

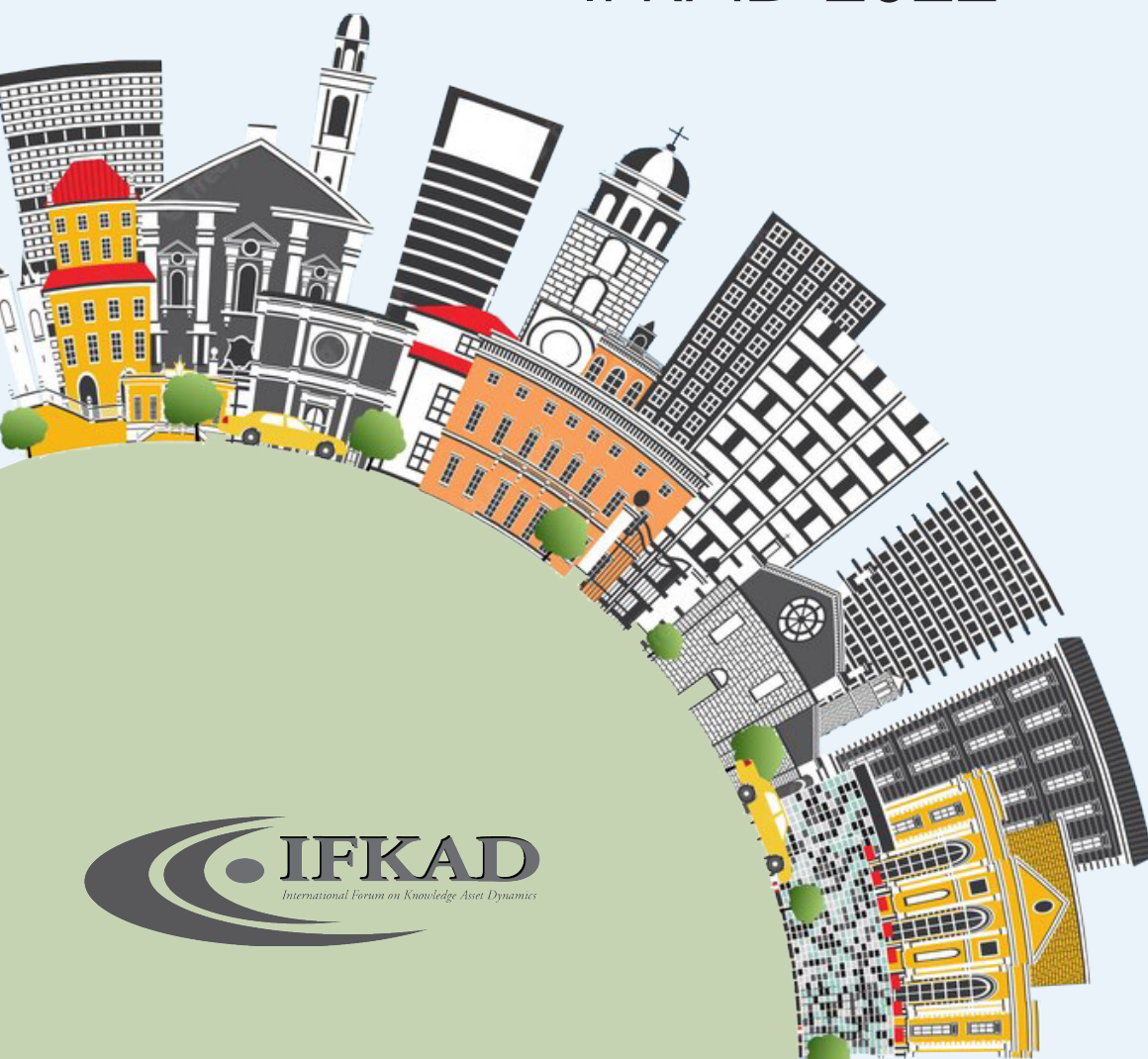
17th International Forum on Knowledge Asset Dynamics

PROCEEDINGS

Knowledge Drivers for Resilience
and Transformation

20-22 June 2022
Lugano, Switzerland

IFKAD 2022



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Making Public Administrations Reflect on Digital Transition: The Approach of the DIGISER Project

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Abstract

Digital innovation of public services has overcome the technology-driven phase and entered the technology-enabled phase towards organisational and governance transformation. This shift offers PAs several opportunities to improve decision-making and orient policy action, but also to engage in profoundly transformative processes affecting -

¹ DIGISER Project Officer, Mr. Gauk is not responsible for the reflections illustrated in this paper. He contributed to conceive DIGISurvey as a learning tool.

among the others- organisational structure, culture and behaviours, processes, employees' requirements and abilities, information systems and technological infrastructure.

