Decidim: political and technopolitical networks for participatory democracy

Decidim's project white paper

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Summary — Decidim [http://decidim.org], from the Catalan for "let's decide" or "we decide", is a digital infrastructure for participatory democracy, built entirely and collaboratively as free software. More specifically, Decidim is a web environment (a framework) produced in Ruby on Rails (a programming language) that allows anybody to create and configure a website platform, to be used in the form of a political network for democratic participation. The platform allows any organization (local city council, association, university, NGO, neighbourhood or cooperative) to create mass processes for strategic planning, participatory budgeting, collaborative design for regulations, urban spaces and election processes. It also makes possible to connect traditional in-person democratic meetings (assemblies, council meetings, etc.) with the digital world: sending meeting invites, managing registrations, streaming content, facilitating the publication of minutes, etc. In addition, Decidim enables the structuring of government bodies or assemblies (councils, boards, working groups), the convening of consultations, referendums or channelling citizen or member initiatives to trigger different decision making processes. Yet, the Decidim project is much more than that. Decidim is in itself a sort of crossroad of the various dimensions of networked democracy and society, a detailed practical map of their complexities and conflicts. We distinguish three general planes or dimensions of the project: the political (focused on the democratic model that Decidim promotes and its impact on public policies and organizations), the technopolitical (focused on how the platform is designed, the mechanisms it embodies, and the way in which it is democratically designed), and the technical (focused on the conditions of production, operation and success of the project: the factory, collaborative mechanisms, licenses, etc.).

Key Words — Decidim, participatory democracy, digital platforms, political networks, free software, public-commons partnership, social innovation, democratic innovation

Document history — This document begun to be written in March 2018 by Xabier Barandiaran and Antonio Calleja-López. Both designed the conceptual structure of the document. Then, the former took the lead in writing passages presenting the core elements of Decidim while the latter took the lead in the historical and theoretical passages. Both of them discussed and heavily intervened in each other's sections. Then, Arnau Monterde carried on a review of and intervened in various sections (specially from 3.4 onward), and was thereby added as co-author. Eloy Caloca contributed to the discussion on datacracy. Pablo Aragón drafted the section on laboratories.

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"Types of machines are easily matched with each type of society--not that machines are determining, but because they express those social forms capable of generating them and using them."

Postscript on the societies of control

Gilles Deleuze.

"Democracy never felt so real"

Decidim.org motto

0. Acknowledgements

Acknowledgement of the project as necessary but insufficient for Democracy. We deeply believe that genuine Democracy shall never be conquered without economic and social democracy, without equality and control over the productive and reproductive networks that asymmetrically flow wealth away from people. Democracy will never fully deserve such a name without re-conquering our living conditions away from all the systems of domination that surround us. Democracy is about the autonomy of the social, there is no democracy when society and nature are dominated by a financial or economic system that become progressively autonomous from democratic intervention. Neither is Democracy possible when parts the population persists dominating others by means of socio-cultural structures that perpetuate this domination (f.i.: patriarchy, racism, etc.). There is nothing magical about digital platforms that is going to solve these problems directly. Decidim, as every other technology, is what people and history make of it. However, we are dedicated (and will continue to do so), to improve digital means for social collaboration, collective intelligence and participatory democracy. Why? A simple way to put it is that, even though digital infrastructures for participatory democracy are not going to solve the problem of Democracy, this problem, we believe, is never going to be solved *without* the adequate digital infrastructures. And if we don't invest social energy into this quest, with each and all the principles that guide our project, Democracy will become increasingly harder to conquer back. The fundamental problem we are trying to address, and this is the ultimate "backend" of Democracy, is an infrastructure for large-scale human coordination that combines the autonomy of each person with equality in participation and collective action, and that wages in favor of the many in the struggles that underlie our societies, todays as always.

Acknowledgement of the many. This project would had never been possible without all the people that contributed to the rise of Barcelona en Comú to the government of Barcelona City Council. The people of Barcelona with their faith on the potential to change government, with their need to stop oligarchic governance, corruption and lobbying in the city and their commitment to create, support and trust a political movement of the many made this project conceivable, possible and sustainable. Hundreds of citizens also participated on the design of the platform, their contributions, conflicts, complains and proposals made this project better. The free software community at large, with its hundreds of tools, infrastructures and knowledge makes it possible for Decidim to stand fully free to use, copy and adapt.

Acknowledgement of the few. All the members of the Decidim Team (Gemma, Joana, Inma, Alex, Joan, Mariola, Mónica, Carles, Pau, Pablo, Nuria, María, Carol, Andrés, Arnau,

Juanli, Josan, Guillem, Xavi, Juanjo, Alicia and Bru) have worked intensely push this project forward. The Decidim ecosystem and the MetaDecidim community is composed of far too many people to name here individually but they nurture and contribute to the project with passion and commitment, trust and rebelion to the way in which market and public institutions are said to work. They are all direct or indirect contributors to this document, their interaction in hundreds of meetings, on Github, on meta.decidim.org and elsewhere is captured on different passages of this document. Marta Clari is responsible of numerous innovative contributions.

1. Introduction

We have been busy building Decidim, it is now time to explain it. The goal of this white paper[1] is to explain in detail the nature of the Decidim project. The paper comes to fill a long lasting gap and outlines what the project is really about, why it is relevant, and how we (the Metadecidim community) have made it possible and developed it so far. It presents the Decidim platform, its features and design principles, but also other dimensions of the project, from the political to the technical. It also outlines the theoretical and political vision, as well as the practical and organizational work behind the project. This document also situates Decidim in a historical context defined by political struggle. Furthermore, it discusses some of the sociopolitical problems it tries to address and the possibilities it opens up looking forward. Authorship of this document entails not more, not less, than putting together, making explicit and elaborating a set of theoretical and practical principles and guidelines that have been developed by a multitude of participants in our community.

How to read this white paper and make it yours. Readers might be interested on different dimensions of the project and we encourage you to find the chapter or section that best matches your interests. The introduction however is worth reading for any of you. We start with a brief explanation of what is Decidim, a definition of the project, how the platform works, the social contract that binds the project together, a description of the community and ecosystem behind it, the model of democracy that it embodies and the three dimensions of the project: the political, the technopolitical and the technical. We next move into the context in which Decidim has been developed to explain why we thought it was necessary to initiate or join this project, why it is relevant today both in the context of a crisis of democracy as we knew it and the context of an increasing control of social digital infraestructures by a few corporations. The rest of the paper is structured along the three planes or dimensions of the project: the political plane explains the model of democracy that Decidim embodies and makes possible, contrasting it with different limitations and models of contemporary democracy (representative democracy and party politics, technocracy and neoliberal models of governance, etc.) highlighting how Decidim makes possible to strengthen new and old forms of participatory democracy, collective intelligence and multitudinous political identities in public institutions and social organizations alike. The technopolitical plane[2] explains how this is made possible through

[1] A white paper is document that expresses the principles, vision, technical details and insights of a project with the goal of explaining, detailedly and contextually, its value, to help others understand, join and support the project.

[2] In short, by technopolitics we mean the intersection and hybridization of technology and politics. This is a conception of politics that focuses on the technical articulation of power, its structure and exercise, highlighting and intervening on devices, interfaces, codes, protocols, networks and methods in contrast with conceptions of politics that focuses on ideas, discourses, symbols and reasons. It is a conception of technology that focuses on its

the platform, its design principles, best configuration practices and the technological articulation of the project's internal politics through the platform: the Metadecidim community. Finally, we extend into the details of the technical articulation of the project: how the software is produced, its architectural details, organizing protocols, legal licenses, collaborative practices, training programs, etc.

1.1. What is Decidim?

Video. https://www.youtube.com/watch?v=zhMMW0TENNA

Intro. Decidim [http://decidim.org], from the Catalan "let's decide" or "we decide", is a digital infrastructure for participatory democracy, a digital platform, built entirely and collaboratively as free software. More specifically, Decidim is a web environment (a *framework*) produced in *Ruby on Rails* (a programming language) that allows anybody to create and configure a website platform to be used in the form of a political network for democratic participation. The platform allows any organization (local city council, association, university, NGO, neighbourhood or cooperative) to create mass processes for strategic planning, participatory budgeting, public consultation, collaborative design for regulations, urban spaces and election processes, etc. It also makes possible to connect traditional in-person democratic meetings (assemblies, council meetings, etc.) with the digital world: sending meeting invites, managing registrations, facilitating the publication of minutes, etc. In addition, Decidim enables the structuring of government bodies or assemblies (councils, boards, working groups), the convening of consultations, referendums or channelling citizen or member initiatives to trigger different decision-making processes. Yet, the Decidim project is much more than that.

Definition: *Decidim is a public-common's, free and open, digital infrastructure for participatory democracy*. It is convenient to explain the terms of this definition in inverse order. By "participatory democracy" we mean that form of "government of the people, for the people and by the people" in which people take part as equals or peers (from latin *pars*, part, and *capere*, to take). By taking part we mean that, under the current political model, that people take the part *of* the sovereign power that belongs to them. And this should be an equal part for each. Moreover, we also mean, under an alternative model, to take part *in* the autonomy of the social and political life, in the construction of collective potency: the capacity to coordinate and commit to collective action. The term "digital infrastructure" makes reference to a set of tools, resources, data-sets, documents, codes (legal, computer, etc.), interfaces and services that are digitalized or made accessible by digital means. This infrastructure is primarily a software platform for participatory democracy. Participants can create proposals, sign and support them, comment, receive notifications, attend public meetings or receive the minutes of the session. Administrators can design participatory processes, define the structure of democratic organs (like councils or committees), configure types of initiatives or set up consultations. The infrastructure also includes documentation, design (icons, images, logos, etc.), legal documents, datasets or training resources, among others. All these make possible to deploy a participatory democratic system in any organization (be it a municipality, a cooperative, an association, a union or a community). By "free and open" we mean that the project's goods (the assets of the infrastructure) do no fall under the form of private property that excludes others from accessing, using, copying, modifying and re-publishing or reusing these resources but,

political dimensions, its mutability and its construction, highlighting and intervening in the power relationships, ideologies and logics in contrasts to views that understand it as value neutral and objective matters.

instead, displays all the legal, technical and social means necessary to share them and open them to collaboration. Finally, the term "public-commons" indicates that the project is mostly financed and made possible by public institutions and is managed and designed by an open community constituted by public-servants, members of different associations, university researchers and students, activists and staff from foundations, workers from different companies or simply volunteers that commit to the principles of the project. For this infrastructure to be a common's it is important that these partners organize democratically in relation to the project. In this sense Decidim is a reflexive infrastructure that uses the very infrastructure to democratize itself through the MetaDecidim community.

Platform features and functional architecture. Since the digital platform displays and embodies both the means of project organization and its democratic principles, it is important to explain how the platform works. Users of the platform (participants) interact through participatory mechanisms known as *components* within different participatory *spaces* that channel their democratic power to specific results. Participatory spaces are the frameworks that define how participation will be carried out, the *channels* or means through which citizens or members of an organization can process requests or coordinate proposals and make decisions. *Initiatives*, *Processes*, *Assemblies* and *Consultations* are all participatory spaces. Specific examples of each of these include: a citizen initiative for directly changing a regulation (*Initiative*); a general assembly or workers' council (*Assembly*); a participatory budgeting, strategic planning, or electoral process (*Processes*); a referendum or call to vote "Yes" or "No" to change the name of an organization (*Consultation*). The more notable components that are combined into spaces to deliver participatory mechanisms include in-person *meetings*, *proposals*, *blogs, debates, static information pages, surveys*, *results* and *comments*. So, for example, the various phases of a participatory budgeting process (where members of an organization are called to decide how to spend a budget) can combine components in the following way: at an early phase, public meetings can be opened for citizens to analyze different needs classified by districts. In turn these meetings can lead to the design of a survey. The survey results can next be used to define a set of categories for projects to be proposed. The proposal component might then be activated for participants to create and publish their projects as solutions to the identified needs. These proposals can be commented on. After a period of deliberation, the voting component can be activated to select among the projects using a budget-expenditure system. Participants can then be called to a public meeting to evaluate the results and an assessment survey can then be launched for those who could not attend the meeting. Finally, the accountability component can be activated to monitor the degree of execution of the selected projects and people can comment on it. This is but one example of how components are combined in a space, but there are many other combinatorial possibilities. What makes Decidim particularly powerful is this combination of components within spaces, which provides an organization with a complete toolkit to easily design and deploy a democratic system adapted to its needs.

The social contract: All members and partners of the Decidim project must endorse and follow a "social contract" that defines a set of guiding principles. The social contract can be summarized as follows: 1. *Free software and open content*: Decidim will always remain free and open to collaboration, without legal or technical obstacles for the use, copy and modification. To ensure this we use a set of licenses: Affero GPLv3 for the code, CreativeCommons By-SA for the content (text, images, design, etc.) and Open Access Database License for data. This means that Decidim will always remain auditable, collaborable, transparent, appropriable and trustworthy, all of which is fundamental for a

democratic infrastructure. 2. *Transparency, traceability and integrity*: the content of participation will always remain transparent, traceable and integral. This means that all the content must be accessible and downloadable, it should always be known what happens with each proposal, its origin, where it was incorporated or why it was rejected, and the content needs to be displayed without been manipulated, any modification (if required) must be registered and be accessible and auditable. 3. *Equal opportunities*: "The platform will offer equal starting opportunities to all participatory objects (proposals, debates, etc.) for them to be viewed, discussed, commented, evaluated or treated without discrimination of any kind" (direct quote from the contract). 4. *Privacy with verification*: participants must retain privacy of their personal data combined with verification. Personal data should never be displayed, nor sold or transferred to third parties while, at the same time, the unicity and democratic rights of participants must be preserved (meaning there cannot be two verified users corresponding to the same individual with democratic rights and all participants with such rights must be verifiable). 5. *Democratic quality and guarantees*: the platform must guarantee the democratic quality, the non-discrimination and equal opportunities for each participant and proposal. 6. *Inclusiveness and multilayerness*: the platform must comply with accessibility standards, its use must favour the integration of online and offline participation and organizations must deploy the means for mediation and training of participants.

Instances. The best known and intensively used instance of Decidim, as a digital platform for participatory democracy, is www.decidim.barcelona, with (as of March the 1st) more than 28,000 registered participants, 1,288,999 page views, 290,520 visitors, 19 participatory processes, 821 public meetings channelled through the platform and 12,173 proposals, out of which over 8,923 have already become public policies grouped into 5,339 results whose implementation level can be monitored by citizens. The instance that actively explores more functionalities is Metadecidim.org, the community portal that designs and supports the project. There is also a demo site with the latest version available for exploration and a training instance open to anybody to learn how to configure, administrate and use the platform. There are currently more than 20 instances of Decidim for organizations of different sorts ranging from municipalities such as Helsinki or Pamplona, to regional governments like the Junta de Castilla la Mancha or the Generalitat de Catalunya, national governments like the Belgium Federal State, NGO networks such as Fundaction or QuorumGlobal, cooperatives like Som Energia, or the National Commission for Public Debate (*Commission Nationale du Débat Public*) in France. We have an online monitoring tool that captures the relevant public data of known Decidim instances around the world..

A sustainable ecosystem. Developed at Barcelona's Laboratory for Democratic Innovation, Decidim is the result of the joint effort of a network of collaborating entities and multiple participants leaded by Barcelona's City Council. Apart from the organizations that use the platform and whose participants and administrators report bugs and suggest improvements, there is a network of 17 different collaborating entities, from software companies to institutional consortia, from research institutions to civil associations. The Metadecidim community uses an instance of the Decidim platform to organize the different dimensions of the project. As of August 7th 2018 it has 379 registered participants, it hosts minutes of 126 public meetings, details of eight assemblies or working groups, four participatory processes (welcome process, bug reporting, feature proposals, and training workshop process) together with various initiatives and two consultations aimed at defining the roadmap and software design of the platform, bug reporting, community and project governance, research and development. Official documentation and code are

developed on Github where the project hosts more than 20 repositories with over 50 contributors. They all together generate a sustainable ecosystem that governs, produces and provides services over the platform (deployment, adaptation, configuration, training, consultancy, administration, etc.).

Democracy and social empowerment: Decidim was born in an institutional environment (that of Barcelona City Council), directly aiming at improving and enhancing the political and administrative impact of participatory democracy in the state (municipalities, local governments, etc.). But it also aims at empowering social processes as *a platform for massive social coordination for collective action* independently of public administrations. Anybody can copy, modify and install Decidim for its own needs, so Decidim is by no means reduced to public institutions. There are different ways in which participatory democracy infrastructures can boost social, economic and political self-organization. Decidim is starting to be used for these purposes: for the internal organization of consumer and producer cooperatives for example, it is also helping movements organize and design strategic planning, and it might soon be used to coordinate massive strikes or other forms of social action. The modular nature of its architecture is also enabling these organizations to develop their own components and improvements (such as crowdfunding, membership management, etc.) and to plug them back into Decidim, expanding its potential. Decidim comes to fill the gap of public and common's platforms, providing an alternative to the way in which private platforms coordinate social action (mostly with profit-driven, data extraction and market-oriented goals). Ultimately, Decidim aims to present an alternative to the existing model of digital economy sponsored by corporate digital platforms (Amazon, AirBnB, Uber, etc).

The political, the technical and the technopolitical. As we have repeatedly stressed, Decidim is more than a technological platform. It has required to assemble a variety of codes, realities and dimensions that go beyond programming code. We define it as a "technopolitical project" where legal, political, institutional, practical, social, educational, communicative, economic and epistemic codes merge together. Ultimately, Decidim is in itself a sort of crossroad of the various dimensions of networked democracy and society, a detailed practical map of their complexities and conflicts. We distinguish three general planes or dimensions of the project: the *political* (focused on the democratic model that Decidim promotes and its impact on public policies and organizations), the *technopolitical* (focused on how the platform is designed, the mechanisms it embodies, and the way in which it is itself democratically designed), and the *technical* (focused on the conditions of production, operation and success of the project: the digital factory, collaborative mechanisms, licenses, etc.). The political plane is best illustrated by the use of Decidim in a city or organization, the type of democratic processes and decisions that are made through it. In other words, it covers what kind of politics can be done using Decidim: what kind of governance, conflict and power relationships can be channelled through it, thus, the kind of democracy it is capable to produce. Its model instance is decidim.barcelona, what happens within, how it alters the political space of the city. The second plane, the technopolitical, includes matters concerning the digital architectural design of Decidim: its interfaces, features, design principles, data policies, user experience, etc. It is a primarily a reflexive space of how technologies structure political processes. It is embodied in the Metadecidim platform and the community that surrounds it. Finally, the technical plane encompasses issues concerning primarily the programming and legal codes (information and legal infrastructures), but is also includes issues of education and knowledge (epistemic infrastructures), spatial and working organization. All three dimensions are part

of the project.

Plane	Relation	Platform	Mode	Scale
Political	Superstructure	decidim.barcelona	Co-decision	City
Technopolitical	Structure	Metadecidim	Co-design	Community
Technical	Infrastructure	github.com/decidim	Co-production	Laboratory

Table 1: Systematization[3] of various aspects of the Decidim project in the political, technopolitical and technical planes with the city of Barcelona as a reference.

1.2. Why Decidim?

The context that has given birth to Decidim is defined by two interconnected phenomena, each of which displays two poles. On the one hand, the last decades have witnessed a crisis of representative democracy (weakening of the Welfare State, subordination to market forces, inability to deal with global problems such as climate change, etc.) as well as the essay with some alternatives, such as grassroots organizations, new parties and institutional forms. On the other, there is the rise of cognitive capitalism, a system where the exploitation of information, knowledge, affects, and social relations become core to the generation of economic value, opposed by the emergence of free software, knowledge and culture. Both phenomena are deeply intertwined, and Decidim is born right at their very intersection, responding to the challenges and opportunities that they open for democracy. In this section, we briefly analyze these two phenomena, with a special focus on the way they impact contemporary democracy.

1.2.1. The contemporary crisis of democracy and its alternatives

Success and decline of liberal, representative democracies. The structures of representative democracy have barely been updated in the last two centuries. The last three decades have seen both their success (with the multiplication of liberal democratic states all over the world) and their decline[4] (as diagnosed in a wide literature ranging from

[3] We have chosen Barcelona here as a scale of reference, but it could be the EU, or any other political territory or democratic organization. The term “scale” does not refer here to territorial extension, but to the number of agents and organizational complexity: the political involves more complexity, more agents, more conflict, more diversity and width of decision to be made, the technopolitical is a smaller community scale, the technical is a laboratory or factory that covers a subset of this community.

[4] The decline has been ongoing for the last two decades, at least (Rosanvallon, 2008), and has been noticed across the “ideological and methodological spectrum” (Tormey 2015: 15). So much so that the crisis of liberal representative democracy has been identified with the crisis of democracy itself (Keane 2009; DellaPorta 2013). Different authors have denounced the technocratic tendencies and the neoliberal hegemony in this same period as heralding a stage of post-democracy (Crouch, 2004) or post-politics (Zizek, 1999; Rancière, 2001), while others, in a more limited way, have used the term "post-representation" to refer to the emptying of power and meaning of representative institutions, by dynamics ranging from globalization and the dismantling of the welfare state to dis-affection and

Pharr & Putnam, 1999 to Tormey, 2015). The decline has been symptomatized in various forms; we will mention two: practically, in the inability of contemporary democracies to deal with problems such as climate change (Klein, 2015) or rising inequality (Piketty, 2014); politically, in the decline of participation and trust in political parties and political representatives, as well as other political institutions (Mair, 2006; Castells, 2017).

Structural limits of representative democracy: the triple challenge of complexity[5]. The structure of modern democracies is based on representation, on a series of mechanisms by which a few actors (political and administrative) manage public issues in the name of the whole of the citizenry, and are (in principle) accountable to it. To deal with complexity, both in society (specially, diversity of interests) and in reality (specially, multifacetedness of problems) more broadly, has been a recurrent challenge. Representation had its roots in medieval institutions, as a mechanism for nobles and knights to push their demands in exchange for consenting taxation (Pitkin, 1967). But it has proven its limits in coping with the complexity of the will. First, it has to face the growth of the franchise, incorporating an ever more diverse constituency, and, second, in the last decades of the XXth century, the rise of consumerism and the ideology of consumer choice (Laclau & Mouffe, 1985; Sennett, 1977, 1998), generating an ever-growing variety of desires and perspectives to be listened to and articulated in government action. Second, because a variety of factors, including the relative independence, long term positions and low numbers of representatives, it has proven open to systemic practices of nepotism or corruption (Buchanan & Tullock, 1962; Peltzmann, 1976). In both cases, the will of the few has ended up imposing itself over the complex wills of the people in public policy. The second key challenge of complexity had to do with reality. As the technoscientific transformation of reality accelerated, the complexity of the problems facing public policy has only increased; and yet many of the systems for detecting social problems and mobilizing social knowledge to address them have remained oligarchic and exclusive. The attack Friedrich Hayek launched to socialism can be launched against representative democracy too: reality is too complex for a centralized decision-making system. The third challenge of complexity fed back into the previous two: it is the challenge (or meta-challenge) of communication and organization. Mobilizing and organizing the will, the knowledge, and the collective action of society faced numerous socio-technological limits: the millions of members composing a given social group could not express their will nor contribute their knowledge and effort to address matters of concern[6]. Still in the XXth century, the time and infrastructure required to bring an expression of will or knowledge of people distributed geographically or laborally into a common problem or decision seemed out of reach. Even if they wanted, people could not gather in assemblies or other political processes: the people were too many, lived far from each other, and had their own schedules (or barely had free time at all). Representative

dis-empowerment (Brito Vieira and Runciman, 2008; Keane, 2009; Rosanvallon, 2011; Tormey, 2015). The readings of "post-representation" are multiple, though, connected with different political readings of the crisis and the potential ways out of it, from those that give conjunctural readings to those that tie it to the transformations of modernity, its subjectivities and modes of sociality (Tormey, 2015).

[5] This section is a theoretical reconstruction of aspects that are historically embedded and power-laden.

[6] Organization or knowledge may be insufficient to solve the problems facing democracy today. However, we there are reasons to believe they can contribute to do so.

democracy, by many electing a few every four years, became a raw and oversimplified mapping of the will and knowledge of many to the management by a few. So raw and simplified that it couldn't solve the problems of society and became one of them: the people's will is never represented but captured, the problems are not solved by politicians, but externalized to the market to be solved, while the problems generated by the market too often remain unsolved.

Technological conditions for going beyond representative democracy: the opportunity of digital networks. The conditions for addressing these problems have partially changed in the last decades with the advance of information and communication technologies. As has been repeatedly stressed, these technologies allow to overcome many of the spatial and temporal barriers that have traditionally haunted democracy: direct participation may take place without people having to share space and time. This allows to think democracy in terms of new scales and forms. From the political or the scientific to the public sphere, ICTs and ICT-based practices allow the circulation of information and knowledge (a form of de-intermediation from traditional authorities and gatekeepers (Castells, 2009)) as well as its filtering on both problems and ways to address them (Benkler, 2006). This may contribute to address the challenge of complexity mentioned earlier. Participatory forms of politics may emerge or consolidate, thanks to digital platforms, contributing to mentioned earlier or to bring about participatory ecosystems rearticulating people´s will and action. Both of these advances primarily result of how ICTs affect forms of organization (Earl & Kimport, 2011). The challenges of complexity remain, but it seems that ICTs and practices associated to them may contribute to address (or transform) those challenges. In section 2, we make some suggestions on how Decidim may help on this regard.

Social limits of representative democracy: the challenge of economic powers and the rise of neoliberalism. The problems of representative democracy today are not of complexity only, though. They have as much to do with issues of social power. Many of the ailments of representative democracy in the last three decades have been rooted in three key shifts of power (DellaPorta, 2013: 23; Offe, 2011: 457): a shift of power from parties and parliaments to executive powers, emptying representative politics of its meaning; from State to Market, with processes ranging from externalization and privatization to the introduction of competition logics in public administration (emptying out the State, Rhodes, 1995, specially, the Welfare State), as well as the rise in power of global corporations; and from nation-states to "international governmental organizations" such as the EU, the IMF or the World Bank, frequently aligned with such corporations, emptying both States and democracies of much of their legitimacy and power (Laval y Dardot, 2017; Crouch, 2011; Sánchez Cuenca, 2014). Political parties have suffered particularly: from the mid XIXth to the mid XXth century, the mass party model was guided by clear programs and rooted in a tupid social structure connected to grassroots social spaces and organizations, unions, media, and so on. The catch all party model rising in the 80s, however, had pragmatic, variable programs and supported itself primarily in mass media (in particular, tv) and polls: a fragmentation of social economic composition, no more easily divisible into "capitalist and proletarians" (Laclau & Mouffe, 1985), and the rise of a mass mediatized and consumer society based on an exaggerated and depoliticising individualism (Sennett 1977, 1998) paved the way for it. The traditional mass party saw a steady decline of its grassroots in Western democracies until today. The aggressive anti-social policies of figures such as Reagan and Thatcher accelerated the process of taming of social forces and actors, starting with unions. This emptying out of representative democracy has coincided with the rise of

neoliberalism[7], and has brought a crisis of legitimacy and meaning of democracy itself, frequently identified with representation (Crouch, 2004; Streeck, 2016). The Great Recession of 2008 (Eichengreen & O'Rourke, 2009) and the austerity politics that followed it (Blyth, 2013) seemed to confirm this shift and its implications, with States first going into debt to save the financial sector and then applying (or being applied) austerity policies without or against citizen consultation, guaranteeing the sustenance of capital accumulation while losing more and more capacity for social provision (Jessop, 2015).

Alter-globalization challenge to the shift of power away from democracy. These processes haven't gone unchallenged. The last two decades have been a period of democratic movements of resistance. At the turn of the century, the alter-globalization movement called for an alternative to the rising neoliberal globalization, an alternative globalization tied to a radicalization of democracy, social justice, human rights, as well as economical and ecological sustainability (Klein, 1999; Stiglitz, 2002). This "movement of movements" had socio-technical networks as a key part of their organizational core. It generated a "cultural politics of networking" in which networks operated not only as technologies, but also as models for the definition of social norms and political forms (Juris, 2008): free association and information, non-hierarchical and flexible organizations, globally distributed but synchronized and locally rooted action, autonomous networked media, etc. were among its key features.

The crisis of legitimacy of the neoliberal-democracy narrative. But it was the 2008 economic crisis that brought about a crisis of legitimacy of the neoliberal narrative. It opened a period of crisis of neoliberalism (Dumezil & Lévy, 2011), not so much in economics (in these terms it lasted only years or months, depending on the country, followed by a deepening of accumulation processes, Jessop, 2015) but, specially, in

[7] By neoliberalism we primarily refer to "(c)hanges in the nature and role of the state following the public-sector reforms of the 1980s and 1990s. Typically, these reforms are said to have led to a shift from a hierarchical bureaucracy toward a greater use of markets, quasi-markets, and networks, especially in the delivery of public services" (Bevir, 2007: 364). Neoliberal advocates of these reforms departed from a critique of the Keynesian Welfare State as unmanageable, unsustainable and ultimately contrary to economic development (in continuity with the early neoliberal critiques to socialist planification---Hayek 1945). A core tenet was that "the state is inherently inefficient when compared with markets", so that it should "concentrate on making policy decisions rather than on delivering them" (ibidem, 365). Differently, the model of an "entrepreneurial government", reliant upon competition and markets, should call for government to "steer" rather than "row", it should make policy to be implemented by markets (or institutions following similar logics): these are basic ideas of the so called New Public Management and its model of governance. A first key to neoliberal New Public Management (NPM hereafter) has been marketization: processes of outsourcing and privatization of public services and bodies. Especially in countries such as the US or the UK, this advanced a process of "hollowing out the State" (Rhodes, 1995) and made it reliant upon a variety of private actors for the implementation and success of public policies. A second strategy is that of "corporate management", which implied the introduction of incentives and metrics coming from private management into public administration: focus upon and evaluation of results, higher quantification of performance, customer attention, or resource optimization tied to budget reduction.

political and social terms: the discredit of the ideology of the primacy of free trade, privatization, international economic institutions, and global markets preeminent since the 80s spread along with new political movements, from the progressive to the reactionary. This crisis specially fed into the crisis of representative democracy mentioned earlier, with a peak of distrust towards official institutions, from politicians and governments to banks. The result has been a crisis of the existing model of neoliberal representative democracy (Castells, 2012, 2017; DellaPorta, 2013; Gerbaudo, 2012, 2017).

The 2011 wave of networked movements of the squares. 2011 is a key year in political terms. Progressive social movements swept the world, from the Arab Springs in the North of Africa to Occupy Wall Street in North America: they challenged the political and economic status quo and the rising inequality, while reclaiming a more radical democracy (Postill, 2017; Gerbaudo, 2012; DellaPorta, 2013, Flesher Fominaya, 2014). The 15M movement was among the key referents of this wave of networked movements of the squares, which used digital networks (by then reaching millions of people in the countries affected) to self-organize. In Spain, it was at the upshot of a cycle of contention that saw the emergence of new forms of collective organization (from the networked squares of 2011 to the direct action tactics of the Platform of People Affected by Mortgages Romanos, 2014), new political parties (from Podemos to Barcelona en Comú), and the taking of power of dozens of cities by citizen initiatives in the Spring of 2015 (Cádiz, Barcelona, Madrid, A Coruña, etc. Feenstra et. al, 2017). The uses of digital platforms were crucial in all of these undertakings, and has been oriented to facilitate and increase the depth of participation of anyone and everyone into the political field (Aragón et al., 2017; Calleja-López, 2017; Monterde, 2016; Toret et al., 2015). As in the 2000s, digital networks seemed to provide a space in which the disaggregating forces of neoliberal society could be partially and temporarily countered and redirected to nurture collective action. The upward extractivism global finance and corporations were partially answered with democratic, locally rooted and globally connected initiatives. In the case of Spain, the struggle around the city, from the squares of 2011 to city halls in 2015, has become ever more relevant in this trajectory, in the form of municipalism (Rubio-Pueyo, 2017; Junqué & Shea, 2018).

The rise of right-wing populism. But these achievements have showed limits and perils, too. At the international scale, the wave of movements tended to fizzle out. In countries such as Spain and Tunisia, the movements left new parties or constitutions, even though the general political and economic landscape remained gloomy (Castells, 2017); in countries such as the US or Egypt (or Spain itself), the situation in the short or the long term has been the advent of increasingly authoritarian governments. Moreover, right wing movements spread across Europe and North America (Castells, 2017). The final result has been defined as the end of the neoliberal era and the advent of a populist moment (Gerbaudo, 2017; Rodrik 2017), in which the basis of the status quo loses its compelling power and is challenged by actor interpolating the common people, from left and, so far more successfully, the right, exemplified in the West by the rise of Donald Trump to the presidency of the US or the Brexit. The various negative effects of neoliberalism particularly accelerated after the Great Regression, in such as increasing inequality, the normalized connivance between economic and political power, the dismantling of welfare structures while public debt rises, social and political disempowerment in the face of transnational corporate and financial powers, the eclipse of the public sphere resulting to both anomie and closed multiculturalism, along with the backlash towards some progressive politics in the previous decade (f.i.: LGTBI rights), have generated a suspicion towards the status quo in which nationalist positions are gaining ground. In many cases, such a rise was facilitated

by corporate social networks such as Facebook and Twitter, used by corporations (such as Cambridge Analytica), or political actors (such as the Trump or the Brexit communication teams). We analyze the various edges of this phenomenon in the following chapter.

Resuming, in the political plane, the last decades have witnessed the tension between processes showing the limits or undermining democracy and others trying either to stop them, or even to radicalize democracy. Decidim is firmly rooted in this last trend.

