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Innovation in public services: the pursuit of economic drivers

Abstract

The interest in innovation in public sector, especially in municipalities, is extensively growing. The paper focuses on exogenous factors shaping changes and/or innovation in public services. The results of investigated cases and Delphi studies in Central Europe are briefly presented. A critical evaluation of the approach applied by authors follows. The learning outcome of the research may be valuable to public managers, innovative businesses and policy-makers who pursuit opportunities and try to analyze various influences on the public service.

Keywords: public service innovation, economic drivers, technology drivers, policy drivers, comparative studies, Delphi studies  
JEL Classification: R11, O33, H4.

1. The problem and current understanding

There is no doubt that innovation in public services has been placed at the forefront of public management research. The complexity of public service management at local and regional levels has moved the issue from purely pragmatic to a theoretical one due to vast changes in the systems of service delivery offered to users around the world.

Local public services can be seen as a unique, i.e. place-specific and publicly secured offer of services and infrastructure. Therefore, the economics, finance and strategic management of local public services have gained extreme attention in various scales. It has been investigated at the micro-level, including the de-
bates of performance of public and private type of delivery providers or contractors, whereas at the mezzo-level it has researched efforts made by planners and responsibility-takers to secure effectiveness and last but not least, it has focused on the macro-level analysis on how to secure welfare systems (Aulich 2011, Kuźnik 2012).

With new approaches to public management, governance processes boosting new opportunities have received an increasing attention (Rhodes 1996; Barczyk, Ochojski 2007). Service operators offer innovative projects (innovative processes/products) and more importantly deliver more public value (Heartley 2005). Thus, the antecedents to innovation in public services may be regarded as truly important concern that underpin innovation potential of public sector. In other words, it is of great importance to learn what influences innovation in public service in terms of external and internal factors?

The interest in innovation in public sector, especially in municipalities, is extensively growing. The issue is not just a buzz word, but it remains on the agenda attracting such global players as IBM or SIEMENS to offer new innovative solutions to municipalities and regions. Smart energy grids, passive buildings or intelligent traffic lights are only the examples of new innovative solutions introduced by business to be delivered in public places. A good question was raised in 2007, however, asking whether innovation-driven public-service value is a luxury reserved for politically mature and economically developed local markets (Parston 2007). Leadership and entrepreneurial attitude as well as joint intra-organisational efforts are featured as key internal factors of innovation in public organisations (Borins 2002; Goodman, Dingli 2013; Klein et al. 2010). It is said to be either the public entrepreneur, a visionary municipal manager or a political leader digging into brave solutions that allow e.g. a shift in the speed of service delivery or quality improvement offered to citizens under new services. On the other hand, sound regulatory framework, governmental funding of projects, as well as collaborative networks boosting the learning outcome are among the external inducements (Lundvall 2002; Bommert 2010; Kickert et al. 1997; O’Toole 1997). But is the innovation so easy for public sector? There are definitely more underpinnings to be considered. The challenges facing global economy and the implications of increasing uncertainty for policymaking may be even more stimulating these days (Sørensen, Torfing 2012). With Eppink and de Waal’s (2001) studies introducing a motivating techniques such as: PEST analysis, five forces analysis or portfolio analysis, one can make the analytical effort and identify global forces changing the environment of sampled public services. We find the issue intriguing and worth further investigation with an interest in present and future stimulants and barriers impacting public services that may be particularly vital for innovation management.
2. Research question and research design

The main question investigated here is to what extent the exogenous factors shape changes and/or innovation in public services at municipal/regional level. The main goal of the submitted research is to offer a critical evaluation of the approach applied by authors together with analytical techniques used to investigate key change factors influencing public services in Central Europe.

The original research plan for the study was based upon accessing Eurostat and national statistics for a period of at least 2000-2010. This approach proved that there is no extent comparable data on public service economics gathered across Europe. It seems to be quite a challenging issue in case the European communities really push on tackling structural changes in local public services, as there is simply no sound economic database that could support this process. Following this statement sector-related reports, newsletters, position papers, etc. have been reviewed to browse for possible expertise and data. This procedure helped to obtain some interesting sector/case/place-specific information but of no comparative value.