The present study starts from the assumption that to seize this transformative opportunity, public administrations (PAs) are required to engage in reflection and learning processes, both at the individual and the organisational level. Also, it assumes that these processes need to take place at all levels and across multiple sectors and organisational units. Relying on the preliminary results of the ESPON Project DIGISER (espon.eu/DIGISER), this study analyses how the exposition of participant cities to the Project and its conceptual and analytical frameworks can set the ground for reflection on their digital and organisational transformation and practices. In particular, this paper illustrates the methodological approach and tools developed, focusing on the activities revolving around an extensive survey about digital service innovation carried out in 250 European Cities. In addition to the survey itself, the study illustrates visual and narrative tools developed to give feedback to participants, highlighting their potential in terms of reflection drivers. The contribution then discusses to what extent (i) filling the survey allowed a better understanding of the digital innovation process and its relation with existing organisational structures; and (ii) the critical reading of the results contributed to triggering reflection and raising awareness among the respondents.

Evidence gathered during the data collection shows that completing the survey has required the identification of respondents from different sectors and with different levels of skills and responsibilities, thus confirming its potential in activating reflection on the survey topic and supporting cross-silo interactions and knowledge sharing. Also, exposure to the survey and to its results has improved respondents' awareness about the organisational structure, opening up to new collaborations and enhancing situational awareness among PA employees. Finally, the experiment carried out shows a high exploratory potential, as it proved able to support reflection on new envisioning about public service design and provision. Even if further testing is required to corroborate these preliminary reflections, the illustrated methodological approach has promising profiles in terms of its ability to support reflection on digital transformation processes within PAs.

Keywords – Reflective practice, Digital transition, Organisational change, Public sector innovation

Paper type – Academic Research Paper

1 Introduction

Digital innovation of public services has overcome the technology-driven phase and entered the technology-enabled phase towards organisational and governance transformation. The Covid19 emergency has further pushed this shift, requiring fast and immediate behavioural transformation from both sides (service provision and service use), pushing for rapid digitalisation of public services across its sectors (Korinek & Stiglitz, 2021; Mazzucato & Kattel, 2020). The current

landscape evinced that a careful reflection is needed for the readiness and availability of public administrations (PAs) to advance in the digital transition (Aristovnik et al., 2021; Gabryelczyk, 2020). This new phase offers PAs several opportunities to improve decision-making (Ferreira et al., 2015; Sivarajah et al., 2017; Concilio & Pucci, 2021; Janssen et al., 2017; Janssen & Kuk, 2016) and orient policy action towards missions defined by high-level EU strategies (Mazzucato, 2018a, 2018b).

For cities, the entrance to the new technology-enabled phase relies on PAs' capacity to improve the awareness of their digital maturity and commitment towards an effective digital transition. From a transition perspective, digital innovation processes require going beyond a passive adoption of new technologies. Digital transition entails profound changes in the organisation affecting, among the others, its structure, culture and behaviours (Avgerou, 2000; Deserti & Rizzo, 2019), processes, employees' requirements and abilities, information systems and technological infrastructure (Nograšek & Vintar, 2015). Digital innovation in the public sector, together with the transformation it entails, is strictly related to knowledge management (Alvarenga et al., 2020) and to the overall reflective capacity of the public organisation itself (Rein & Schön, 1996). In particular, PAs need to gain awareness of their competencies and capacities, institutional and organisational arrangements, and policy actions' responsiveness and appropriateness.