1.2.2. The rise of the network society, cognitive capitalism and knowledge commons

First generation digital networks: informational networks. A similar opposition between conservative tendencies and progressive ones can be found on the moving field of the so-called digital economy. The 90s saw the rise of the Internet and the WWW to the status of phenomena of global proportions. The initial hopes for the cyberspace envisioned by figures such as John Perry Barlow (in this Declaration of Independence of Cyberspace) anticipated a time where many of the old social structures would be superseded by a new dawn of human creativity and freedom from old governments and social constraints (bodies, sexes, races, etc.). Since its origin, the construction of the internet resulted from the conflicting interests, visions, and practices of various actors (Abate, 1999; Rasmussen, 2007), specially, military and research actors. The idea of a distributed (and thereby resilient) information network was tied to the threat of possible high scale attacks to information centers by the Soviet Union (Baran, 1964), but even more so to practices and narratives of information and knowledge circulation and freedom among university researchers (Leiner et al., 1997). Already in the 1990s, a first generation of worldwide digital networks, informational networks, paradigmatically exemplified by the World Wide Web, allowed free the flow of information and users between websites.

Old and new communication powers: from mass communication to mass self-communication. This seemed to be the dawn of a "networked public sphere" (Benkler, 2006), where earlier mediators of social communication receded from view. The XXth century protagonism of capital-intensive media such as radio, newspapers or TV, with their olygocratic editorial teams, seemed to give way to an explosion of uncensored digital media such as websites and blogs. Social communication was said to be in its way to de-intermediation, its power to be more equally distributed (Rushkoff, 2002; S Republic of Letters in XVIIth and XVIIIth centuries), had been shaken in the XIXth and XXth centuries by technologies that afforded one-to-many circulation of informhirky, 2009). Early modern communication ecologies, based in one-to-one interactions, either face to face or via letters (which still generated complex systems such as theation such as newspapers, radio or TV: this was the model of broadcasting, which potentiated a centralization of social communication, mass communication, where a the majority of the public played a passive role. The Internet and social media afforded new versions of these earlier communication models, and combined it with a new model, that of many-to-many communication, in which many emissors were able to generate (and react to) messages reaching many others, without having to pass through any mediating center (Kellner, 1999). This was giving way to "mass self-communication" , a model in which mass communication is "self-directed in the elaboration and sending of the message, self-selected in the reception of the message, and self-defined in terms of the formation of the communication space" (Castells, 2009). This did not imply an equal redistribution of communication power in society but rather its re-structuration, with new actors, including networked social movements, having an opportunity to play a role in a media sphere earlier controlled by big corporations. The fourth power of mass media journalism gave way to a fifth power: digital networks (or

perhaps to a complex, more decentralized form of the fourth, a “hybrid media system”, Chadwick, 2008).

The rise of informational and cognitive capitalism. The Internet and digital networks did not only affect the public sphere in a potentially democratizing tendency, they also greatly contributed to push globalization forward as a historical process, beginning with the acceleration of global finance (Castells, 1996). At the core of the economy ticking behind neoliberal globalization there was information and other immaterial assets, such as knowledge, affects, human relations, etc. The result was a new form of capitalism: informational and cognitive capitalism (Castells, 1996; Fumagalli, 2007; Moulier-Boutang, 2007; Vercellone, 2006). Differently from industrial capitalism, where the transformation of material resources into commodities was at the core of the process of capital accumulation, now it was information, knowledge, affects, and social relations what became key in the generation of economic value. Intellectual property is a key legal mechanism under this new paradigm, used to privately appropriate social knowledge and natural information, e.g.: strong copyrights on books and music, patents on technoscientific innovations, traditional medicines and techniques, or animal and plants DNA (Fumagalli, 2007). This in spite of the fact that information and knowledge are non-rival goods, with zero marginal cost, meaning that they can be reproduced and used without depletion. Furthermore, in most cases their value increases with use: the bigger the spread of trademark the higher its value, the more a song is listened to the higher its value. While digital networks provide the means to freely reproduce and re-distribute this kind of goods, artificial scarcity is generated via legal and technological mechanisms. This appropriation has not only the form of a “theft”, but is rather based on structures and processes (from education to entrepreneurship policies) that orient, transform and produce new personal and collective practices, desires, affects and relations sustaining the neoliberal system (Laval & Dardot, 2014).

From cognitive capitalism to platform & surveillance capitalism. In time, the digital element in these processes has only gained prominence. The so called web 1.0 (O’Reilly, 2005) exhibited various limits to users’ interactions with both digital contents and other users. Differently, web 2.0 was all about interaction: the web as a platform. This exponentially increased the quantity and quality of information that could be extracted. By the late 2000s the emancipatory hopes tied to social networks were heavily in dispute (Morozov, 2011), and by the late 2010s the situation seems to be rather the opposite of the anticipated. From Amazon to Tinder, technological platforms are a way for a few corporations to extract data (going from activity, to opinions, to metadata), while leaving users with a little a say on what is gathered, how it is used or how the resulting benefits are distributed; this institutes a regime of “data extractivism” (as suggested by Evgeny Morozov). These corporations have access to more details of the lives of millions of people than any State or corporation to date. Combined with the development of new techniques of big data analysis and the always increasing rate of computing power, the infrastructural conditions were there for a socioeconomic mutation. Corporations such as Google or Facebook were heralding a specific form of informational and cognitive capitalism, which has been variously qualified as “platform”, “data” or “surveillance” capitalism. These three names speak of three connected elements: digital infrastructures, data, and social control. Digital platforms have become the basic means of production and management of a valuable resource (data) out of its source, human activities (Srnicek, 2017). Data, considered as the new “oil” (The Economist, 2017), “infrastructure” (Kawalek & Bayat, 2017; Prospect, 2017), “labor” (Arrieta et al., 2017), etc. is processed using data science

methods and business intelligence (from modern statistics to Artificial Intelligence). Then, it is used in various ways in social processes of data-driven politics, science and economics (Lohr, 2015). This process of extraction, processing, and use is radically oligarchic. Corporations such as Alphabet (which includes Google), Microsoft, Amazon or Facebook have earned a monopolistic position[8]. A few actors have become the owners of both platforms and data and can thereby surveil social life in order to experiment with it: surveilling thereby appears as a first step to what we may define as "surwilling", or willing and shaping the will of others from above; otherwise, platform corporations move from unveiling social life to orienting (or "willing") it from above. If surveillance intrudes into privacy, into the negative freedom of people (to use Isaiah Berlin's), into their freedom-from, surwilling shapes their positive freedom, their freedom-for. Platforms crucially influence the information people get about others and about the world, be it from friends, social actors, mass media, advertising corporations or beyond. The result is the emergence of new forms of knowing and influencing the actions of millions of people, a new techno-political power in the hands of States (such as NSA programs), corporations, or political actors (such as the Trump or the Brexit communication teams). This surveillance (Zuboff, 2015) and surwilling capitalism brings ever closer to a Big Brotherhood dystopia.

Towards technopolitical heteronomy? From mass self-communication to mass capture. Social networks such as Facebook or Twitter have grown to user bases in the billions in only a decade. This has turned them into new intermediaries of social communication, if not of social life as such. Mass self-communication has risen hand in hand with mass capture, the capture of masses of data, human actions and interactions. These platforms feed from, and feed on, some dynamics already diagnosed by Guy Débord (1967) around the society of the spectacle, heralding a society of hypervisibility and exhibition tied to capitalism. Exhibition and self-exhibition (from the intimate everyday life to political opinions and actions, passed through a variety of fiction filters), are stimulated and situated at the center of the functioning of these platforms (Crogan & Kinsley, 2012; Goodwin et al., 2016), which are in turn at the center of an economy of attention. Furthermore, in social networks, surveillance and control is not only top-down but also bottom-bottom. There are two axes of surveillance, vertical and horizontal. While the first tends to be unidirectional, the second is frequently (though not always, as platform privacy settings are variable) horizontal and multidirectional: users can and do surveil each other, with playful or predatory (Albrechtslund, 2008; Tokunaga, 2011) purposes. The monopolistic concentration of power around social network corporations becomes daunting: Facebook, for instance, also owns Instagram and Whatsapp. Key rules of social relations are not produced in and decided by processes, actors or conflicts spread in space and time, but rather are increasingly decided and designed by a reduced number of people and specific interests (geostrategic, economic, etcetera). The power of social networks moves from selling advertisement (a concrete type of content) to a deeper shaping of social attention and affects (Grizzioti, 2016), and thereby, behavior. The social anomie resulting from several decades of neoliberalism had given way to a landscape in which the autonomy resulting from new forms of multitudinous self-organization in networked social movements was underlied and exposed to new forms of corporate influence via

[8] Alphabet, Microsoft (a giant from the early days of cognitive capitalism) and Amazon occupy three of the four top positions of the rankings by market capitalization. Facebook occupies the 8th place, but remains the third most visited web, with Google and Youtube (both owned by Alphabet) being the first and the second, according to Alexa and SimilarWeb, as of March 2018.

technologies, that is to say, technopolitical heteronomy.

How datacracy is dissolving democracy. Democracy became exposed to datacracy, namely, to the strategic use of big data and digital platforms to gain and exercise political and cultural power (Cancellato, 2017; Gambetta, 2018). The rise of Barack Obama in 2008 and Donald Trump in 2016 to United States presidency are examples of how social networks and big data operations have a growing impact on electoral processes, affecting the networked public sphere. Trump invested 94 million dollars in expert consultants and Facebook's paid advertising services (The Guardian, 2017). More importantly, the campaign included numerous examples of political automation: the use of chatbots, posting bots, false profiles and the automated inflation of metrics and followers (Bessi & Ferrara, 2016). These were frequently tied to the diffusion of *fake news*: biased, incomplete or spurious media stories with exaggerated and emotional adjectivation (Graves, 2018). This fed back with the activity in platforms such as 4chan, Omegle, Reddit and Tumblr, where Trump's followers formed an irregular community, self-appointed as *Alt-Right* (Nagle, 2017a; 2017b), which showed clear manifestations of sexism, xenophobia, islamophobia, anti-feminism, intolerance and white supremacy, openly or in the form of satirical jokes and memes (Mendoza-Denton, 2018, Van-Zuylen Wood et al, 2018; Pollard, 2018). He may also has been supported by Russian espionage and communication experts, who received large financial incentives, showing the geopolitical character of these technopolitical struggles (The Guardian, 2018a). Finally, there was the hiring of London consulting company Cambridge Analytica, which extracted personal data from 87 million Facebook profiles between 2014 and 2016 to analyze their political preferences (De Llano, 2018), using a Facebook application disguised as a "personality test" (Cadwalladr, 2018; The Guardian, 2018b). This is not exceptional, though. Cambridge Analytica intervened in the last presidential campaigns of Argentina, Mexico, Brazil, Sri Lanka, Malaysia, China, Australia and South Africa, as well as the referendum that caused the separation of Britain from the European Union, known as *Brexit* (The Guardian, 2018b). These cases have drawn public attention to issues such as the vulnerability of online personal data, the power of corporations and States that can access these databases (either legally or illegally) and use these platforms for influencing and shaping public discourse and action (Mottram, 2018; Tufekci, 2018). In words of Facebook's founder and president, Mark Zuckerberg, the platform has no affinity with any political party, and any client can access its services (Price, 2018). However, Facebook algorithms keep working as "black boxes". Zuckerberg's company has never shared details of its technical operation or data processing software or policies besides the content of Facebook's terms of use, which still remain general, abstract, and non-negotiable. This opacity becomes ever more problematic as the role of platform algorithms, political automation and Artificial Intelligence (including machine and deep learning) systems grow (Trevathan, 2006; Manovich, 2013; Zysman & Kenney, 2015, 2016). Datacracy will pervade more aspects of people's lives to the extent that the increasing pervasiveness of digital platforms grows and follows the current corporate and technocratic logics.

Free software, knowledge, culture, and internet. However, in continuous struggle and contact with these dynamics there has also been a proliferation of actors, movements, practices and projects oriented by principles such as democracy, freedom, social justice, or commonality. For instance, as an alternative to commercial social networks, also in the second half of the 2000s, there emerged alternative social networks, from Diaspora (with more than one million users) to n-1, a platform widely used during the 15M movement, together with a self-managed network of blogs (wordpress), voice-call rooms (mumble) and

collaborative real-time writing pads (etherpad). They followed in the steps of a tradition dating back, at least, to the 1980s and 1990s: the WWW and free software such as the GNU/Linux operating system, have provided free digital services (free as in "freedom" and not only as in "free beer", as Richard Stallman put it[9]) to millions of people over world. Furthermore, the GNU license was a legal tool to produce and reproduce such free digital infrastructures. The Creative Commons license expanded its possibilities to cultural works. First, free software licenses and, later (as the principles and practices of free software spread to other fields, Kelty, 2008) creative commons licenses helped to outline an alternative paradigm of collective appropriation of informational and cognitive wealth. Projects such as Wikipedia brought the free software culture into knowledge. This neatly fitted with the discourse of scientific knowledge (Merton, 1942), traditionally self-proclaimed universalism, communalism, and disinterestedness, specially up to the 1980s and landmarks such as the Bay-Dohle Act, that put science into a path of closure, privatization, and corporate interestedness. By putting the classic Encyclopedia Britannica and Microsoft's Encarta out of business Wikipedia became an example of and alternative "open knowledge" regime, from its production to its appropriation. Softer forms of this regime, such as "open access", have gained solid ground in time. Under this alternative paradigm, platforms for digital collaboration became key in the collective production of information and knowledge out of the proprietary logics of informational and cognitive capitalism. The broad category of "digital commons" has served to encompass a variety free software, knowledge and culture products. More broadly, the term FLOK (Free/Libre Open Knowledge) includes also non-digital forms of knowledge that generate common practices and democratic communities out of the proprietary form: from education to hardware, from engineering to culture, from biology to software (Villa-Viñas & Barandiaran 2015). More recently, struggles around Net Neutrality (have brought to the front the centrality of the control of concrete aspects of a common such as the Internet (in this case, the discrimination a types of data traffic on the network by service providers and governments) for the flourishing of other basic rights such as freedom of speech or equality in the network society[10].

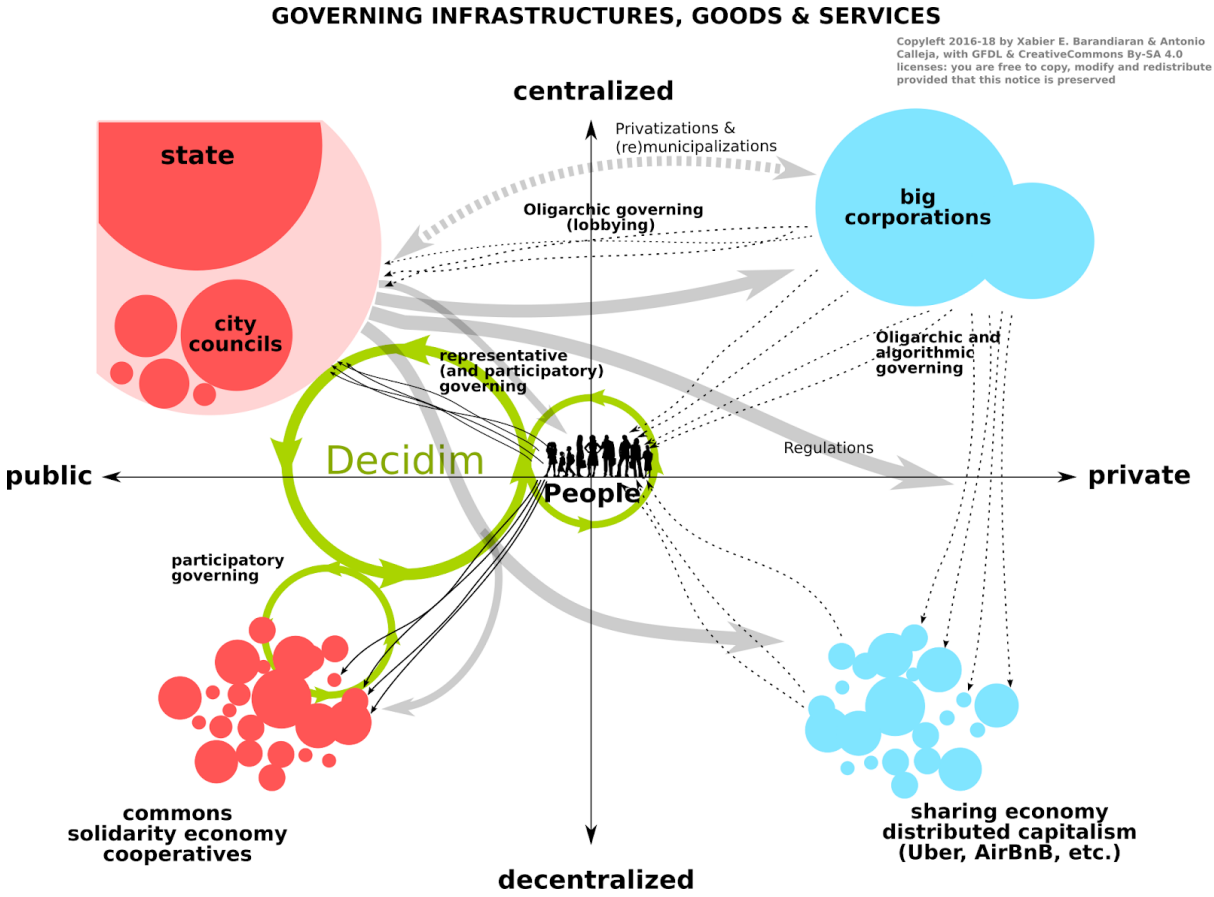
Hacker culture, digital communities and knowledge commons. Free/Libre and Open Knowledge does not stand simply as a commodity or a good that is accessible by means of legal and technical devices. It is followed and often preceded by certain forms of social relation, modes of production and the collaborative culture that is necessary to produce and sustain it. The hacker culture, often associated with an ethics of fun, openness and sharing (Himanen, 2003), is even so with concrete practices (Kelty, 2008) and forms of politics (Barandiaran 2003; Maxigas, 2012); crucially, it involves the attitude to transform the way in which artifacts (in its broader sense: from institutions to modems) are given to us in order to open them up to new possibilities: a practical believe on the capacity (both individual and collective) to challenge existing limits and to collaboratively explore how to break, re-assemble and build upon what is available. In doing so communities are created around technical challenges, common infrastructures, collective resources and struggles. In turn, these communities are faced with a myriad of governing problems and these are

[9] The four basic freedoms are the freedom to run the program for any purpose; to access its source code, study how it works, and change it; to redistribute copies; to distribute copies of modified versions. They can be retrieved at https://www.gnu.org/philosophy/free-sw.en.html.

[10] Various reports and a history of the battle around Net Neutrality can be found at https://www.laquadrature.net/en/Net_neutrality.

solved by a combination of recursive tools and democratic/collaborative procedures: from the mechanisms to solve disputes in Wikipedia, to the voting procedures of the Debian community, from Forks (the duplication of the content and resources of a project to create a new one, something that is made possible by the non-proprietary form of knowledge and technologies involved) to version control systems in software development. Added to the unlimited reproductive capacity of digital goods, all this provides the sphere of Free/Libre Open Knowledge with a productive power and collective management capacity that results on a knowledge commons that often parallels that of profit-driven corporations and has been the object of extensive study (Hess & Ostrom, 2007; Benkler, 2006).

Decidim in context. As we have shown, democracies in the network society face the double challenge of the crisis of representative democracy and the rise of platform capitalism. The first phenomenon is tied to neoliberalism (and its periodic crises) as well as to the emergence of progressive and reactionary networked politics. The second phenomenon underlies new social conditions as well as those very forms of networked politics, while it is opposed by commons-oriented forms of production. The following image can help to understand the role of Decidim in this context.



Under platform capitalism, corporations extract social data in huge quantities and turn it into wealth and power over people and institutions (this is what, in the image below, we label “algorithmic governance”), challenging democracy as we know it. New forms of distributed platform capitalism (airbnb, uber, deliveroo, etc.) herald forms of capilar exploitation of social wealth. However, non-corporate, collaborative forms of digital production exist, and they make possible to find alternatives. Decidim is one such alternative. It is conceived as a commons’ digital infrastructure for participatory democracy that is publicly supported and democratically designed, using itself for such purpose. The

value of Decidim stands out in a context in which democratic collective intelligence faces the challenge of corporate artificial intelligence and datacracy, where the democratic impulse of networked social movements, from alter-globalization to 15M, faces reactions by market, State and right wing forces, and where public and commons' institutions require democratic innovative infrastructures to overtake market-driven innovation in solving the complex social challenges of our times. Whereas a dominant trend pushes the governing of infrastructures and services to the top-right of the picture, towards increasing privatization and centralization in the hands of big corporations, the socio-technical potential exists to shift this trend towards the bottom-left corner: towards decentralized and public-common's ecosystems of services, infrastructures and goods. Decidim contributes to this transition by boosting democratic participation into the governing of public bodies, social organization, the cooperative economy as well as the joint circulation among the three. So far, public emphasis has been put into regulating consumer markets, corporate governance and economy as a means to slow down privatizing trends and its negative consequences; meanwhile, corporate interests keep exerting their lobbying influence into the public and state institutions. Instead, Decidim contributes to the strengthening of innovative forms of commons-oriented economy and participatory democracy. The next section deals with "how" this strengthening operates, explaining how Decidim explores the potential of participation at various scales.

1.3. How to Decidim: Barcelona's participatory strategic planning as a case study

Participatory democracy for strategic planning, a case-study in Barcelona. AQUÍ VA UN RESUMEN CON DATOS DEL PAM.

2. The political plane: Decidim as a participatory democracy (eco)system

Decidim is an infrastructure for participatory democracy and technopolitical democratization, not a tool for digital democracy. The last decades we have witnessed an explosion of tools and literature on electronic democracy, e-democracy, or cyberdemocracy (Hacker & Van Dijk, 2000; Fuchs, 2008). It is often, but not always, the case that many of such projects stop at a rather superficial vision of Democracy with the goal of channeling "ideas", "petitions" or "requests" to authorities without further deepening into the nature of democracy. Just as there is no electronic health, health is biological and social, there is no electronic or digital democracy[11]. Democracy is about social and political power, and Decidim is a project that aims at transforming them. The digital in Decidim is never meant to substitute other arenas of politics, like public meetings or councils, demonstrations or strikes, but to connect them and to restructure them, make them transparent and systematize outcomes and participatory opportunities. Hopefully, "augment" them too. If, as a platform, Decidim does not transform political power relationships beyond the digital, it will not be fulfilling its goal. The type of transformation we are speaking of can be labeled as a "technopolitical democratization" (Calleja-López,

[11] We are aware that the terms "digital democracy", "electronic democracy", "e-democracy", or "cyberdemocracy" are generally used as implying electronic or digital means for democracy (see, f.i.: Hacker & Van Dijk, 2001). The usage of these terms, however, too often risks falling into superficial aspects of democracy and do not always conceive the complexity of democratic life and the struggles behind it. We thus prefer to address the issue of democracy altogether, and, generally, do without the electronic/cyber/digital prefixes. When we use the a prefix, we prefer networked democracy, as it points towards new social forms, practices and imaginaries beyond the digital (Juris, 2004; Latour, 2005).

2017), historically inspired by the 15M movement on the field of politics and the free software movement on the field of technology, it aims to democratize both politics (as the 15M movement aimed) and technology (possibly beyond what the free software movement did) order to democratize a broader array of social fields. Decidim operates as a mediator and model of such democratization, whose political meaning is discussed in more detail in the following sections.

Participatory vs oligarchic governing. Decidim affords (in technical terms, not in socioeconomic ones) processes by which actors of a social group can take part in collective life as peers or equals, or, depending on how it is configured, a few (the administrators, governing bodies, or experts) and the many (the members of the organization or citizens) enter into a dialectic negotiation for decision making. This is what we may call "participatory governing", but that is not the model by which key forms of social organization are run today. Rather, oligarchic governing is the rule, a form of organization in which only a few actors fully take part in decision making. This is the case in those dimensions of social life that intersect with power, such as politics, communication, knowledge and the economy. In the political plane those holding representative power rule, a ruling class of a few, often taking the form of a political elite. In the economic plane those holding property and capital rule, where the accumulative dynamic of the market leads to oligarchy. As seen in previous sections, the XXth century was a time that saw the rise of mass media oligopolies in the field of social communication. Meanwhile, knowledge has also been increasingly monopolized by a few corporations and certified experts. As a digital infrastructure Decidim works against these tendencies, internally (as a socio-digital ecosystem) and externally (in the social milieu in which it operates). It is specially oriented to do so in the fields of politics and social communication. However, its use could also be expanded to knowledge and economic fields.

2.1. Decidim, models of democracy, and its discontents

Four models of democracy. In the previous two paragraphs we have talked of participatory democracy, a notion at the core of the Decidim project. The following ones begin to clarify what we understand by it. Democracy is a complex concept and reality, it "can be separately, concurrently, or simultaneously a civic activity, a regime, a form of society, and a mode of government. Furthermore, each of these four dimensions can be perceived in several different ways" (Rosanvallon 2011: 225). There are different models of democracy (Held, 2006), and each of them shapes differently those four dimensions. Four classical models are the direct, the representative, the deliberative and the participatory. These models often overlap. Deliberative democracy can accompany different modes of direct or representative democracy, and it is possible to interpret direct democracy as a subclass of participatory democracy (e.g.: as a digital infrastructure for participatory democracy Decidim includes mechanisms of direct democracy).

Direct democracy. Following the Athenian example, direct democracy was, for many centuries, the model of democracy as such. Its basic principle is that citizens can participate in and decide upon public matters directly. In Athens, delegates existed, but they were rotatory in character and sortition played a role in the selection, guaranteeing a form of radical equality among citizens. The primary institutions were: the assembly, composed by all adult males qualifying for citizenship (which included owning property) and deciding upon relevant matters (f.i.: declaring war), legislation, or choosing and recalling military magistrates; the boulê, a council of 500 citizens chosen by lot (renewed periodically, such as once per year) and charged with running the daily issues of the city;

and the law courts, which included hundreds of jurors chosen by lot. Today, direct democracy mechanisms are combined with or subsumed under representative democracy; its three key mechanisms are the referendum, the citizen initiative and recall. The key mechanism is the referendum, by which the entire electorate of a given jurisdiction is called to decide upon a public matter. When the vote is called by the government, we have a plebiscite. The initiative is a petition formulated by citizens, which must gather a given threshold of voter signatures in order to be considered either by representatives or by the whole of the electorate in referendum. Finally, recall is a direct vote through which the electorate can remove a representative at any time. In general, direct democracy forms frequently imply the direct making of executive decisions and lawmaking. The paradigm of modern direct democracy is Switzerland, which includes these mechanisms at the local, regional and state level, and a tradition of frequent use of them. Out of the 117 countries that self-define as democratic, 113 of them include some of these mechanisms, and 80% of them have held at least a nationwide referendum on legislative or constitutional matters[12].

Representative democracy. The second model, representative democracy[13] only was constituted as such in the XIXth century. Originally, representation was a way for the King to ensure resources and allegiance from nobles and knights by recognizing some of their demands (thereof the classical "no taxation without representation", Pitkin, 1967). It had little to do with democracy, which was seen as unstable system still at the time of the American and French Revolutions: US and France were born or reborn as republics. Only in mid-XIXth century, through social struggle, the franchise became big enough (universal male suffrage, still excluding women) for "democracy" and representation to converge in public discourse (Costopoulos & Rosanvallon, 1995; Graeber, 2013). Oligarchic structures were maintained in the process of extending the franchise, and were even legitimate, given the size and complexity of the social bodies thereby emerging, in a time when people were excluded from education and from the possibility of directly intervening in politics by reasons ranging from lack of economic resources to precariousness of communication systems. It was a way of electing people that could consider matters in the light of expert knowledge and calm judgment, in search of the general good, while being sensitive to the views and wills of the people (via election) (Pitkin, 1967). In this model, citizens are periodically (usually, every few years) called to select representatives that produce legislation and enact public policy. In most cases, these representatives are divided into two key institutional powers: the executive (which makes public policy) and the legislative (which develops legislation). The third institutional power, the judiciary, is composed by selective bureaucratic procedures, and is charged (among other things) with guaranteeing that the other two abide to the framework of laws that anchors the system. In some countries the judiciary is also open to election systems.

Deliberative democracy. This third model, which gained momentum in the 1990s as a response to calls for participation in previous decades, stresses "the need to justify decisions made by citizens and their representatives" (Gutmann & Thompson, 2004: 4). The key is the "reason-giving requirement". It is also important for this notion of democracy that people have room to change their preferences during deliberation. What legitimates political decisions and laws is not the fixed will or interests of the individuals or their representatives, but rather "the process of its formation, that is, deliberation itself" (Manin, 1987: 351). The deliberative approach aims to inform opinions, to reveal and test interests,

[12] See data at https://www.idea.int/data-tools/question-view/482.
[13] For some, an oxymoron, given the oligarchic character of representation (Manin, 1997).

and to shift those opinions and even interests by "no force except that of the better argument" (Habermas, 1976: 108). It is compatible with both direct and representative democracy. However, it does not only focus on State institutions, it "works instead with the higher-level inter-subjectivity of communication processes that flow through both the parliamentary bodies and the informal networks of the public sphere" (Habermas, 1994: 8). In this way, civil society turns from a market-first space into the basis of "autonomous public spheres", independent from both the market and the State administration. Although public opinion "cannot rule of itself", it orients the exercise of State administrative power. Beyond these general theorizations, concrete processes and mechanisms of deliberation have been designed. Two of them are deliberative polls, deliberative referenda and citizen juries. The first is focused in outlining what people may think if fully informed: practically, it consists in a process involving a representative sample of citizens that discuss public issues or policies, calling competing experts to provide information, with opinion polls run among participants both before and after the discussions for registering any changes in positions, and a disseminating of the results and insights of the process. On the other hand, deliberative referenda are referenda that includes elements that explicitly foster deliberation, such as: a) citizen juries (a set of randomly selected, representative set of citizens that interact with experts) reviewing the questions to be asked, helping to educate the public on the issues at stake, or publicly answering to the referendum; or b) educative tutorials before voting.

Participatory democracy as a model of society. The notion of "participation" is core to Decidim: it ties together a set of principles, conceptions and motivations of the project. The term comes from the latin "pars capere". We translate "pars" in a twofold way, as "part" (as in "this part of the country") but also as "peer", "pars" has a connotation of reciprocality and a very ancient Indo-european root. On the other hand, "capere" means "to take", "to grasp", it is an action, not something given or passively held by law or by nature[14], but something that needs to be captured. Participatory democracy is a model that involves forms of civic activity, political regime, sociality, and government in which people can *take part as peers* (pars capere), actively *take* and exercise their power, and where the conditions for this to happen are present. It points to collective processes where control is exercised either by all the members of a group or by those affected by it. This is different from the representative model, where people primarily (although not only) take part in choosing those that govern for them. It is also different from the liberal representative democracy, where democracy stops at the gates of the factory and the market: in the economic sphere people participate unequally, depending on their access to money. Participatory democracy is a model that aims to extend peer participation (and its requisites) to an increasing number of spaces and processes of society, starting with politics and the economy (Pateman, 1970). This distinguishes it from representative democracy, who is usually tied to formal politics. Deliberation, the provision (especially, reciprocal provision) of rational and reasonable arguments for one´s own positions (Habermas, 1980), has also been a relevant element in participatory democracy models (Barber, 1982). Differently from

[14] In some interpretations (Debrunner, 1947), the gesture of the "taking" is crucial for the original meaning of the term "democracy". Democracy speaks of the "kratos" (power) of the "demos" (the people), and can be counterposed to monarchy and oligarchy, in which the arché" (ground, origin) is "one" or "a few". The arché is something fixed, something that precedes and underlies the reality that it grounds or originates; differently, kratos is something variable, something that must be constructed or taken. By extension, democracy is, normatively and historically, not something given but something achieved through struggle.

liberal representative or some versions of direct democracy, participatory democracy shares with deliberative traditions a belief in the transformation of people and positions through political practice. People's selfish interests and selves can be transformed in the process of collective decision and action: participation is the best school of citizenry. Differently from mere deliberative democracy, though, it believes discussion in the public sphere or among representatives is not enough: the many must have agency and control (Arnstein, 1969) over collective endeavors, resources, and life more broadly. Ultimately, the vision of participatory democracy is that of a radically participatory society.

The case against (participatory) democracy I: the argument of competence, the derogatory view of citizenry, and their discontents. Participatory democracy, and democracy as such, has received numerous attacks in time. The tension between the rule of everyone and anyone and the rule of the few is as old as democracy itself, and probably much older (Clastres, 1974). Plato classically attacked democracy as a flawed political regime that gave priority to the variable will of the mob over justice and the common good. These could only be known and applied to government by the few, the philosopher kings. In the XVIII century, the fear of the mob rule was also held by America's Founding Fathers, who created a Republic inspired by Rome (based in a framework of laws and property, a system of check and balances, and censitary representation), explicitly rejecting the unstable direct democracy of the Greeks (Graeber, 2013). The fear of mob rule was alive and well in the XXth century, with numerous authors raising the argument of competence (basically, the argument that average voters lack the knowledge and competencies necessary for carrying on wise political decision making) to question the benefits of more participatory forms of democracy (Schumpeter, 1942; Magleby, 1984; Sartori, 1999)[15]. The argument of competence is tied to what we may call a "derogatory view of citizenry"[16], which suggests, firstly, that citizens lack knowledge or competence that representatives have, and secondly, that citizens cannot change or learn. Citizens' competence (defined, for example, as the "capacity to justify political decisions with policy-related arguments") has been shown to be highly dependent on context (institutional setting and information environment) as well as individual conditions, with motivation being more relevant than education (Colombo, 2016). In countries where strong participation is well established, such as Switzerland, competence seems to be high, with 70% of citizens being medium or highly competent (Gruner and Hertig, 1983; Kriesi, 2005; Colombo, 2016), with mixed evidences from the US (Delli Carpini and Keeter 1996; Somin 2004; Bolsen, Druckman & Cook, 2014; Boudreau & McKenzie, 2013). Disputes have emerged around how citizen competence is measured[17]. Furthermore, it has been shown that less informed citizens can use shortcuts to make reasoned choices that identical to informed citizens' ones (Lupia, 1994; Bowller & Donovan, 1998; Lupia & McCubbins, 1998) and, more importantly, in ways that fit their expressed interests (Kahn & Matsusaka, 1997; Kahn, 2002). The challenge,

[15] A classic formulation of the attack to direct democracy can be found in Magleby (1984: 198): "the majority of ballot measures are decided by voters who cannot comprehend the printed description, who have only heard about the measure from a single source, and who are ignorant about the measure except at the highly emotional level of television advertising".

