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A Government 2.0: Fostering Public Sector Rethinking by Open Innovation

Considering the success of Open Innovation practices in the private sector we want to shine a light on the benefits of Open Innovation for the Public Sector - for the Government and its administrations. Recurring on Obama's Open Government philosophy we discuss the benefits of transparency, participation and collaboration with external contributors, especially with citizens. In our article we primarily address Public Managers and civil servants in order to inspire new ways of collaboration within the administrations. Moreover, we see various opportunities for firms to moderate and accelerate public crowdsourcing activities, revealing new markets for consultant firms and Open Innovation Intermediaries.

EXECUTIVE SUMMARY

New approaches of innovation management suggest that the innovation process of products and services does not have to take place isolated and within entrepreneurial borders. The growing success of open innovation practices in many firms raises the question of whether these principles can be transferred for the reinventing of public sector organizations. Going beyond a technocratic egovernment paradigm, but with the support of internet technology, we want to present a structural overview of how external collaboration and innovation between citizens and public administrations can offer new ways of citizen integration and participation, enhancing public value creation and even the political decision-making process.

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THE KNOWLEDGE IN DETAIL

The innovation potential of firms apparently depends on external knowledge, and thus on the increased scope and intensity of interactive relationships with external contributors. The systematic integration of e.g. customers and users into the development process decisively contributes to an efficient product design, as customer needs can accurately be identified and implemented. Terms, such as co-creation, mass customization, interactive value creation, or **open innovation** represent the increasing success of new (predominantly internet-based) practices and give evidence that the general public can constitute a source of enhanced innovational strength.

Examples can be recognized in several ways. Companies communicate via websites with their clients, and let them create and actively design products in virtual spaces. Idea competitions invite customers to creatively shape entirely new products. Online bulletin boards are founded, read-along and evaluated ("netnography") by firms. Technological progress is also fostered by so-called innovation platforms between a firm and external co-innovators. On platforms such as NineSigma or InnoCentive, problems are tendered for which specific (technical) solutions are searched for and rewarded with prize money. And last but not least, Apple has received much attention as it offers 200.000 software applications on its platform iTunes for extending the functionality of iPhones, iPads and iPods – these are not developed by Apple, but by many different programmers from all over the world, including many hobbyists and freelancers.

Entrepreneurial boundaries blur or fully dissolve. The formerly closed, internal value creation is changing to an "interactive value creation" (crowdsourcing). In the most extreme case, this cooperation model leads to completely new forms of value creation, such as the open-source software projects (e.g. Linux), or the joint creation of user-generated content as with Wikipedia.

But what does this mean for the public sector? What does this mean for its organizations, for its agencies and administrations within the politic-administrative system?

An essential purpose of the so-called "new public management" reform of the past 20 years was to understand the citizen as a customer of public services, and to orient the organization processes toward the clients' expectations. Public administrations of regional administrative bodies changed from a bureaucratic organization to services providers focusing on transparency, responsibility, client orientation, and a perceptible result of public task performance for the citizenship. The citizen should be viewed as a principal and tax payer, but also as customer or user of public services. Flanking this aspect, the e-government reforms during the last few years emphasized the digitalization of administrative processes regarding quality, time, and efficiency with entirely new chances concerning the design of new organizational structures and procedures, but also concerning the communication with third-parties in the outside relationship. As a result, many administrations have started to build up a systematic innovation management these days.

Consequently, the question arises whether public management, in terms of "Citizensourcing", should also include the knowledge and experience of clients, users, and external actors into the public innovation and value creation process: can citizens act as contributor to public tasks that are traditionally performed by an administrative employee (mostly a civil servant)? After a period of reforms based on customer orientation, is there nowadays a need for more customer/citizen integration, or even a collective value creation between a public administration and its stakeholders that can positively influence the political decision procedure?

The Pressure on the public sector to think about this is immense.

Apart from the **technological revolution** and the ubiquitous internet, all kinds of organizations (public and private) are challenged to offer more than just static representative websites. In terms of web 2.0, active platforms with proactive users are flourishing and able to enhance the interaction with customers and users but also with citizens or voters. Moreover the **social revolution** changes the ways of cooperation. Division of labor experiences a new meaning in the virtual space. Online collaborations, such as Wikipedia, address the participation of millions of users. In terms of an **economic revolution** ("crowdsourcing"), organizational company borders fade. Customers feel included and taken seriously, and new business models are based on an increasing networking culture and open innovation strategies. Ultimately, by means of a **demographic revolution**, a completely new user behavior of today's 13 to 30 year olds occurs, that - being digital natives - do not know a world without online connection and depict a varied consumption pattern through various digital canals. Here too, a change in stakeholder expectations concerning digital accessibility is taking place, combined with a transformation from a passive reader and observer to a natural need for active participation.