However, PAs are still struggling to identify drivers and barriers to digital transformation (Tangi et al., 2020) while developing and implementing their digital strategies. Also, they often encounter difficulties in understanding their progress and in turning difficulties into useful information. Reflection and learning are hampered by barriers acting on several levels, from the individual (as in the case of problems in understanding and interpretation of their action space by single public employees and decision-makers) to the organisational one (as in the case of institutional and bureaucratic rigidities and resistance to change). Being not homogeneous in scope and scale, PAs also feature complex path dependencies, intricate institutional factors, being subject to socio-political arrangements while having economic constraints (Castillo, 2021).

These difficulties, having major impacts on PAs' performances both in terms of overall management capacity and individual activities, have been analysed to a limited extent by public policy literature, which often focus on specific management dynamics, while failing to adopt an integrated, cross-silo

perspective to the exploration of digital transition enabling and hindering factors across multiple organisational and policy levels. Also, insights from literature often rely on interviews to experts and qualitative analysis of organisational documents (Meyerhoff Nielsen & Mahmoud Ali, 2021), while a systematic, data-informed exploration of digital transition processes across different cities is still missing. Furthermore, beyond the availability of consultancy reports, there is little systematic insight into how PAs, especially at the local level, are approaching, systematising, and operationalising digital transformation, from the scale of their daily practices to that of long-term strategies. Moreover, literature shows that at all levels of government, PAs digital transformation is mostly prompted by external demands such as changes due to the organisation's environment, technological change, and stakeholders needs (Mergel et al., 2019), while paying less attention to internal drivers, e.g. related to reflection and learning. In sum, little is said in both grey and academic literature about PAs' reflection and learning dynamics along with digital transition processes.

In the attempt to fill this gap, the present study reflects on learning opportunities deriving from confronting PAs with relevant questions, such as: *What is the level of digital maturity of the PA? How is the PA approaching service development building on available technologies? Is the PA locked into market offers or are they becoming protagonists of digital transition? Is it prone or resistant to the organisational change required by digital transition?*

The study aims at encompassing both a theoretical and operational perspective to encourage PAs to reflect at large on the topic of digital service innovation and its dimensions. It provides a complementary perspective to the existing public sector management literature (van Helden & Reichard, 2013; Hoque, 2008), by reasoning on the learning and awareness-raising process that data collection and analysis of contextual performance feedback can encourage. To explore these interrogatives, the paper relies on some preliminary findings of the ESPON project DIGISER (espon.eu/DIGISER). The project analyses the digital transformation of public service delivery in European cities, focussing on related organisational change processes. This study analyses how the exposition of participant cities to the project and its conceptual and analytical frameworks can set the ground and encourage cities to a multi-level and cross-sector reflection on their digital and organisational transformation and practices.

2 DIGISER conceptual framework

This study relies on the DIGISER conceptual framework, which explores key socio-technical transition mechanisms along with digital transformation processes. The DIGISER conceptual exploration is guided by broad research questions investigating: “how digital transformation can generate long-term innovation in public sector organisations” (in terms of organisational change); “how public sector organisational innovation can generate public value in local contexts” (in terms of modification of local context dynamics) and “what paths and key enablers can make best innovation practices replicable and scalable” (see ESPON, 2021).

Adopting a transition perspective (Geels & Schot, 2007; Loorbach, 2010; Loorbach & Rotmans, 2010), this study assumes that transformative processes require iterative learning at all levels. For this reason, research questions suggest looking at the DIGISER analysis as a Triple-Loop Learning (T-LL, see Argyris & Schön, 1978; Gupta, 2016; Stacey, 2007) driver. In T-LL, the relationship between organisational structure and human behaviour changes as the organisation “learns how to learn” and understands more about the values and assumptions below patterns of actions (Kahane, 2004). In this model, learning loops are associated with specific degrees of critical reflection, which have been conceptualised (e.g., by Sinek, 2009; Engelbart, 2002) as a reflection on actions (“what”, single-loop), on approaches (“how”, double-loop) and on assumptions and values (“why”, triple-loop).

Drawing on this conceptual setting, DIGISER Concept revolves around three learning spheres (see Fig. 1):

1. Digital service innovation maturity (“what”). Grounded in a broad understanding of digital transformation processes (Hinings et al., 2018; Schein, 1985), this dimension focuses on the degree of penetration and maturity of technical and organisational innovation in public service delivery. On the one hand, it looks at *Digital Maturity*, exploring the extent to which PAs embrace new digital technologies and deliver innovative public services. On the other hand, it explores changes in PAs’ processes, structures, practices, values and culture. In particular, DIGISER looks at the *Level of Service Embedment*, analysing the role played by the service in driving changes in public authorities.