[16] Derogatory in the double sense of being derisive of the citizenry and being used to abolish the possibility of its full expression through strong participation.

[17] Evidence of low competence, especially in the US, is usually based on metrics such as general political knowledge; however, issue-related (Gilens 2001; Krosnick 1990; Price and Zaller 1993) or local (Shaker 2012) knowledge may be much more relevant for competent direct decision making (Gilens, 2001).

however, is to ensure the best conditions of deliberation, such keeping it close to people's life and simple issues, ensuring inclusion, as low education and high complexity can operate for deterrents of participation, and evaluating polarization, as high polarization may reduce it (Colombo, 2016). On the other hand, there are also reasons to doubt the wisdom (or goodness) of the elite: processes of selection of representatives are fail prone (Matsusaka, 2005; Pilet & Cross, 2014), and the presence of personal and group interests and biases among professional politicians (Buchanan & Tullock, 1962; Peltzmann, 1976; Becker, 1986) or experts (Fischer, 1990; Kynn, 2008) are usual. Corruption, informal power, clientelism, or differences between party program and government performance, are an everyday experience and part of the recent crisis of representation (Tormey, 2015). Then, there is the problem of the entanglement of technical means and political ends (Feenberg, 1999), or the explicit technocratic forms of governance, where technical goals are situated explicitly as political ends: in both cases technical means and goals are presented as axiologically or politically neutral, hiding and thereby reinforcing their ideological character (Habermas, 1971; Fischer, 1990). With regard to the second attack, of the inability of citizens to learn, which we specifically address in section xxx, it is enough to say here that not only can citizens learn on concrete topics, but participation explicitly seems to foster "political sophistication and civic engagement" (Matsusaka, 2005).

The case against (participatory) democracy II: the argument of minority and majority tyranny. A double attack has been launched against direct participation: it has been accused of opening the gates to unbridled minority rule over majorities, and it has been accused of opening the gates to majority tyranny, as well. Against the first accusation (based on expectations around strength of mobilization based on resources, deception to uninformed voters, or change of legislatures by outsiders), evidence suggests that these mechanisms tend to approach results to the majoritarian/median voter (Matsusaka 2008, 2010, 2018; Gerber, 1999). When factors such as money affect the fate of an initiative, they tend to succeed only when they go against a measure, thereby simply reinforcing the status quo (Gerber, 1999; Matsusaka, 2005). More importantly, there already is a form of minority rule operating under representative democracy: lobbying (Peltzmann, 1976; Becker, 1986). It just happens to operate under fuzzy rules and be mostly reserved for the few; participatory lobbying via direct democracy mechanisms would be both more transparent and much more open to the citizenry. Rather than co-opting representatives, direct democracy seems to help to prevent them from being co-opted by lobbyist or their own group interests. The second attack seems to be more problematic: part of it comes from the ancient fear of mob rule commented above, but XXth century events served to confirmed it. Although some literature has suggested there is no conclusive evidence that minorities are damaged by participatory mechanisms more than by legislatures (Matsusaka, 2008), recent studies indicate there are some restrictions of minority rights (Bochsler & Hug, 2009; Lewis, 2013). Here, two aspects are worth noting: the first is that these restrictions may result from widespread social tendencies that should be the core target of transformative policies and struggle, the second is that direct democracy mechanisms can be complemented with other measures (f.i.: enhancing deliberation, potentiating the voice of affected minorities, etc.) that prevent cooptation or the curtailing of rights.

The case against (participatory) democracy III: the argument of optimal policy.

A final set of arguments have to do with the results of participatory democracy from the viewpoint of maximization of the benefits resulting from public policy. Research on this area is complex, however, authors using different metrics have casted and initially positive look on this regard. For instance, analyses of economic data in US States (back in the 1970s

and 1980s) showed that, even controlling for other variables, States holding initiative processes had fastest rates of growth and more output per capita than those without it (Hess & Weerapana, 2004). Others showed that reported subjective well-being was higher in Swiss cantons with more direct democratic mechanisms (Frey and Stutzer, 2000). When it comes to the charge of potential tendency to overspending, evidence from the US suggests borrowing and expenditure is reduced when initiatives or referendums on debt issues are held (Matsusaka, 1995; Bohan and Inman, 1996; Kiewiet & Szakaly, 1996; Feld & Kirchgassner, 2001). In Switzerland, the same result applies at the level of cantons, however, data show higher spending in cities (Matsusaka, 2018). Controlling for other variables, there seems to be a tendency towards slightly more conservative policies in regions of the US and Switzerland holding initiatives (Matsusaka, 2007, 2018). Progressive political actors, therefore, may need strategies beyond initiatives mechanisms to further their goals. As a rule, the progress of direct democracy mechanisms such as initiatives is to approach policy to the majoritarian voter (Matsusaka, 2018), and not necessarily beyond that in terms of optimal policy and social progress.

2.2. Decidim and forms of governing

The difference between government, governance and governmentality. We divide the following sections into three views on governing, from formal State institutions to diffuse activities and practices in society, in other words, we move from government, through governance to governmentality. We touch upon them in that order. The most traditional of these concepts, government, can be approached as a "thing" (an institution)[18] and as a "process" (an action, the exercise of governing)[19]. When we move from government to governance[20] there are changes in both axes. In the institutional axis, it implies that new actors collaborate with State bodies and intervene in the enactment of some of its traditional functions. In the processual axis, it implies that the hierarchical, rigid, top-down, and centralized model of governing typical of government gives way to a less centralized, more flexible, sometimes less hierarchical and more bottom-up forms of doing so. In some formulations of "governance", Government is no more than a concrete institution enacting a concrete type of governance. Finally, Governmentality (Foucault, 2008) points to the concrete practices by which human conduct is conducted, that is, how, in society, forms of being, thinking and acting are generated, shaped or influenced by concrete practices, by the State and other social actors. The concept results from the combination of the practice of governing with the rational form that defines it in modernity. Formal methods of

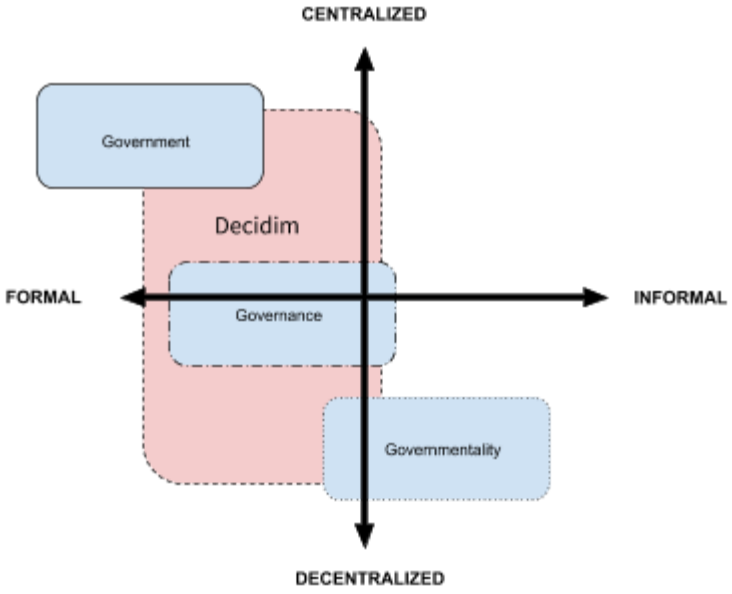
[18] Although word usage varies from country to country, "Government qua thing" is frequently associated with either the body of elected officials that hold office in a given country (the executive power), its representative political bodies (the executive and the legislative, sometimes including the judiciary), or its public administration as a whole (including the aforementioned powers). That means the term covers meanings that go from the State as a whole to the subset of it charged with politically orienting its action (f.i.: in the form of public policy) and giving it a frame (f.i.: in the form of legislation), as well and to represent it at the highest level (f.i.: in internal and international relations).

[19] "Government qua process" is sometimes considered as an abstract term to label the "method, range, purpose, and degree of control of society by state" (Bevir, 2007: 387).

[20] Governance has been repeatedly considered an ambiguous concept (Björk et Johansson 2001; Hufty, 2011a). Probably one of the broadest definitions, Hufty (2011a: 405) suggests that governance encompasses: "processes of interaction and decision-making among the actors involved in a collective problem that lead to the creation, reinforcement, or reproduction of social norms and institutions". A key point is that "it focuses not only on the state and its institutions but also on the creation of rule and order in social practices" (idem).

calculation, measurement, registration, definition, taxonomy, etc. developed during modernity both are abstracted from, applied to and reinforced by social or personal practices. This approach detaches State and governing: it looks at practices of governing in other institutions and, beyond, to the level of the individual and its self-conduct, as well as social counter-practices. According to Foucault, these are processes of knowledge/power[21] that have come to pervade the social field and underlie both traditional models of top-down State government as well as decentralized governance practices. The concept of governmentality challenges views that suggest a direct link between governance´s distributed forms of governing and emancipatory goals (Rose, 1999; Miller & Rose, 2008).

Decidim on government, governance and governmentality: Decidim has effects that permeate all three scales, in different degrees, although it is at the level of governance where it finds its most fruitful impact. We analyze each of them in the sections below. A final subsection deals with *political networks* covering the unified effect that Decidim can have on all three scales taken together, and serves as a transition to the technopolitical plane of the Decidim project. However, before we move into the analysis of participatory government, governance and governmentality, we offer a general overview what participation and participatory democracy mean in the historical tradition of democracy.



2.3 Decidim and participatory government

Decidim and the representative system: addressing and reconstructing the complexity of the will.

We have noticed above the crisis of trust on both political parties and institutions. Part of this problem has to do with their limits to address the complexity of the will, problems ranging from difficulties of representation to corruption. Part of those lacks result from the

[21] Modern human and social sciences rely upon these practices in order to generate knowledge. It is not that knowledge is power (to put it with Francis Bacon) or even that power is knowledge, but that this pair has to be thought as a hybrid knowledge/power. Furthermore, Foucault was premonitory in his analyses of technologies and techniques as forms of assembling forms of knowledge/power: his classical image of Jeremy Bentham's Panopticon as a material metaphor of surveillance.

logics and structures of representation. Modern representative logics has three crucial elements: delegation, competition and bundling. The delegation aspect is at the core of representation: there is delegation from citizens to representatives, there is delegation among party members, especially, between rank and file and leaders, and there are some forms of delegation in government[22]. Ultimately, the whole structure tends to take the form of a pyramid of delegation[23]. The division of roles tied to expertise, time availability, background, etc. seems to follow the so called "iron law of oligarchy" by which organization equals oligarchy (Michels, 1912). A second core element of representative logics is competition. Competition takes primarily place among different people, different interests, different proposals. It takes place both within parties and within the political field more broadly, for human support and material resources. Competition for the vote (rather than representative mirroring) is the way through which competing interests in society get their way into public policy (Bourdieu, 1982). A third core element of party logics is bundling. Governments and parties can be partially understood as bundles of people; representatives can (also partially) be understood as bundles of opinions, choices and proposals; finally, political programs and public policies can be similarly understood as bundles of proposals for action. Decidim as infrastructure tries to open an alternative to these three elements (delegation, competition, bundling), namely: participation, cooperation, and granularity. Firstly, it opens the possibility of intervening directly, without delegation. This means that both in parties and in government many decisions could be carried on by the people directly: the whole, rather than the party (in the electorate or in government), could act. This would break "the legislature's monopoly on policymaking", and citizens could always choose between "the legislative status quo and an alternative" (Matsusaka, 2005: 204). These mechanisms are likely to potentiate the approach of the legislature to the preferences of the majority (Matsusaka, 2005, 2007, 2018), be it by direct intervention or by indirect influence (by legislators´ consideration of potential, direct citizen interventions), especially if combined with digitally enabled transparency[24]. Similarly, this would break the leadership's monopoly of decision-making within parties. Secondly, inspired in 15M's insistence on the potential of cooperation, Decidim tries to foster various forms of cooperation (as we see in the section devoted to the technopolitical plane). Decidim does not eliminate competition (a crucial political feature of an unequal society), but the design of its interface is oriented to potentiate cooperative and deliberative elements in the mix. Through its smooth integration with other digital social networks, Decidim also builds and improves upon the dynamics of the networked public sphere. Finally, Decidim challenges the bundle logics. People may be able to track and publicize (transparency), evaluate (evaluation) and act (direct participation) on a person by person and proposal by proposal basis. This increases accountability and allows people to cross lines across factions within parties or among parties in Parliament, in order to choose what they think is best. Citizens can know and act better on a case by case basis rather than on complex bundles embodied

[22] Primarily, between elected representatives and party leaders in the legislative, especially when there is strong party discipline, and between cabinet members and the prime minister or president.

[23] The direction of such delegation is bidirectional, it can happen downwards (when party leaders delegate concrete tasks in their subordinates) or upwards (when the citizen delegate decision making in their representatives). It is this second type of movement that interests us here.

[24] Information asymmetries have proven to hinder such convergence process (Gerber and Lupia, 1995; Matsusaka and McCarty, 2001), thereby digitally enabled trackability and publicity becomes key.

in political representatives or programs (Matsusaka, 2005). For reasons such as accountability, representation seems to improve as the number of matters decided by representatives is reduced (Besley and Coate, 2003; Matsusaka, 2005). Furthermore, the possibility of recombination resulting from unbundling and cooperation could also foster mechanisms of collective intelligence that could be either an alternative (when consensus across the social spectrum is searched) or a complement to competition (by improving the quality of the proposals of the social actors involved). Ultimately, Decidim opens a different venue and forms the interests in society to be both embodied and transformed into public policy. More than a "substitution" of representation, Decidim ultimately affords a variety of types of participatory mechanisms (Fung, 2006), which run through different levels in the ladder of participation (Arnstein, 1969). Surely, the stronger forms participation frequently imply direct decision by the people, but "voting" may be either not be present, it may involve only a subset of prepared citizens (like in deliberative polling or minipublics), or be only a step in a much richer process (that includes citizen framing of the problem, implementation, evaluation, etc.).

Decidim and Government: from open government to common government. The notion of "open government" (Lathrop & Ruma, 2010) was oriented to nurture these types of advances, to foster ICT-enabled "transparency, participation and collaboration" between State and citizens. It was a way to open the State to citizen intervention, contribution and scrutiny. Decidim connects with some of those goals. However, a majority of open government policies have focused on the first of those three vectors: transparency; open government has usually been reduced to open data policies (Yu & Robinson, 2012). Furthermore, the public often finds these datasets cryptic or hard to use, while corporate actors strategically benefit from those data by their epistemic, organizational and economic capacity to act upon them (Gurstein, 2011ab; Halonen, 2012). More broadly, this transition emerges as an opportunity for the private sector: the "massive business of government"[25]. The Open Government paradigm, which imports practices from the world of open source software development to the world of institutional politics, reveals some of its shortcomings. As already seen in the debate between Richard Stallman and Eric S. Raymond on open software development paradigms (Kelty, 2008), the open model[26] is compatible with the neoliberal logic of production, management, and the appropriation of democratic infrastructure. A cooperative project (e.g., with public-common funding) to develop democratic platforms with free software does not, a priori, deserve any more privilege than a corporate project (privately owned and funded with speculative capital) as long as they both follow open-source principles during development (although corporate projects rarely adhere to them strictly). This may not only mean million-euro outlays for the public sector but also another step towards the privatisation of public infrastructures and a lost opportunity to support technological sovereignty, free technologies, and social autonomy. Differently, the Decidim project advocates a public-common model of infrastructure for democracy. Finally, the Decidim image of a Common's government is oriented to the redistribution of the various forms of capital in society, from the political to the economic (Barandiaran & Calleja-López, 2017). Far from the transformative implications

[25] As defined in Forbes http://www.forbes.com/sites/mikemontgomery/2015/06/24/why-civic-tech-is-the-next-big-thing/#1df2f6ce24b6

[26] This reference to "openness" is connected to a recent liberal tradition, from Karl Popper's thesis on the "Open Society" to George Soros and his Open Society Foundation (Tkacz, 2012).

of this aspiration, the Open Government paradigm is compatible with a more efficient, sustainable, and refined neoliberal system, although it is still just as inequitable in terms of economics, politics, symbolism, culture, etc. Differently, the notion of a common's government underlying the Decidim project both in theory and practice (at least, when it comes to the development of Decidim as a project and as an infrastructure) is oriented to put the State institutions in the service of a democratic, commons-oriented transformation of society.

2.3. Decidim and participatory governance

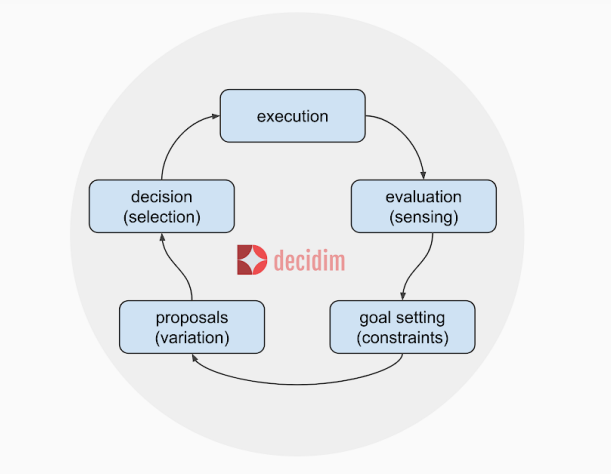
Governance beyond government: neoliberal and democratic models. The opening of governing to participation and collective intelligence speaks of a model of governing beyond representative government. The notion used since the 1980s for such opening is "governance", which can be synthetically characterized as "governing beyond or without the State". But governance is a problematic concept and a complex phenomenon. From the very beginning, the term was key to a policy approach oriented to transform forms of governing as much as to describe them (Bevir, 2007; Clarke, 2004). It was the concept with which the New Public Management School tried to redefine the role and action of the State in society. Against the social-democratic model of a providing State constituting a sphere autonomous from the operations and logics of markets, the New Public Management school tried to either impose the rule of such operations and logics in the sphere of the State (market logics in public administration) or reduce and marketize its functions (via privatization, outsourcing, etc.): market logics were internalized, public functions were externalized. Governance became a form to name a decentralization of the tasks of the State, which should "steer" (orient public action) while letting other actors "row" (provide services). Neoliberal governance, in which the private sector takes upon and intervenes into the sphere previously reserved for the State, must be counterposed to our model of participatory governance, in which it is the citizenry (with public support) the one intervening upon those tasks of steering and rowing.

From the Big Society to the Participation Society and beyond. A step beyond in the neoliberal view we have models such as that of the "Big Society" of British tories (Bach, 2012) (or, more recently, the "participation society"[27] in Holland, Rijksoverheid, 2013), that appeal to community empowerment, partial redistribution of power from State to the citizenry and to the culture of volunteering white omitting the key role of the State in guaranteeing the necessary conditions for the active life of citizens and communities (beginning with the economic resources and the social justice that enable it), promoting critical and political capabilities and dispositions (against mere philanthropy or volunteering) and introducing the necessary process mediators (countering power asymmetries in processes, preventing the cooptation of discussions, etc.) in the debate, design, and implementation of public policies (Kisby, 2010; Runswick-Cole, K. & Goodley, D., 2011). All of it results in a new neoliberal formula that legitimates the hollowing out of the State without articulating real social counter-powers or autonomy.

A systemic-functionalist view of participatory governance (when): Decidim and the policy cycle. Systemically speaking, formal governing involves three core practices: proposition, decision, and action. Proposition refers to the practice of sharing positions on courses of action. It can take a variety of forms: from expression of beliefs about general goals to judgments on others' opinions or the results of a given course of action; it

[27] We strongly disapprove the use of this term, for it denaturalizes the concept of participation as we have defined and defended it.

potentially encompasses deliberation before the decision is taken as well as evaluation after its enaction. It involves proposals of courses of action as well as reflexive statements or proposals about them. Differently, decision-making equals to the collective selection of propositions. Finally, action is the step of implementing a selected proposition. A systemic view on governance can thereby be summarized as a process in which actors propose courses of action (variations) in view of a series of goals (constraints) and decide among them (selection), with the selected ones being executed and then evaluated (sensing), evaluation that helps to set new (or improved) proposals, goals, or steps. This systemic view maps the traditional public policy cycle of agenda setting, policy formulation, decision making, implementation, and monitoring and evaluation.



A systemic view of participatory governance.

A systemic participatory version of governance implies intervention from below in all of those steps. Decidim helps to rethink the intervention of citizenry and social actors (f.i.: associations, cooperatives) into the public policy cycle, from the inception of a given policy to the long term monitoring of its results. The division between "steering" and "rowing" established by the New Public Management paradigm becomes, thereby, problematized.

A systemic view of governance (what): three dynamics and two dimensions of democratic governance through Decidim. Three are the key general types of dynamics of governance enabled by Decidm: top-down, bottom-up, and bottom-bottom. They attend to where the leading actors behind a given dynamic[28] are situated within a given collective order. In top-down governance dynamics, a few (usually, a set of representatives or delegates) open their action to the feedback of the many (their represented). Decidim aims to make these forms of feedback more democratic firstly, by opening them to scrutiny and accountability by everyone (transparency and accountability mechanisms), secondly, by allowing public deliberation (discussion mechanisms), and, more strongly, by allowing people to decide in response to their action (recall or plebiscitary mechanisms)[29] or to collaborate in the process (co-creation of public policy). Here, a sort of back-and-forth, feedback or dialectic dynamic ensues. Even if transforming top-down dynamics is a minimalist form of participatory governance, the intervention of Decidim is oriented to

[28] Leading actors are those initiating and shaping the dynamic.

[29] This implies that the top down process (e.g. a given policy) is complemented with a second type of dynamic: the bottom-up dynamic (e.g.: auditing, voting in a consultation, etc.).

prevent a fourth type of governance dynamic: top-top dynamics, in which a few decide solely on the base of their interaction. This is paradigmatically exemplified in oligarchic forms of governance such as technocracy or lobbying in the sphere of public policy. A second, more powerful, dynamic of decision making afforded by Decidim is the bottom-up. In this case, people can directly lead the process of collective decision making, from making proposals or debating them up to approving them. A paradigmatic example of bottom-up dynamic is the citizen initiative, which can be created by anyone and be approved by everyone after being processed (even if not modified) by representative actors. Another is that of civic management of public infrastructures or resources, urban commons where a substantial or all actors are citizens. These dynamics overlap with the traditional ladder of participation (Arnstein, 1969). Most forms of top-down dynamic fall within the information (f.i.: circulation of data, documents), the consultation (f.i.: surveys, open meetings), or placation (f.i.: citizen juries) stages, which lack decision making power and fall within the "tokenism" category, with partnership (the weakest form of citizen power) a the best case scenario (f.i.: participatory strategic planning). Differently, bottom-up dynamics tend to fall within the citizen power area, and display delegated power (f.i.: citizen initiatives) or citizen control (f.i.: urban commons). Where recognized participatory mechanisms exist, hybridity proliferates (f.i.: consultations that accept citizen counterproposals, thereby combining top-down and bottom-up mechanisms). Beyond top-down and bottom-up dynamics, Decidim also affords and point towards bottom-bottom dynamics, where there is no reference to representative actors or even the public sector. These cases can go from networked social communication and deliberation to autonomous organization (e.g.: autonomous social centers, which are fully independent from any representative body). The bottom-bottom dynamic implies to get beyond the vertical axis typical of the State-oriented model of participation. It introduces a second, horizontal axis, a second dimension. This allows to think of diagonal processes, such as a social movement that grows to institute citizen panels (officially recognized or not) with decision power on a given issue, where a cross-section of society is displaced into a decision making position while being transformed through struggle and deliberationr).

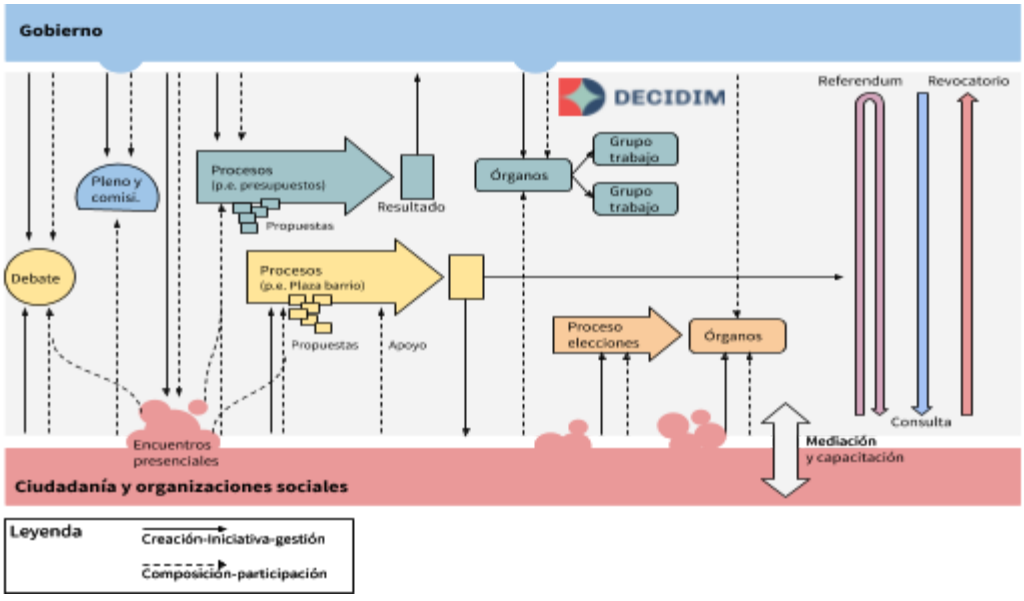


Figura 1: Funcionalidades y mecanismos de participación del Decidim y flujos sobre la toma de decisiones.

A systemic view of governance (how): Decidim and participatory modes. Different

participatory mechanisms are tied to different cores aspects, or even models, of democracy. Some of the core functionalities of Decidim are described in section 3.3.1. Below. They afford practices of information (f.i.: notifications, newsletters), deliberation (f.i.: debates, comments), control and decision making (f.i.: voting), transparency (f.i.: full process tracking), online-offline hybridization or multilayeredness (f.i.: geolocalization of meetings), and more. It also opens a wide array of modes of participation: from low engagement modes such as reading, supporting or sharing a proposal, through more engage practices such as commenting or creating proposals, up to moderating or leading a process, even if the distribution of these practices tend to follow a power law distribution (Mayfield, 2006). An aim of Decidim is to potentiate the transition up the ladder of consumer, commenter, contributor and co-leader (Venmoth, 2006--modified). More broadly, to turn the wheel of participation, and move from informing (minimal communication, limited information, high quality information), through consultation (limited, customer care like, high level consultation) and participation (effective advisory body, partnership, limited decentralized decision making) to empowerment (delegated, independent, and entrusted control) (Davidson, 1998). As mentioned in the proviso of this white paper, such advance depends on the political and social dynamics in which the platform operates. The correlations of force among various actors is key on this regard.

A systemic view of governance (who): Decidim and social actors. There are various types of actors that can be related to a given process, and various ways of selecting them (Prieto-Martín, 2014). Decidim can help to better visibilize them, mobilize them, and select them, while tracking all of this processes. A first type of participants can be distinguished by their relation to a given process: a differentiation can be made between between the whole of the population, those likely to be affected by the process, those participating in it, and those effectively influencing it. Then, there are different ways of becoming enrolled in the process: self-selection, selection by election (be it democratic or technocratic), selection by a representative selection mechanism, by an inclusive selection mechanism, or by arbitrary selection. Then, there are different types of social actors: the public sector (administration, politicians, etc.), the private sector (corporations, SMEs, etc.), civil society and general citizenry, and still other actors. In each of these fields Decidim allows to move political agency from elites (owners, leaders), through selected elites (representatives, experts), through organized citizenry (associations, NGOs) up to anyone. Decidim incorporates (or is planned to incorporate) modes of visualization, mobilization, selection, and tracking oriented to ensure a more transparent, inclusive and empowered participation. Who participates is crucial in the struggle around democracy. Although Decidim has a strong privacy preserving social contract, new functionalities may contribute to promote the empowered inclusion of excluded groups for gender, class, race or other reasons. Beyond established social and sociological distinctions, the irruption of the uncounted (Ranciere, 2005) is one of the biggest strengths of Decidim.

A systemic view of governance (where): relocating participation. From a systemic standpoint, another relevant issue is where does participation take place. Decidim was originally designed for municipal processes. However, its ongoing design allows to deploy its growing functionalities both within or without institutions, be these public, private, or civil society, in the political, economic or other spheres. More importantly, it helps to redefine the boundaries between the inside and the outside of those institutions, somehow redefining the geometry of institutionality. It affords a variety of participatory forms that go from episodic, sporadic, periodic or continuous processes, events or spaces up to the constitution of functional (open channels and procedures, such as citizen initiatives) or

organic institutions (participatory bodies, such as district councils) (Ibañez Macías, 2007).

A systemic view of governance (IV): reassembling power. Formal governance, the process of proposing and discussing, deciding upon, enacting, monitoring and evaluating collective courses of action, is a key form of constructing power in any human group. Power is both part and result of the process. Governance crucially shapes power "with" and power "over" in society: it is the collective process of ruling people and things. Decidim aims to both formalize and redistribute the power "of" and the power "in" governance, the power that results from governance and the power that operates inside its processes. Ultimately, it aims to democratize it. According to Michael Mann, the key four sources of power in contemporary societies are the military, the economic-productive, the political-bureaucratic, and the ideological-cultural. Decidim is oriented to boost a participatory governance of the political, the economic, and the ideological-cultural field currently crucially shaped by elites, that is, as oligarchic.

Decidim and public administration (I): from the iron cage and its hollowing-out to democratic reappropriation. If public institutions are to play a leading role in the radicalisation, broadening and deepening of democracy, they must open themselves to different forms of democratisation and innovation processes. As noted by Max Weber, from the mid-19th to mid-20th century, bureaucracies operated as modernising agents focused on rational calculation, control, and efficiency. Alongside Fordian capitalism, they created "iron cages" which worked against personal and social autonomy, creativity, and even democracy itself. Opposed to this tendencies, which included the Soviet State economy and the bureaucratised "Welfare State" model, criticisms were raised both on the right (from Friedrich Hayek to the Chicago School) and the left (from movements such as the Students for a Democratic Society to publications such as Socialism or Barbarism). Already in the 80s, the neoliberal view of the State as a slow-moving machine, incapable of innovation, got traction on public policy. The neoliberal model of "governance" was oriented to "hollow out the State" (Rhodes, 1994; Bevir, 2007) and to turn it into a more capilar, polycentric form, based on the privatisation and outsourcing of public services, often led by non-democratic institutions (such as the IMF and the World Bank), promoting public-private partnerships, sponsoring policies and issuing recommendations codifying political ideology as technical analysis. The calls to efficiency and innovation brought about new, flexible forms of standardisation, exclusion, and social control (Rose, 1999; Miller & Rose, 2008), when not increasingly brutal forms of material and symbolic accumulation, extraction, and expropriation (Harvey, 2003). If Weber defined modern bureaucracy as a "disenchantment of the world", the new forms of democratic innovation connected to the Decidim project point toward a reorientation (rather than hollowing out) of public institutions and technologies towards alternative modernities (Feenberg, 1995; Gaonkar, 2001; Hardt & Negri, 2009), guided by the idea of the commons, creativity, and multitudinous reappropriation of social life. This would feed, internally, with forms of institutional innovation (Mulgan, 2014) and, externally, with forms of social transformation. This means defining, implementing, and innovating in concepts and criteria related to democratic quality and public service, countering the more traditional principles of public institutions, such as representation, hierarchy, and efficiency (in the traditional Weberian model) or privatization, competition, and optimization (in the New Public Management model), with the Decidim logic of bottom-up empowerment, radical democratization, and public value. Public institutions must transform themselves to lead a democratic, public-common alliance, which follows multifaceted forms of rationality (not just technocratic or efficiency-centred), organised in more participatory and deliberative, agile

and autonomous practices, instead of slow, centralising and monolithic or, much less, externalized and privatized; practices which, at the same time, are federated and interoperable, based on common codes. Institutional arrangements should go beyond the triple helix model (the triad government-companies-university, Leydesdorff, L., & Etzkowitz, H. 1996) to open ecosystems and innovation networks with fourth or even fifth helices (including public institutions, citizens, university, companies, and the environment - Carayannis, E. G., & Campbell, D. F. 2012), with a central place for organised citizenry, a critical technopolitical view, and oriented to the public-commons partnership cooperative-solidarity economy. Section xxx includes an exposition of how the Decidim project has enacted this vision in practice.

Decidim and public administration (II): practical possibilities. Traditionally, the State is divided in a set of representative and a set of administrative layers, with the later being much broader and charged with the task of executing the tasks of the State. The possibilities of a platform such as Decidim for governance processes (organization, decision-making, action) within administrative bodies and for the relation between these and the citizenry in different forms of democratic governance remains to be explored. Some possibilities can be outlined, though. Internally, a platform such as Decidim can facilitate the intervention of the rank and file into important internal decisions, equilibrating the elitist, technocratic forms of decision making today. The second has to do with collective organization: the organization of workers of the administration in order to prevent and keep in check the various forms of oligarchic power. The third, more relevant from our general viewpoint of a common government, is the possibility for the citizenry to intervene into public service, specially at the proximity scale (neighborhood, district, city), from decision making to resource control and service providing in various forms of public urban commons. A fourth use has to do with an increase in transparency of bureaucracy and accountability by providing new forms of trackability of policies from their inception to their implementation, contributing to the previous three dynamics. A fifth, hypothetical, use may be internal communication. The informal use of corporate social networks and services (whatsapp, telegram, etc.) are today informally central for the coordination of the work among public servants. Providing public infrastructures for such practices is a task to be addressed in the coming years, and new versions of Decidim could be oriented in that direction. But others are much closer at hand, clearly, collective decision making.

