to-face participatory budgeting. Data Sources: Lisbon eCID, Milan & Wuppertal data are drawn from the EMPATIA dataset, Lisbon ePB data is drawn from the extra survey deployed by EMPATIA, Cascais provided the data directly upon request, New York data is publicly available and Porto Alegre data is also publicly available.
From the analysis of the demographics data we can draw three interesting lessons:

**LESSON 1**

**We need better monitoring to track gender discrimination**

The participatory processes facilitated by EMPATIA on average engage more women than men in the voting phase. However, the trend is completely different if we look at the gender of the proposers in the ideation phase, where the males are always the majority. This suggests that many of the claims of practitioners that participatory processes are capable to overcome gender bias need further investigation. Only with the advanced monitoring capabilities of the EMPATIA project it was possible to highlight this issue. It is crucial that future participatory platform implement similar monitoring capabilities, otherwise gender discrimination might remain hidden.

**LESSON 2**

**Hybridization promotes some inclusion**

On average the participatory processes promoted by EMPATIA have struggled to engage elderly people and people with lower educational attainment. The pilots that promoted hybridization show better results. Wuppertal achieves the best results among our pilots for education. While Milan that deployed during the vote a specific strategy to engage elderly people in marketplaces achieve the best results with respect elderly inclusion. Thus, the EMPATIA research teaches us that inclusion is possible, but it requires a hybrid approach combined with customized outreach strategies that target difficult to engage population.

**LESSON 3**

**Quality is more important than quantity**

The pilot in Wuppertal has overall the best inclusion results. Wuppertal achieves level of inclusion that are close to famous best practices that have focused their strategy on inclusion such as New York City and Cascais in Portugal. It is interesting to note that, from a quantitative standpoint, Milan implemented 30 face-to-face events during the ideation phase, while Wuppertal implemented only one. The difference between Wuppertal and Milan was in the design of the face-to-face events. While most of Milan face-to-face events were designed to offer support and information, Wuppertal invested on a few curated deliberative events that had crucial impact on the process. Thus one lesson we can draw from the EMPATIA research on inclusion is that the quality of the participatory channels is often more important than their quantity.
3.2. Lessons on trust, efficacy and antipolitics

To investigate efficacy, trust, and political discontent, we have conducted surveys with participants at two points in the process: during the voting phase\(^4\), and between two to three months after the results of the process were announced. The key element of this design is that we have asked the same battery of questions twice to the participants, so that we can track the impact of participation on the change in answers.

In Milan and Lisbon, we also deployed additional surveys. In Milan we collected data on the new users that did not participate in the ideation phase and enrolled just in the voting phase, whilst in Lisbon we collected data on the users of the participatory budgeting processes, an issue reporting software (something inspired by fix-my-street) and a debate platform that were running in parallel to the EMPATIA pilot.

The design of the survey system leverages the new theoretical framework and language introduced by the EMPATIA project. Instead of evaluating entire democratic innovations, EMPATIA has focused on comparable subsystems to draw practical and more effective lessons. Thus, the survey targeted the ideation and voting phase in each pilot, while the inclusion study described in the previous section targeted the engagement and communication subsystem. When we analyse the data the table in the next page shows a significant decrease in the average of our antipolitics metrics in Wuppertal and in Milan, and a significant increase in trust in Wuppertal, Milan and Říčany. While in Lisbon we observe a significant decrease in trust. Overall, we take this group of results to signify that participatory processes can both enhance or hinder trust and political discontent depending on their execution. When participatory processes manage the expectations of participants effectively and generate clear results they promote trust and reduce political discontent, when they miss-manage expectations they instead generate mistrust.

However, even if the continuous ideation platform in Lisbon was problematic, the integration of the process within the Lisboa Participa portal promoted its visibility and allowed around 2000 citizens to take part in the process. Our post-survey shows that most participants discovered the CID by chance due to the integrated website.

\(^4\) Each participatory process implemented by EMPATIA had a voting phase in which participants selected the project that were going to be included in the budget (Milan, Wuppertal and Říčany) or were passed to the city council for review in the case of the continuous ideation platform implemented in Lisbon (see deliverable 3.2 for more details).
### Total survey collected: 15124