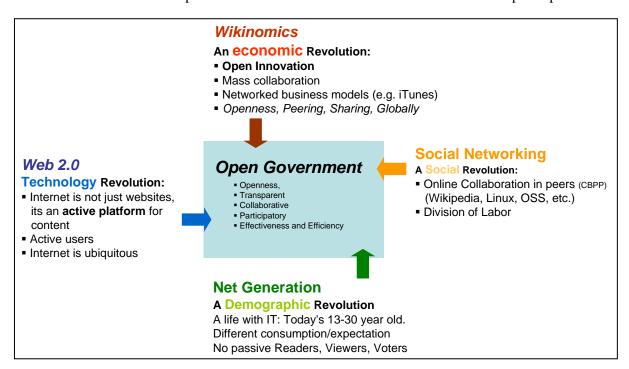


Figure 1: Forces of Public Sector Transformation

In consideration of these challenges, the question arises whether the diverse administrations at the different regional administrative levels and at the end the whole political-administrative system is ready for this transformation. Recent literature discusses this topic as "government 2.0", as a new way of interactively creating public value and directing to a new kind of citizen cooperation by systematically integrating external actors into the process of governing and administrating. Within this context, Barack Obama proclaimed in his first speech to his administration the statement of an **Open government** ("A clear commitment changing the way government works with its citizens: Government should be transparent, participatory and collaborative").

How can this be done precisely?

In an initial step, open innovation implies transparency. All public sector organizations are actively and promptly requested to publish all relevant political and administrative processes (such as parliamentary processes; legislative procedures; development of important administrative instructions; public tendering; procedures that affect the budget and budget management) on all levels of administration (federal government, state, and communities). Apart from the constant requirement of efficiency and effectiveness of administrative processes, transparency, traceability, and the feeling of possible participation are actually values that are particularly important in the public area.

In a second step, transparency turns into participation. A prominent example of this debate (that is partly conducted under the topic of "Open Data") is the New Zealand Policing-Act-Wiki. The New Zealand police law from 1958 was presented to the general public on a platform in a Wikipedia format so it could be re-written and modified. In the middle of 2008, this wiki-version of the new police law was officially approved by Parliament. Amendments and wordings were completely individually designable and variable and the influence of lobby groups during the legislative procedure was much more transparent than ever before.

But here the common creation of rules, laws, and norms ("e-rulemaking") combined with prior published government information and data generally can be taken much further: governments and administrations should promote citizen participation on political decisions and political opinions on all levels. The dialogue between citizens and government increases the acceptance of government actions. At the same time it fosters sustainable participation, and consequently alludes to a new concept of democracy.

Specific characteristics of these new **participation processes** are, for example:

People's budget: Active citizen integration into budget decisions of the city council and consolidation concerning the utilization of funds. This includes discussions about objectives regarding the budget allocation, the intended outputs and outcomes, and the collaborative measurement of results by common evaluation.

- Virtual town hall meetings (or so-called "Mini-Publics"): On AmericaSpeaks.org e.g. citizens are included into the process of public decision-making by discussing problems concerning all political areas, and presenting the discussion results to the political decision-makers.
- *Political agenda setting:* Party programs, public strategies, and mission statements are increasingly created in publicly and participatory.
- *Political monitoring:* Monitoring of politicians and their misbehavior in the sense of a "representative watching".

In a third step, participation changes to a collaborative or interactive public value creation.

Certain procedures in the administrative system can be designed much more effectively in terms of an open collaboration process. Beyond technocratic e-government reforms, one main issue in administrative reforms of these days is to enhance the intra-administrative cooperation on the one hand, but also with organizations beyond the administrative borders, like other public agencies, companies, networks but also the citizenship. Currently there are many vivid examples of this development, four of them have become prominent:

Urban planning: Planning and designing of public space by those people who live and work in it. A good example for integrating creative citizen input is the success of the "Future Melbourne Program", an approach based on Wiki and blogs, to redesign the urban landscape of Australia's second largest city after the devastating bush fires. Citizens can comment and work on, as well as individually design, the future development of the city via this program (www.futuremelbourne.com.au). There have been also similar well working projects to reconstruct New Orleans in the hurricane Katrina aftermath.

Public innovation and ideas competitions: The "U.S. Agency for International Development" (USAID), an authority of the US government that offers global economic and humanitarian support, organizes an idea competition for developing countries. USAID is searching for innovations in the field of health, education, agriculture, trade, etc. Another example is the "US National Science Foundation" which offers rewards for solutions to specific problems in several science disciplines and has spent millions of dollars on these projects since June 2008. One example: During the contest "Apps for Democracy", 47 software programs entered the platform within 30 days, enabling citizens to access published government databases, and offering an added value for citizens. With prize money amounting to 50.000 USD, software development expenses of more than 2 million USD were saved (www.appsfordemocracy.org).

Public maps and continuous open improvement: The publication of official maps of the English road network enables citizens to autonomously report potholes and damaged infrastructure (via photos), in order to mobilize the road maintenance depots. The website FixMyStreet receives approximately 1000 notifications of claims per week (www.fixmystreet.com). The city of Boston has even created its own iPhone application for its citizens that is one of the most downloaded apps, and enables citizens to transmit suggestions for improvement and notifications of claims in real time.