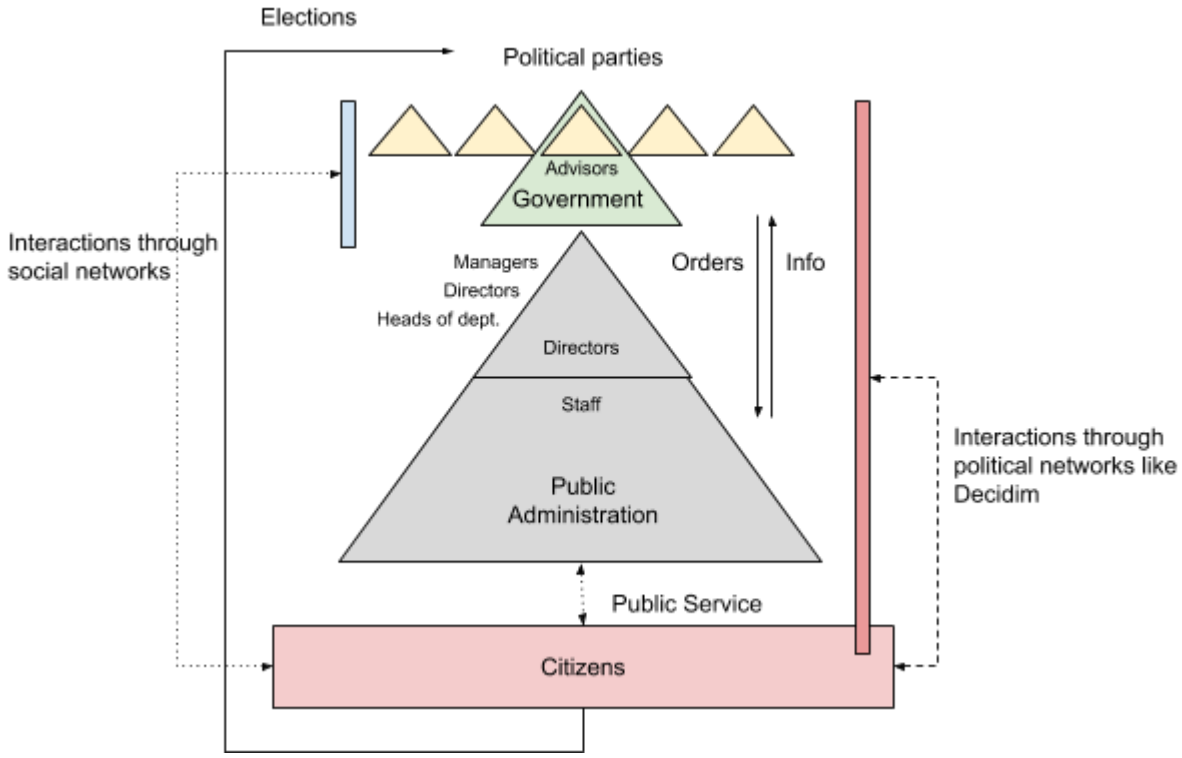


Figure X: The public administration hierarchy and influence flows

Decidim.eco for cooperatives (self-management) and unions (counter-management).

Decidim also holds democratic potential for the economic sector. It enables two core types of democratic practices: internal self-organization or self-management for cooperatives and unions, and counter-management for the latter to intervene into corporate organization. Cooperatives are economic actors that, at their bare minimum, are guided by two principles: economic sustainability and democratic management. Decidim can contribute to economic sustainability on at least two fronts. The first front is building collective intelligence: better ideas to address problems can be shared, filtered and chosen thanks to it. The second has to do with its condition of free software, free in economic terms (it costs very little while providing, at the very least, a variety of services) and in its flexibility, which allows it to be adapted to new organizational needs (f.i.: a digital currency or timebank could be added to the platform). To democratic management, Decidim can contribute to the aspects we have mentioned in previous sections, from transparency to deliberative and participatory functionalities. In the case of union work, Decidim can be an infrastructure for collective organization as well as for intervening in and upon corporations.

2.4. Decidim and participatory governmentality

Decidim also implies forms of governmentality, that is, norms and forms of rationality and practice that are entangled with its software, its mode of production, its organization, its meetings, languaging and collaborative infrastructures, that shape people's ways of thinking, behaving, and being affected. Against neoliberal forms of governmentality, though (Rose, 1999; Miller & Rose, 2008), Decidim tries to make it "participatory". By that we mean two things: first, that governmentality practices associated to the project are oriented to generate participatory processes and subjects (both individual and collective),

otherwise, participation and participants, shapers of their collective lives; second, that those actors can redefine in a more direct way those very practices. Achieving that requires, to some extent, to translate into formality what are usually (and that is a feature of governmentality too) rather informal social practices and norms. That implies to build new ways of articulating knowledge, desire, and action. We will take "collective intelligence" as an example. positions

Decidim as a platform for collective intelligence: beyond the wisdom of the crowd, and corporate intelligence.berty. The language and interface of Decidim already imply and afford a vision of power and interaction that falls under the scope of governmentality at large: it calls for a "we decide" by a set of mechanisms and namings that open up to the very possibility of such collective decision. As such the participant invited and channeled towards a collective project, one that is recognizably complex, yet affordable, handy, empowering. It does so by implying a form of collective intelligence on decision making (particularly on participatory processes) that is open to struggle. It is in a sense similar yet different from how we (all of us) are conceived as useful or valid as subjects of decision making. The wisdom of the crowd hypothesis () suggests that mobilizing a crowd of participants potentially holding a variety of perspectives is a way to both mobilize existing knowledge and neutralizing biases. However, here it is important to stress the centrality of the models of organization and the platforms enabling it. On the organizational side, it is important to notice that the wisdom of the crowd hypothesis tends to rely upon the statistical aggregation and analysis of opinions, while more advanced collective intelligence models point towards more granular and organic forms of defining, evaluating and organizing knowledge, connecting and spreading it to non/experts, etc. When it comes to the platforms enabling such participation, platforms ranging from Google to Amazon, from Facebook to Tripadvisor, show how the knowledge of millions of people is being extracted for private profit, a privatization of knowledge for the sake of the creation of corporate (and yet, crowdsourced) intelligence. This includes the use of user activity for training AI, the rise of what we may define as a Incorporated Artificial Intelligence (IAI). Platforms of information, organization and communication such as Decidim are oriented to nurture the idea of collective intelligence as a commons (CIC), differing from both wisdom of crowds and corporate or privatized intelligence, artificial or simply social. The possibility of freeing collective and, more broadly, social intelligence is a struggle that goes beyond the technology, but which can be crucially shaped by its construction. In the face of technoscientific and social acceleration, and the challenges posed by it, Decidim may contribute to accelerate distributed decision making, catalyze collective intelligence, potentiate, as well as accelerate collective action to affect change.

Decidim as a system for democratic subjectivation: fostering citizens in theory and in practice.

Democracy is the best school of democracy. Rousseau, Pateman, Barber, Colombo, etc.

Practices and subjects.

Citizenry (unity in exercise of political rights) and multitude (self-governing exercise of political life, not a mass)

in the right context (f.i.: motivation matched with opportunities for deliberation) average citizens have proven able to become knowledgeable on a given topic (Colombo, 2016; Esterling, Neblo and Lazer 2011; Warren & Gastill, 2015), which seems to be the crucial type of knowledge for direct democracy processes (Gilens 2001; Krosnick 1990; Price and Zaller

1993; Shaker 2012).

2.5. Decidim as a political network

Third generation networks: political networks. We consider Decidim an example of an emergent model of third generation networks, that we call "political networks". The differential characteristic of political networks lies in what can be done in them and with them. Digital networks such as Decidim have three fundamental characteristics: firstly, they reduce the centrality of the figure of the prosumer (someone who produces and consumes digital content, Toffler 1980) and replace it with that of a clearly political actor; secondly, they do so by articulating spaces that allow the construction of collective identities, wills and intelligences beyond the mere expression, aggregation or circulation of individual tastes and preferences; thirdly, they connect these with decisions that affect the collective plane as such. In this sense, the differences in naming are indicative: instead of a Facebook (a book of faces), Decidim ("we decide", in English) places the political bond at the center of its construction. It doesn't appeal to individuals in a network but to a "we", a decisive “we” or decisive articulation of “we”s. As municipal platforms, political networks provide intervention in institutions and the construction of public policies. But it is currently being used by other social organizations, from cooperatives to activist groups, thereby pervading the broader economic and social realms. Its regulative principle is that participants should take part as peers (in our interpretation of the Latin "pars capere" of participation). This applies to collective processes run by the State or by any other social organization. Resuming: in informational networks the key is information; in social networks, interaction; in the political ones, decisions and commitments. Each generation collects and modulates characteristics of the previous ones. In the same way that social networks built upon, and questioned, the model of informational networks (according to the usual reconstruction of the transition from web 1.0 to web 2.0), political networks build upon, connect with and diverge from, the logic of social networks. Promoting a free multitudinous (no longer mass) self-communication, avoiding its capture, at least on the level of participation (and, potentially, much beyond). If various forms of subveilance and subwilling, vigilance and will from below, are to pervade in social organization, infrastructures like Decidim are crucial. In this way Decidim contributes to an ideal of social autonomy that is key for the health of 21st century democracy.

3. Decidim: technopolitical plane

The technopolitical plane operates as the key (albeit surely not the only) surface of interaction and translation between the technical plane (which includes the technological) and the political plane.z It is the area of the project where social and political considerations shape technological design (a line from the political to the technical), and where this technological design first affects and shapes social behavior (a line from the technical to the social). This is the level at which the code is law (Lessig, 2006), and thereby displays its social pre-conditions and effects.

Digitalizing democracy, democratizing power. Whereas the new regulation for democratic participation in Barcelona has about 3.500 lines of code, a deploy of Decidim involves over 500.000 lines of code. This comparison, despite its feebleness, provides a good approximation to the complexity of the project. But, more generally, it also points to the extraordinary effort of concretion and explicitness that digitalization demands. Theoretical language, or juridical language, even administrative language, is full of ambiguities and generalizations that are not possible within the digital realm. Computers do not accept ambiguous messages, every button, every link, every message sent to the

computer needs to be perfectly accurate to the ultimate level of binary concretion. In a sense, the process of digitizing democracy is a process of making democracy explicit on its details, a process of uncovering the ambiguities and implicit traditions, a process of defining and redefining power structures, interactions, relations and interfaces. It is also a process of fixation in which many aspects of soft technologies (implicit habits, shaky protocols, routines) are made visible and need explicit definitions. This extends to mechanisms, categories, relations and structures and also to terminology, color-codes, or the very size of a button. Power is often hidden on those details, by making it explicit, computer executable, transparent and redesigned we are also democratizing power. Moreover, legal code is open to a variety of degrees of dependency on the "will" of administrative structures to execute it. So, for instance, even if Barcelona's old participatory regulation (legal code) made, in principle, possible to register and promote citizen initiatives, for 20 years there was no single initiative opened due to a lack of administrative procedure. Surely one could have reclaimed her right to promote an initiative, move the issue to a court, that in turn, could had enforced this right. Legal code can (and must) be enforced, whereas computer code is executed.

- A detailed knowledge of all processes involved is required. Also a great effort of generalization across use cases, organizations and contexts.g

We divide this section in three big parts: first, we schematically present the functional architecture of the platform, in the section entitled Decidim.arc (3.1). Then, in a second part that looks at the politics of the technology, we have the Decidim.dsg section (3.2), where we expose some of the technopolitical design principles behind Decidim, and the Decidim.meta section (3.3), where we outline some key aspects of Metadecidim, a technopolitical community that democratically shapes the project and its software. Finally, in the third part, we reorient our sight and point out some of Decidim's immediate effects upon practices (transformations of participatory practices, discussed in Decidim.pars, 3.4) and data (the data structures and politics of the platform, exposed in Decidim.data, 3.5).

3.1. Decidim.arc: Decidim's functional architecture for participation.

Decidim's sociotechnical code: functional, informational and behavioral architecture. The complex technopolitical dimension of the Decidim project is most apparent when looking at the functional architecture and mechanical details embedded in the platform. From its very conception, the design of the platform has been carefully crafted to attend the political dynamics that can emerge out of its usage. At an ideal level, the functional architecture (described in 3.1.2), which describes what Decidim does, directly defines what people and things can do, in other words, it defines an ideal informational and behavioral architecture for the "activity" that emerges right on top of it. Because of its structured form, this "activity" can be measured in formal metrics and fed into quality indicators. Thereby, in the following sections we understand Decidim's functional architecture as also defining an informational and, more importantly, a behavioral architecture. Decidim's functional architecture becomes a "sociotechnical code". It is relevant to clarify that this code (or law) of what Decidim does and makes people and things do, is different from what people do with Decidim, that is, from the broader participatory practices (and, further away, political processes) that it enables. These practices (rather than behaviors or activity), result from the new uses that the street always finds for technologies, as Williams Gibson put it.

Decidim as a democratic-system programming framework. Decidim is an abstract, functionally open, modular and configurable framework (see sections below) meaning that an administrator can easily activate, configure and deploy different mechanisms and

spaces for participatory democracy. In a sense, Decidim is a framework to program (not at the computer level, but at the socio-technical level) a democratic system. Administrators can design democratic systems through the many combinations of components within processes, assemblies, initiatives and consultations. In other words, thanks to Decidim the "democracy-designer" is free from the complexities of programming details and can focus on the design of participatory process, organs, initiatives and the interrelated architecture of a full democratic system.

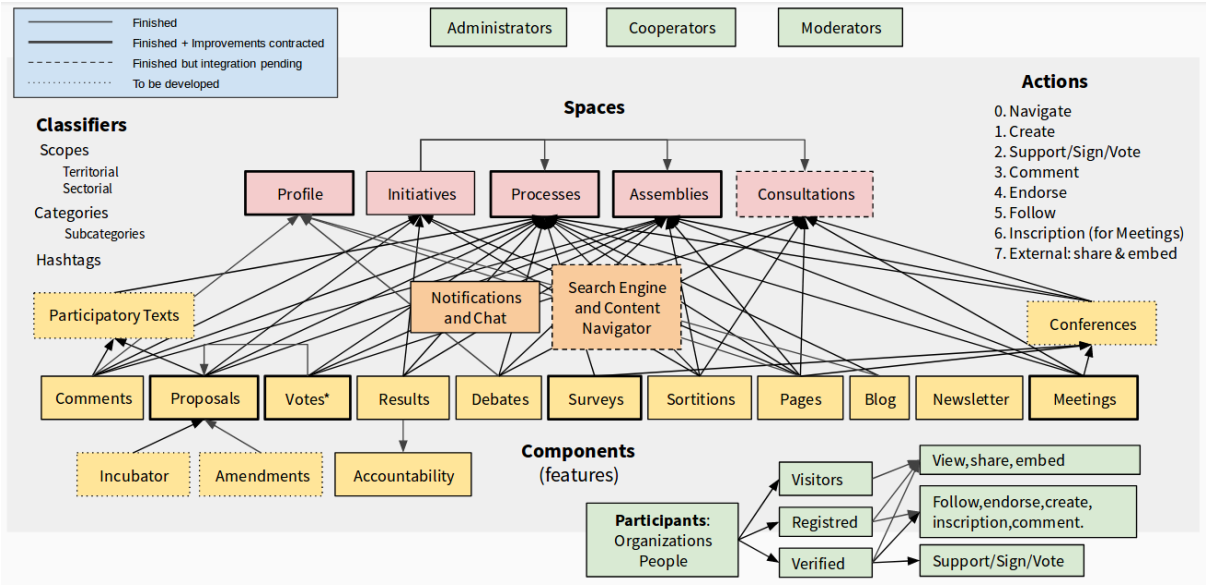


Figure 1. Summary diagram of Decidim's functional architecture showing a combination of components in participatory spaces. The "Vote*" component allows a variety of voting systems, expressions of support or allegiance for a proposal.

To understand in detail how it operates, the first relevant distinction is the one between the two most basic elements of the platform: participatory *spaces* and *components* (see Figure 1).

- **Participatory spaces.** These are the frameworks that define how participation will be carried out, the *channels* or means through which citizens or members of an organization can process requests or coordinate proposals and make decisions. *Initiatives*, *Processes*, *Assemblies* and *Consultations* are all participatory spaces. Specific examples of each of these include: a citizen initiative for directly changing a regulation (*Initiative*); a general assembly or workers' council (*Assembly*); a participatory budgeting, strategic planning, or electoral process (*Processes*); a referendum or call to vote "Yes" or "No" to change, for instance, the name of an organization (*Consultation*).
- **Participatory components.** These are the participatory *mechanisms* that allow a series of operations and interactions between the platform's users and objects, as well as between users themselves, within each of the participatory spaces. The following are participatory components: *comments, proposals, amendments, votes, results, debates, surveys, sortitions, pages, blogs, newsletters* and *meetings*. Second order components that build on top of basic components are: *participatory texts*, *accountability* and *conferences*.

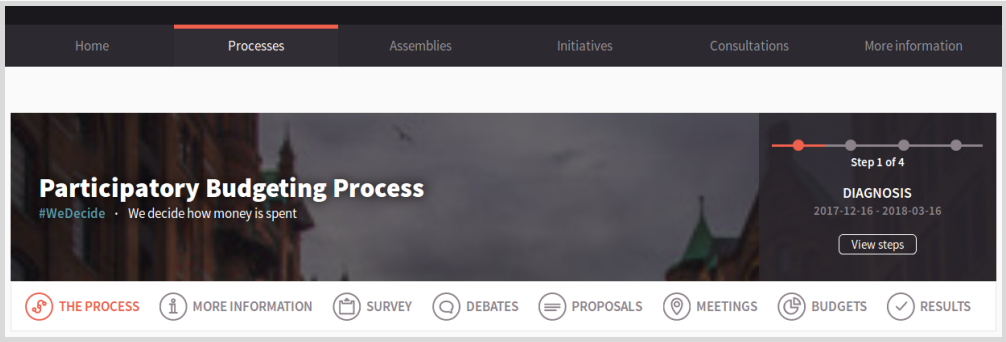


Figure 2. Decidim displays participatory spaces on the top menu (dark) and components are displayed on the bottom menu (white).

The ways in which spaces and components interact is the following. Users of the platform (participants) interact through participatory mechanisms known as *components* which afford a variety of operations. They provide specific features for the various participatory *spaces*. In other words, participatory *spaces* such as *Initiatives*, *Assemblies*, *Processes* and *Consultations* have components at their disposal which work together as participatory mechanisms. The more notable components include in-person *meetings*, *surveys*, *proposals*, *votes*, *results* and *comments*. So, for example, the various phases of a participatory budgeting process can combine components in the following way: at an early phase public meetings can be opened for citizens to analyze different needs classified by districts. In turn these meetings can lead to the design of a survey. The survey results can then be used to define a set of categories for projects to be proposed. The proposal component can then be activated for participants to create and publish their projects as solutions to the identified needs. These proposals can then be commented and, after two weeks of deliberation, the voting component can be activated to select among the projects with a budget-expenditure system. Participants can then be called to a public meeting to evaluate the results, and an assessment survey can be launched afterwards for those who could not attend the meeting. Finally, the accountability component may be activated to monitor the degree of execution of the selected projects, and people can comment on it. What makes Decidim particularly powerful is this combination of components within spaces, which provides an organization with a complete toolkit to easily design and deploy a democratic system and adapt it to the organization's needs.

Decidim's top navigation bar displays the different types of active **spaces** of the platform. **Processes** is a space that allows to create, activate/deactivate, and manage various participatory processes. These are distinguished from other spaces by being structured in different *phases* within which all of the components can be incorporated. Examples of participatory processes are: an election process for members of a committee, participatory budgeting, a strategic planning process, the collaborative writing of a regulation or norm, the design of an urban space or the production of a public policy plan. **Assemblies** is a space that offers the possibility of setting decision-making bodies or groups (councils, working groups, committees, etc.) that meet up periodically, detailing their composition, listing their meetings and allowing to take part in them (for instance: attending if the seating capacity and nature of the assembly so permits, adding items to the agenda, or commenting on the proposals and decisions taken by that body). **Consultations** is a space that makes it possible to coordinate referendums, trigger discussions and debates, get voting results published; it can be connected to a secure e-voting system. **Initiatives** is a space that allows participants to collaboratively create initiatives, define their trajectory

and goals, gather endorsements, discuss, debate and disseminate initiatives and define meeting points where signatures can be collected from attendees or debates opened to other members of the organization. Initiatives is a special kind of space by which members of the organization can trigger actions that are generally restricted to elected bodies or platform administrators, by collecting (digital) signatures. The organization can define the types of initiatives and set up the number of signatures that are required to trigger the expected result (e.g. to call for a consultation).

The **components** are displayed as a menu (with white background) within spaces (as displayed in Figure 2). The proposal-**incubator** facilitates the collaborative creation of proposals as well as the monitoring and control of changes throughout the process. The **proposals** component allows a user to create a proposal using a creation wizard, compare it with existing ones, publish it in the platform and include additional information like geolocation or attached documents and images. This component also makes possible to navigate, filter and interact with a set of proposals. The **voting** component offers organizations the possibility of activating different voting or support systems around proposals: unlimited, limited to a given threshold, weighted, cost-based, etc. The **results** component is used to turn proposals into results and give official responses concerning their acceptance or rejection, merging various proposals into a single result. The **accountability** component offers the possibility of subdividing results into projects, defining and applying progress statuses around their implementation, as well as displaying the extent of the results' implementation grouped by categories and scopes. The **surveys** component can be used to design and publish surveys and to display and download their results. The **sortition** component allows to select a number of proposals (e.g. candidates for a jury) with random, yet reproducible, procedures that guarantees non-biased and uniform distributions. The **comments** component enables users to add comments, to identify the comment as being in favor, against or neutral in relation to the commented object, to vote comments, respond to them and to receive notifications about responses. The comments can be active into any other component (proposals, meetings, results, etc..). The **participatory texts** component can be used to convert lengthy text documents into various proposals or results and, vice versa, to compose and display a unified text based on a collection of proposals or results. The **pages** component is used to create informative pages with rich text formatting, embedded pictures and videos. The **blog** component makes possible the creation of posts or news, and to navigate them chronologically. The **meeting** component offers organizations and participants the opportunity to convene meetings, determine their location and time, register and limit attendees, define the structure and content of the meeting, as well as publishing the minutes and the resulting proposals. The **conference** component allows an organization to create a website for a big event by joining up a series predefined meetings (chats, workshops etc.), putting together a unified program and managing attendees. The **newsletter** component makes possible to send emails to everyone registered in the platform or, more selectively, to those who participate in a specific space.

Participants can carry on different **types of actions** within the platform: 0. they can **navigate** and search for information 1. They can **create** contents of different types (e.g. proposals and debates). 2. They can **vote, support or sign.** All three modes allow for participants to aggregate their preference or will for a specific consultation question, proposal or initiative respectively (the difference between these three types of actions involve different levels of security and anonymity: signatures can be audited and attributed to a participant, supports cannot, in order to prevent coercion, while votes involve higher

cryptographic guarantees than supports). 3. They can **comment** on any object of the platform (proposals, debates, results, sortitions, etc.). 4. They can **endorse** any content, meaning that they can publicly declare they support it or find it relevant, with the participants following it then receiving notifications. 5. They can **follow** other participants, a participatory process, an initiative, a specific proposal, etc. and receive notifications. 6. Participants can also make use of a private **messaging** space to start conversations. 7. They can **sign up** for a meeting. 8. They can also **share** and **embed** content out of the platform, sharing the link to other social networks and embedding content on other sites.

Component items (e.g. a proposal, a blog post, a meeting) have their individual page but are also displayed as **cards** throughout the platform, cards being a major design interface to interact with components. Figure 3 displays a proposal card with the different types of data and interactions identified within the card.

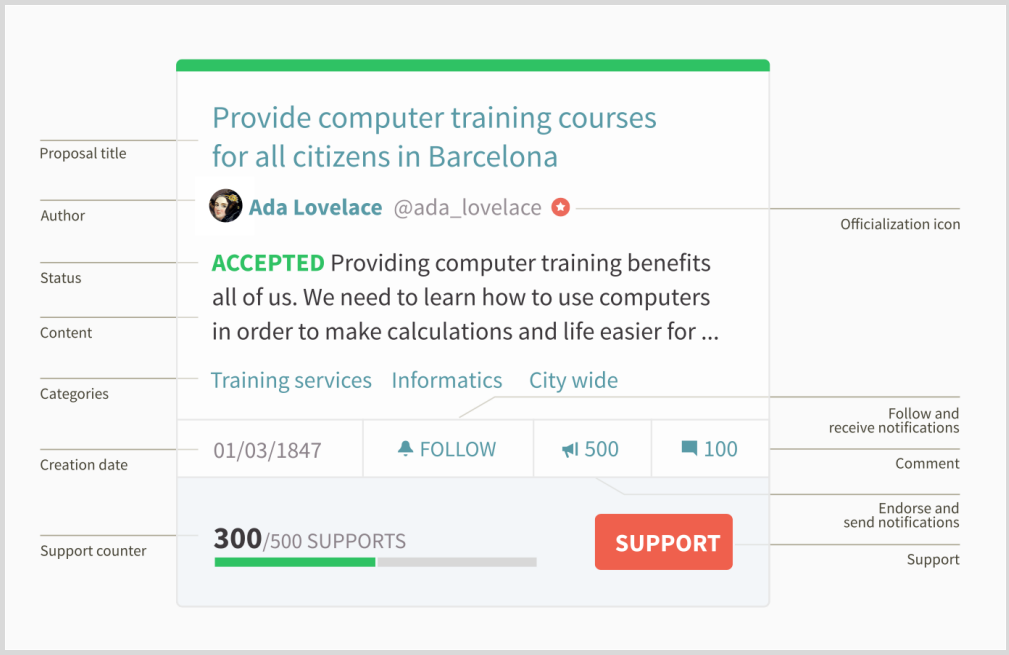


Figure 3: Decidim's proposal card anatomy.

The users who participate in Decidim can be grouped into three different categories:

- **Visitors** have access to all of the platform's content without having to sign up or provide any information.
- **Registered** participants can create content and comments, sign-up for meetings, endorse content, follow other participants and objects of the platform, customize their profile and receive notifications, mentions and private messages. By choosing a username and password, accepting the user agreement, and providing an email account (or using an account for several social networks) participants become registered. Registered participants can also have their account officialized (meaning their username is accompanied by a special symbol indicating they really are who they claim they are on their profile).
- **Verified** participants can make decisions. In order to fall under this category they must first be verified as members of the organization, citizens of the municipality, or constituents of the decision-making group (an association, community, collective etc.). Decidim offers different ways to carry out this verification. Once verified, participants will be able to take decisions by supporting proposals,

signing initiatives and voting in consultations.

Administrators can **manage permissions** for registered or verified users selectively. For example, proposal creation can be activated for both registered and verified users but supports to proposals only for verified users. It is also possible (although rarely recommended) to consider all registered users as verified and to grant them decision making powers.

There are different types of administrators: **administrators** of the whole platform or of specific spaces and components, they can also be **moderators** (with the exclusive power of moderating proposals, comments or debates) or **collaborators** that can read unpublished content, create notes and responses to proposals.

Participants can register as an **individual** or as a **collective** (associations, organizations etc.,). **User groups** might also be created so that individuals can be associated to a collective. Decidim allows participants belonging to such a group to express or act individually or embodying the collective identity.

Participants can not only navigate the content of Decidim through the top menu and move down the architectural hierarchy, from a space to its different components; they can also get information through the **search engine,** or via **notifications**. Participants can also talk to each other by internal messaging or **chat**.

The content of the platform can be classified by different criteria. A participatory space and its contents (e.g. a participatory process or the proposals within) can be (independently) assigned a **scope**. Scopes are defined for the whole platform, and they can be thematic or territorial (for example, an assembly can be assigned to a specific theme or subject, like "ecology", and to a specific territory, like a district within a city). Content within a space-instance can be assigned to a **category** or sub-category (e.g. topics) that are specific for such a space-instance. For example, the categories "sport facilities", "parks" and "schools" can be created for a participatory budgeting process, and proposals will be assigned to these categories. **Hashtags** can also be freely created and introduced in the body text almost anywhere in the platform (proposals, debates, comments, process description, etc), both by participants and administrators, to classify content and make it searchable.

Unlike other existing platforms, Decidim's architecture is **modular, scalable**, easy to **configure,** and **integrated** with other tools or apps (data analysis, maps etc.). The platform has been designed in such a way that processes, assemblies and mechanisms can be set up easily and deployed from an administration panel. No knowledge of programming is required to install, configure and activate it. The components (participatory components) can be developed, activated and deactivated independently.

3.2. Decidim.dsg: decidim and its technopolitical design.

Decidim imposes a very special challenge from the point of view of design. What should it do, and how? Many professionals from the world of Design (web, interfaces, etc.) struggle with it. The natural step is to target a specific "market" or user-base, to explore motivations and test interfaces. But the goal of Decidim is not to target a specific customer base FALTA. The success or failure designing Decidim is not something that can be tested from the individual user-experience. The goal of Decidim is not to allow a citizen to propose something to government, the goal is to redefine government. Decidim will be well designed if it leads to a democratic organization of people to coordinate action. This is extremely challenging. There are no precedents, perhaps initiatives like Wikipedia can help.

From the point of view or user-centered design Wikipedia is poor and would have never been designed as it was. Yet it works, it is the best enciclopedia humans have ever done.

Decidim does not ship a product. It is not a citizen-petition software, it is not product platform, Decidim is more like a high level programming "language" for democratic organization. In this sense it is more like Drupal or RP, than it is to Tumblr or Medium.

Decidim has no users, decidim has participants. A user is defined against that which s/he uses: an object a tool an interface. A participant is related to how s/he builds power with others, it is a socially (políticall) relational capacity that cannot be reduced to the relation with the tool or object. Surely participants "use" Decidim, but they don't use it as users post a blog or as users buy in Amazon.

Decidim was not, and could not have, been *designed*. There was not, and could not be, a creative design team that delivers a designed product. Decidim has evolved and developed like an organism that has been created collectively: democratically at times, technocratically at others, politically, technically... It is the result of many influences, experiences, laws, traditions, creative exchanges, institutional needs, collective desires, popular demands, service restrictions, architectural constraints, ...

In order to understand some of the design principles of Decidim it is important to consider that one of goals of the Core team was to design a digital infrastructure that is robust to misuse, manipulation, coercion and resistant to censorship from the organization that manages it and its administrators. It is also important to note that the social contract is not simply a statement of will or a mere code of conduct for members of the community but that it directly translates on design principles for the platform (in analogy with the way in which a constitution translates into laws or specific regulations). In this section we explain the reasons behind some features of the platform attending to the technopolitical dimension of the way in which different mechanisms in the platform have been designed to attend to specific rights and also to specific forms of the resulting emergent dynamics they afford.

3.2.1 Some general technopolitical design principles

Compositionality: It should already be clear how Decidim is compositional, allowing for a combinatorial design of components inside spaces. This property of the platform responds to two different needs: first the need to develop the platform progressively and modularly and to be able to combine innovations in a component within all the spaces: e.g. if the Meeting component is updated all the spaces that make use of it can immediately benefit from the improvements. The second is to reduce cognitive load on participants, it suffices for them to be familiar with a space structure and a set of components to identify them and use them in a different context.

Relationality: All the components can be related to others. This relations can be established by admins, participants or automatically. This way information is structured in an active manner, not only through menus and submenus (vertically) but through cross references between components and spaces.

Polymorphic follow: Polymorphic follow is the feature that allows participants and administrators to receive notifications of events occurring to component-items or spaces (and their components within) as well as the events or actions generated by other participants. In short, a participant can selectively follow anything in the platform and receive notifications accordingly.

Multiplicity: Most platforms for participatory democracy reduce subjectivity to individual citizens. This is often complemented with the absence or even impossibility of proposals being made by the organization itself. Such is the case of "Petition" software, which implies a form of paternalism from the very institution. Decidim, on the contrary, differentiates between four different types of proposal creators: individual participants, user-groups, meetings and the organization. Participants can filter the proposal by type of origin or creator. This fourfold nature of proposal creation some intentional implications: a) Meetings are considered subjects of proposal creation on their own right, it is not the raw sum of the individual attending the meeting but acknowledges the sort of collective mind that emerges from a meeting and the intrinsic deliberative dynamics that is created within, b) the Organization can be the creator of proposals standing at the same level as individual participants, groups and meeting, which enriches participatory processes, a sense of joint effort and responsibility on the production of public policies and a the contrast proposals among equals, and, c) the combined result display the multi-scale structure of social organization without simplifying it to a collection of individuals.

Vertical and horizontal communication: We talk about verticality in communication of participatory spaces and components when navigation of content is guided by menus and submenus in a hierarchical manner and by the massive or selective newsletters written and sent by administrators. This helps having a systematic and ordered path for information navigation and display. It does, however, also hinder the possibility of selectively receiving information in a social, rather than administrative manner. In vertical communication participants can only talk to each other within containments: in relation to a participatory object that is open to comments. This is why we introduced a set of mechanisms to foster horizontal communication. By this we mean that participants can send and receive information about platform content independently of the hierarchical structure afforded by the site-map. Mechanisms of horizontal communication are: private conversations, follow and endorse/reclaim actions, `#hashtags`, `@mentions` and `~relations` … In a sense if you are to picture the hierarchy of information as a tree, horizontal communication mechanism are meant to establish transversal links between objects of the hierarchy converting the tree into a distributed network. Private conversation can boost relationships between participants, independently of the participatory spaces created by administrators. The follow-endorse coupling allows for a network of notification spreading between participants as they both selective choose to follow one-another and selectively choose to broadcast information about a participatory item or object. On the other hand `#hashtags` allow participants to classify content and reorganize information clusters independently of the categories and scopes defined by the administrator. Also `@mentions` make possible to call for a specific participant in various places bringing participants to action by means of other participant's will. Finally `~relations` allow for participants to connect any given item in the platform with another crossing boundaries between the constraints established by the hierarchy of information of the site-map.

Multitenant. Decidim is a multi-tenant infrastructure, this means it allows to set several instances in a single server while guaranteeing their independent operation, facilitating and reducing costs in the provision of Decidim as a service.