2. Proneness to change (“*how*”). This second dimension relates to the PAs capacity to *manage change* to engage in digital innovation processes, and *shape change* (Rammel et al., 2004) by supporting innovation pathways. Therefore, proneness to change is conceived in terms of both collaboration among different service sectors and governance of innovation processes (Bekkers & Tummers, 2018; Sørensen & Torfing, 2012, 2017). Also, based on a transition management perspective (Loorbach, 2010), it encompasses different levels: strategic problem-structuring and the definition of long-term objectives; agenda-setting, networking and partnership development and a more operational level, related to actual experimentation and implementation of innovative policies, practices, and tools. In DIGISER, proneness to change has been explored in relation to four *innovation governance* processes, namely: data management, procurement, societal engagement, and institutional capacity building.
3. Orientation to mission (“*Why*”). This third dimension represents the goal to achieve in terms of systemic change as an answer to one or more societal challenges local authorities are asked to face (Kattel & Mazzucato, 2018; Robinson & Mazzucato, 2019). In DIGISER, it represents the overarching perspective to which the innovation of public services should be contributing.

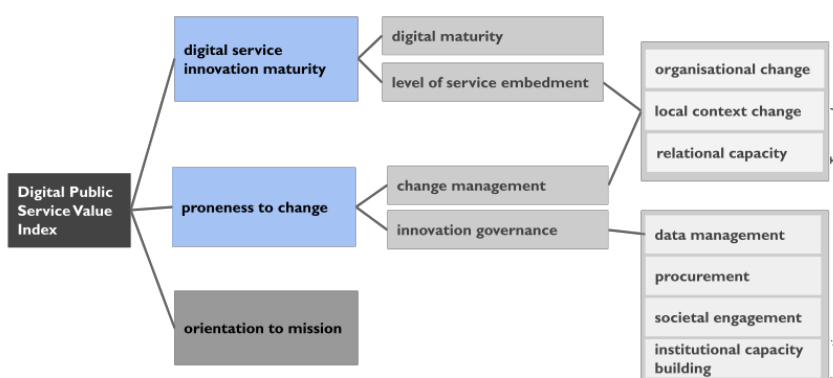


Figure 1: DIGISER Conceptual Framework (revised). In blue, the processes directly analysed in the present study.

The first two dimensions of the DIGISER conceptual framework (i.e. *Digital Service innovation Maturity* and *Proneness to Change*) are mirrored in the design of the survey and guide the computation of the PAs performances in the different dimensions of observations introduced above. *Orientation to mission* has been only implicitly explored by the survey, which encourages reflection on the goals underlying digital transition (for further insights, see <https://www.espon.eu/DIGISER>).

3 Methodology

In line with the DIGISER conceptual framework (ESPON, 2021), this contribution focuses on the learning activated throughout the different stages and processes through which cities and their PAs have been engaged: from the encounter with the DIGISER concept when cities have been required to fill in the survey developed to collect data, to the way in which data analytics are visualised and reported back to cities. This methodology section briefly outlines how the survey was structured reflecting a clear learning scope, and how individual and organisational reflection has been encouraged throughout its sequential exposition phases (Table 2).

Table 1: Reflection spheres and exposition phases

	Digital Service Innovation Maturity <i>what</i>	Proneness to Change <i>how</i>
Reflection Exposition Phases	DIGISurvey completion	
	Feedback to the participants	

3.1 DIGISurvey as a reflection and learning driver

The experimental approach adopted to encourage (self-)reflection resolves around an extensive online survey ([espon.eu/DIGISER](https://www.espon.eu/DIGISER)), launched by the ESPON Project DIGISER¹. The survey looks into multidimensional digital transition processes in the public sector across European Cities, and further investigates the

¹ OASC was in charge of data collection in the DIGISER project.


relationship between digitalization and public sector innovation (Lindgren & Van Veenstra, 2018; Wimmer et al., 2020; Dwivedi et al., 2011).