Therefore, the study was made at a two-step approach. The first phase of the study was based on a case-study investigation over the critical factors influencing public service delivery. It was meant to reveal key factors impacting change, underpinning the economics of the service and imposing new solutions introduced to public services in municipalities. Thus, fifteen cases spread around Central European municipalities/districts were carried out, providing knowledge on service delivery in six fields. These included: roads, transportation, water and sewage, social care, health care and housing. A literature review on public economics, innovation in public services and governance served as background for the case study set-up (Baron et al. 2014). In general, the framework tailored for the research included: national and system context analysis, operators’ description, market (spatial and economic issues) identification, trends description of the sector and its future prospects.

The second phase was held with a corresponding goal – to investigate the factors underpinning widely discussed changes in service delivery. Here, a Delphi study was arranged based on the early results of cases observations and followed by further literature review. The hypotheses on future change factors were tested over the Central European perspective. More than 130 public managers, policy-makers, public agency officers, private service operators and other relevant stakeholders shared their reflections. The views has been collected from all the countries of CE.
3. Findings

The method applied over the case studies has been successfully tested over the CE. However, with a limited number of cases, it can only be regarded as introductory outcome. Nevertheless, it seems that national context basically shapes all services and influences their innovativeness. Local/regional authorities are so much dependent upon solutions provided by national regulations concerning public services that they only seek efficient ways to maintain standards, having no pressures nor biases towards innovating. But national settings across the CE differ so much that one can only pinpoint some best practices while their transfer to another country may not be possible. Also there is no justification for direct comparison of performance or service economics. Besides, some global technology-based factors have already been identified. They push innovation in products and services delivered by the public sector. Public transportation in one of the cases is, these days – for instance – half-donated by state, and with a decrease in funding over the last 10 years, a new call-a-buss service has been locally introduced to cope with spending and a decrease in demand. In other words, technology changes overwhelmingly spreading around the globalized economy, allow more services to become more sensitive to new business solutions. It can be seen in health care sector which cuts its costs on delivery and extends its capability by use of telemedicine. Intelligent transportation systems in urbanized areas may be another good example to mention.

The Delphi study across the CE public sector, is a promising source of knowledge on possible future challenges and drivers of services. The selected Delphi statements that are the most relevant for this paper and challenge the understanding of antecedents to innovation processes in public services are presented in Table 1.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Spatial perspective</th>
<th>Time perspective</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected territories in Central Europe will be affected by a critical decrease of existing water sources that will influence water price levels</td>
<td>rural</td>
<td>before 2020</td>
<td>38% yes, 62% no</td>
</tr>
<tr>
<td>New techniques of delivery will... affect price of water</td>
<td>rural</td>
<td>after 2020</td>
<td>72% yes, 28% no</td>
</tr>
<tr>
<td>New technologies (e.g. environmental) imposed by European and global directives will... the cost for operators of short range public transportation</td>
<td>rural</td>
<td>after 2020</td>
<td>23% significantly increase, 54% moderately increase, 23% not</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>47% increase, 37% stabilize, 16% decrease</td>
</tr>
</tbody>
</table>

Table 1. Selected Delphi statements on public services in Central Europe
Table 1 cont.