Federation.

3.2.2 The social contract as a design principle

The social contract is not a mere statement, it translates into specific design principles and

solutions of profound technopolitical and technical effect. Here we explain some of them.

1. *Free software and open content: Decidim will always remain open to collaboration, without legal or technical obstacles for the use, copy and modification. To ensure this we use a set of licenses: Affero GPLv3 for the code, CreativeCommons By-SA for the content (text, images, design, etc.) and Open Access Database License for data. This means that Decidim will always remain auditable, collaborable, transparent, appropriable and trustworthy, all of which is fundamental for a democratic infrastructure.*

We need to stress here that "free" is used in the sense of "freedom" not in the sense of "no-need-to-pay". It is essential not only for the code of the platform, but also for the data and content (proposal titles, comments, images and information) to guarantee freedom of use, re-use, copy, modification, and re-publication of the modifications. This is a technopolitical decision that translates into the social contract and the EULA (end user licences agreement), the software repositories, and platform copyright notices with a set of intended effects that prevent certain actions and make possible others. The benefits and nature of the software licences will be explained in detail on the technical plane (section 4 of this document). Suffices to say here that the Affero GPLv3 license legally binds the service providers to give direct access to the computer code that runs in the platform. This should be a precondition of all participatory democracy platforms because it is a key guarantee that numbers, comments, mechanisms and data is not being manipulated or processes in ways that are not transparent and accessible to anyone.

It is important to stress here the technopolitical aspects of the free licenses for the content. We live in a world that is crossed by copyrighted materials that asymmetrically shape the expressive power of people: you cannot create your Star Wars t-shirt, you cannot improve the last musical hit at school, etc without costly and complicated copyright contracts that only big companies and institutions can afford. Under this conditions collaboration between peers is almost impossible. Decidim, and participatory democracy altogether, is a quest for collaboration of the design of public policies, plans, and solution of complex problems. The freedom to remix, copy, modify (with amendment, etc.), re-use and improve proposals, initiatives, etc. is critical to participatory democracy. Moreover, it is important to stress that copyright and intellectual property regulation is often instrumentalized for censorship and other means of blocking the development of certain ideas, even in the political arena (Tehranian, 2015). The only way to guarantees such misuses and the only way to guarantee collective unrestricted creativity is to guarantee the rights identified above. This is the role of the Creative Commons licenses.

The same applies to data. Today, the asymmetric access to data generates inequalities on the capacity to analyse, understand and influence social processes in the digital domain (Gurstein, 2011ab; Halonen, 2012). Decidim follows the principle by which all data that can be obtained by repeated visits to the web, or with more or less sophisticated techniques of data mining (usually in hands of a few experts) must be accessible without barriers, in the most systematics and accessible manner and, when possible, with visualization data that helps understand and analyse the data for non-experts. In addition, open data interfaces (e.g. API) allow third parties to establish automatic transparency applications, systems of auditing, accountability, etc.

2. *Transparency, traceability and integrity: the content of participation will always remain transparent, traceable and integral. This means that all the content must be accessible and downloadable, it should always be known what happens with each proposal, its origin, in which result or decision is was incorporated or why it was rejected or left behind, and the*

content needs to be displayed without been manipulated, any modification (if required) must be registered and be accessible and auditable.

This point of the social contract directly translates into design principles present in the functional architecture and other features covered on the relationality principle. The principle of **relationality** explained above is one of them. FALTA. No pre-moderation

3. *Equal opportunities: "The platform will offer equal starting opportunities to all participatory objects (proposals, debates, etc.) for them to be viewed, discussed, commented, evaluated or treated without discrimination of any kind" (direct quote from the contract).*

Equal opportunities with incremental differentiation: The social contract states that "[t]he platform will offer equal starting opportunities to all participatory objects (proposals, debates, etc.) for them to be viewed, discussed, commented, evaluated or treated without discrimination of any kind" (direct quote from the contract). Two competing principles must be satisfied within a democratic process. On the one hand all participants and ideas/projects/proposals should be granted equal opportunities, on the other hand differentiations have to emerge, when resources are scarce, proposals are incompatible or too many to be executed, then there must be a way to discard and select, some means to reach consensus or make dissent and conflict visible. For this to happen Decidim first displays all the proposals randomly on the proposal navigation; this makes all proposals (old or new, with many or few supports/votes, with or without comments, created by individuals or by the organization) equally visible at first sight. It is then a matter of horizontal communication and active filtering by the participant to navigate the proposals and choose for them, campaign, promote or support them. We have discarded the use of similarity matching to propose similar proposals to be voted to avoid filter bubbles (Flaxman, Goel & Rao, 2016). It is also important to note that the default option is to separate the proposal creation phase with proposal voting or the supporting phase, that is, proposals cannot be supported until the proposal creation is closed (this configuration can be changed). Although this plays somewhat against engagement (participants feel more engaged if they can create and support proposal and have more lively interaction experience) it is crucial to guarantee equal opportunities, otherwise the earlier proposals get most attention and support, no matter what the display algorithm is.

4. *Privacy with verification: participants must retain privacy of their personal data combined with verification. Personal data should never be displayed, nor sold or transferred to third parties while, at the same time the unicity and democratic rights of participants must be preserved (meaning there cannot be two verified users corresponding to the same individual with democratic rights and all participants with such rights must be verifiable).*

Identity, anonymity and verification: It is a design principle of Decidim to protect the privacy of participants. This is not only a requirement of existing regulation, it is an ethical and political principle to protect weak participants from coercion, to avoid retaliation from the powerful, purchasing of votes or the expression of preferences, or simply as a digital right. But this right to privacy must be combined with the verification of participant rights for decision-making (citizenship, membership, etc.), in other words, participants must remain pseudo-anonymous while verified. Decidim is intentionally designed to make this possible. The way to do it is to keep the personal data that identifies a user as a right-carrier from its username and database identifier on Decidim. After registration, where participants choose a username and provide an email (for notifications and password change) a verification process is available. This process can be done in different ways, all of them imply some form key (often personal) information been transferred as a proof of

identity. This information is compared to a census or membership database, and the participant's username is verified. The personal information of the verification transaction is not stored, it is only temporarily used for verification purposes. However, unicity (that a member or citizen has a unique verified account) must be ensured, and the possibility of revoking verification (e.g. when an account has been compromised or credential, e.g. passwords, lost or an identity stolen) must also be granted. In order to make this possible Decidim stores a hash of a personal identifier together with a secret that is only known to the server that stores the hashes. A hash is a function of the type X-->Y so that small variation in X deliver very different results of Y and the operation X-->Y is easily done but the operation Y-->X is very hard or impossible. Thus by storing only Y it is very hard or impossible to deduce X (the real identifier of the participant) but having X it is possible to compute Y and check whether this person already had an account, or revoke it.

5. Democratic quality and guarantees: the platform must guarantee the democratic quality, the non-discrimination and equal opportunities for each participant and proposal.

Democratic quality by default-configuration: Decidim makes possible to configure spaces and components with various options, not all organizations are equal and the demands and needs are different. However, the default configuration must boost democratic quality by providing a set of pre-established configurations that guarantees the best practices for most known use cases. Decidim ships with a set of default configuration options activated. This configurations have been carefully discussed to as to produce the best possible emergent democratic dynamics within the platform.

6. *Inclusiveness and multilayerness: the platform must comply with accessibility standards, its use must favour the integration of online and offline participation and the organization must deploy the means for mediation and training for their members.*

Meetings: There are various aspects to be highlighted here. The first is the centrality of the Meeting component for a genuine development of any democratic process, particularly if the scope of democracy is territorial and the sovereign body is diverse (like a city or a complex organization with a variety of agents). There is a forerunner reflexion over the 15M and *Indignados* movement that translates to this centrality: the notion of *augmented event* (Toret et al. 2015). This notion highlight the amplying effect that digital technologies have over face-to-face encounters and events. It stresses the capacity of digital connections to re-connect, amplify, intensify and re-present (not in the sense of representation as a mirroring or standing-by that which is represented, but in the sense of re-stating the presence). To say it differently: if hackers always search for high bandwidth as a means to higher quality connection, it is in physical encounters where we find the highest bandwidth, highest definition, best quality 3D experience. The digital comes to connect, amplify, record, and coordinate such events. And Decidim has been designed with this idea of *zugemented event* in mind, trying to foster and favor face-to-face politics, to call for meetings, to hybridize and re-connect the digital and the presencial. From its very conception to today, a distinguishing feature of Decidim over other kinds of participatory democracy software (particularly the so called civic-tech dispositives) was that of connecting digital processes directly with public meeting and vice versa.

Mobile first: The mobile is becoming the first interface of access to the internet, particularly for people with less resources (REF MISSING) this is why Decidim has a "mobile first" design principle to foster inclusiveness.

Training and mediation against the digital divide: The digital divide is still here, it will never go away. Capitalism has reduced accessibility as a critical infrastructure to deploy

services and commodities. One such commodity has become connectivity itself: devices, . Mass consumption has made digital interfaces become cheaper than ever imaginable to the extent that the traditional market for exclusive, high class, commodities do not exist on the mobile or PC market except for standard devices with golden covers with diamonds[30]. The digital divide is mostly elsewhere: on the knowledge and capacities to understand and inhabit digital worlds that do not impoverish us. This is why Decidim is not simply a platform but also includes a training project: training.decidim.org where participants can access Open Educational resources to empower themselves, understand the importance of data, the principles of democracy and digital communication. Attending to the connectivity divide Decidim is currently working on a mediation program that helps those without the means (both cognitive and economic) access and intervene on Decidim.

7. XXX

3.3. Decidim.conf: configuration and design of participatory spaces

3.3.1 Technopolitical design of a participatory process

We have explained the functional architecture of what Decidim makes possible and we have defined the technopolitical design of its underlying logic and intended effects. In this section we explain how to design and configure a participatory process using Decidim as an example of best practices and a model of the bridge between the technical (software implementation) and the political (its effects on a participatory democracy process). This in-between the technical and the political is filled through the admin panel when configuring process option, opening phases, activating components and filling in the forms from the administration panel. In other words, if Decidim is understood as a "programming language" for participatory democracy this section should be understood a technpolitical how to program a participatory process. The explanation is divided in phases of the participatory process.

Phase 1: Presentation and call for participation. The first phase involves a campaign calling for participation, it is a phase in which the very configuration of the participatory process needs to be explained in detail, with a particular emphasis on the metadata fields that are required to open any participatory process: a) *who* is in promoting this process, b) *what* is the scope of decisions to be make (what is this process meant to decide upon?), c) *how* is the decision process structured and how is the final decision going to be made. At this early stage it is very important to make an explicit effort to invite as many and diverse stakeholders as possible.

- **Meeting**: it is important to announce the participatory process, explaining the core information and making a public commitment from the organization to accept the autonomy of the process and its results. Public engagement and trust will be determined by this announcement.
- Upload **documentation**: the basic documentation of the process needs to be uploaded. It is recommendable here to upload campaigning material so that groups and communities within the organization can adapt it and spread the call on their own media.
- **Blog** with the announcement (linking to meetings and documentation). The first blog post should be written as a magazine article, with a language that is closer to so target audience and empowering (unlike the official language used for official

[30] This is true for developed countries, which are, needless to say, a high-class of the global world.

and institutional communication). It is important to activate the blog because this first post should become the reference post to share and broadcast the start of the process within the platform and outside.

- **Newsletter**: a newsletter for the whole platform is important to be sent in order to call attention over the recently opened process and make participants follow the process. Depending on the number of newsletters sent it might be better, however, to keep the first newsletter ready form phase in which there are more opportunities to interact within the process, it might otherwise lost a simple visit that bring little value to the process. So, it is often recommended to send the newsletter on the transition between phase one and two where more actuable components will be available.

Phase 2: Diagnostic. The goal of this phase is to identify the problem in details, including as much diversity and participation as possible, and making use of the best available information. The following component activation and configurations should be made

- **Survey**: A survey is opened with specific and open questions that make possible to identify the most important elements of the diagnostic (which are the problems that are most important on that specific domain?). It might be convenient make a first public meeting to define the content and questions of the survey in a collaborative manner.
- **Meetings**: A diagnostic has to be shared among stakeholders and open to a diversity of agents. It is thus important to reinforce digital mechanisms with public meetings that discuss and include as many people as possible. There are two types of public meeting that can be set up for this phase: those that are more informative and lead by data, problem analysis, expert contributions in the form of talks and seminars and, on the other hand (and perhaps usefully combined with the previous type of meetings) deliberative meetings.
- **Debates** on the results of the survey: Debates can be activated on the basis of the survey results, to provide for a collective quantitative analysis that leads to a better problem definition. At this point digital debates can also complement the results and development of the open meetings for those who couldn't attend.
- Define **categories** for proposals: it is convenient to define categories based on the results of the diagnosis. These categories will make possible to organize the rest of the forthcoming contributions. If the result of a process is a book or a long text (such as a regulation) it is convenient to think of the categories as the Table of Contents.

Phase 3: Proposals creation. During this phase the proposal component is activated and drives the dynamic of the phase together with the meetings. The goal of this phase is to end up with a stock of quality proposals. Merging fase-to-fase dynamics with digital dynamics is key to the success of this phase and a special emphasis needs to be made to foster deliberation within proposals.

- **Proposals**: It is highly recommended that some early and high quality proposals be rapidly uploaded. These might be generated by the organization or by an open meeting, or be specifically created under demand by experts and/or relevant actors and stakeholders. Decidim is designed so that these early proposals should not condition the content of the rest of proposals but they can set up the *tone* of the proposal creating phase. Early quality proposals bring the standards high, contribute to good deliberation. Regarding participant generated content It is very

important to clarify through notifications and the proposal creating wizard helper how a proposal should be made, what the limitations are, explain how to write a successful proposal, etc.

- **Meetings**: It is also very relevant to set up public meetings both to discuss existing proposals and to create new ones. Note that meetings are authors of proposals, as a collective mind where participants jointly generate new ideas. The value of these meeting goes beyond the creative quality and it involves also positive side effects of deliberations: conflict resolution, consensus reaching, acknowledgement of stakeholder positions, etc. It is highly recommended that meeting note-takers create the proposals within the platform right at the end of the meeting (before attendees leave). Participants on these public meetings should get some basic training on the digital platform before the meeting begins and right after. They must understand that specific proposals came out the meeting, that they can follow them online, comment on them and promote them. It is also recommended to make an evaluation survey (preferably online, within the meeting component) and take advantage of the time spent on survey responses to upload the proposals.

Phase 4: Selection of proposals. This is the most important phase regarding the "decision making process". Different support/voting mechanisms can be used, different levels of binding can be agreed upon, even different phases or cycles of decision making can be carried out. This is something to be defined at an earlier stage, preferably before the very announcement of the process, because it greatly affects the engagement and commitment to the process. Broadly speaking there are two possible scenarios that condition the type of proposal selection process: 1. An scenario where hundreds or thousands of proposals are expected, and 2. An scenario where the number of proposals is low. The first scenario calls for a preliminary filtering and it is thus recommended to use the Threshold voting system for proposals, in order to end up with a reduced number of high quality proposals, from which it might be further required to select or prioritize. This is also recommended for cases in which a careful technical evaluation of the proposals is required (e.g. cost evaluation, or legal studies made to ensure the viability of the proposal).

NOTE: In most occasions phases four and five might be iterated into one or more creation-selection cycles. Decidim makes this possible: administrators can activate various proposal components and import proposals from the previous cycle to a new set of proposals (filtering the import by various means, for example, importing those that have been accepted or reached the threshold). Proposals can pass, be improved, merged, recategorized, re-ordered, etc from one cycle to another under the final result is reached. Decidim makes possible to maintain traceability across these cycles. However, it is recommended to reduce the number of cycles to the minimum required, to avoid too much complexity for participants. For these extra cycles it is convenient to open explicit phases or stages of the project. We are here providing a simplified scheme but and alternative scheme could move phases 5, 6 and 7 to 7, 8 and 9 and insert two more phases here: 5. Project definition phase, 6. Selection with participatory budgeting.

Phase 5: Results. This phase marks the end of the decision-making process as such and it must clearly state what the organization is accountable for in terms of the binding and commitment with the decision that has been taken. If the result of the participatory processes depends on a further step for the definitive approval of the results, we recommend NOT to call it result. Instead it should should be made explicit by *whom* and *how* is the final decision taken and include it as a phase of the participatory process itself

(even if it takes place out of the platform). So, for example, it might be possible that a House of Representatives needs to approve the final decision and amendments are made to the proposals created in Decidim. If this is the case the results should be created after the final proposal and selection phases, adding a further meeting (that of the House of Representatives) where the final result has been taken. Then, the result component is activated and each result created (e.g. each article of a new law, or subsection of a new plan). Results must bear a direct connection to the last proposal phase. This is done in two ways: a) changing the status of proposals (accepted or rejected) and b) importing them to the result component so as to guarantee traceability. This import can be a many-to-many mapping, that is, one proposal could lead to one result, two or more proposals to one result, one proposal to two or more results, etc. This is often the case when two or more proposals are very specific and merged into a more abstract or generic result, or when participants made a proposal that includes various aspects within that demand specific and differentiated results (e.g. a proposal might suggest to change A and B and this should translate into two results: change A and change B, if A and B are relatively independent on its execution). When writing down the results two principles should be carefully met: a) to respect with maximum accuracy the writing of the original proposal of with the result-item is a consequence or adaptation, and, b) to create results such that they can be directly and explicitly monitored on the level of execution and accountability (see phase 7). In order to facilitate this second requirement it is important to note that Decidim makes possible to split results into sub-projects such that executable or measurable actions are made explicit (this is particularly convenient when proposals or results are abstract or unspecific: e.g. “improve accessibility in a building” might be subdivided into: “improve signage”, “create a ramp at the main entrance” and “adapt bathrooms of the second floor”).

Phase 6: Evaluation. Once results are published it is convenient to call for an evaluation of the process itself. This evaluation can be carried out making use of the following components:

- **Newsletter**: this is a good moment to send a newsletter announcing both the publication of the results of the previous phase and calling for participation on the evaluation survey and meetings.
- **Survey**: In order to collect evaluation data and standardize measurement of the democratic quality it is convenient to activate an evaluation survey[31].
- **Meetings**: If possible, calling for open meetings is a good option here. In order to be able to match the content of the surveys and the meeting it is recommended that the content of the meeting includes the survey itself or a parallel structure, enriched with qualitative methods of analysis and contrast, and improvements for next processes..
- **Blog**: the process as such is closed here so it is convenient to open a final blog post with a summary of the process, the results of the evaluation phase and as a means to provide a return and congratulate the participants.

Phase 7: Result-monitoring and accountability. This final stage is somewhat out of the decision making process itself but it is essential to close the public policy cycle and complete the participatory democratic process. Decisions that are not executed have no value, a participatory process that doesn’t lead to any action has no democratic meaning. Result monitoring needs to be activated in the result component and leads to the

[31] We are currently working on shiping Decidim with a default evaluation survey for all processes.

possibility of displaying the level of execution of each result and sub-results within, together with a milestone roadmap, beginning and end dates and some additional information. Also results can be updated on their content if adaptations are forced by different reasons. Note that this changes will be recorded and participants notified to avoid misuse of this feature. It is convenient to establish periodic updates of the results so that participants can know when to expect new updates. It is also recommended to keep comments open so that feedback can be given on the execution details of the results.

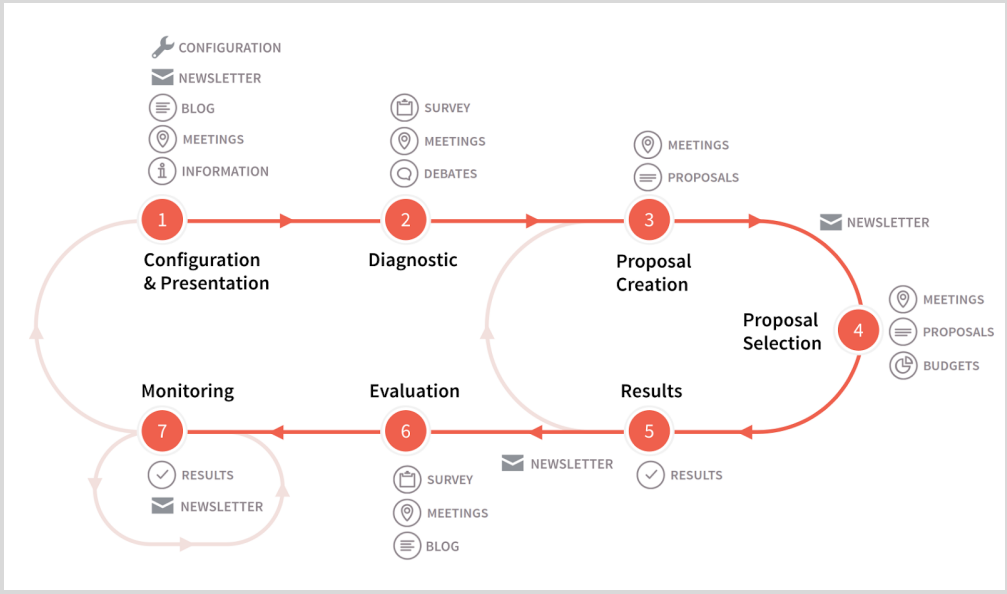


Figure XXX: Participatory process structure and flow depicting different phases and the components that should be activated in Decidim.

This generic design of a participatory process is open to different variations. We have suggested an expansion and iteration of phases four and 5. Other variations are also possible including the insertion of sortition-based citizen or member juries that can produce, evaluate or select proposals or generate a good diagnosis.

In many occasions the cost of an ideal participatory process in terms of attentions, time, human and economic resources might be too high to assume for an organization, and a more simplified version might be inevitable. Here is a potential simplified version:

1. Presentation and call for participation
    - Newsletter
2. Diagnostic
    - Survey
3. Proposal creation
    - Proposals
    - Meetings
    - Newsletter
4. Selection
    - Proposal support/voting
5. Results
6. Evaluation
    - Survey
7. Result monitoring

Note that we have reduced the activation of components to a minimum here but three components are compulsory if the process is to be called democratic and participatory: meetings, proposals with comments and supports activated and results. The meeting/s at the proposal creation phase will inevitably become a combination between diagnostics and proposal creation, since putting different and diverse agents together in a meeting to create proposals will inevitably lead to situations where the problem needs to be defined, or the goals of the proposals discussed.

3.3.2. Technopolitical design of Assemblies

Assemblies are technopolitically conceived as mesoscopic collective structures for decision making: collections of participants (members) that meet recurrently to take decisions over a specific scope or territory. Councils, parlaments, committees, working groups are all examples of Assemblies or participatory organs. It is hard to abstract away the functioning of all these types of entities. But from the point of view of Decidim components we have designed an assembly as a recurrent collection of Meetings, where members of the assembly evaluate proposals coming from participants or create their own proposals and deliver results. In short, an Assembly is an entity that takes proposals as input, processes them in Meetings or on their own digital space, and delivers results or other proposals as output.

Participatory democracy and Assemblies. Assemblies like a community council are traditional means to channel participatory democracy. The most participatory of assemblies are those that are open to anyone to join and have full autonomy on the decisions that are taken and affect the organization (like a General Assembly). Such assemblies are not always feasible and are often combined with other types of assemblies where participation or decision power is narrowed (e.g. working groups, executive committees, etc.). In such cases the relationship between Assemblies and between members of an Assembly and the rest of participants of the organization might vary. Assemblies can have a specific set of members or not. If composed of a specific set of members an assembly might accept newcomers or “external” participants on their meetings, or simply receive proposal coming from outside (from individual participants or from other Assemblies) and study them, accept, improve or reject these proposals on a meeting.

Public, closed-transparent and closed-private Assemblies: Decidim is designed so as to increase the participatory potential of Assemblies on the whole spectrum, favouring participation of anybody in the flow of proposals and results of an Assembly. However different configurations are possible. An Assembly can public (open to any participant) or private. When closed an assembly can be transparent or private. A **public** assembly is one where participants (other than the members of the Assembly) can create, comment and support proposals and join the meetings. A closed assembly can be **transparent**, meaning that other participants cannot freely join a meeting and create and support proposals, but they can access and comment on the activity of the Assembly. When a closed Assembly is **private** its activity is only accessible to the members of the Assembly.

Autonomous and auxiliary Assemblies: Assemblies are autonomous when the decisions taken by it are mandatory for their execution by the organization of some of its executive bodies (e.g. a specific department) or they can be auxiliary when they provide advice to be delivered to another Assembly that takes the final decision (e.g. an Advisory Board whose decisions are not mandatory but help further bodies to take the final decision). The nature

of an Assembly will condition the way in which proposals and results are connected between assemblies.

Relationship between Assemblies: Assemblies can be nested or organized as networks (hierarchical or otherwise), with an Assembly *n* accepting results from Assembly *n-1* as proposals to be considered and delivering results to Assembly *n+1*. So for example an Council (level *n*) might accept proposals from an Advisory Committee (level *n-1*) and make them results to be executed by an administrative body. Connections between Assemblies and Processes are also possible. An election process might determine the elected members of an Assembly, or an Assembly might participate with proposals, or filtering the proposals of a participatory process.

Configuring and activating components in Assemblies: For the proper functioning of an Assembly we suggest the following activation of components:

- **Information**: Together with the configuration information that is filled when creating an Assembly the information component should include a description of how the Assembly is configured and how participants can make use of other components to participate on the Assembly.
- **Members**: If the assembly has a set of official members, this components displays a card for each of them, their role within the Assembly, and a link to their profile so that participants can follow the activity of these member and interact with them.
- **Sortition**: The sortition component is an interesting feature to be used to select all or part of the members of an Assembly. If the Assembly is meant to be representative of the diversity of an organization, or if it important for the decision taken by the Assembly that its member should not be appointed by particular interest Decidim allows to randomly select the members of an Assembly out of a set of proposed candidates.
- **Meetings and proposals**: As mentioned, these are the most important components of Assemblies. Exploring the full potential of this component and connecting it adequately with proposals and results is key to the proper technopolitical design of Assemblies for participatory democracy. Agenda setting and minutes are the critical features of a Meeting. The agenda should be set up by a specific proposal component named “Agenda Items”, a threshold of proposals can be established to accept this item in the next meeting. If accepted the proposed item is included by the admin as an agenda item for the next meeting. During the meeting the item or proposal is discussed and then accepted (converted into a result or a proposal that feeds into another Assembly) or rejected (see Figures XXX and XXX bellow for more details)
- **Results**: If the Assembly is autonomous results should be automatically executed, otherwise results should be understood as proposals delivered to a higher order Assembly or decision making body capable to asses and accept or reject them.
- **Debates**: When an Assembly is composed of members that have decision power and represent particular groups or interests of the organization they belong to, or when they are hold responsible for their decisions within the Assembly, the debate component can be activated with a specific AMA (Ask Me Anything) configuration. Each member should periodically be subject to an AMA as a measure of accountability. Debates can also be used to address several problems that fall under the decision scope of the Assembly prior to the creation a specific proposal or as a means to openly deliberate upon alternative courses of action with the rest of the organization in the form of a Forum.

- **Blog**: Finally, if the activity of the Assembly is constant and complex for other participants to follow, it is convenient to active the Blog component to explain the news and updates of the course of action that the Assembly is following in order to share selected and relevant information with the rest of the organization.

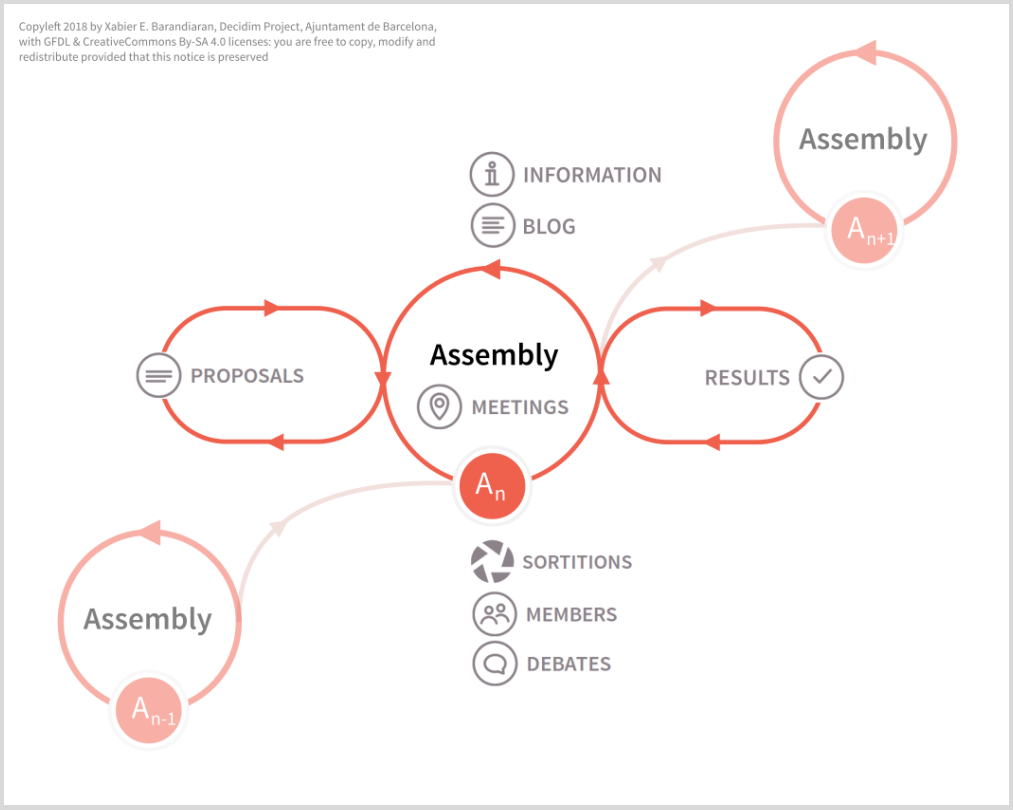


Figure XXX: Diagrammatic summary of the flow of proposals-results between nested Assemblies and the functioning of components within an Assembly. Assembly "An" takes proposals from assembly "An-1" and delivers results to assembly "An+1". Internally an Assembly elaborates its own proposals and feeds back into its own results. Information pages and a Blog can explain the ongoing life of the Assembly. The election of its Members can be done using the Sortitions component, and Debates might be used to foster accountability of its members by forcing them to respond to the questions posed by the rest of the organization.

The flow of proposals through an Assembly can have different configurations. We propose here two models. The first one (illustrated in Figure XXX) is the simplest model: anybody can make proposals, anybody can support proposals, given a certain threshold of supports proposal can enter the next Meeting of the assembly to be discussed. When that happens the proposal enters a state of "Evaluating" until it is discussed at the meeting and then accepted or rejected and finally turned into a result. The second model (see Figure XXX) involves a more complex flow involving two proposal components. The first one is open to participation to any member of the organization, the second is restricted to the Assembly members that can directly vote/support proposals to make decisions (see Figure XXX).

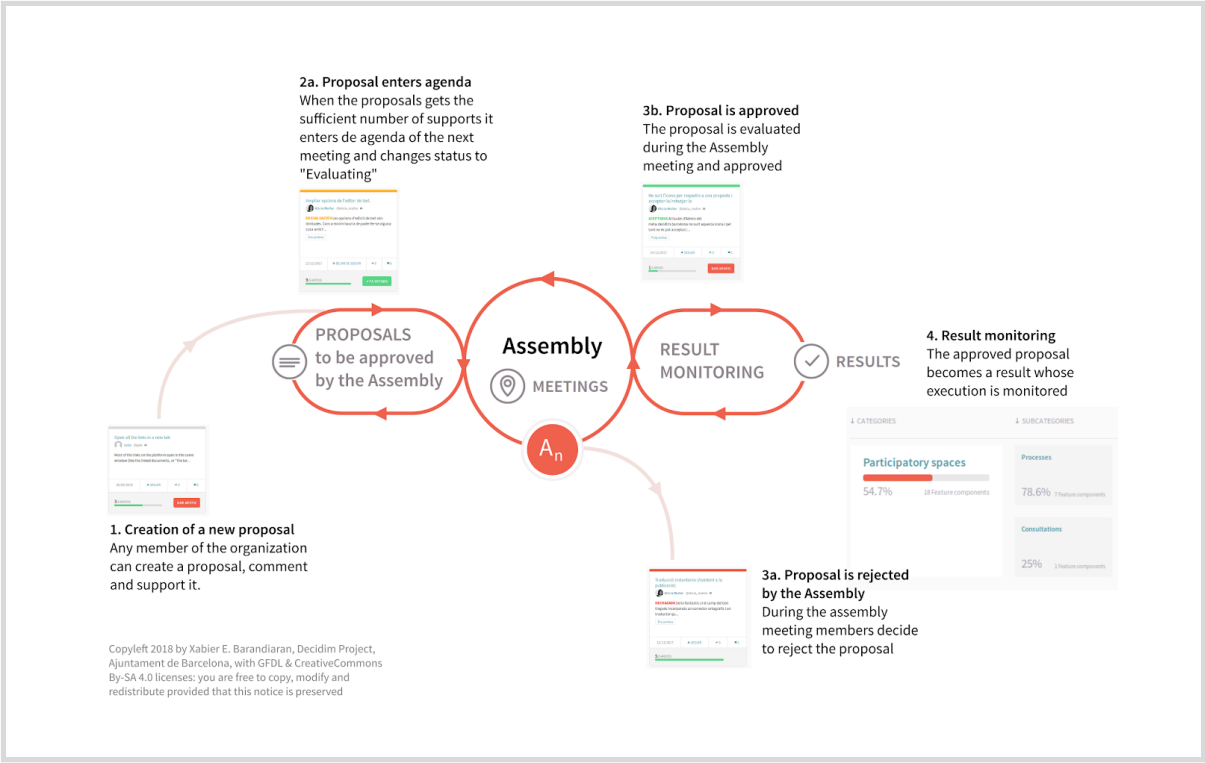


Figure XXX: Simple flow of proposals through an Assembly.