The questionnaire consists of nine thematic sections, each built as a vertical exploration of a specific sphere of the public sector digital innovation:

1. *General Information*, collecting general information about the PA.
2. *Digital Innovation Strategy*, enquiring about specific strategies in place to manage digital innovation and their effects.
3. *Financing and Procurement of Digital Solutions and Services*, exploring how the PA funds digital innovation and how its procurement is organised.
4. *Institutional Capacity and Skills*, tapping into how the PA organises work around digital innovation and supports employees to build the necessary set of skills.
5. *Data Management*, investigating how the PA governs data, how it adopts and uses platforms, how interoperable and accessible data are, and whether it uses or shares big data.
6. *Citizen Engagement and Innovation Ecosystems*, supporting reflection about public authority's innovation ecosystem, and about methods and tools employed to involve and inform citizens about innovation activities.
7. *Service Design*, enquiring how PAs approach the design and implementation of new (digital) services and what innovative technologies it has already implemented or is planning to implement.
8. *Digital Maturity*, collecting information about the offer of digital services and their impact on different service areas.
9. *The Impact of COVID-19*, exploring how the pandemic has affected PAs and what role digital innovation has played.

The DIGISER survey has been conceived and developed to activate self-reflection throughout the answering experience. The learning-enabling strategy is twofold. On the one hand, it compels the local authority to complete the survey by delegating it to various persons and departments, as no single PA employee can be considered informed enough to provide all the necessary answers. On the other hand, questions are posed in such a manner to make weak or preferable conditions (answers) explicitly clear, so directly allowing the respondent to position his/her answers within a sort of preference scale.

The survey covers a relevant number of topics, which are usually not related to one single office/sector inside a public authority organisation. Requiring the commitment of different employees, the survey activates cross-sectoral collaborations and reflections between public officials and pushes them to reflect on transversal issues and opportunities. For example, Question 7.4 -included in section 7. Service Design- explores to what extent different service sectors are planning, implementing or managing services using/adopting IoT technologies (Fig. 2).

7.4 State for each service area if the adoption of Internet of Things (IoT) technology is planned, implemented, not planned or not applicable:
 Note: Please consider "Not Applicable" if the service area is not under the responsibility of your public authority, or the information is not available. 

	Planned	Implemented	Not Planned	Not Applicable
• General Services / Administration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Building & Spatial Planning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Culture & Leisure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Healthcare	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Order & Safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Social & Welfare Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Transport & Mobility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Utilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 2: Question 7.4 of the DIGISER survey

This question shows how different sectors are called upon to answer the question. Similar questions are posed also about AI, wearables and block-chains. By requiring collaboration among different offices/sectors, they seek to support a forward-looking reflection on the opportunities offered by these technologies in the specific services. They are supposed to activate questions like "how could IoT, block-chain, wearables or AI be embedded in the services we are designing or providing?". Survey questions may raise this kind of constructive interrogative, eventually driving different offices/sectors' employees to envision collaborative attempts or experiments.

In the direction of possible collaboration among the different offices/sectors, the survey also integrates more direct questions suggesting basic initiatives for collaboration like data sharing (See Question 5.1, Fig. 3).

- 5.10 To what extent are relevant data exchanged among service areas, departments, or units of your public authority?
- Data are not or rarely exchanged
 - Data exchange is limited
 - Data exchange occurs regularly
 - All or most relevant data are exchanged

Figure 3: Question 5.10 of the DIGISER survey

As already written, questions in the survey are posed in such a manner to make weak or preferable conditions (answers) explicitly clear so directly, allowing the respondent to “measure” her/his answers within a sort of preference scale. This strategy has been largely adopted in the survey to allow respondents to recognize their answers’ relative (as related to every single question) quality without waiting for the data analysis feedback. Question 5.10 in Fig. 3 is already revealing such a mechanism as applied to the organisational dimension and/or behaviours adopted within the PA. As data exchange is a relevant proxy of the open or sylos form of the organisational structure, question 5.10 allows respondents to “measure” how far you are from the most preferable condition, i.e. extensive data exchanged across sectors and offices. Coherently with this strategy, other questions seek to activate reflections on several issues, like the governance model of the digital transformation; the level of the vendors lock-in of the digital innovation strategy; the level and purposes of collaboration with other PAs; the level and forms of inclusion of citizens while designing, developing or supplying services.