<table>
<thead>
<tr>
<th></th>
<th>Lisbon</th>
<th>Milan</th>
<th>Ústí</th>
<th>Wuppertal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-survey</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondents</td>
<td>264</td>
<td>3322</td>
<td>487</td>
<td>482</td>
</tr>
<tr>
<td>Participants</td>
<td>1855</td>
<td>10995</td>
<td>1022</td>
<td>3324</td>
</tr>
<tr>
<td>Answer rate</td>
<td>14.2%</td>
<td>30.2%</td>
<td>47.6%</td>
<td>14.5%</td>
</tr>
<tr>
<td><strong>Post-survey</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondents</td>
<td>92</td>
<td>2095</td>
<td>311</td>
<td>154</td>
</tr>
<tr>
<td>Participants</td>
<td>264</td>
<td>3322</td>
<td>1022</td>
<td>375</td>
</tr>
<tr>
<td>Answer rate</td>
<td>36.6%</td>
<td>63%</td>
<td>30.4%</td>
<td>41.0%</td>
</tr>
<tr>
<td><strong>Participatory</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>system survey</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondents</td>
<td>1805</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participants</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Answer rate</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New users</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>survey (Milan)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondents</td>
<td>6112</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participants</td>
<td>16804</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Answer rate</td>
<td>36.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LEGEND:** The pre-survey was deployed during the ideation phase/voting phase targeting all participants, the post-survey was deployed two months after the end of the process and targeted only pre-survey respondents, the Participatory system survey was deployed only in Lisbon at the same time of the post-survey and analysed all participatory processes, not just EMPATIA’s pilot, the new users survey was deployed only in Milan at the same time as the post-survey and targeted the users that had joined the process after ideation had been completed.

### IMPACT ON TRUST & ANTIPOLITICS

<table>
<thead>
<tr>
<th></th>
<th>Wuppertal PB</th>
<th>Lisbon CID</th>
<th>Ústí PB</th>
<th>Milan PB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antipolitics sentiment</td>
<td>Decrease **</td>
<td>No effect</td>
<td>Decrease *</td>
<td>Decrease***</td>
</tr>
<tr>
<td>Trust - members of the national parliament</td>
<td>Increase *</td>
<td>Decrease ***</td>
<td>Increase ***</td>
<td>No effect</td>
</tr>
<tr>
<td>Trust - members of the city council</td>
<td>Increase ***</td>
<td>Decrease ***</td>
<td>No effect</td>
<td>No effect</td>
</tr>
<tr>
<td>Trust - members of the city staff</td>
<td>No effect</td>
<td>Decrease ***</td>
<td>No effect</td>
<td>Increase***</td>
</tr>
</tbody>
</table>

**LEGEND:** The code displayed in each cell (No effect/Increase/Decrease) represents the average individual change in the metric between the post survey and the pre-survey (post minus pre); the asterisks identify the significance of the effect: *=significant effect at 10% level, **=significant at the 5% level, ***=significant at the 1% level; The table displays paired test results for Wuppertal and Lisbon, unpaired result for Ústí.
From the survey dataset we can draw three key lessons.

**LESSON 1**
**Participatory systems carry the risk of promising more than what they can deliver**

The multiplication of channels of engagement in a participatory system risks to multiply the promises that the city makes to its citizens, without increasing the guarantees of fulfilling such promises. The EMPATIA pilots in Milan, Říčany and Wuppertal had a strong emphasis on establishing a clear budget that could be devoted to the ideas proposed by the citizens, while the continuous ideation platform in Lisbon did not. Our qualitative work detected not only that citizens in Lisbon were confused by the redundancy of the platform, but also that there were some doubts that project were going to be implemented.

**LESSON 2**
**Participatory systems carry the risk of creating competition among channels of engagement**

Milan, Wuppertal and Říčany, three out of our four pilots, managed to positively affect trust with very different types of technology, process and approach. However, each of these three participatory systems did not include a redundant and competing participatory process. Each of these three pilots integrated a face-to-face channel of engagement and an online channel of engagement in such a way that the two channels did not compete with one another. Lisbon instead implemented two parallel and difficult to distinguish digital participatory processes, Participatory Budgeting (PB) and a continuous ideation platform (CID). Our qualitative work shows that PB completely overshadowed the new CID platform.
LESSON 3
Participatory systems can leverage cross-selling and save significant communication costs

Lisbon was the pilot with the most advanced participatory system. In this pilot we can observe the usefulness of cross-selling techniques, i.e. techniques that promote one process within another. As EMPATIA learned from the post survey, most participants (41%) declared that they discovered about the Continuous Ideation Platform by chance while looking for the participatory budgeting platform. This is the first recorded example of the power of integrating multiple participatory processes in a single platform.

