Smart public governance development at the national level: A conceptual framework

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Abstract: Recent challenges related to globalization and digitalisation, further emphasized by the ongoing Covid-19 pandemic, have revealed several deficiencies in public administration, including public governance. Therefore, implementing smart technologies into public governance may provide effective and efficient support to day-to-day operations and long-term socio-economic challenges and, most importantly, significantly improve public administration performance and consequently public value. Therefore, it is not surprising that the concept of smart public governance is gaining increasing attention among researchers, policymakers, and practitioners worldwide. The purpose of the conference paper is therefore to propose and present a conceptual framework which can act proactively as an enabler and driver of progress towards smart public governance, allowing for citizen centricity and achieving public value. The originality of the framework is based on several improvements, enabling an innovative evaluation of the most relevant (sub)elements related to smart public governance, public value and smart environment. Conceptual framework is based on theoretical foundations and is supplemented by secondary data obtained from various EU and OECD data sources. Following sophisticated statistical techniques (e.g., index calculation, etc.), conceptual framework will serve as a basis for examining smart public governance development at the national level. The preliminary results reveal differences in smart public governance development between individual (sub)groups of countries across selected (sub)elements of smart public governance. Moreover, by pursuing the citizen centricity approach, smart public governance should enhance public value, which is especially important from the perspective of society. Therefore, a developed conceptual framework is expected to be an effective tool for policymakers to evaluate the current state of smart public governance within the public administration and to determine trajectories for further national public administration reforms.

Points for Practitioners: This conference paper introduces and defines a relatively new idea in the scientific literature called smart public governance. It also aims to operationalize the interplay between smart public governance, public value, and smart environment. The authors offer (sub)elements of the indicated dimensions based on the literature review. Conceptual framework is then further put to the test using empirically verifiable indicators in EU and OECD countries.

Keywords: Smart Public Governance, Public Value, Smart Environment, Conceptual Framework

1. Introduction

Digitalisation has been widely debated over the previous two decades in the scientific literature. Many social scientists have identified digitalisation as the primary driver of human socio-cultural development, influencing societal change by increasing connectivity and converting analogue processes and information into digital, improving communication and interaction between people, organisations, and things (Pereira, 2021; Scholz et al., 2018; Linkov et al., 2018; Loebbecke & Picot, 2015). Meanwhile, digitalisation also appeared in public sector debates. Concepts such as e-government, e-services and e-democracy have been used in the public sector for some time in order to define digitalisation activities (Velsberg, Westergren, & Jonsson, 2020; Meijer & Bolívar, 2016; Nam & Pardo, 2011; Yildiz, 2007; Van de Donk & Snellen, 1998). However, studies on the smart state in the digital governance literature are still rare to find (Gil-Garcia, Zhang, & Puron-Cid, 2016; Scholl & Scholl, 2014; Jimenez, Solanas, & Falcone, 2014; Gil-Garcia, 2012). The question then is: what should smart public governance look like in the context of smart state (on the national level)? A review of the scientific literature shows that scientists are increasingly interested in smart public governance, a concept recently introduced into social sciences. Certain scholars use the concept of smart public governance to emphasise the

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importance of information and communication technology in the public sector, as well as the importance of e-government. Others argue that smart public governance is one of the most important aspects of a smart city and use this phrase to define and construct the concept of a smart city. However, certain scholars interpret smart public governance as synonymous with good governance or evaluate it in the context of good governance, emphasising the importance of implementing the principles of good governance in the public governance process. There are therefore many ways to interpret and further understand the concept of smart public governance, whilst the concept itself is not yet clearly defined in the scientific literature. The dilemma is whether smart public governance can be distinguished as a specific idea of public administration with a specific level of smartness in the public governance process or whether it is still used in a fragmented manner (Bernardo, 2017; Buškevičiūtė, 2014). It is important to mention another relatively not new, but still under-researched concept in social sciences, which has emerged in the scientific literature in recent years due to digitalisation, and which is also a part of the concept of smart public governance. Of course, we are discussing the concept of smartness. This term originates primarily from technical sciences. Even though the research definitions of smartness have recently become increasingly popular, different scholars still interpret this term very differently. The phrase frequently appears in several sources, each with a different meaning. One of the reasons for this diversity is that there is no universally accepted definition of smartness among scholars. The second reason is the language of scholars. The term “smart”, for example, is used in the Anglo-Saxon area to describe the characteristics of smartness of technical and social objects. At the same time, smartness can be described in different ways in many other languages (Jucevicius & Juceviciene, 2018; Buškevičiūtė, 2014; Juceviciene & Jucevicius, 2014). What does smartness represent? When trying to figure out what smartness is all about, answering that question is critical. People are the primary stakeholders in any social system, such as a state or a city (Jucevicius & Juceviciene, 2018; Rosen, 2003). Because smartness involves good understanding of communities and constituencies (i.e., being receptive) and accurate assessment of a certain situation or people (i.e., being smart), people have a keen ability to judge (i.e., be prudent) and make decisions and to respond quickly or effectively to change (i.e., being fast), which is considered in the literature of the present time as a desirable aspect of governments, cities, communities, infrastructure, and organisations (Gil-Garcia et al., 2016). Some definitions place a strong emphasis on technology and data, while others emphasise sustainability, openness, creativity, and resilience. As a result, the idea of smartness incorporates aspirations for the public sector to become more resilient and agile through the adoption of the emerging technologies, as well as positive assumptions such as interconnection, efficiency, sustainability, effectiveness, transparency, and collaboration. Being smart is not an aim in itself, but rather an enabler of other desirable social, economic, or environmental consequences (Gil-Garcia, Helbig, & Ojo, 2014; Nam & Pardo, 2014).