3.2 Feedback to the participants

The restitution of the survey results to respondents is intended as a further opportunity for critical reflection. The DIGISER Project has developed specific tools to support data interpretation and to encourage both individual and organisational learning processes: semiotic squares and individual city profiles.

DIGISER semiotic squares are analytical-interpretative tools inspired by Greimas semiotic squares (Greimas 1983). This model is built on Cartesian coordinates and is based on binary relationships between two contrary elements associated with positive and negative qualitative judgements. DIGISER semiotic squares use processes and process typologies as x-axis and y-axis. To facilitate the interpretation, bisectors are associated with ideal-typical profiles that characterise each Cartesian quadrant (Figure 4. Other squares were also built for DIGISER sub-categories). Semiotic squares are used to provide cities with visual feedback about cities’ performances. Ultimately, semiotic squares seek to build awareness about each city's performance concerning DIGISER processes, and allow for relative comparison with other respondents. To facilitate the interpretation, bisectors are associated with ideal-typical profiles that characterise each Cartesian quadrant. Those are: *transformative pioneer* (Quadrant I); *champion prospect*

(Quadrant II); *conservative follower* (Quadrant III); and *deadlocked innovator* (Quadrant IV). Profiles were specified and described based on the conceptual categories and on the corresponding process topologies represented.

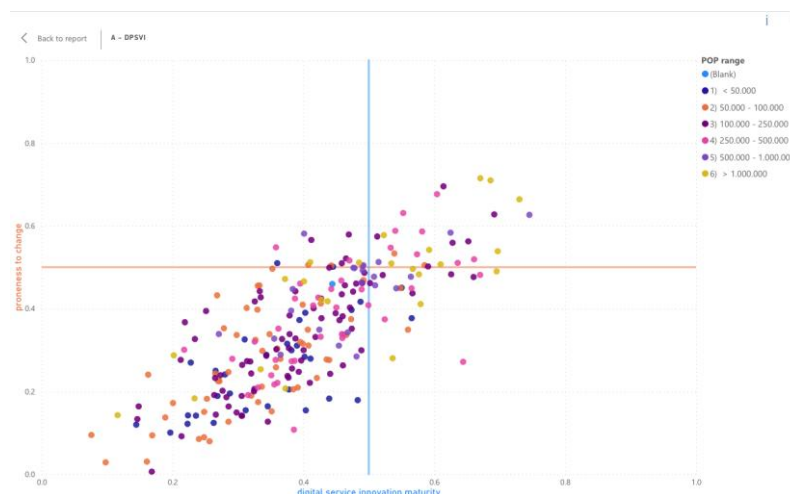


Figure 4: The semiotic square of digital innovation

To further stimulate reflection, single city profiles were developed by translating the survey outputs into semi-automated narrative descriptions. Tailored city profiles allow going beyond the mere restitution of data by enhancing it through contextualisation, interpretation, and directionality at multiple levels of (policy and action) implementation. Accordingly, this tool provides a general overview about a city performance, accessible to actors with different competences, roles and degrees of data literacy. Understanding is further enhanced because data are translated into semantic narratives and also contextualised in their context of reference, pointing out the relevance of the topic within a broader and more complex picture. As it includes ad hoc recommendations, city profiles also seek to support policymakers and public administrations in making better decisions.

ADVANCED METHODS AND PRINCIPLES

Digital transformation is radically affecting service delivery practices, and advanced approaches raised citizens' expectations regarding the access to information. In parallel, they are encouraging the public authority to progressively rely on standards and shared solutions for an open governance, in order to encourage an optimised management and re-use of resources. This dimension analyses the consistency of the methods and principles used to increase and better orient digitalisation in the public sector. **CityNR** has a **good** capacity to embed and make use of methods and principles for sustaining its digital innovation. Concerning this, effective strategies regard the sharing of digital solutions, services or products with other public authorities. **CityNR seems not to have** propensity towards importing and adopting solutions developed from other public authorities, while it **seems not to export nor share** the digital solutions it develops. The tenders for procuring innovative solutions are instructed **considering** open standard and open source requirements. Preferring open standards and open-source solutions feeds forward-looking practices of data sharing and data re-usability. **CityNR may consider** the use of open standards and open source solutions, since it encourages data sharing and data re-usability, while the use and contribution to develop open-source software can increase public trust in the software. Interoperability as the ability of services to communicate among each other is crucial to make services more sustainable and even seamless. However, a set of good practices need to be implemented: from the use of standards for data and sharing collection, to the availability of information in multiple languages and procedural transparency. In this regard, **CityNR is not yet adopting** interoperable digital solutions or services. To further streamline operations exploiting EU-wide services available on the market, public administrations need to consider the provision of cross-border and cross-sectoral public services. Finally,