In sum, the unique dataset collected by the EMPATIA research offers the first confirmation of the new systemic framework and language – that Spada and Allegretti begun to develop in 2012 – that provides a set of guidelines on how to better design participatory systems to avoid conflicts among channels of engagement and maximize their synergies such as cross-selling.
4. CONCLUSION

EMPATIA had two primary objectives: 1) building a flexible platform that could promote co-design of complex participatory systems; 2) exploring the advantages and disadvantages of multichannel participatory processes, with respect to their impact on inclusion and trust.

With respect the first goal, EMPATIA is now an open source platform that has been deployed and tested in a variety of very different scenarios, proving its flexibility and its capacity to easily integrate pre-existing technologies - as the pilots of Milan, Lisbon and Říčany show. The EMPATIA platform also proved capable of managing an entire multichannel participatory system, as the Wuppertal pilot demonstrates. Moreover, EMPATIA has tested multitenant features that make it an ideal instrument for a regional or a state administrative institution which is interested to test inter-scalar participatory processes, or intends to offer free services to its subunits, as the National Youth Participatory Budgeting Project in Portugal had started to show.

The pilot of Lisbon, to our knowledge, at the moment is still the most advanced example of integration of multiple participatory processes in a single system. As already noted, several improvements can be made, but the capacity to recognize failures with early warning systems and enact correction procedures proved to be a key-component in the philosophy behind the EMPATIA approach. The fact that Lisbon City Hall has hired one of the consortium members as main consultant to optimize the conception of its participatory system - also continuing the collaboration with several of the EMPATIA founders - is a proof that EMPATIA set roots to be sustainable after the formal end of the project.

The careful hybrid strategy of engagement promoted during our pilots (particularly in the case of Milan and Wuppertal) proved able to show useful directions improving the capacity of many Digital Social Innovations (DSIs) to engage the citizenry in public policies far beyond the “usual suspects”. Most importantly, the research conducted while testing the EMPATIA platform showed that multichannel participatory processes can promote trust in local institutions when they avoid the pitfall of creating expectations that they cannot fulfill, and they create transparent and not-redundant channels of engagement. Even some of the ambiguous results of “LisBOAIdela” experiments, the continuous ideation platform of Lisbon, proved highly effective for validating the main research design of EMPATIA, showing that the used metrics are capable to connect design to impact on trust and political disaffection.

Overall the EMPATIA project adopted a “serendipity-oriented” approach, allowing the consortium to maximize unexpected lessons, failures, learning-by-doing, and discussions with a fast-growing network of actors and institutions in a large number of countries (well beyond those initially targeted) which may ensure the long-term sustainability of the project outcomes and significantly increase its impacts.

Some of the lessons learnt during this winding journey deserve to be highlighted, as for example:

1. Commitment on intensification of democratic innovations’ tools can come from unexpected encounters and can be lower in early-bird testing environments.

Among the almost 30 pilots that EMPATIA has implemented, some of those with the highest political support were not in the group of official pilots that entered as partners
of the project in its early stages. Paradoxically, our encouragement to innovate in some cases has acted as a dampener to the flourishing of political support and some of the most radical and interesting features that we had developed in the first prototype of EMPATIA platform were not adopted by any of our official pilots. We naively thought that by providing a service for free we would have freed resources, and that our pilot cities would have invested in communication and training more than in a situation in which they had to pay for the platform and the support to use it. Instead, cities that discovered EMPATIA later-on and were not part of the original pilots’ circle, came to us and proved interested in exploring more radical solutions and invest more resources in communication and training their staff. Such unexpected outcome should be kept in mind for future projects similar to EMPATIA, for example creating a bidding process to select the pilots in a second stage, with strict requirements with respect the investment in communication and training in exchange of a free service such as the EMPATIA platform.

2 A free and flexible platform is not enough to solve the problems of small administrative institutions in managing hybrid participatory processes.

EMPATIA successfully created a free and a flexible platform, especially for small municipalities without many resources. However, we quickly realized that flexibility inevitably carries complexity, and the need of extra training. A free platform proved not to be enough, to solve the problems of small municipalities – that need training for using it, and managing complex operations like the collection, storage and visualization of personal data of participants, which could fulfil all requirements of local, national and European normative frameworks. For this reason, the consortium started offering free support and begun a dialogue with metropolitan and regional governments – negotiating with them the possibility of creating public hubs, to support weaker administrative authorities. In the model we are negotiating with Tuscany, for example, the region would offer in SaaS the platform and trainings and support services.