Peer to patent: The integration of external contributors is helping to compensate for resource constraints of the US Patent Office (USTPO). In a two-year pilot program, patent applications were published on the USPTO website. After registration, anybody was able to review patent applications online and provide information of already existing patented know-how in an application (hint for prior art). So the general public gave hints why applications were to be excluded from patentability. Overall, 350 suggestions were handed in "prior art". In this way the patent examiner, whose search is limited by his local knowledge, was supported by external expertise due to the open call to participate – an impressive prove of highly specialized division of labor aiming at an increased quality of patents (www.peertopatent.org).

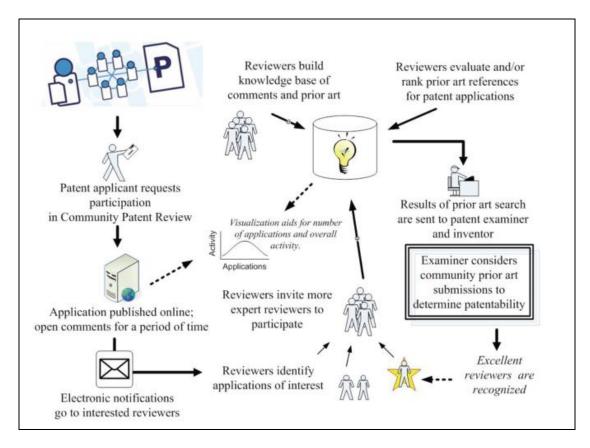


Figure 2: Peer-to-Patent Process Map (www.peertopatent.org)

LESSONS LEARNED

A new culture of open public innovation

Many successful examples in the private sector provide anecdotal evidence of a more effective design and development of products and services by an open call for participation by leveling the organizational frontiers. Generally, these concepts are applicable for public sector organizations as well. By nature public institutions are embedded in a democratic setting of co-determination,

transparency, and participation and instruments such as tendering, co-determination, or outsourcing are not new at all. Public administrations have to realize that it can imply advantages to cooperate with

external contributors beyond the own organizational borders, integrating external knowledge systematically into the internal decision making and public value creation process. We call this Citizensourcing, as is the act of taking a job traditionally performed by a designated public agent (usually a civil servant) and outsourcing it to an undefined, generally large group of people in the form of an open call.

1) Citizen Ideation 2) Collaborative 3) Collaborative and Innovation Administration Democracy Citizen Feedback and **Urban Planning:** 21st century town hall meeting: ■ FutureMelbourne.com.au AmericaSpeaks.org **Recommendation System:** unifiedneworleansplan.com deliberative-democracy.net FixMyStreet.com calhealthreform.org ■ Patient Opinion (Health) Patent examination: californiaspeaks.org democracylab.org Innovation contest initiated by european-citizens public organisations: consultations.eu/ ÖÖ USAID Development 2.0 Challenge **PEERTOPATENT** Collaborative legal codification: Inducement Prizes at the ■ Peer-to-Patent.org National Science Foundation PatentFizz, IP.Com Patent POLICE U.S. Dept. of Energy Lighting Debate (no formal connection to Prize USPTO) New Zealand Wiki Policing Act 2008 Regulations.gov **General Public Sector Service Public Security:** (eRulemaking) Improvement: ■ Texas Virtual Border Watch ■ Southern California Wildfire www.showusabetterway.co.uk **Policy monitoring:** Transportation Security Response govtrack.us Administration's Idea Factory Crime Mapping data.gov Peoplefinder-Project reveals new public duties

Figure 3: Examples of Citizensourcing in the Public Sector

Radical innovation and changes generally take place in times of crisis and an amplified pressure to act. In times of increased system mistrust, decreasing ability to act because of public indebtedness, constantly poor polling rates, and missing trust in public (bureaucratic) processes, we consider the time has come to think about new ways of the division of labor also in the public sector – not only, but especially in times where the reduction of staff seems to be the predominant strategy to consolidate the public budget.

On the other hand side the civil officers' daily work gains more importance, indicating a new role as boundary-spanners, enabling them to press for central objectives in the face of competing decentralized solutions and collaborative input. Such new roles eventually lead to a new kind of civil servants as innovation and information managers believing in creating sustainable public value.

CONCLUDING REMARKS

Getting acceptance from public agencies toward all these innovative practices is certainly harder than it is in the private sector, as the policy framework for Citizensourcing and its potential reforms moves so much slower, making it hard to implement such a radical concept. Moreover, public problems are often considerably different from the "low-risk" challenges of corporate product development. It is easy to think of potential limitations and risks e.g. that vested interested groups or political parties may exploit the system in their favor, as large number of citizens may not be interested in such voluntary participation or regard it as a waste of time. But this is not a reason not to encourage further thinking in transferring and developing innovative ways of public participation and integration. Otherwise, governments will find themselves ill-prepared for the sustained pressure of citizen-driven policy activism. Moreover, if the gap increases between the way, in which citizens and companies collaboratively interact on the internet on the one hand, and citizens and government on the other, there is a great risk that the citizenry will become increasingly dissatisfied if their expectations of what modern governance should entail are not fulfilled.

FURTHER READING

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