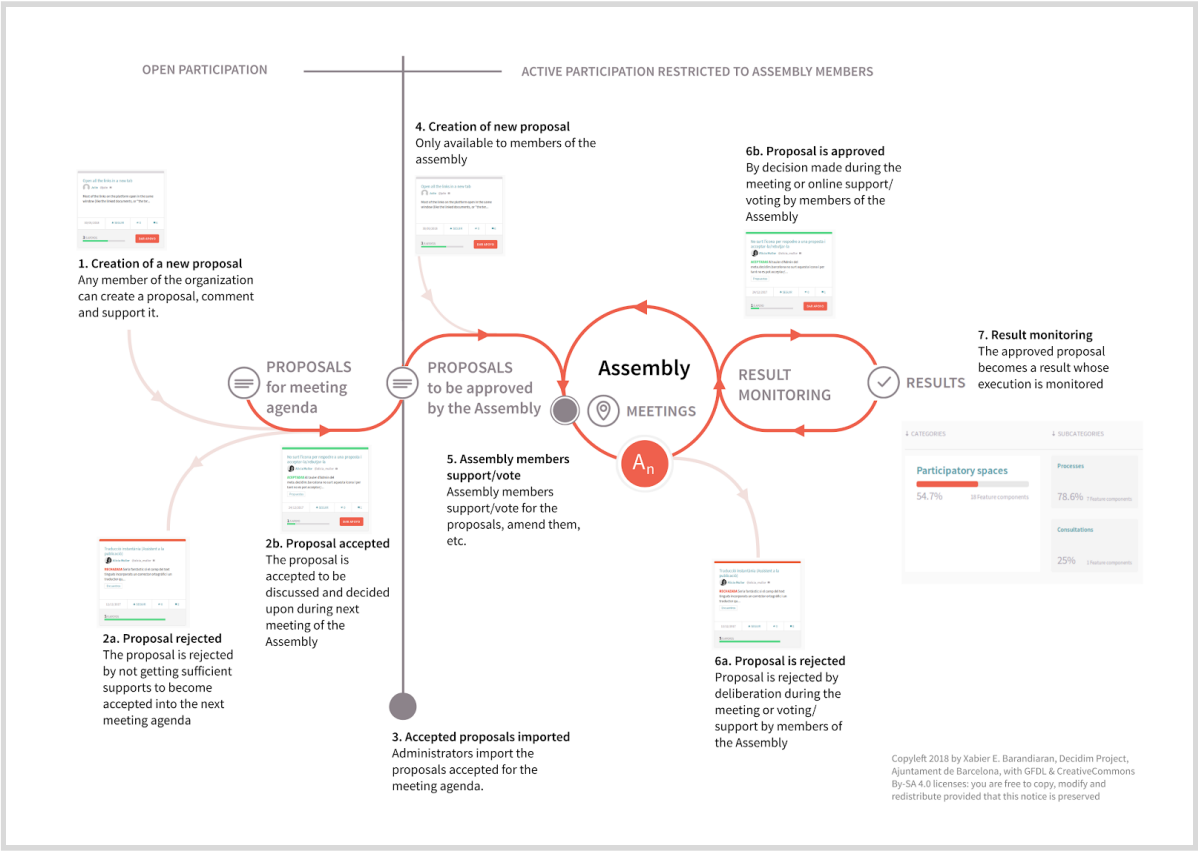


Figure XXX: Complex flow of proposals through an Assembly. Two proposal components are active: one for proposals coming out of the Assembly, a second one for members of the Assembly.

3.3.3. Proposal flow and potential life-cycle

Proposal flow as the most important activity flow in Decidim. As previously stated a proposal is the most basic building block of Decidim, it can be understood as the article of a Law or a regulatory text, as a project to be executed, as a suggestion to change the name of a street, as a advice on how to organize a party or as an idea to improve a bike lane in a city. If power is metaphorically understood as the capacity to build a house proposals are the bricks, the basic units of construction of decisions. The configuration and design of participatory processes is mostly centered around this component, and the way in which proposals flow over time is critical to successful participatory decision making. Figure X shows the full life-cycle diagram including all possible trajectories of a proposal and the actions that be exerted on it. We explain the diagram below.

Proposals can be originated by participants individually (following the creation wizard with a participant account) or collectively through the collaborative draft module where a draft is first created by a participants and other can join the discussion and authorship, rewriting the proposal collaboratively. Administrators can also create a proposal from the admin panel (displayed as “official” proposal) or importing them from a text document (that gets split into a number of proposals, one per paragraph or sub-sub-section). Proposals can also be imported from a previous set of proposals, thus allowing for an iterative proposal flow to improve ideas (imported proposals get linked to the original ones, allowing for complete traceability).

Once created, proposals are published, they can then be displayed as a set of proposals to be filtered and navigated as cards (default option) or displayed as a continuous document (organized by categories and sub-categories as sections and sub-sections of the document). Once published, proposals can be endorsed, commented or shared (also embedded on other sites). A proposal can also be amended: different participants can suggest changes. This changes can be accepted or rejected. When accepted (by the author/s of the proposal) the proposal gets modified accordingly. If the amend gets rejected the author of the amend can publish the amend as an independent proposal. Next proposals can get supports. On the basis of the supports received (or by with other criteria: e.g. after evaluated by a committee) a proposal can be rejected or accepted. Acceptance can lead to a new phase of proposals, it can also lead for a proposal to become a projects to be voted by means of participatory budgeting system, or to be finally included or converted into a result (which is in turn subject to accountable and transparent follow up of their degree of execution). When imported into a new proposal set a proposal can be deleted, or merged with another proposal of the same set or split into two different proposals.

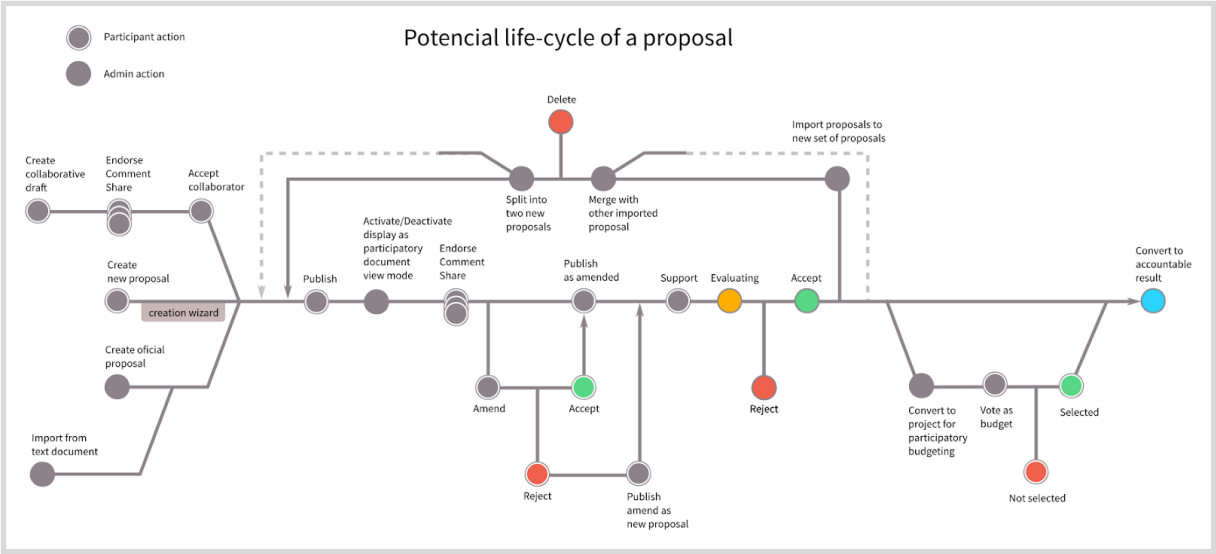


Figure XXX: Potential life-cycle of a proposal from its creation to its turning into a result. The diagram shows all types of proposal creation and the actions that can be executed into a proposal (both from the point of view of participants and administrators). See text for details.

3.4. Decidim.pars: Decidim as a project of augmented participation.

Decidim is associated to transformations in participation. Right above the layer of digital sociality defined by the functionoal architecture of the platform, there comes the actual performance of people and the construction of collective action and participation. The focus moves from how the platform operates and even how it makes people operate to the effects this has in broader practices, of how these practices go beyond what the platform simply allows, and how the platform is reconstructs and is reconstructed in various contexts.

The problem of collective action and the commons: catalyzing multitudinous self-organization. But to get people to act together for producing something in common is not easy. Two symmetric problems have been traditionally raised: the problem of collective action and the tragedy of the commons, the problem of creating collective goods and the problem of maintaining them. The first poses the question of why an individual (understood as utility maximizer, meaning someone trying to increase its wealth or power as much as possible) would contribute to produce a common good if it is possible to free ride and benefit from it after others have produced it (Olson, 1965). The second poses the question of how, if something "common" exist, avoid that every individual uses the resource beyond its proportional part, bringing about the eventual depletion of the resource and the so called "tragedy of the commons" (Hardin, 1968). Two traditional answers to the first question have been resource mobilization and collective identity: the first suggests that people contribute because others mobilize resources (either their own or someone else's), which compensates everyone´s effort while those mobilizing the resources get a better share of the result (be it in material or immaterial terms); the second answer suggests that people contribute because their own self-understanding is shaped by collective interaction, which orients their identity towards some form of duty or altruism towards others (at the very least, those composing the group). Collective action seems to require strong organizations and identities. The ones mobilizing resources and shaping collective identity (usually, via the resources of the party or the mass media) are traditional

leaders. But digital networks are changing this conundrum by reducing some of the costs of collective action, and otherwise transforming it (Earl & Kimport, 2011): platforms such as Decidim enable less costly and more diverse forms of participation, thereby open collective action to a greater base of contributors (LONG TAIL). This situation challenges the need of generating strong organizations and collective identities. Even if they do not disappear, their shape can change towards more flexible, decentralized, ad hoc forms, solidarity can mix with various forms of fluidarity (McDonald, 2002). Rather than traditional mass organization via social movement organizations, mass media, or mass parties, an open possibility is there for multitudinous self-organization and multitudinous identities. Digital networks can also contribute to the tragedy of the commons objection, in several forms. The first is by facilitating cooperation. The second is by enabling a much more fluid process of decision making on the commons. The third is by defining more clearly the ways of being in or out of the group. The fourth is a much more explicit formulation of the rules and the forms of resolving conflicts. The fifth is by affording a more transparent tracking of common activity. The sixth is by allowing a more transparent and secure application of the rules and sanctions. Digital networks surely require many other conditions to perform in beneficial manners, from measures for nurturing material equality among participants or courses for socializing the skills necessary to use them (see section XXX below) to forms of revising structures not to fall into digital cages (Weber). It is also important to stress the many factors they rely upon or cannot change; however, under the right sociotechnical settings (whose construction they may contribute to) they are already helping to advance towards new forms of multitudinous self-organization, identities and commons.

Augmented participation vs click participation and digital divides. For the Decidim project it is essential to avoid a double reductionism, the first is what we may define as "digital reductionism". This form of technocentrism focuses mostly or exclusively on digital aspects and infrastructures of participation, without attending adequately to the necessary and plural innovations in terms of participatory practices, processes and culture potentially associated from the hybridization of digital and analogical participation. Our approach is oriented to connect spaces and activities in Decidim with face to face spaces and activities, thinking through the variants in which this may take place in order to catalyze augmented collective action. The second form of reductionism is click participation: in this case participation becomes a phenomenon defined, first, by being digital only, and secondly, by the superficiality and brevity of interaction with other actors and ideas. On this side, we believe it is necessary to enable and favor enriched forms of interaction among Decidim participants, as well as with platform contents, hybrid participatory processes, and political events in a wider sense. This implies, on the one hand, to enrich participation in Decidim with features beyond the vote (deliberation features, social networking features, data visualization, etc.) and, on the other, to design hybrid processes (f.i.: face to face meetings connected to the platform) that enable an augmente, integral and multi-mode participation, instead of reduced and clicked. Hybrid participation helps to further reduce the traditional digital divide, the gap in terms of internet access, and enriched forms of interaction help with newer ones, such as the the digital divide in information processing and, more importantly, in information application for action.

3.5. Meta.decidim.org: Decidim's participatory governance, community and organization.

- DONDE METEMOS LO DE AGREGACIÓN DE PREFERENCIA COMO CONTRAPODER?
-

The most important (tecno)political space of the decidim project is the MetaDecidim

community and its platform meta.decidim.org. As the very name indicates this is a reflexive democratic community over the multiple dimensions of the project. The meta.decidim.org platform is the basic digital infrastructure for this community. As of 07/10/2018 there are 441 users registered on the community, four participatory processes, 12 assemblies, two consultations, 483 proposals, 19 debates, 613 comments and 128 meetings channelled through the platform. Other important digital infrastructures involve: decidim.org website, github.com/decidim, docs.decidim.org, edu.decidim.org, several Telegram (instant messaging) groups and channels, gitter.im/decidim, crowdin.com/project/decidim but we will talk about these latter.

The meta.decidim.org platform fulfils a number of needs:

- Onboarding of newcomers: implemented as a participatory process this onboarding brings the newcomers through a journey that covers all the main features of the platform and the community.
- Support: a community support forum is open for administrators and participants to ask questions and open debates of different sort regarding best practices of the platforms, advanced configuration, etc.
- Bug-reporting: Mistakes, broken features, malfunctioning or software problems of different kinds can be reported and discussed through the platform.
- Training:
- Participatory Design of the platform: The most important participatory process in the meta.decidim community is the very design of the plaftorm. FALTA
- Structuring of the community: working groups, general assemblies, etc.
    - The general assembly is called SOM (litteraly “we are” in Catalan, but it is also the acronym for *Sesiones Operativas Metadecidim*, that is, Metadecidim Operative Sessions).
    - Working groups or teams:
        - COM
        - TECH
        - GOV
        - LAB
        - PX
        - PRO
        - EDU
    - There are early assemblies like JAM16, JAM17 and JAM18
- Newsletter for major updates and community events.

It embodies a number of essential technopolitical virtues:

- **Dog-fooding**[32]: Through meta.decidim the community (developers, admins, consultants, etc.) **use** their own software, we eat our own dog-food. Decidim is not a product *for others*, but first (and often foremost) for the very producers, the community directly enjoys (and suffers!) the functioning (and malfunctioning!) of the software it produces. This is something that helps improving the quality of the software at different scales, it serves as a quality control or testing procedure. And it is intended to be used as such. Everytime there is a new release of the Decidim framework, it is always tested first at the meta.decidim.org site, where users can

[32] https://en.wikipedia.org/wiki/Eating_your_own_dog_food

directly report bugs, explore the new features and systematically disconver possible failures and suggest improvements (see the development process bellow FALTA REFERENCIA A LA SECCIÓN DEL DOCUMENTO). But dog-fooding is not only effective at the level the software itself (usability, experience, testing, etc.) but also of its technical and political effect, which brings us to the next level:

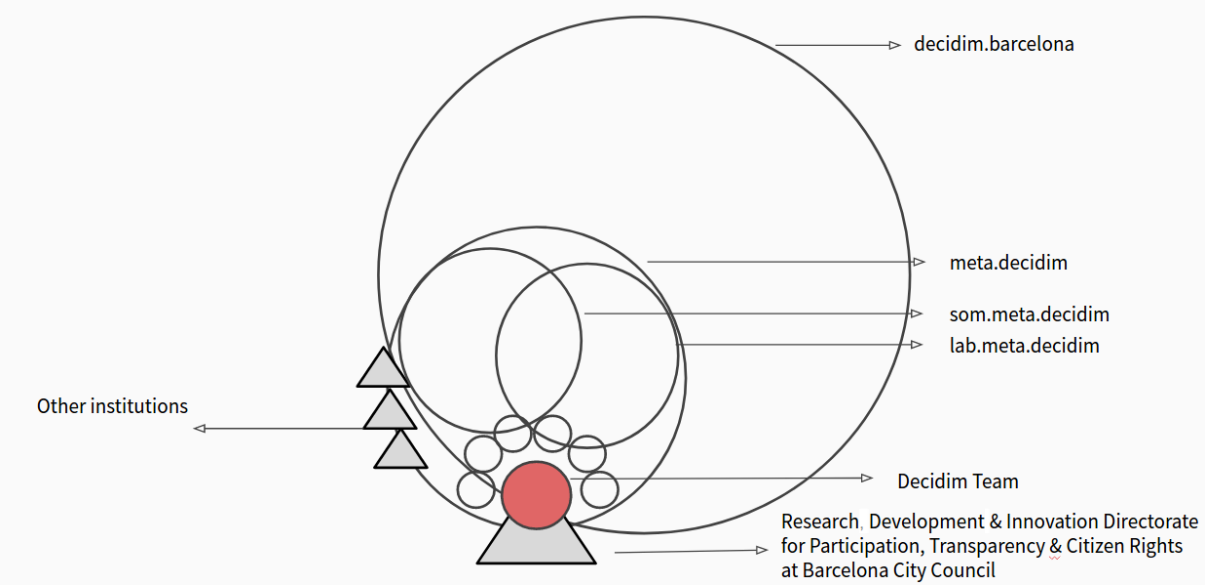
- **Recursive bootstrapping**: Decidim is the main space for the (democratic) **organization** of the community. This means that the reflexivity is constitutive of the community. In a sense the organization does not only eat its own product, it nurtures from it. The very software is a product and also the scaffold of the community. The more successful the software facilitating an adaptive, resilient, autonomous and strong community the better for the community → the better the software → the better the community. This implies a deeper testing of the software, a political test. There have been many cases in which improvements to the software have been made as a result of the difficulties encountered on the way it shaped democracy itself within the meta.decidim community. This translation of political difficulties into software improvements is possible thanks to a participatory process inside meta.decidim.org:
- **Reflexive democratization**: d **Democratic design** of democratic infrastructures.

Participation and reappropriation: the new uses of technology. As William Gibson put it: the street finds its own uses for things. The communities and practices that surround Decidim redefine it as it redefines them. The prescriptions inserted in the code are rewritten by the inscriptions inserted by actors in action. This process can go from unexpeted uses to the actual redesign of the platform. This second point is the primary objective of the Metadecidim community.

Metadecidim: software and community. Metadecidim is a community that collaborates in the design of the platform and the construction of the project. It is also an installation of Decidim software[33] that enables (along with face to face events) the community to do so. Dentro de Metadecidim pueden distinguirse actualmente dos sub-comunidades principales: SOM.Metadecidim y LAB.Metadecidim. La primera está constituída por ciudadanía, asociaciones, servidores y servidoras públicos, hackers, y otros actores.

Decidim:

[33] https://meta.decidim.org



3.5.1. Organizational scales: Decidim Team and Metadecidim Assemblies

FALTA. Aquí hay que describir toda la organización y cómo funcionamos: desde Decidim Team, el kanban, el laboratorio, los diferentes roles, etc. y luego el Metadecidim, los ejes, seminarios de los LABs, SOM, las JAM, etc.

Decidim is an open and collaborative community, an ecosystems of small and medium size businesses, organizations and citizens: Metadecidim is how the community is called in Decidim project. Metadecidim has different layers of intervention: LAB, SOM and JAM.
LAB Metadecidim is an open and collaborative research space which revolves around the challenges that technology raise with respect to the transformation of political participation. New systems, such as Decidim, are changing the traditional paradigm of citizen participation in the political sphere. On 2017 the LAB has host several events about relevant aspects of Network democracy and Decidim challenges such as Democratic innovation guided by simulated models, Democratic governance of digital commons infrastructures, Digital ontologies of participation, Investigating new democratic governance models for new scales of cities, Strategies of engagement for democracy, Digital identities, verification and democràtic processes or Political Gamification1.
SOM Metadecidim is a productive ecosystem, where citizens can think, prioritize development lines, decide on improvement projects and discuss the uses and future possibilities of the Decidim platform. Is the most important part of the Decidim Community and one of main goals is to empower citizens to appropriate Decidim, contribute to its development and be co-participe in its construction.
The SOMs are a monthly open meetings of the community (made up of technical staff, hackers, researchers, experts, organizations of civil society and citizenship in general). Sessions are organized around thematic areas of work or specific assemblies. The active axes are these:

- TECH (technologies): experimentation and reflection on useful technologies for Decidim, platform architecture, development community and gitflow, installation of the Decidim, technical documentation, etc.
- PX (participant experience): where you know and share the experience that users have of Decidim in order to improve the usability and the participation experience in the platform.

- COM (story): narratives of reflection, imagination and techno-political seduction, for the construction of common and creative discourses about participation, Decidim and democracy.
- LAB (research): To go deeply into the debates open in the monthly session of the Decidim.lab, as well as in other research challenges connected with the development of Decidim and online democracy.
- GOV (governance): dedicated to collectively discussing the governance of the community and the steps to follow in its development.
- PR (processes): Exchange of experiences and collaborative design of functionalities from the technical point of view of the participation and democracy in the organizations that use Decidim.

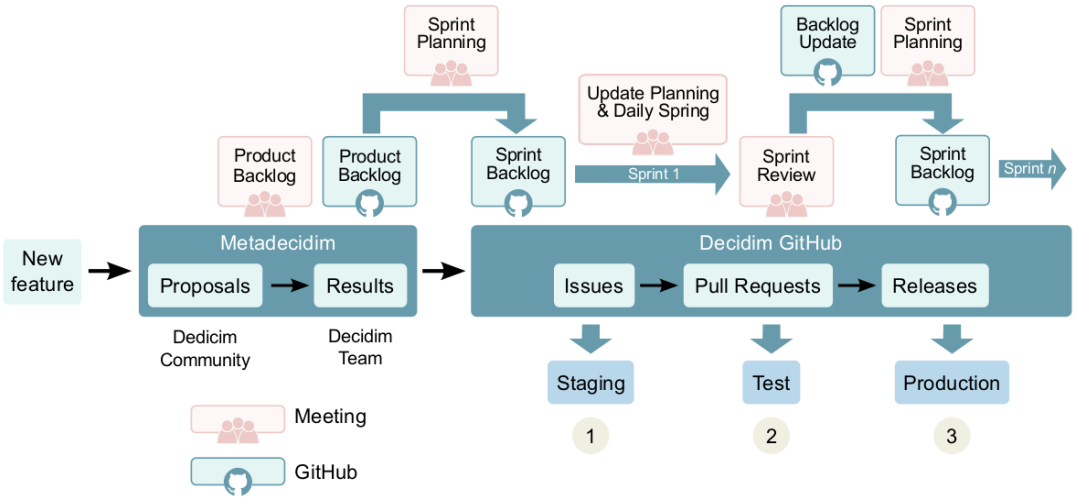
Finally the community has the JAM Metadecidim the annual conference of Decidim project. Three days of workshops, conferences, panels, interventions, presentations and other activities related to networked democracy, political participation, digital technologies and Decidim Software.

3.5.2. Code governance[34]

FALTA Aquí hay que hacer un resumen la investigación de SOM-UOC, pero también los roles de Product, y la explicación de los pliegos, etc.

The Decidim is a GitHub project which includes thirteen repositories, where one of them implements the core framework. The platform also uses development supporting tools, mainly to provide package management, perform code quality and promote communication among developers (Cabot & Canovas, 2017).
The Decidim project is being developed in GitHub, a Web-based Git version control repository hosting service overpowered with extra functionalities like bug tracking, feature requests, task management and wikis. The project includes thirteen repositories1.
Decidim is deploying a custom development process which relies on (a) Metadecidim to discuss change features for Decidim and (b) GitHub to address their implementation. Next we briefly describe this development process, which is illustrated in the following figure.

[34] This section is based on the work of Jordi Cabot and Javier Cánovas from SOM research Lab (IN3/UOC), “Code Governance in Decidim” (2017).



Agile development process followed in Decidim; sprints and product cycles and meetings. (Cabot & Cánovas, 2017).

The Decidim GitHub project includes a document describing the code of conduct2 . This document defines set of rules to guarantee a harassment-free experience for everyone willing to contributes in the project.

One of the main dynamics in the development process is the integration with Metadecidim: Initially everything goes through the Decidim leaders (core or product owners). Metadecidim has an open space to collect proposals. If the proposal have funding and goes in accordance with the social contract, the request goes to github and the programmer in charge (hired by the financing entity) executes. There are two types of developments:

Fix (minor thing): Bugs or minor developments. With a PR and code review is enough to be accepted.

New functionality: the repo Decidim is opened, they work in a branch of Decidim or they work in their own installation / fork.

At the same time all the developments planned they have a circulation process with the community. The community can test and give feedback to the developers in order to improve and correct the developments.

The decisive figure right now are the key developers (who approves or not modifications). In an open model a person not included in the project making a certain modification could intervene. One of the option studied is to avoid discussions on github and convey any modification through Metadecidim.

The governance model in the code layer implies to define the rules of contribution, decision making in acceptance or rejection and the implications of the contributions in these three levels: issues (small contributions or proposals), pull requests (code contributions done it to the Decidim code) and releases (the set of new features and fixed bugs included in a new version or subversion of Decidim). Finally the main challenge is the integration of Github (the code repository) and Metadecidim (the community platform for the democratic governance of Decidim). This integration should solve some problems and limitation on decision making process, allow the communication between programmers and non-programmers, and structure democratic process of the whole chain of design, deliberate, decision and follow of any kind of development.

Metadecidim: technopolitical networks, democratization, and recursive communities.

Metadecidim implies several key innovations. The first is its condition as a technopolitical digital network and community: in both senses, Metadecidim is oriented to design Decidim as technology and as a project. A second key innovation concerns how Metadecidim steers the project into technopolitical democratization: it makes the Decidim project to be not only one of technology for democracy, but also one democracy for technology. This brings about a final relevant feature: it nurtures a recursive citizenry, which shapes the technological (or technopolitical) condtions for its exercise of democracy.

4. Decidim: technical plane.

El plano técnico de Decidim tiene múltiples subdivisiones, que van desde lo puramente informático a lo legal o lo pedagógico. En última instancia, incluye aspectos que componen y definen las nuevas condiciones infraestructurales de la democracia en red, y que van desde las normas regulativas a las competencias humanas, pasando, claro está, por el código informático.

4.1. Decidim.dev: code development and deployment

- Decidim's modular architecture
- Dev experience and technical organization on Github
    - EPICs, issues and PRs
    - Tests and code review
    - Technical documentation
- Installation and deployment
- Service integration

4.2. Decidim.doc: documentation system

- Intro: importance of open documentation: it is not only technical documentation but also, and importantly, theoretical and political documentation, including legal documentation, most of this documentation is still under development but the documentation systems for the decidim project is already working and designed to be free, open and collaborative following the social contract.
- Pre-publication: drafts, control version, etc.
- Metadata chart and explanation
- Asciidoc, github and multiformat delivery

For a software project, documentation can be an asset as important as the software itself. This fact is even more true for a technopolitical community as Decidim. We have a strong requirement for collectively produce, maintain, evolve and curate a large body of documents of different kind: technical, theoretical and political, legal, etcetera.

In accordance with our Social Contract, documentation must be written "in the open" and published under a Creative Commons By-SA license, collaboration should be fostered, and contributions need to be traceable and carefully attributed. Many documents need translation to different languages and both technical and social forks can be useful in some situations.

Another strong requirement for us is that contributions to any document can be done with free software. Publication of any of our contents in a static web site must also be possible without resorting to proprietary tools. At the same time, the Decidim Team is trying to minimize its use of corporate platforms that trade with user data, like Google Docs.

After some investigation we have adopted a documentation methodology that follows three quite well-established trends in the technical documentation community:

- *Single-source contents and multi-format delivery*: our aim is to write contents once and,

relying on tools and formats that facilitate its separation from presentation, reuse those contents whenever necessary.

- *Docs-as-code*: by storing text in software source code repositories we get a very mature versioning technology that provides integrity and traceability of contributions, multi-version documents, and automatic checking and publication after edition, among other facilities aligned with agile principles.
- *Online first*: we favour the web as our primary publishing format and medium, even if we also provide means to generate other formats, as PDF files.

The key pillars of our document authoring process are:

- A light-weight markup language called *Asciidoc*. It is similar to Markdown both in syntax and spirit, but it is more expressive and sound for writing long, complex documents.
- A public Git repository for every document. Git is a text versioning and collaboration technology widely used in software industry.
- Clear guidelines on how to set up a new document, produce new contents that can be reused, and interact with other authors through Git and a collaboration service called GitHub.

In our guidelines we enforce some conventions about what metadata store for each document and how to show it in a chart. We store, for each document: title, contributors, revision number and date, keywords, summary, history, distribution terms, and how to cite. Decidim has a sophisticated classification of contributions, inherited from the project FLOK Society - Buen Conocer. The authorship levels are: editor, author, contributor, participant, proofreader.

Every document can be independently published, but there is also a central documentation site for Decidim.[35] This site is automatically generated from a number of Git repositories with a static site generator specialized on publishing technical documentation.

4.3. Decidim.lex: regulations, public procurement, copyright licenses, EULA and agreements

- Legal code and computer code --- the multiple connections.
- Licences: brief explanation of the software, data, content licenses.
- The social contract and why it matters, how it has been used as a basis for public procurement and contract with Decidim service providers
- Interinstitutional agreements and public commitment: the social contract as a shield for misuses of decidim, protecting service providers and administrators from political interested and illegitimate interference
- Barcelona's regulation for participatory democracy as a legal foundation for Decidim's model of participatory democracy

4.4. Decidim.lab: research and innovation

Decidim results from the knowledge of people who contribute to the project in its different axes. The Decidim Team and the Metadecidim community are formed by people with different abilities who coordinate themselves to push Decidim further. This nature, typical of FLOSS communities such as Wikipedia, represents an instance of collective intelligence: "intelligence distributed everywhere, constantly valued, coordinated in real time, which results in an effective mobilisation of skills" (Lévy & Bononno, 1997). However, the aggregation of the participants' knowledge is not sufficient to guarantee that the project is innovative in relation to the state of the art. To this end, Decidim requires a space for citizen experimentation and innovation in which to address the challenges of networked

[35] https://docs.decidim.org

democracy in an intelligent and participatory manner.

The collective intelligence capabilities of a FLOSS community in a space of democratic experimentation and innovation is directly inspired by hacklabs as a technopolitical collective assembly to address problems ranging from society to the laboratory and from the laboratory to society (Barandiaran, 2003). Therefore, unlike the traditional university laboratory models or the "lab" version driven by capitalism Silicon Valley, Decidim.lab reflects the importance of the design concept in technoculture and the practical ways of increasing the agency's capacity for digital design, as well as its relationship with increasing the level of participation (Sanguesa, 2014). This space is conceived as two intertwined layers: **Lab.Metadecidim**, the networked laboratory governed by the community Metadecidim (research group); and the **Laboratory for Democratic Innovation** that provides resources to the first layer and to other requirements of democratic innovation in Barcelona.

4.4.1. Lab.Metadecidim

LAB.Metadecidim is an open and collaborative research network aimed at addressing key issues in the development of the Decidim as a project and of networked democracy and collective intelligence as a framework. The network was launched at the same time Metadecidim community was born. The first activity of LAB.Metadecidim took place at the 1st Annual Metadecidim Conference (I Jornades Anuales Metadecidim) in 2016 and consisted of a data hackaton in which the results of the Municipal Action Plan were modeled, analyzed and visualized for different purposes:

- Benchmarking of citizen proposals[36]
- Development of new data visualizations[37]
- Data auditing of the participatory process[38]

This event was then followed by the most characteristic activity at LAB.Metadecidim, the monthly research seminars. The main goal of these meeting is to explore collaboratively a research challenge in relation to the development of Decidim, to date:

- Digital identities, verification and democratic processes (March 2017)
- Strategies of engagement for democracy (April 2017)
- Models of democratic governance for new city-scale May 2017)
- Digital ontologies of participation (June 2017)
- Democratic governance of digital infrastructures (July 2017)
- Democratic innovation driven by models and simulation (September 2017)
- Participatory design for digital democratic platforms (December 2017)
- Indicators of democratic quality (January 2018)
- Narratives for citizen participation and network democracy (February 2018)
- Data visualization for democratic participation (March 2018)
- Administrative-legal validity for digital participation (April 2018)

Another objective of the seminars is to network with existing communities of experts in topics related to the corresponding research challenges and, also, to global scope of Decidim as a project. For this reason, the seminars of LAB.Metadecidim seminars bring together experts in the field at local, national and international levels. The schedule of each seminar is usually made up of two sessions separated by a coffee break. The first part

[36] https://es.slideshare.net/sdivad/comparacion-de-propuestas-en-decidim
[37] https://github.com/josepjc/d3-decidim-sunburst
[38] https://collectivat.cat/en/2017/01/08/data-auditing-decidim/

begins with the presentation of the challenge and the research questions by a member of the Decidim Team (usually, a person who has co-designed the seminar). Then, three invited lecturers give a 10-15 minute talk each to share their knowledge with the Metadecidim community. This is followed by an open debate with the attendees, including a group of local experts (Barcelona metropolitan area) who are also invited to the seminar. After the break, the second part is aimed at generating proposals for improving Decidim and Metadecidim in a participatory manner. The diverse nature of the proposals (theoretical approaches, technical functionalities, prototyping of systems, bug detection, etc.) and the facilitation methodology that is applied vary according to the specific needs of the seminar. For each session, videos of the talks and of the debate are recorded and these contents are available at the Metadecidim instance to provide access to the members of the community who could not attend the event (https://Metadecidim.org/assemblies/eix-lab/f/87/).

Figure X. Seminar of LAB.Metadecidim

Different proposals originated in the LAB Metadecidim seminars have been incorporated when the first stable version of Decidim was implemented (Decidim Ada Lovelace (v.0.12)). When this development cycle was completed, other seminar formats were designed to explore the application of Decidim in diverse contexts and ecosystems, e.g., social movements and organizations, socio-economic innovation systems, multidisciplinary spaces in the cultural sphere, and data-driven government laboratories.