3 Producing real-time data can help to promote participatory processes improvements on the fly

As noted before, monitoring and oversight tools have been – since the beginning – a pivotal component of EMPATIA, and some pilots leveraged this data to modify organizational features and communicational strategies to achieve their target. For example, in Milan, during the first week of ideation, the real time data of citizens’ enrolment proved the need to immediately change the course of action and invest significantly in new (and previously unplanned) face-to-face meetings and online advertising, to rebalance and enrich the demo-diversity of participants beyond the involvement of “usual suspects”. Thus, Milan City Hall ended up using face-to-face participatory channels the most among EMPATIA pilots, and thanks to this last-minute insertion, the local PB achieved and overcame its foreseen targets in terms of number of participants and quality of deliberation.

4 The systemic approach can be optimized via better monitoring & transparency

Creating a coherent participatory system that seamlessly integrates face-to-face channels of engagement and online ones is a fundamental step to promote better inclusion and trust. However, participatory systems can also reinforce inequalities and depress trust if their design and their mutual integration are problematic. Monitoring their impact closely is a fundamental key in order to evaluate and stress
their capacity of being incisive in policy transformation and conquer a stronger legitimacy. The Milan experiment (which provided a series of monitoring tool of previous edition of participatory budgeting) has been a clear example of such a need. Therefore, the next generation of best practices of participatory decision-making will be fuelled by a constant experimentation and optimization effort based on increased monitoring capabilities. In part due to the EMPATIA project dissemination, now most participatory platforms include basic monitoring modules, however the technology is only relevant if the organizers provide sufficient and timely information on the status of projects.

5
The need of starting a process with inclusive co-design

During EMPATIA testing, co-design of procedures and organizational features proved to be a crucial step to optimize the complexity of a participatory system. However, all stakeholders should be included in the discussions of the entire architecture of the system, from the design of the engagement campaign, to the design of the monitoring system, otherwise there is the significant risk to create a participatory system architecture that will not promote inclusion and will simply reinforce the participation of “usual suspects”.

6
Reinforcing the adoption of frugal technologies can help to scale-up face-to-face participation

A large variety of high quality participatory processes is conducted through face-to-face meetings, which prove pivotal for reinforcing community bonds as well as for improving the quality of citizens’ proposals. These processes are often the most capable to reach out to marginalized or vulnerable social groups, usually difficult to engage for having limited access to technology or no capability to use it to participate in policy making. Frugal technologies, specifically designed to simplify and scale-face-to-face events, showed useful, and were requested by several institutions, well beyond the initial planning. During their conception and testing, we learnt that they need to be produced in a way that can work even in locations without internet and limited power.

7
Focus on quality more than quantity: reducing the channels of engagement might be optimal in some situations

One of the most important lessons learnt through EMPATIA project has been highlighting how sometimes reducing the number of channels of engagement while maximizing their quality and impact generates more convincing results and a stronger legitimation of the participatory processes. Undoubtedly, the current generation of participatory processes is still more focused on maximizing the quantity of participants, than on the goal of promoting a higher quality of proposals and more impactful spaces of participation. The maximization of channels of engagement does not always generate positive impact on inclusion, trust and political discontentment as EMPATIA research clearly show.

8
The added value of EU Commission’s support
As the grant received by EMPATIA highlighted, the European Union can play a crucial role in the promotion of the next generation of participatory systems through sustaining knowledge exchange, and funding projects that can offer to cities that have limited resources and capabilities both flexible platforms of support, and capacity building skills for enhancing the organizational and procedural quality of their process of social dialogue aimed to intensify democracy. Projects that combine both research and innovation, and include interdisciplinary teams of researchers and practitioners, can better promote quality, experimentalism and strong impact evaluation, demonstrating to what extent (and at which conditions) participation is able to increase citizens’ knowledge, efficacy of processes and trust in institutions. Such a mix of expertise can revert the frequent risk that political environments continue to promote the implementation of participatory designs that maximize the quantity of participants but lower the quality of deliberation, without providing the needed monitoring of demo-diversity of participants, as well as the processes outcomes and impacts. The EU support proves crucial also in focusing on ethical dimensions of such projects and can have a strong added value in coordinating the creation of European level datasets that collect long-term data on participatory processes, trying to measure long-term impacts of Digital Social Innovations. In fact, until now, the research dimension of projects on democratic innovations has not been able to promote many comparative analyses based on collaborative and open datasets. On the opposite, it seems imprisoned in a perverse mechanism of continuative and constant reinvention of new impact evaluation frameworks with different standards (often proprietary), for data storage and replication.
INDEX