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<tbody>
<tr>
<td>New trends in organizing/financing locally-based public transportation (i.e. ‘call a bus’) will... reduce the prevailing (previous) cost of a single line</td>
<td>rural</td>
<td>before 2020</td>
<td>13% significantly reduce 33% moderately reduce 54% not reduce after 2020</td>
</tr>
<tr>
<td>The territories affected by depopulation and ageing will have no choice, but deliver social, counseling, welfare, referral and similar services mostly as e-services (e.g. remote monitoring, talks over communicators, registration to services,...)</td>
<td>rural</td>
<td>before 2020</td>
<td>17% yes 83% no after 2020</td>
</tr>
<tr>
<td>E-services with new technological interfaces (devices, communicators, mobile technologies) will... supply of social services in ageing society</td>
<td>rural</td>
<td>before 2020</td>
<td>53% increase 40% stabilize 7% decrease after 2020</td>
</tr>
<tr>
<td>Technological trends in social services will... supply of more individualized and activation oriented as well as place-indifferent services</td>
<td>rural</td>
<td>before 2020</td>
<td>60% increase 40% stabilize 0% decrease after 2020</td>
</tr>
<tr>
<td>Forecasting and scenarios over the demand, dynamics and diversity of transportation services (cross border, ageing, tourism) will gain more attention at the regional level</td>
<td>urban</td>
<td>before 2020</td>
<td>74% yes 26% no after 2020</td>
</tr>
<tr>
<td>Promotion of sustainable mobility (eco-friendly, energy efficient public transport, etc.) will... the amount of investment expenditure on the development of road system</td>
<td>urban</td>
<td>before 2020</td>
<td>61% increase 22% stabilize 17% decrease after 2020</td>
</tr>
<tr>
<td>E-services or other IT-based improvement tools targeting organization of transportation services will be... useful in achieving operators’ cost-effectiveness</td>
<td>urban</td>
<td>before 2020</td>
<td>43% significantly increase 52% moderately increase 5% not after 2020</td>
</tr>
<tr>
<td>More elderly and handicapped will safely use roads and pavements due to new technologies and facilities</td>
<td>urban</td>
<td>before 2020</td>
<td>50% yes 50% no after 2020</td>
</tr>
<tr>
<td>The technological innovation in water and sewage management will... consumer price</td>
<td>urban</td>
<td>before 2020</td>
<td>78% increase 17% stabilize 4% decrease after 2020</td>
</tr>
<tr>
<td>Large scale passive housing projects (optionally co-funded by external sources) will... increase maintenance costs for public housing sites</td>
<td>urban</td>
<td>before 2020</td>
<td>19% significantly increase 56% moderately increase 25% not after 2020</td>
</tr>
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The trends introducing green technologies to housing will... reduce long term maintenance costs

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<tbody>
<tr>
<td>The trends introducing green technologies to housing will... reduce long term maintenance costs</td>
<td>urban</td>
<td>before 2020</td>
<td>28% significantly 58% moderately 14% not</td>
</tr>
<tr>
<td></td>
<td></td>
<td>after 2020</td>
<td>47% significantly 42% moderately 11% not</td>
</tr>
</tbody>
</table>

Source: Authors ADAPT2DC project research.

The statements presented above can be a source of future-oriented reasoning concerning either businesses pushing new innovative solutions ready for implementation in public services (products and processes) or public sector pulling technologies for their implementation in new and innovative services.

Even though, it is not the scope of the study to offer such innovative solutions, it describes drivers that are useful to build most possible future (external) scenarios or to define strategic visions by municipalities and the service providers (Durance and Godet 2000). To some extent, it also informs on the willingness or resistance of the public managers and policy-makers regarding present and future application of technologies in local public services. As a general conclusion, we believe that the costs of public service provision has been and will most probably remain the core issue of the operations and thus, the pursuit for new ways to economise on the benefits provided to local public service users should trigger innovation processes internal and external to public service organisations both in rural and urban areas.

Conclusions

The learning outcome of the research may be valuable to public managers, innovative businesses and policy-makers who pursue opportunities and try to analyze various influences on the public service. This may be important to set new areas of interest and lead to innovation in processes, products, communication. Innovation policy is a buzz word these days and even though public economics is far different than market-driven demand and supply schemes, more and more deregulation and governance solutions are seen in public sector management over the last decades. Thus, we find the research a hopefully expandable source of knowledge for both public and private sector in a sense that it stimulates new solutions or forces adaptation processes within the private or public sector who offer services to citizens.

The episodic character of public innovation is absolutely problematic because it does not lead to enhancing the public sector’s capacity for innovation.
To make it permanent and more systematic, tools to facilitate information critical to public sector innovation need to be developed. Anyway, these tools will definitely be based upon tailor-made approaches with qualitative and quantitative methods or extend case studies. This is due to fact that direct comparative studies are hardly feasible and national international statistics do not cover the needed scope of information. However, it would be of great significance to offer such an analytical tool, especially in times of unstable finance and an increase of public debt over the public budgets.

Despite its limitations, the study looks forward to offering such a pragmatic attitude. Case studies may indeed present an interesting panorama of approaches and causalities concerning contextual prerequisites and actions taken. Addressing experts – e.g. in Delphi studies – provides creative opinions on the future valuable for scenario building and creating the very requested visions of the future. However, one should bear in mind that they are highly dependent on diversified experts’ views and as such may only be grassroots for further decisions.

References


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