4.4.2. Laboratory for Democratic Innovation

In recent years, many cities have already set up citizen laboratories to solve a wide range of problems. Taking advantage of the renowned trajectory of the Decidim project as a technopolitical device for democratic innovation and LAB.Metadecidim as an inspirational networked and participatory approach to research, the Laboratory for Democratic Innovation was born in Barcelona to solve urban challenges in an intelligent, participative and democratic way, with special attention to problems of governance, social innovation and co-management of commons. The laboratory is therefore an open participative and networked space, offering knowledge, human resources, technology, legal support, and funding for democratic and collaborative research and innovation. To do this, the laboratory is located at the municipal art factory Fabra i Coats with shared public resources (spaces for workshops, auditorium for events and talks, etc.), open and managed with the public, together with its own digital and communication space. The space is projected as an

accelerator of an economy of innovation services, an inter-institutional and social collaboration and a public-common science space. Furthermore, it expected that the laboratory will serve as well as a pioneering node in a network of municipal laboratories of social experimentation in Barcelona covering a range array of areas: culture, economy, democracy, etc.

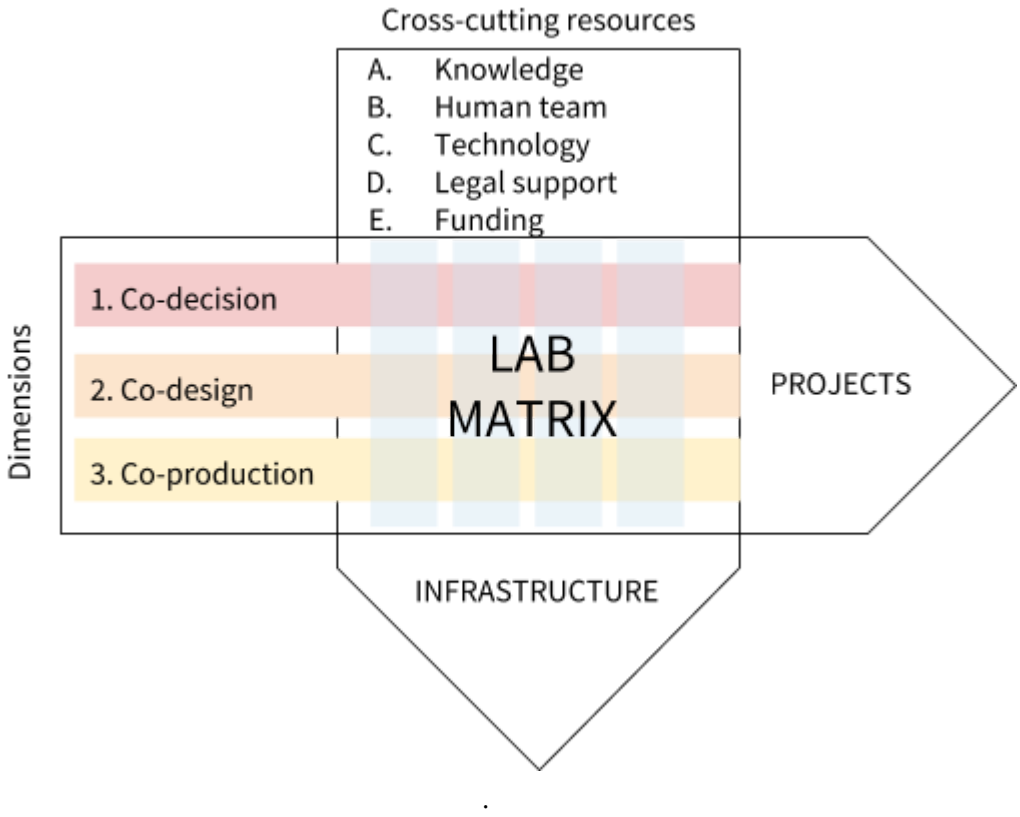


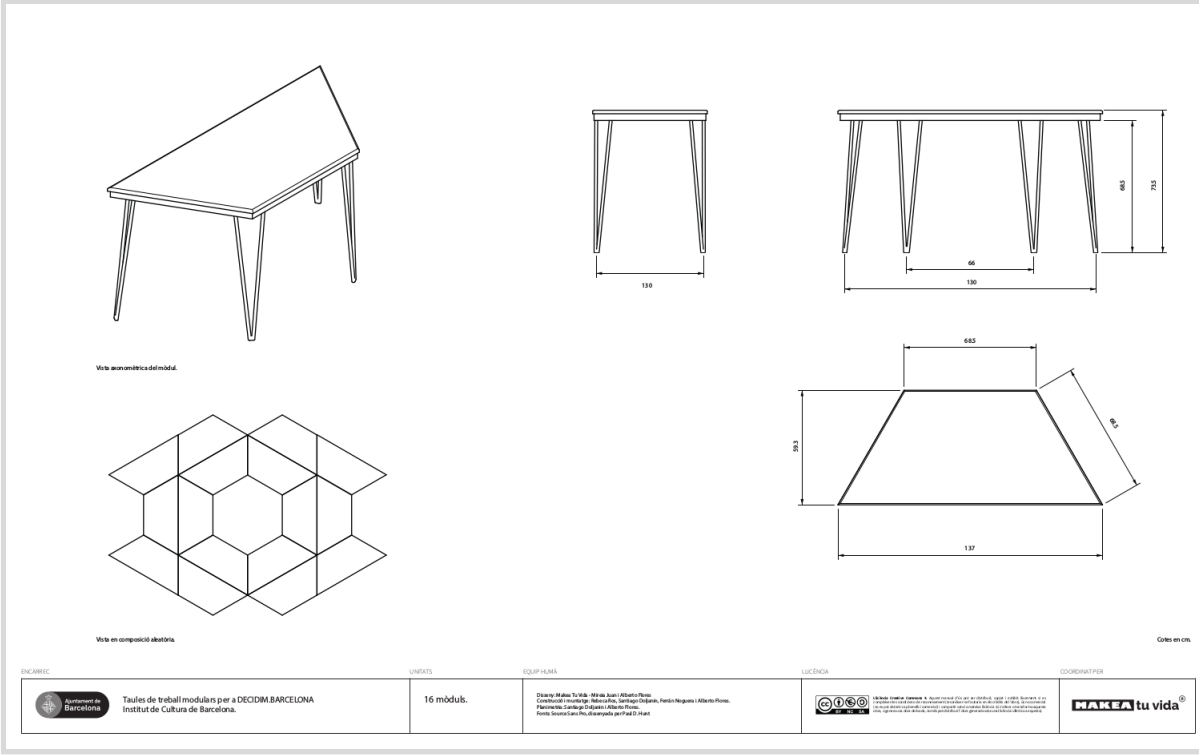
Figure X: Operative matrix of the Laboratory for Democratic Innovation

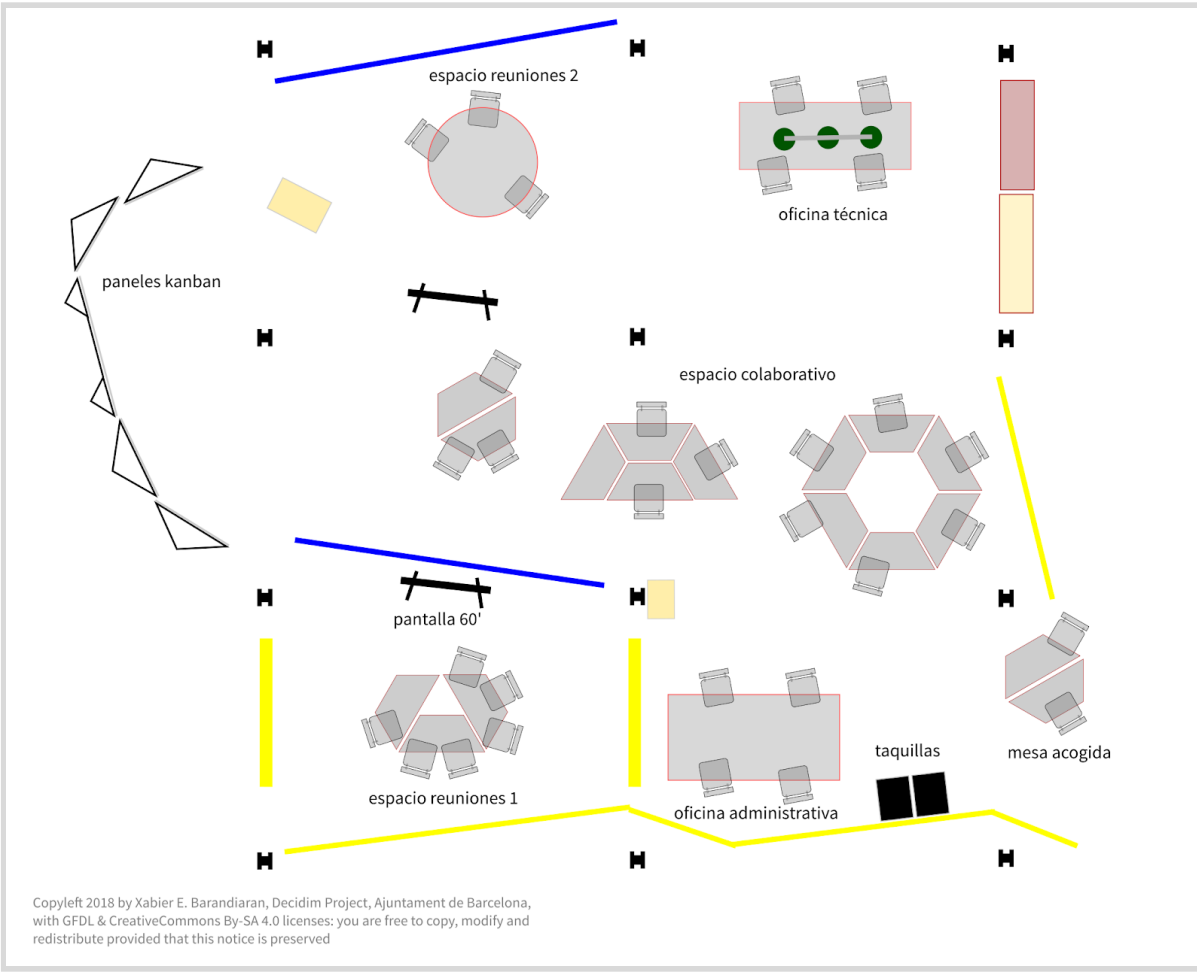
In the short term, the Laboratory for Democratic Innovation hosts the dynamics of SOM.Metadecidim and LAB.Metadecidim and, in the long term, its mission includes different action plans:

- To offer services, resources and infrastructures for the development of co-decision projects and co-design of social action co-productions.
- To experiment with new functionalities and applications of Decidim.
- To promote citizen research and synergies with academia, institutions, industry and society to generate democratic solutions to the different urban problems.
- To prototype models of citizen science, social innovation and co-management and governance of urban laboratories.
- To generate a productive ecosystem of services around social and democratic innovation.

4.4.3. Designing a participatory lab space

Designing the physical space for the lab has been a technical and technopolitical challenge. Very much like digital interfaces define and condition forms of interaction, architecture and interior design condition the way in which a team works and opens/closes modes of collaboration. The basic unit of spatial constitution of the lab was the working and meeting table. FALTA





4.5. Decidim.edu: training, empowerment and mediation

- The multiple forms of decidim.edu
- Education, equality, and empowerment
- Digital divides and their overcoming
- The Protection (security, privacy, data protection) and potential (participation, transformation, social awareness, empowerment, action)
- Rousseau and the school of democracy

6. Discussion

6.1. Towards a distributed & augmented participatory democracy

common government, technoacracy, technopolitical democratization

7. Conclusion

"There is no need to fear or hope, but only to look for new weapons".

Gilles Deleuze

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Annex 1: Social contract

Annex 2: Code of conduct for developers

RESTOS

3.5. Decidim.data: Decidim como proyecto de datos. Datos críticos, abiertos y comunes para la democracia.

To adapt the famous characterization of democracy by Abraham Lincoln as a government of, by, and for the people, we could say that a key element of DECODE's vision is to construct ecosystems of "data of the people, by the people, for the people" (rather than "from" the people, as in the current model), otherwise, where they have personal and collective control over it (over its ownership, storage, access, use, etc.).
Distinguish: content data, activity data, and metadata of both

Transparencia, trazabilidad e integridad. Exceptuando aquellos datos que puedan afectar a la privacidad de la persona usuaria, sobre cuyo manejo ésta debe tener un control total, los detalles de la actividad en los procesos participativos mediados digitalmente debe ser absolutamente trazable y pública, para potenciar un nuevo nivel de transparencia en la participación. La participación transparente es condición necesaria de la confianza en estos nuevos procesos. La integridad es referida al compromiso y garantías de no alteración de los contenidos y las contribuciones emitidas a lo largo del proceso.

Otro de los principios fundamentales de cualquier plataforma digital de participación es el de garantizar la seguridad de la propia plataforma y, estrechamente vinculado, la defensa de la privacidad de los ciudadanos, garantizando la no cesión a terceros de los datos personales y la seguridad de estos datos, evitando así tanto las finalidades comerciales como las de vigilancia o las de control político.

El protagonismo de corporaciones multinacionales (con poco o nulo interés en el bien común) a la hora de definir la ontología de la Smart City, supuso un nuevo episodio de la privatización del espacio público, en este caso, la construcción digital de la propia ciudad. La economía política predominante con respecto a los datos es la de la propiedad privada y, a menudo, cerrada de los mismos. Los datos son el "nuevo petróleo". Los datos que Google o Facebook acumulan cada día son propiedad de estas corporaciones, que los utilizan para operaciones que van desde la venta para la publicidad al análisis e ingeniería social del comportamiento. El modelo Decidim es el de datos abiertos, esto es, disponibles para ser aprovechados por cualquiera y en formatos que lo faciliten.

Entre los retos, se encuentra el de pensar y construir los datos como comunes o data commons, producidos y gestionados por la comunidad Metadecidim, con capacidad de decisión sobre cuáles abrir (o no) y para quién, en qué condiciones y con qué contrapartidas, es una posibilidad en el horizonte[39]. Una posibilidad que va más allá de la dicotomía público/privado y abierto/cerrado.

5. Conclusión

5.1 Más allá de la democracia digital: hacia una democracia en red poliédrica[40]

[39] Posibilidad que algunas de nosotras nos encontramos actualmente explorando como parte del proyecto europeo DECODE, https://decodeproject.eu/.
[40] Para una discusión más extensa de los modelos expuestos en este apartado y su conexión con Decidim, véase Calleja-López (2017).

Como puede apreciarse a lo largo de este artículo, frente a conceptos como los de "democracia electrónica", "e-democracia" o el más frecuente de "democracia digital", hemos preferido el término "democracia en red". Esto se debe a dos razones fundamentales: la primera, evitar la reducción de las nuevas formas de democracia a sus aspectos digitales, la segunda, subrayar la forma red (net-form) y, sobre todo, el trabajo en red (net-work) (Latour, 2005) como dos aspectos clave de las transformaciones de la democracia resultante de la extensión de internet y las prácticas emergentes en torno a ella.

Con todo, también esta fórmula encierra una doble complejidad: tanto los modelos de democracia como los de las redes son diversos, históricamente cambiantes y en disputa. En este sentido, diferentes autores han distinguido diferentes modelos de democracia digital (Hacker & Van Dijk, 2000; Dahlberg, 2011) que pueden aplicarse a la democracia en red: los modelos de democracia representativa, directa, deliberativa (p. Ej.: Habermas, 1994), participativa (Barber, 1984), antagonista (Laclau & Mouffe, 1984, Laclau, 2001, Mouffe, 2006), autonomista (Hardt & Negri 2000, 2004, 2009), entre otros, tienen sus heterodoxas traducciones en red. En cierta medida, las diferentes secciones de este artículo (de Decidim.dev a Decidim.gob) anticipan muchas de las dimensiones, áreas y problemas de esa democracia. Dada la complejidad del asunto, hemos de posponer su exploración a trabajos posteriores. En lugar de ello, cerraremos como una reflexión en torno a las "redes".

5.2. De las redes sociales a las redes tecnopolíticas en la crisis de la hegemonía neoliberal

El crecimiento progresivo del uso y penetración de Internet durante los años 90 fue, según Manuel Castells (1996) de la mano de la emergencia de "sociedades red"[41] y un nuevo "capitalismo informacional"[42]. En este periodo, la world wide web se extendió al mismo tiempo que Internet, dando lugar a lo que podríamos denominar "redes informacionales", que abarcaban de lo local a lo global. Estas redes informacionales, lo que vino a denominarse "web 1.0", se caracterizaban por permitir el acceso a cantidades de información insólitas hasta ese momento, de ahí que se celebrase y bautizase este periodo como el de la emergencia de una "era de la información" (Castells, 1996).

Frente a los límites de acción e interacción de las usuarias en esta primera generación de redes fue creciendo, especialmente en la segunda mitad de la primera década del milenio, una nueva generación de redes digitales, las denominadas "redes sociales". De acuerdo con gurús como Tim O´Reilly (2005), éstas representaban una "web 2.0" cuya principal novedad era su carácter "participativo", esto es, la capacidad de las personas usuarias de producir e interactuar con los contenidos digitales de manera enriquecida. Éstas pasaban a ser prosumidoras (por usar el término de Alvin Toffler) en lugar de solo consumidoras de contenidos. El paradigma de esta segunda generación, por volumen de usuarias, es Facebook: un "libro de caras" construido en torno a individuos en red. En este modelo de red se estimula la actividad de la usuaria y se registran las datos de su actividad y preferencias, datos que son, a su vez, utilizados por otras usuarias o por corporaciones (bien aquellas sobre las cuales se desarrolla dicha actividad, bien aquellas que pagan por sus datos o servicios) con diversos objetivos. Estas redes sociales son espacios controlados por grandes corporaciones, en los cuales la actividad y la vida social, si bien más "participativa" que en las redes informacionales de la web 1.0, se maneja por reglas no democráticas orientadas a la

[41] Sociedades en las que las Tecnologías de la Información y la Comunicación (TIC) y la forma "red" (esto es, estructuras de comunicación, organización y acción descentralizadas, flexibles e hiperconectadas) penetran cada vez más aspectos de las relaciones personales, grupales e institucionales.

[42] Una nueva forma de capitalismo apoyada en la información como factor central en la producción de valor.

explotación del "nuevo petróleo" del capitalismo de datos y de la vigilancia (Lohr, 2015; Zuboff, 2015): los datos. Las normas y la socialidad en estos espacios (las interacciones posibles entre usuarias, la propiedad y uso de sus datos, el flujo de contenidos, etc.) son decididos por dichas corporaciones con el objetivo de maximizar el beneficio privado. Como afirma un conocido slogan, si esta web 2.0 participativa es "gratis" es porque "el producto eres tú".

Decidim es una red de tercera generación (tras las redes informacionales y las redes sociales), que comparte muchas características de las redes de segunda generación al tiempo que trata de evitar muchos de sus déficits. Decidim es ejemplo de un modelo emergente de redes "políticas". Estas redes tienen tres características fundamentales: en primer lugar no son superficial sino radicalmente participativas, esto ese, permiten el control y la participación de las usuarias en todas las capas de su estructura, de los contenidos al código; en segundo lugar, son redes fundamentalmente políticas, esto es, reducen aún más la centralidad de la figura del consumidor, y la sustituyen por la del actor político; lo hacen articulando espacios que permiten la construcción de voluntades colectivas más allá de la mera expresión o agregación de gustos y preferencias. En este sentido, las diferencias de nomenclatura son indicativas: en lugar de un "libro de caras", Decidim ("decidimos") sitúa en el centro el vínculo político, habla de un "nosotros" y de un nosotros decisivo. Del mismo modo que las redes sociales de la web 2.0 construyeron sobre y, al tiempo, cuestionaron el modelo de la web 1.0, las redes políticas, construyen, conectan y van más allá de las redes sociales: como Decidim abren un horizonte político y democrático para el internet y la sociedad red del futuro. Esto es particularmente crucial en la coyuntura política actual, que explica parcialmente su génesis y su relevancia. Queremos hacer un comentario en este sentido.

En esta coyuntura de crisis de la democracia representativa (neo)liberal, en la que las redes sociales pasan a ocupar en la construcción de la política, construir redes digitales radicalmente democráticas e inteligentes (esto es, que movilicen lo que el 15M llamó "inteligencia colectiva") se convierte en un reto fundamental. Decidim aspira a responder a ese reto, a construir formas de relación igualitarias (en lugar de asimétricas), informadas (en lugar de infoxicadas), deliberativas (en lugar de dogmáticas o info-falseadas), abiertas (en lugar de endogámicas) y decisivas (en lugar de meramente recreativas) entre sus usuarias, esto es: ir más allá del paradigma de la política mediada por las redes sociales corporativas, hacia el de una democracia en red poliédrica y real. Como comentamos al inicio, entendemos Decidim como una *infraestructura público-común, abierta y libre para la democracia participativa del siglo XXI*.

4.1. Decidim.dev: Decidim como proyecto y código tecnológico. Construyendo infraestructuras digitales para la democracia.

Decidim es una plataforma construida en abierto y con software libre hecha en el framework de desarollo web Ruby on Rails. Es el proyecto de software libre más importante del Ajuntament de Barcelona, para cuya ejecución se ha abierto el espacio del Ajuntament en la plataforma colaborativa *"GitHub"*[43]. A diferencia de otras plataformas existentes, desde la perspectiva de arquitectura digital, *la arquitectura de Decidim* es modular, escalable y fácilmente configurable. No hace falta tener conocimientos avanzados en programación para instalar y utilizar la plataforma, que ha sido diseñada para facilitar la configuración y despliegue de procesos, órganos y mecanismos participativos desde un panel de administración.

En su nacimiento en febrero de 2016, Decidim estaba basado en el software de participación ciudadana Cónsul[44], desarrollado por el Ayuntamiento de Madrid para su portal Decide Madrid[45]. A

[43] El volumen de repositorios de Decidim es actualmente tan amplio que tiene un espacio propio en github del cual el repositorio Decidim-*barcelona* es solo un sub-espacio donde se alojan las adaptaciones específicas del código para Barcelona.
[44] http://decide.es

partir de febrero de 2017, se ha puesto en producción una nueva versión del código, un modelo más abstracto en términos de componentes, configuración de procesos participativos, diseño, gestión de contenidos de textos y traducciones, verificaciones de usuarias, despliegue y adaptaciones necesarias para cada organización. Esto trata de evitar la necesidad de generar *forks*, esto es, bifurcaciones del código base, que dificulta la compartición de actualizaciones del mismo.

Decidim está mantenido y desarrollado por un *ecosistema sociotecnológico* creciente, compuesto por redes técnicas que enlazan empresas, fundaciones, ciudadanía, asociaciones, hackers, investigadoras y otras instituciones. Todo su desarrollo, incluyendo las especificaciones de funcionalidades y corrección de errores, se realizan de manera abierta a través de la plataforma de publicación y colaboración de código GitHub, utilizando el idioma inglés para llegar la comunidad internacional de desarrolladoras. En GitHub se pueden encontrar distintas métricas[46] sobre la actividad del desarrollo.

Los retos, no siempre alcanzados, en este ámbito son diversos. Algunos de ellos son el de definir el modelo de gobernanza del desarrollo[47] (de muy centralizado a muy distribuido), la capacidad de reutilización por otras organizaciones[48], o la trazabilidad y resiliencia de los contenidos agregados a la plataforma[49], todo ello conservando la facilidad en el mantenimiento, evitando curvas de aprendizaje pronunciadas para desarrolladores nuevos.

Como hemos dicho, estos puntos a su vez tienen una tensión con respecto al mantenimiento[50] y curva de aprendizaje de desarrolladores nuevos[51].

4.2. Decidim.lex: Decidim como proyecto y código legal/normativo-administrativo. Nuevos reglas para la

[45] http://decide.madrid.es

[46] Las métricas extraídas a día 8 de junio de 2017 indican: 16 personas contribuidoras, 37 stargazers (usuarias de github que han marcado el proyecto como interesante), 22 bifurcaciones, más de 890 pull requests (propuestas de incorporación de código), 594 peticiones de mejoras o correcciones de errores de las cuales 409 ya se han cerrado.

[47] El modelo de gobernanza del desarrollo se refiere a la capacidad de los mantenedores del código de permitir a otros desarrolladores interesados en el proyecto a tomar decisiones relevantes con respecto a las funcionalidades del mismo. Se pueden tener varios escenarios de cara al futuro, teniendo un modelo más o menos distribuido entre programadores de múltiples organizaciones.

[48] La capacidad de reutilización por otras entidades se refiere al grado de abstracción de las funcionalidades desarrolladas hasta el momento. Si permite que nuevas organizaciones puedan utilizar los mecanismos propuestos por el proyecto a través de configuraciones o adaptaciones compatibles con futuras actualizaciones del mismo. Como ejemplos de adaptaciones se pueden encontrar la imagen y diseño de la plataforma, cambios en los textos que estén publicados en la ella, traducciones de los textos e interfaz y lógica de verificaciones requeridas por cada organización dependiendo del proceso que se esté llevando a cabo.

[49] Por trazabilidad y resiliencia de los contenidos agregados a la plataforma nos referimos a un sistema de registro no centralizado que prevenga la posibilidad de que un actor (administrador o programador) la utilice de forma maliciosa, realizando modificaciones de contenidos hechos por usuarios sin que queden disponibles los originales.

[50] Con mantenimiento nos referimos a la facilidad de escalar con nuevas funcionalidades, es decir la capacidad del código de ir creciendo en sofisticación y complejidad de manera sostenible.

[51] Por último, es posible que todas estas necesidades entren en contradicción con la curva de aprendizaje por parte de desarrolladores nuevos, siendo necesario entre otras cosas mantener una documentación detallada y actualizada, un ecosistema de herramientas de desarrollo que faciliten la generación de aplicaciones y librerías y controles de calidad automáticos para detectar y corregir regresiones en funcionalidades y bugs proactivamente.

democracia en red.

Desde la perspectiva del código legal o normativo-administrativo, Decidim tiene tres vertientes centrales. La primera de ellas conecta con las normas de participación necesarias para desplegar todo el potencial de una plataforma como Decidim. La segunda, con el uso de Decidim para generarlas. Durante el 2017 se ha redactado participativamente el nuevo reglamento de participación de la ciudad de Barcelona. Este reglamento está orientado a potenciar la participación ciudadana y rebajar muchos de los requisitos existentes en materias como las iniciativas ciudadanas. Un reto ha sido el de hacerlo "interoperable" con Decidim, con características tales como la introducción de nuevas formas de verificación y control de identidad. Estas normas conectan el plano tecnopolítico (sección 3) con el plano político y a Decidim con la cuestión del gobierno.

La tercera vertiente tiene que ver con las condiciones normativas que definen la producción del código mismo, en concreto, los pliegos contratación pública. El marco existente, construido bajo la hegemonía del discurso y la práctica de la externalización de servicios y el estímulo a la competición en el mercado, prioriza el coste como criterio casi exclusivo para la adjudicación de contrataciones públicas de software. Frente a ello, parte del trabajo del proyecto Decidim ha consistido en definir pliegos de contratación pública que incluyan cláusulas exigiendo el uso de licencias libres, la producción en abierto del código, el estímulo de las PYMEs, etc. como criterios positivos a la hora de afrontar la selección de proveedores.

A modo de contrato sociotécnico (versión contemporánea del moderno "contrato social"), un código legal dgarantías democráticas[52] vincula a la comunidad y a sus usuarias, sean personas o instituciones, en su desarrollo, implementación y uso. Éstas incluyen garantía de apertura (licencia Affero GPLv3 para el código, Creative Commons By-SA para los contenidos y Open Access Database para los datos)[53], garantía de transparencia, trazabilidad e integridad de procesos y propuestas, garantía de rendición de cuentas, garantía de participación anónima, garantía de igualdad entre usuarias e ideas, y garantías de inclusividad.

Dos retos en disputa en este ámbito son los de armonizar posibilidades tecnológicas y código legal (p.ej.: para la gestión de identidades digitales) o el de aumentar las posibilidades y potencia de la participación vinculante apoyándose en dichas tecnologías (de la preservación del anonimato a procesos deliberativos aumentados).

Por otro lado, un reto y posibilidad finalmente frustrada, ha consistido en introducir en los mencionados pliegos de contratación las condiciones para una co-decisión democrática y periódica con la comunidad emergente en torno al código. Este objetivo, que requería dejar abierto parte del presupuesto, se ha encontrado con diversas dificultades normativas. Dicho de otra manera, los pliegos de contratación conectan (o, mejor dicho, han desconectado) el plano técnico con el plano tecnopolítico (comunidad Metadecidim).

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[52] El código de garantías democráticas es accesible en https://github.com/AjuntamentdeBarcelona/decidim-doc-plandedesarrollo/blob/master/anexo-2.-codigo-de-garantias-democraticas-y-colaboracion-abierta.md

[53] Los principios de liberación y apertura hacen referencia, en primer lugar, al código y funcionalidades de la plataforma, en segundo lugar, a los datos y contenidos de los procesos y, en tercer lugar, de un modo más genérico, a los procesos mismos. En los dos primeros casos, esto implica utilizar las licencias abiertas, libres y estándares más exigentes en materia de compartición entre iguales (ej.: GPL Affero v3.0 o las Open Data Licenses). Decidim ha de ser una plataforma de software libre, que permita a cualquiera ver, copiat, modificar, reutilizar y distribuir el código en que se basa. En el caso de los procesos, estos principios conectan con algunos otros que mencionamos en esta lista, tales como el de transparencia o el de accesibilidad, y apuntan a hacer de estos procesos máximamente participativos y reapropriables en múltiples niveles.

4.3. Decidim.lab: Decidim como proyecto y código tecnocientífico. Investigación y conocimiento en red para una democracia en red.

Como parte del proyecto Decidim también se ha tratado de construir espacios y comunidades de investigación en torno a la plataforma. Esta es la tarea del LAB.Metadecidim, un espacio de "investigación en red para la democracia en red". Las sesiones mensuales de investigación del LAB son un espacio de investigación abierta y colaborativa orientado a abordar problemas clave en el desarrollo de la plataforma Decidim y de la democracia en red en un sentido más amplio. Entre marzo y junio de 2017 este espacio ha supuesto un punto encuentro fundamental para divulgar y reflexionar entre la propia comunidad sobre temas de máximo impacto en Decidim: identidades digitales, engagement, gamificación, territorio y políticas de datos.

Estos eventos, tanto en formato seminario como en formato de hackatón, ponen de relieve las capacidades de Decidim como proyecto y código tecnocientífico, y su relevancia para el devenir de las prácticas democráticas en Barcelona. En lo referente a las políticas de datos, la primera versión de la API de Decidim permitió un primer hackatón de datos del JAM Metadecidim donde se modelaron, analizaron y visualizaron los resultados del Plan de Actuación Municipal con diferentes propósitos:

- Comparación de propuestas[54]
- Generación de nuevas visualizaciones[55]
- Auditoría del proceso[56]

Retos urgentes en este ámbito son los de conectar conocimiento tecnocientífico y proyectos aplicados para la democracia frente a los múltiples modos de cercamiento del conocimiento y exclusión epistémica generados por el capitalismo cognitivo. Más allá se sitúa está el reto de crear redes y procesos que permitan articular la inteligencia colectiva experta (tanto académica como de la sociedad civil) y ponerla al servicio de la mejora de la vida en común.

4.4. Decidim.edu: Decidim como proyecto y código pedagógico[57]. Construyendo ciudadanías tecnopolíticas.

La construcción del modelo de democracia subyacente al proyecto Decidim implica, también, ayudar en la construcción de nuevas formas, prácticas y capacidades de ciudadanía. Así, un elemento clave del mismo ha sido la elaboración de materiales formativos. Los cursos sobre "ciudadanía digital segura, privada y empoderada" representan una innovación en un área clave: la de la pedagogía de los principios, prácticas, posibilidades y amenazas del ejercicio de la política mediada por las TICs.

El currículo, dirigido especialmente a formadoras, incluye materiales y actividades orientadas tanto a la concienciación como a la capacitación. Algunos temas tratados son: privacidad y la seguridad en una sociedad informacional, usos y potencias de Decidim, claves de la participación en red, la relevancia de las TIC para incrementar la organización y alcance de actores y procesos políticos, alternativas a servicios comerciales y cómo elegir alternativas, o la seguridad en el uso del móvil.

Las prácticas y formas de ciudadanía crítica y empoderada son la base de una emergente democracia en red, son la condición primera y última de una forma de democracia capaz de catalizar la transformación social. Potenciarlas es el objetivo de Decidim.edu. El reto en este ámbito es desarrollar materiales curriculares y metodologías capaces de promover estos objetivos. Y que estos sean, además, revisables y colaborativos.

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[54] https://es.slideshare.net/sdivad/comparacion-de-propuestas-en-decidim
[55] https://github.com/josepjc/d3-decidim-sunburst
[56] https://collectivat.cat/en/2017/01/08/data-auditing-decidim/
[57] Los materiales, desarrollados por Tactical Tech, están disponibles en https://github.com/decidim/training/tree/session-ui-with-npm-package

Funcionalidades y procesos

Cada proceso cuenta con una serie de fases, para las cuales se activan diversos componentes. A continuación se muestra la relación existente entre las fases y los componentes tal y como está planteado a día de hoy el proceso de participación

Fase: ***Componente:***	**Información**	**Diagnosis**	**Propuestas y Decisión**	**Retorno y Seguimiento**
Encuentros presenciales	X	X	X	X
Debates		X	X	X
Recogida de Propuestas			X	
Priorización			X	
Rendición de cuentas				X

Tabla 2: Relación entre componentes y fases en el diseño del proceso de participación del Plan de Actuación Municipal 2016-2019 del Ayuntamiento de Barcelona

El configurador recomienda abrir el componente debates en la fase de diagnosis, a fin de construir un proceso deliberativo en torno a las temáticas definidas en cada diagnosis. Seguidamente recomienda abrir el componente de propuestas para introducir las propuestas iniciales, poder recoger otras nuevas con criterios claramente definidos, y priorizar estas propuestas a través de un sistema de apoyos. Finalmente se recomienda el uso de los debates para poder evaluar y hacer el seguimiento de la propuesta final. Es importante subrayar la transversalidad de los encuentros presenciales como componente de la plataforma que es útil en todas las fases. El componente de encuentros presenciales permite documentar estos encuentros adjuntando sus actas, el número de asistentes, las organizaciones participantes, las propuestas recogidas o fotografías del encuentro.