— contextualisation and general information

— data turned into narrative feedback

— recommendations and possible directions

Figure 5: Excerpt of the narrative description of digital maturity from the city feedback, highlighting the different typologies of information the feedback provides to the reader.

4 Preliminary findings and reflections

Around 250 cities participated in the DIGISurvey. Although the process of reporting data back to respondent cities is still ongoing, some preliminary findings can be illustrated. At this stage, mainly evidence collected in the phase of survey completion can be reported. The reception of the feedback by the participants has not been tested yet, with the exception of a pilot inquiry investigating the potentials of the city profiles as a (self-)evaluation device and a decision-making support for sustaining transformation in policymaking, informing policy formulation and encouraging cross-silo multi-level reflection in the PA (Mariani & Bianchi, Forthcoming). The validation of the city profile occurred involving one of the cities that responded to the DIGISER survey. The usefulness of this narrative feedback is tested through a qualitative survey on an excerpt provided to three unity managers belonging to different departments.

4.1 Insights from survey completion

Evidence gathered during the data collection shows that the survey required different people to commit to its fulfilment and that, in point of fact, it activated a diffuse reflection on the survey topics.

Primarily, many respondents asked for a longer time to complete the survey as per the different offices to get the chance to work on the answers they were

competent for. The first chosen respondents were forced to identify additional "suitable" interlocutors to fill in the survey –those suitable people owning the responses, which allowed a sort of investigation inside the organisation and a better knowledge about "who does what". In some cases, it required an internal coordination effort among the subjects having different roles, positions, and expertise within the PA. This evidence also confirms that units are not informed about other units' work or performances and that a lack of common and/or reciprocal knowledge may also affect the institutional capacity for innovation.

Also, the data collection experience provided evidence related to the "self assessment" scope of the survey. In some cases, once the person in charge of responding to the survey completed her/his job, she/he has asked for approval from city managers or policymakers. From the moment of compilation, the exposition of the range of possible choices depicting scales of performances raised in the respondents the awareness that several answers provided to the survey questions were suggesting a general picture of the PA not aligned with the best performances/choices available among the answers.

Last but not least, some feedback received by respondents showed that the survey worked as an activator of reflections as per the envisioning of possible innovations or experiments. The first comes from the following sentence, that accompanied the confirmation of the survey completion sent per e-mail by a public official: "I have never thought about the possibility of adopting wearables as a promising technology for public services... maybe in healthcare!". The chosen example is very extreme, as wearables have been investigated by the survey among other advanced technologies to sense the proneness to experiments of the public authority and does not imply that wearables represent a promising technology to be adopted in the services of the register offices. Still it is pushing imagination, and the sentence is a proxy of envisioning mechanisms potentially activated by the survey on other issues like data sharing or management, societal engagement or approach to innovative public procurements procedures. The second is related to some responses provided incorrectly and related to the existence of a data platform. Question 5.2 (Fig. 6) is associated with the explanation of what a data platform is.