EMPATIA Enabling Multichannel PArticipation Through ICT Adaptations ...................................... 2
THE ACTION MAIN ACHIEVEMENTS ............................................................................................... 3
EMPATIA’S RESEARCH ...................................................................................................................... 4
EMPATIA’S OVERALL IMPACT ......................................................................................................... 6
The EMPATIA CONSORTIUM ........................................................................................................... 8
1. IMPACT ON TECHNOLOGY ........................................................................................................... 9
   1.1. PLATFORM ARCHITECTURE: FLEXIBILITY & MODULARITY ............................................... 10
   1.2. PLATFORM ARCHITECTURE: APIs ......................................................................................... 10
   1.3. PLATFORM ARCHITECTURE: EMPATIA AS A SERVICE .................................................... 12
   1.4. PLATFORM ARCHITECTURE: PRIVACY, MONITORING, AND TRANSPARENCY .................. 12
   1.5. PLATFORM ARCHITECTURE: AGPL LICENSE ...................................................................... 13
   1.6. EMPATIA SOLUTIONS: INNOVATIVE PROCESSES TO SUPPORT CO-DESIGN ................. 13
   1.7. A HYBRID ECOSYSTEM, MOBILE, TABLET AND KIOSKS ................................................. 16
   1.8. PLATFORM ARCHITECTURE .................................................................................................... 18
   1.9. PARTICIPATION TOOLS .......................................................................................................... 19
2. IMPACT ON THE PARTICIPATORY SECTOR ............................................................................... 20
   2.1. DIRECT INTERVENTION: IMPLEMENTING PILOTS ............................................................... 20
   2.2. PROMOTING NEW BUSINESS & COLLABORATIONS ......................................................... 22
   2.3. COOPERATING WITH COMPETITORS .................................................................................... 25
   2.4. DISSEMINATING KNOWLEDGE ............................................................................................. 25
3. IMPACT ON KNOWLEDGE ......................................................................................................... 30
   3.1. LESSONS ON INCLUSION .................................................................................................... 33
   3.2. LESSONS ON TRUST, EFFICACY AND ANTIPOLITICS ...................................................... 38
4. CONCLUSION ............................................................................................................................... 42
INDEX ................................................................................................................................................ 46
INDEX OF FIGURES ............................................................................................................................ 47
INDEX OF FIGURES

Figure 1: The EMPATIA system ......................................................... 2
Figure 2: Overview of the action ...................................................... 3
Figure 3: The Four Main Pilots Variety ............................................. 4
Figure 4 – EMPATIA Consortium ..................................................... 8
Figure 5 – EMPATIA platform architecture ...................................... 10
Figure 6 - The Lisbon Participatory System ...................................... 11
Figure 7 - EMPATIAaaS multi-tenancy pilots overview ...................... 12
Figure 9 - EMPATIA open data functionality ................................... 13
Figure 10 - EMPAVILLE RPG: Learning Through Failures ................... 14
Figure 11: EMPAVILLE influence on the project ............................... 15
Figure 12: Kiosks & Frugal Technologies ........................................ 16
Figure 13: Participants in the primary pilots .................................... 20
Figure 14: Summary of the Action .................................................... 21
Figure 15 - EMPATIA organized events ........................................... 26
Figure 16 - EMPATIA organized events attendees profile ................. 27
Figure 17 - EMPATIA participation to third party events .................... 28
Figure 18: The Four Primary Pilots ............................................... 30
Figure 19: Lisbon Participatory System ........................................... 31
Figure 20 - EMPATIA DKAN portal .............................................. 32
Figure 21 - EMPATIA dissemination of scientific knowledge overview .. 32
Figure 22: Participants' breakdown ................................................... 34
Figure 23: Cross-selling ............................................................. 40
Report details

<table>
<thead>
<tr>
<th>Project</th>
<th>EMPATIA: Enabling Multichannel PArticipation through ICT Adaptations (Grant nº 687920)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliverable</td>
<td>D6.2: Final progress report</td>
</tr>
<tr>
<td>Leading partner</td>
<td>CES</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Paolo Spada, Kalinca Copello, Giovanni Allegretti, Michelangelo Secchi, Luis Cordeiro and Vitor Fonseca</td>
</tr>
<tr>
<td>Reviewers</td>
<td>All members of the Consortium</td>
</tr>
<tr>
<td>Dissemination level</td>
<td>Public</td>
</tr>
<tr>
<td>Status</td>
<td>Final</td>
</tr>
<tr>
<td>Date</td>
<td>6th of July 2018</td>
</tr>
<tr>
<td>Version</td>
<td>1.0</td>
</tr>
</tbody>
</table>

More info

- Website: https://EMPATIA-project.eu
- Reports and documents: https://EMPATIA-project.eu/reports/
- Open datasets: https://dkan.EMPATIA-project.online
- Code repository: https://github.com/EMPATIA/
- Docker: https://hub.docker.com/u/EMPATIA/

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 687920.