Otras funcionalidades que ya están disponibles pero no han sido activadas todavía incluyen: procesos de elección de cargos, órganos de participación, debates abiertos y umbrales de filtrado colaborativo. Los componentes previstos para su desarrollo y despliegue antes de Julio de 2018 incluyen, en su “front end” o interfaz de uso, funcionalidades de gamificación, definición participativa de orden del día para consejos, plenos y órganos de gobierno, legislación colaborativa y comunicación horizontal (privada y pública) entre usuarias, y, en su “back end” o estructura interna, la posibilidad de federar servidores, la integración con voto electrónico seguro, una base de datos y operación distribuida, una app móvil y firmas digitales.

Decidim and the city. Towards democratic cities. The politics notion is created before the states, and it is connected to the activity of the citizens in the public structures with shared and participatory institutions (Biehl & Bookchin, 2009). The notion of "politics" comes from the Athenian polis (city), the cradle of democracy and one of the most important historical experience of direct democratic practices, where "politics" were the self-governance of the people in the city. Therefore the city, with all the governance dynamics inside it, plays a primary role in Decidim. Decidim is designed to recuperate the democratic essence of the

city, to recuperate direct democracy practices, the best and most advanced democratic traditions in the history related to the city and the construction of new governance scales beyond the nation-state. In this sense Decidim works in three main directions: 1) From city government to citizens and social organisations, through Participatory process and assemblies enhancing the citizen deliberation and experimenting with coproduction (ref) of public policies. 2) From citizens to government through direct democracy mechanism as citizen initiatives and 3) From citizens to citizens promoting self-organizing processes and enabling the ability of citizens to be part of the common issues of the city and the everyday life of citizens. To walk towards a democratic city, it is fundamental the will of the city government to open its doors and explore the possibility to transfer sovereignty to citizens. At the same time the guarantee of the basic democratic rights, that is social and political rights (concerning material conditions of life). But it is needed to active citizenship in the everyday political life of the city. Several features on Decidim allows working on this way, from sortitions to assemblies.

PROYECTO Decidim

2. Capa política

2.1. Decidim como código político, dispositivo de gobernanza: conecta ciudadanía y gobierno

2.2. Decidim como código narrativo y discursivo

Comunidad *.decidim.barcelona o decidim.* articula un ámbito y un sujeto políticos y de gobernanza

substancia, expresión, performance

3. Capa tecnopolítica

Decidim como arquitectura de red política, matriz, forma, espacio

Nuevas formas de participación: trazabilidad, deliberación aumentada, platform effects, vínculo político, hibridación, multicapa.

3.1. Decidim como código sociopolítico (relación): nuevas formas de estar juntas.

3.2. Decidim como código institucional-administrativo. Abrir la burocracia: transformación institucional. Partenariado público-común. CORE

Decidim como infraestructura que transforma la relación entre lo democrático y lo tecnocrático

Comunidades Decidim y Metadecidim

4. Capa técnica

4.1. Decidim como código informático: infraestructura digital, publico-común, free software, affero. DEV.

4.2. Decidim como código legal: nuevos reglamentos para la democracia en red. LEGAL

4.3. Decidim como código científico: conocimiento, formas de visualización, datos, Decidim y sus procesos como objeto de análisis y modelización de datos, tecnologías, protocolos... LAB

4.4. Decidim como código pedagógico: dispositvos de capacitación. EDU

Comunidad Metadecidim: coordinacion de la producción colectiva de esos códigos

Metadecidim.SOM: co-decide, co-diseña y co-produce el código (tiene diferentes sub-comunidades).

Metadecidim.lab.: produce conocimiento para Decidim y la democracia en red. Analiza sus datos abiertos.

Decidim is a project rooted in a concrete historical conjuncture. Although we can trace the inspiration of the project back to democratic social forms going from early societies to pirate ships (Clastres, Graeber), its inmediate influences are less and closer. The experiments in radical participatory democracy in both the Soviet and the Capitalist blocks in the 60s. The rise of informationalism (a form of capitalism that makes of information and digital technologies the key in the production of value, Castells, 1996) and the Internet culture (with landmarks such as the Declaration of Independence of Cyberspace), specially from the 90s onwards. The alterglobalization movement and its practices of networking and radical democracy against the neoliberal hegemony (Juris, 2008). Alternative models of democracy, the rise of the network society and neoliberalism, movements of resistance, digital practices and cultures: these are elements of the cultural landscape of the last 30 years.

2008 was a landmark that opened a new territory. That is the key year in the Great Regression (Krugman), the biggest economic crisis in almost a century in Western countries. It opened a period of crisis of neoliberalism (Dumezil), not only in economic but, specially, in social terms: the discredit of the ideology of the primacy of free trade, privatization, international economic institutions, and global markets spreads. More importantly, the long term crisis of representative democracy (a crisis almost coextensive of the rise of neoliberalism Putnam and Pharr, Crouch, Tormey) becomes acute. By that year the user base of digital social networks such as Facebook and Twitter begins to skyrocket. On that year Barack Obama reaches the presidency supported by the MoveOn.org movement, which made profuse use of those same digital networks.

2011 is probably the key year in our narrative. Dicho esto, el año clave para nuestros intereses es el 2011. Decidim surge del ciclo de transformación política abierto por el 15M. En 2011 la crisis económica ya se traducía en una crisis social y política rampante (Castells). En el caso de España, diferentes campañas y colectivos articularon el descontento social por la crisis económica y política a través de las redes sociales (Toret et al., 2015). La popularización de las redes en el periodo 2008-2011 conecta entonces con popularización de la política, de una repolitización de la sociedad, resultante de las reacciones a la triple crisis económica, política y social. Diferentes actores sociales recurren al medio de comunicación más potente del momento: las redes sociales. Estas redes son redes corporativas controladas por grandes corporaciones como Facebook o Twitter. Redes diseñadas con otro propósito que son re-apropiadas para la política (la tecnopolítica) de movimiento. Como han indicado múltiples diferentes estudios (), movimientos como el 15M u Occupy no hubieran tenido la forma y magnitud que alcanzaron sin estas redes. Esta táctica activista mostró sus enormes potencias, pero también sus límites, en los meses siguientes. Permitió movilizar a cientos de miles de personas presencial y digitalmente, tejer redes que fueron la base de acciones en los años subsiguientes, de la PAH a 15MpaRato (Monterde, 2015). Sin embargo, las limitaciones democráticas que hemos mencionado más arriba, numerosos casos de censura de contenidos, la progresiva limitación del alcance de las publicaciones (salvo pago), la colaboración de estas corporaciones con el gobierno de EEUU en procesos de espionaje masivo o la “infoxication” (saturación por exceso de información), así como, más recientemente, la generación de “filter bubbles”, nuevos “gatekeepers” o el “infofaking”, tres fenómenos clave para la victoria de Trump en EEUU y el ascenso de la ultraderecha en otros países, muestran los usos nocivos y límites de estas redes de segunda generación en un contexto de crisis social y política.

4.3 Aproximaciones, principios y retos tecnopolíticos para la participación (apartado donde reflejar las principales críticas)

Modelo representativo: transparencia, trazabilidad, integridad.

-Modelo participativo. El principal concepto a la base de Decidim, curiosamente, no es el de “decisión” sino el de “participación”. La significación de este segundo término, sin embargo, es más

rica de lo que pudiera parecer. Una de las etimologías posibles e interesantes del término consiste en entenderla como *pars capere*, como tomar parte, ampliándola, podríamos concebir un tomar parte como pares (*pars capere inter pares*). Ranciere (2001) definía el momento político y democrático como aquel en el que el supernumerario, los no contados, los sin parte, pasan a tomar parte de la polis y, con ello, redistribuyen los lugares establecidos y la estructura misma de lo social. Esa irrupción va de la mano, según Ranciére, de la aplicación del principio democrático por antonomasia, el de la igualdad. Por eso, recurriendo al juego de palabras y la aliteración, apuntamos a una definición ampliada de la participación en tanto que "tomar parte como pares". Desde los fundamentos del derecho, la soberanía reside en el pueblo, que expresa su voluntad y delega dicha soberanía sobre una serie de re-presentates políticos. En este sentido la participación, el *pars capere*, el tomar (la) parte, alude a la recuperación o re-apropiación de la parte de la soberanía que le corresponde por derecho a sus legítimos "propietarios", presentes (y no ya representados) en las redes. Para nosotros, ésa es una de las potencias máximas de la participación, una aspiración del Decidim y un reto a construir. Porque la participación igualitaria presupone formas de igualdad a las que, a su vez, trata de contribuir. La participación presupone y debe ayudar a redistribuir el poder social. Dicho de otro modo, la democracia participativa es aquella en la que cada uno participa, es de decir, toma la parte del poder social que le corresponde legítimamente (igual por cada individuo) en lugar de cederla o delegarla sobre representantes o burócratas.

Un segundo aspecto clave de la reformulación del modelo participativo se da desde: 1-el multicapa vs tensión presencial-digital: beyond digital democracy; 2-debate vs vinculación; 3-software privativo vs software democrático.

-Más allá de la tensión entre el modelo directo vs deliberativo (?): debate vs vinculación (?). Además de apuntar a la participación como "tomar parte como pares" hay al menos, otros aspectos clave del proyecto Decidim a tener en cuenta. El primero resulta del debate en torno al modelo clave que opera como referente tanto como marco externo como en tanto que modelo interno para la participación. Actualmente, todo proceso de participación se da en el marco de la democracia representativa. Internamente, los procesos participativos aparecen, habitualmente, bajo dos modelos: el de la democracia directa y el de la democracia deliberativa. En el primero el centro de la participación se sitúa en la toma de decisiones vinculantes sobre las políticas públicas, cuyo paradigma es el referéndum; en el segundo, el foco de la participación se pone en el debate no vinculante en torno a dichas políticas, cuyo paradigma es .

Como señalara Manuel Castells (2009), la comunicación es una de las fuentes fundamentales de poder social. Con el advenimiento de internet y las redes sociales estaría emergiendo un nuevo paradigma de comunicación y, de este modo, la posibilidad de diversas reconfiguraciones de ese poder. Según Castells, una de las claves de esta transformación reside en lo que denomina "autocomunicación de masas" (y de lo que nosotros definimos, para casos como el del 15M, como "autocomunicación multitudinaria"[58]), esto es, ecosistemas comunicativos que incluyen no solo formas previas de comunicación de una persona a otra (como en el cara a cara, el teléfono, o la carta) o de una persona a muchas (como en la comunicación por radio o televisión) sino también de muchas a muchas (como ocurre en numerosas redes informacionales o en las redes sociales). Ecosistemas que recombinan estas tres formas de comunicación.

[58] Estas nuevas formas de comunicación exhiben un alto grado de complejidad interna, estructuras descentralizadas, y, a menudo, liderazgo temporalmente distribuido, más que la indiferenciación interna, las estructuras centralizadas, y el liderazgo fijo típico de la organización de masas: en casos como el 15M, la comunicación en red generé multitudes (Hardt & Negri, 2004), no masas (como muestran Monterde et al., 2015).

En manos de grandes corporaciones de servicios digitales, la organización algorítmica de la vida social y, en en el caso que nos ocupa, de la comunicación política, supone un peligro democrático y de soberanía tecnológica que sólo un esfuerzo público-común en infraestructuras digitales puede revertir.

En tanto que proyecto, Decidim involucra código informático, documentación técnica (informática y sociológica), diseño, recursos y dispositivos de capacitación, marco legislativo, interfaces colaborativas, comunidades de desarrollo, de usuarias, de facilitación, y una visión y culturas y procedimientos colaborativos compartidos.

En su faceta política, Decidim facilita a un determinado sistema social auto-organizarse democráticamente, permite a la ciudadanía y las instituciones co-producir políticas públicas, reglamentos, planificación estratégica, presupuestos participativos, tomar decisiones de manera masiva y distribuida y articular, en definitiva, la inteligencia colectiva de una manera democrática.

2.4. Decidim.city: Hacia la ciudad democrática

El diseño, desarrollo e implementación de políticas de participación, mediadas tecnológicamente, a través de infraestructuras digitales público-comunes como es el Decidim, en la medida que son impulsados por una o varias instituciones públicas y que a la vez, y al ser de código abierto, permiten la colaboración abierta, abren nuevos escenarios para entender, pensar y intervenir en la gestión democràtica de la ciudad.

Decidim está abriendo el acceso a la participación política más allá de los espacios de participación tradicionales al extenderse a nuevos sujetos, e incluso está amplificando los espacios existentes dándoles visibilidad, transparencia y capacidad para mejorar su desarrollo interno, como son los órganos de participación.

Decidim permite amplificar y complejizar los procesos de participación, gracias a la flexibilidad de su diseño a través del configurador de procesos, permite documentar públicamente y trazar todo lo que pasa, y permite experimentar en nuevos formatos de co-diseño, co-reación y co-producción de políticas públicas, amplificando su potencial de innovación y extensión democrática.

Decidim autoorganización y autogobierno

Definición provisional ciudad democrática

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2008 representa un momento clave en dicha coyuntura, por tres razones fundamentales. En primer lugar, porque la popularización de las redes sociales comienza a ser masiva. Además, es el año en que se desencadena la crisis económica global, que afectará especialmente a EEUU y Europa. Por último, es el año Barack Obama utiliza estas redes en internet para alcanzar la presidencia de los EEUU. Dicho esto, el año clave para nuestros intereses es el 2011. Decidim surge del ciclo de transformación política abierto por el 15M. En 2011 la crisis económica ya se traducía en una crisis social y política rampante (Castells). En el caso de España, diferentes campañas y colectivos

articularon el descontento social por la crisis económica y política a través de las redes sociales (Toret et al., 2015). La popularización de las redes en el periodo 2008-2011 conecta entonces con popularización de la política, de una repolitización de la sociedad, resultante de las reacciones a la triple crisis económica, política y social. Diferentes actores sociales recurren al medio de comunicación más potente del momento: las redes sociales. Estas redes son redes corporativas controladas por grandes corporaciones como Facebook o Twitter. Redes diseñadas con otro propósito que son re-apropiadas para la política (la tecnopolítica) de movimiento. Como han indicado múltiples diferentes estudios (), movimientos como el 15M u Occupy no hubieran tenido la forma y magnitud que alcanzaron sin estas redes. Esta táctica activista mostró sus enormes potencias, pero también sus límites, en los meses siguientes. Permitió movilizar a cientos de miles de personas presencial y digitalmente, tejer redes que fueron la base de acciones en los años subsiguientes, de la PAH a 15MpaRato (Monterde, 2015). Sin embargo, las limitaciones democráticas que hemos mencionado más arriba, numerosos casos de censura de contenidos, la progresiva limitación del alcance de las publicaciones (salvo pago), la colaboración de estas corporaciones con el gobierno de EEUU en procesos de espionaje masivo o la "infoxication" (saturación por exceso de información), así como, más recientemente, la generación de "filter bubbles", nuevos "gatekeepers" o el "infofaking", tres fenómenos clave para la victoria de Trump en EEUU y el ascenso de la ultraderecha en otros países, muestran los usos nocivos y límites de estas redes de segunda generación en un contexto de crisis social y política.

También ofrecen nuevas garantías democráticas en las redes de comunicación digital (seguridad o privacidad), articulan dinámicas abiertas, de colaboración y de vinculación sobre la participación política (procesos, espacios y mecanismos), y abren múltiples escalas de participación (barrio, distrito, ciudad, red de ciudades).

diferenciar comunicación y decisión.

Diferenciar agregación de preferencias de compromiso colectivo con respecto a una acción.

Ejemplos: legislación (moviliza fuerza coercitiva colectiva) y asamblea (moviliza identidad colectiva),

4.4. Dos procesos: análisis cuantitativo de Decidim.barcelona y Metadecidim

Usar ejemplos del PAM

5. Discusión: Los retos de la ciudad democrática

Decidim se inserta en un extenso terreno de innovación en experimentación y producción de prácticas democráticas con el objetivo de abrir el proceso de desintermediación entre gobiernos, ciudadanía y organizaciones de la sociedad civil, avanzar hacia el desarrollo de modelos híbridos de producción de políticas públicas, desarrollo de mecanismos de participación directa, servicios propios a la ciudadanía y gestión de recursos público-comunes. Aún así sus usos para la gestión y organización de cualquier comunidad, a diferentes escalas, son ilimitados, debido a su carácter abierto y en permanente desarrollo, yendo va más allá de las redes sociales hacia un nuevo modelo de redes tecnopolíticas

- Innovación democrática
- Gobernar desde lo común
- Redes de ciudades del cambio

- Abrir el gobierno de la ciudad
- Autoorganización, autonomía, gestión y gobierno de los común en la era de las redes.
- Siempre permanecerá abierto a la colaboración, sin obstáculos legales, tecnológicos o de otro tipo para su uso, copia y modificación con licencia de código Affero GPLv3 para el código, licencia CreativeCommons By-SA para el contenido y licencia Open Access Database. Esto implica que Decidim siempre será auditable, colaborable, transparente, apropiable y fiable, lo que es fundamental para una infraestructura democrática.
- El contenido de la participación será siempre transparente, trazable e íntegro: todo el contenido es accesible y descargable, en todo momento debe quedar registrado qué sucede con cada propuesta, de dónde viene, en qué resultado se integró o porqué fue rechazada (trazabilidad) y el contenido debe preservarse sin manipulación o modificación sin que esta quede claramente registrada y visible.
- Las personas usuarias de la plataforma deben preservar privacidad con verificación: sus datos personales no deben mostrarse, ni cederse a terceros, pero, al mismo tiempo, su identidad como ciudadanos únicos con derechos democráticos debe preservarse.
- La plataforma debe garantizar la calidad democrática asegurando la no-discriminación y la igualdad de oportunidades de partida para cada propuesta y persona, asegurando también la unicidad (debe garantizarse que existe un único usuario con derechos de decisión por cada persona y que dicho usuario tiene que poder ejercer una única vez su derecho).
- La infraestructura es inclusiva y multicapa: debe permitir y fomentar la integración entre las dimensiones presenciales y digitales de la participación.

La democracia del futuro se construye sobre infraestructuras democráticas. El plan de desarrollo para la plataforma Decidim Barcelona, que se detalla a continuación, es una hoja de ruta en esa dirección. Con ello, nos jugamos, no sólo la salvaguarda de garantías democráticas para la participación institucional, sino la posibilidad misma de democratizar la economía digital y la construcción de un ecosistema que abra las puertas a una soberanía o autonomía tecnológica a través de una tecnología para la soberanía democrática en un entorno digital que cada vez inscribe más profundamente sus efectos en el resto de dimensiones del entorno humano y social.

No hay hoy personaje o partido político que pueda permitirse no sólo ignorar sino dejar de invertir una creciente cantidad de recursos en Facebook o Twitter, articular campañas en redes sociales en busca de legitimidad, dedicar gran parte de su tiempo en la erosión de los adversarios políticos o directamente en el llamamiento al voto.

El futuro de la participación democrática parece pasar por el desarrollo de plataformas digitales y procesos híbridos, que renueven las prácticas tradicionales y la combinen con las digitales (Fuchs, 2007). El

Los problemas (tecno)políticos centrales a los que nos enfrentamos no giran en torno a contraposiciones teóricas entre tecnofilia o tecnofobia, tecnopesimismo o tecnoptimismo, sino en torno a asuntos como el de las políticas de datos (privacidad, anonimato, etc.) y el liderazgo de grandes corporaciones transnacionales en el diseño, producción y mantenimiento de las nuevas infraestructuras de la democracia. Dichos actores tienen fines distantes, cuando no opuestos, a los de garantizar el poder y el gobierno del *demos*, objetivos como el aumento de la capacidad analítica para el márketing o la creación de bases de usuarios a quienes proveer de servicios de pago, gestión, venta y tratamiento de datos, todo ello sobre la base de plataformas de código privativo y no interoperable (jardines amurallados, como los llama Berners-Lee, 2010), cuya gobernanza no es ella misma democrática y que, en última instancia, tienden a generar dependencia tecnológica y asimetrías crecientes en el control de la conducta humana y la organización social.

La relevancia de esta cuestión no debe subestimarse. Como afirma el jurista y abogado Lawrence Lessig (2006) el código informático es hoy ley: ordena y sanciona el comportamiento social, hace posible o imposible los cursos de acción individual y colectiva, limita y dirige los comportamientos y estructura las relaciones sociales. En definitiva, como señalara Langdon Winner (1983, 1986), emerge así una segunda "constitución técnica" de la sociedad, no necesariamente alineada con la jurídico-estatal. El potencial disruptivo de las nuevas formas de coordinación social que permiten las TIC queda perfectamente reflejado en plataformas como AirBnB, capaces de desequilibrar el mercado inmobiliaro en cuestión de meses, desplazar a grandes sectores poblacionales a la periferia urbana, aumentar el flujo turístico y desencadenar una cascada de desigualdades sociales frente a la impotencia administrativa, jurídica y democrática.

El modelo y los mecanismos representativo liberales de democracia en red mantienen en el centro el concepto y la práctica de la representación. Con la progresiva implantación de las TIC se enfatiza la relevancia de la información para la transparencia y la práctica de la vigilancia ciudadana; también para la transición digital de la administración (e-government), que permitiría una relación más sencilla entre gobierno, administración y ciudadanía. Este modelo se ajusta bien al modelo de redes informacionales típicas de los 90 y primeros 2000.

Por el contrario, el modelo y los mecanismos de la democracia directa y participativa (con esta segunda como versión amplia y suave de la primera) enfatizan la relevancia de la intervención directa de la ciudadanía en las decisiones comunes (Barber, 1984). Las TIC aparecen como una oportunidad para la apertura participativa del gobierno (open government), que permite procesos que van de la co-producción de políticas entre gobernantes y gobernados a la intervención directa de los segundos en la toma de decisiones políticas. A menudo, la intervención directa decisoria y la co-gestión se dan en los ámbitos más cercanos a la ciudadanía (barrio, distrito, etc.).

Otro modelo es el de la democracia y los mecanismos deliberativos, que enfatizan la relevancia del debate público libre de dominación como clave de la gobernanza de una sociedad compleja, multi-sistémica y descentralizada (Habermas, 1994). Este debate puede formar parte tanto de procesos participativos como del gobierno representativo Algunos autores han sugerido que las TICs transforman estructuralmente la esfera pública de debate y la convierten en una esfera pública en red (Friedland, Hove & Rojas, 2006).

Un cuarto modelo, que podríamos definir como antagonista, enfatiza la centralidad de procesos y espacios que permitan articular discursivamente el conflicto que define lo social. Mediante dicha articulación se construyen sujetos agonistas (ya no antagonistas), ya sean democráticos y pluralistas (en Mouffe, 2006) o populares y hegemónicos (Laclau, 2005).

Frente al modelo liberal, los modelos participativo, deliberativo y antagonista conectan mejor con las posibilidades de las redes sociales, donde predominan cierta versión superficial de la participación y prolifera la construcción de sujetos en conflicto (Adamic, 2006, etc.).

Un quinto modelo para la democracia en red, según Dahlberg (2011) es el autonomista. En este caso, el énfasis se sitúa en la producción inmaterial y afectiva en red. Este último modelo parece casar mejor con las posibilidades abiertas por redes tecnopolíticas como Decidim, tanto en su modelo autónomo (conectado a centros sociales o movimientos) como público-común (conectado a redes que incluyen instituciones públicas con actores sociales autónomos y ciudadanos en la definición participativa del código).

El modelo de redes tecnopolíticas encarnado por Decidim aspira a recoger mecanismos de todos estos modelos, facilitándolos y potenciando los procesos sociales que implican. Al ser libre y construido modularmente, el código de Decidim es fácilmente re-apropiable por diferentes tipos de actores para diferentes tipos de procesos. A diferencia de las posibilidades de las redes

informacionales o las redes sociales, solo el modelo de Decidim contribuye a construir el quinto de esos modelos. Esto, a su vez, facilita la construcción de nuevas infraestructuras y formas de articulación de los modelos directo, deliberativo y antagonista.

Elitist comes from elegere, “elected”. This goes against the democratic principle of equality, of the rule of anyone and everyone. Sortitios selects but does not elect because there is not a will, a judgment, a reason behind the selection. It is, in a way, egalitary. Election is a type of selection based on a will (of one or of many), sortition is a type of selectiono based on chance. To choose sortition is to choose to select but not to choose.

The contraposition meritocracy vs democracy. A selection based on a reason: merit, in whatever practice, field or aspect (work, knowledge, etc.).

Sobre el uso de "gobernanza" vs "gobierno", que sirve también para legitimar el uso del adjetivo "oligárquico" para referirnos a un régimen que es formalmente/jurídicamente democrático.

Alternativas a la dupla democracia---oligarquía

ekastocracia, panacracia, pancracia, isocracia, isarquía------oligocracia, oligarquía

arché como natural (origen, physis) y kratos como social Von Albert Debrunner, 1947 democracia

formal: gobierno, legitimidad, jurídico, legalidad; informal: gobernanza, ejercicio, poder efectivo, materialidad.

Un régimen puede ser una democracia en lo formal, como régimen de gobierno, y una oligarquía en lo material y efectivo de la gobernanza.

Crisis 2008 y emergencia capitalismo no-neoliberal/autoritario (cierre fronteras, cuestionamiento tratados libre comercio)

Desde 2008 se politiza la vida de sectores mayoritarios, pero usando redes sociales corporativas (diseñadas con otro propósito). Resultado: 15M/Occupy (fallos de facebook como plataforma) y Donald Trump (usos de las filter bubbles para el cierrre antidemocratico).

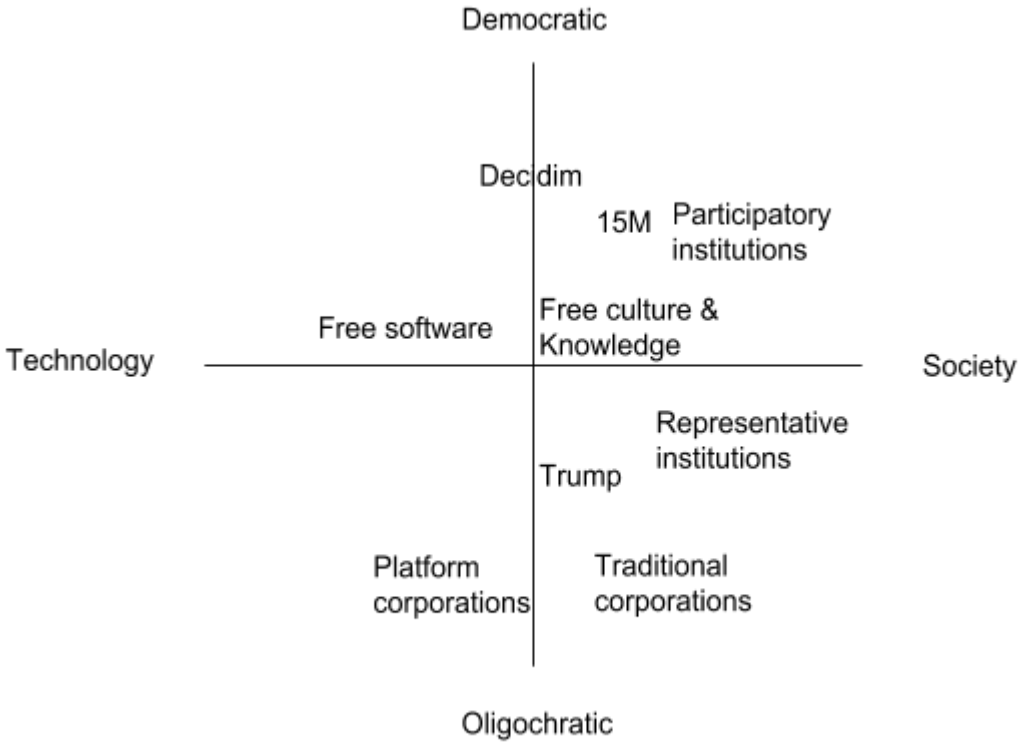
En tanto que proyecto de software (una de sus múltiples dimensiones) Decidim ha exigido concretar, articular y proyectar toda una serie problemas y soluciones que atraviesan la organización política municipal, los sistemas de producción de software desde la administración pública, la gobernanza de los servicios digitales o las relaciones entre institución pública y sociedad, pasando por el contexto tecnológico y social más amplio, en el que grandes corporaciones y sus plataformas digitales irrumpen en los sistemas más tradicionales de gobierno y organización social.

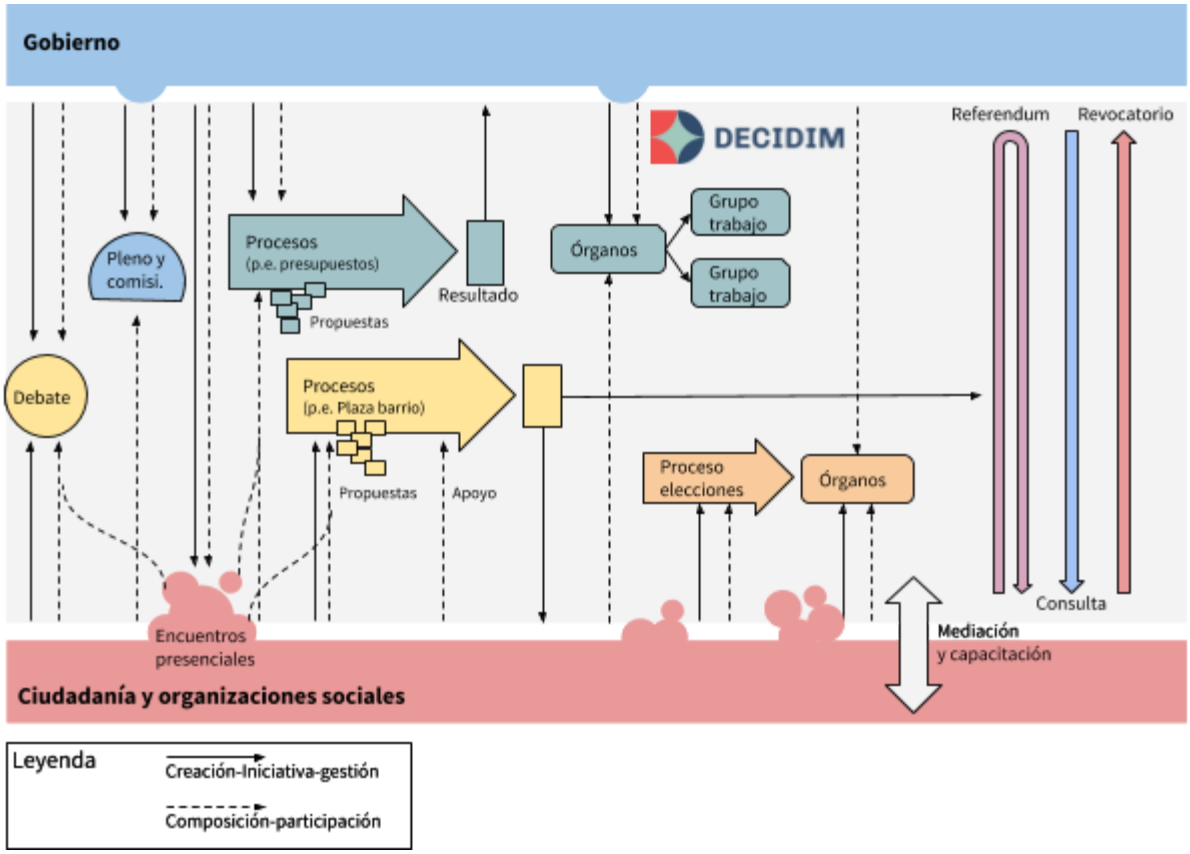
tríadas alternativas son: polos tecnoestructural, socioestructural y políticoestructural; polos infraestructural, estructural y supraestructural. El primero parece mejor porque elimina la connotación jerárquica. También evita la tensión del concepto de tecnopolítica que implica la alternativa actual.

En el contexto de las nuevas configuraciones del capitalismo informacional (Castells, 1996), el denominado "capitalismo de datos" (Lohr, 2015; Morozov, 2015) o "de la vigilancia" (Zuboff, 2015), las nuevas infraestructuras digitales de la democracia corren el riesgo de ser ellas mismas (y contribuir a dinámicas) contrarias a principios como la privacidad o la soberanía tecnológica.

Decidim cuenta con una serie de *funcionalidades* que van de la creación de propuestas abiertas y apoyos a propuestas, a encuentros presenciales con convocatoria, geolocalización y actas, debates abiertos con cargos electos, comentarios deliberativos y discusión de propuestas, actuaciones o resultados, encuestas, iniciativas ciudadanas, varios sistemas de voto (incluyendo presupuestos participativos), apertura y visualización de datos, seguimiento de resultados y rendición de cuentas, e integración con redes sociales. Estas funcionalidades se han combinado para realizar un abanico de procesos participativos que incluyen presupuestos participativos, reglamentos, co-diseño de software o planificación estratégica masiva, planes de transformación urbanos...

Desde la asociación de vecinos más pequeña hasta la campaña electoral más intensa, desde una organización de barrio o un movimiento social hasta la Unión Europea, las relaciones políticas están cada vez más atravesadas de dispositivos y tecnologías digitales. Hace tiempo que el debate no es el de si las tecnologías digitales deben penetrar o no la organización política de la sociedad, sino qué tipo de infraestructuras y prácticas digitales deben promoverse y desplegarse para esta tarea, con qué objetivos, y quién debe diseñarlas y.


Democratic
Decidim
15M
Participatory institutions
Free software
Free culture & Knowledge
Technology
Society
Representative institutions
Trump
Platform corporations
Traditional corporations
Oligochratic


Gobierno
DECIDIM
Referendum
Revocatorio
Pleno y comisi.
Procesos (p.e. presupuestos)
Resultado
Propuestas
Órganos
Grupo trabajo
Grupo trabajo
Debate
Procesos (p.e. Plaza barrio)
Propuestas
Apoyo
Proceso elecciones
Órganos
Consulta
Encuentros presenciales
Mediación y capacitación
Ciudadanía y organizaciones sociales
Leyenda
Creación-Iniciativa-gestión
Composición-participación