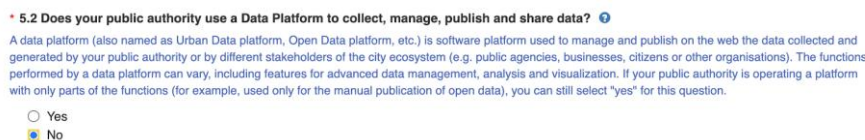


Figure 6: Question 5.2 of the DIGISER survey

The description provided in the explanation is quite complex and refers to a far advanced platform offering advanced data-related functions to different possible utilizers. Although a recommendation was introduced to clarify that the response to the question should have been "yes" even in case of a less performing platform, some "no" were provided. Cross-checking data with the state of the art in cities, some responses resulted quite surprising since coming from cities that, it was well known, do indeed have a data platform. Therefore, these cities have been invited to reflect on the owned data platform, and some of them explained that their negative answer was preferred as per the "un-coverable" distance of their platform from the advanced one described in the explanatory text. This dynamic brings to light the emergence of a negative interpretative bias among respondents, who have implicitly evaluated their platforms as 'not compliant' with the high-level standards proposed in the survey.

4.2 Insights from feedback to the participants

At the moment of writing¹, results from the analysis of data collected through DIGISurvey have not yet been sent to the respondent. To the present state of development, the semiotic squares –developed by the DIGISER Team at Politecnico di Milano– have been tested internally by the Consortium partners. The testing with the cities is planned but not yet occurred, therefore there is currently no data about their capacity to support reflection and learning in real organisational settings. Nevertheless, a pilot test was carried out to assess the city profiles and validate the underlying dynamic narrative feedback construction mechanism (Mariani & Bianchi, Forthcoming).

First, this pilot test inquired about the capacity of city profiles to enhance data understanding. Respondents fairly or very much agreed in stating that the narrative feedback is understandable and clear, adding that it contributes to translating data into actionable information. Also, they highlighted the tool's

¹ April, 2022.

capacity to make available information about PA performance to an audience that would not have accessed it otherwise, stressing the need to further enlarge the target audience by complementing narrative restitution with visualisations and data extracts. Second, the test investigated the extent to which city profile is useful to support self-reflection and build awareness in the PA. While being cautious about the capacity of the tool to bring to light organisational barriers and specific needs, respondents acknowledge that city profiles can help situating data within place-specific and contextual PA performances, thus “opening up to a deeper understanding of possibilities not yet considered or applied by decision-makers and technical operators working in the public administration” (Mariani & Bianchi, Forthcoming). Finally, the test aimed to evaluate the extent to which city profiles are helpful to orient policy actions and support decision-making processes. With this respect, all respondents very much agree about the usefulness of restitution from a policy building perspective. They highlighted that the narrative feedback allowed them to identify priorities about the thematic section analysed (i.e. digital maturity), such as “the improvement of the overall digital service accessibility across service areas” or “the adoption of open-standards and open-source solutions”.

5 Concluding remarks

Governance and strategies, public service provision and delivery, citizen engagement and democratic participation, budgetary decisions, are just some of the areas that have been impacted by the rapid transformations occurring in the public sector. This study starts from the assumption that a shift from a technology-driven to a technology-enabled digital innovation process in PAs requires reflection and learning to take place at all levels and across multiple sectors and organisational units.

This study explores the capacity to trigger reflection and learning of the activities revolving around an extensive survey about digital service innovation carried out across European Cities. In particular, it investigate to what extent (i) the survey filling in can allow a better understanding of digital innovation process and of its relation with existing organisational structures, ultimately working as a self-diagnosis tool; and (ii) the critical reading of the results reporting the performance of each PA can support awareness and reflection in-and on action.

Due to difficulties related to the collection of feedback and to the extended time schedule of data collection and reporting, the present study mainly reports insights gathered along with the data collection phase. Overall, the survey completion has allowed for the identification of respondents from different sectors and with different levels of skills and responsibilities, thus confirming its potential in supporting cross-silo interactions, information transfer and reciprocal knowledge sharing. Also, even if further testing would be required, exposure to the survey and to its results has already proved to activate the growth of respondents' awareness about the organisational structure, by requiring respondents to identify "who does what" and potentially opening to new forms of collaboration and experimentation. In addition, preliminary results indicate that exposition to the survey and to its results has the potential to enhance situational awareness among PA employees. In particular, in this context awareness derives from both a better understanding of each PA performance and from a relative comparison with other respondents, which are provided in visual, narrative and numerical formats. Finally, the experiment carried out through the survey shows a high exploratory potential, as it supports reflection on possible levels of digital innovation, also opening up to new envisioning about public service design and provision. To further corroborate these preliminary reflections, further research about feedback from respondents will be needed.

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