Since the beginning of the twenty-first century, governments, and cities, in particular, are actively creating plans to become "smart" through the extensive use of information and communication technologies as a means of addressing various environmental concerns (e.g., economic, and social). To achieve this purpose, the essential spirit is the need to produce public value by constructing institutions based on the accepted participation of numerous public and private stakeholders. The ultimate goal of smart governments and smart cities is to create public value, however, this necessitates reviewing process planning, political-public relations, and building internal cultures that enable all civil officials to perceive the world through the eyes of a citizen. In reality, building public value entails focusing all programmes and activities on citizen-oriented projects, which entails incorporating individuals in government affairs (Bolivar, 2017; Albert & Passmore, 2008; Pinnegar, Marceau, & Randolph, 2008; Moore, 1995). More and more social scientists exploring the influence of digitalisation on public administration and smart public governance have recently introduced the concept of public value into their work. Their findings show that a more democratic and participatory governance style results in generation of greater public value. Creating public value demands new and innovative forms of governance to address the challenge, which goes beyond the talents, capacities, and accomplishments of established institutions and governance procedures (Bolivar 2017).

Based on the review of the existing literature, the purpose of this conference paper is to show the interaction of concepts of smart public governance, smart environment and public value. The value of the relationship between them is further determined by empirical research. Empirical insights can thus strengthen our theoretical conceptualization and adapt it to the point where it can be used to build a conceptual framework (Bolivar & Meijer, 2015). Since the concept of smart public governance has not yet been thoroughly researched in the scientific literature by scholars, the topic described in this conference paper is a typical scientific novelty with limited research. It is crucial to start by defining the main concept of the conference paper, which is smart public

governance. For the purposes of this paper, we propose to define smart public governance as a *modern approach to public governance that uses sophisticated information technologies to transform processes (interventions) between public administration and citizens with the aim of increasing collaboration, interaction, co-production, improve decision-making and to achieve results that meet the needs of citizens (that is generating public value)* (Criado & Gil- Garcia, 2019; Webster & Leleux, 2018; Pereira et al., 2018; Gil-Garcia, 2012). The definition we propose offers a broad perspective which includes not only the importance of information and communication technologies and collaboration between the state and the citizens, but also achieves the results creating public value.

This conference paper is divided into four sections including this introduction section. The literature review and the innovative conceptual framework are discussed in more detail in the second section. Section three includes the methodological part with a presentation of interaction and a discussion of our findings. The paper concludes with the fourth section with our conclusion.

2. Literature review and the proposed conceptual framework

During the research, we developed a conceptual framework that shows the interplay of smart public governance, smart environment, and public values. The proposed conceptual framework is shown in Fig.1. We were able to construct our conceptual framework using a variety of research contributions from the social science literature, all of which addressed a comparable problem. This chapter will begin with a review of the literature, focusing on existing attempts to build a conceptual framework for the dimensions involved. This will be followed by a presentation of the built conceptual framework based on our theoretical research and later tested with actual empirical data from EU and OECD countries. We are certain that each element must pay attention to the essential (sub)elements, given the overarching purpose of this conference paper (i.e., to present the interaction between smart public governance, smart environment, and public values). Only with such an approach it is possible to develop smart public governance at the national level.

2.1 Literature review

The concept of smart public governance as a new and promising path in the social science literature drives and informs the creation of fresh and pioneering activities, such as the development of a conceptual framework that allows for conceptual understanding and subsequent study. It raises awareness of the need for new governance models, as well as new policy agendas and regulatory frameworks (Estavez, Pardo, & Scholl, 2021). Scholl and Scholl (2014) published the first high-profile article in the social science literature in order to attempt to define the characteristics of smart public governance in a smart and open government environment. The study explored Wilke's concept of smart public governance, which highlights the robustness of government takeover operations, as well as Johnston's and Hansen's findings on the smart public governance aspect. In their article, they empirically identify eight key areas of public administration in the first half of the twentieth century, which results in a plan for prudent smart public governance research and practice. The authors differentiated between type A and type B problematic results, urging colleagues and practitioners from the social science field to recognize and investigate problematic outcomes for a greater grasp and mastery of the subject matter. According to the authors, evolution of smart public governance was the key to unlocking smartness and infrastructure, public-sphere interactions, public administration, and societal security and safety, all of which would result in a better state of smart and open government compared to the traditional democratic government (Estavez et al., 2021). A review and an empirical study published in 2016 (Bolivar & Meijer, 2015) were the first of its type to address the conceptual gap in smart public governance. The authors constructed a study model of smart public governance at the local government level based on a systematic evaluation of the literature. The latter proposes three main building blocks, namely strategies for establishing, arrangements, and outcomes, which could be used in many types of future studies. In the same year, the concept of smart public governance at the local level was considered in another study (Lin, Zhang, & Geertman, 2015). While the study adds little, if any, novelty to the topic of pioneering activities, such as the development of a conceptual framework, the authors claim that smart public governance is inextricably linked to the issue of social sustainability. The author views the enormous and quick influx of peasants into cities as a serious problem for urban sustainability and planning, which necessitates participatory and inclusive smart public governance, aided by current information

technologies (Estavez et al., 2015). In 2017, a study by the Lithuanian authors (Šiugždinienė, Gaule, & Rauleckas, 2017) investigated the characteristics and criteria of smart public governance and further proposed an instrument for its assessment at the national government level. The authors rely on participatory mechanisms and collaboration between various stakeholders in their contribution to maximizing the potential of the proposed framework. They maintain that smart public governance can include a variety of factors, such as participation in decision-making and the utilization of internal and external resources, in this way. Citizens can express their thoughts on policies, engage in boards and public hearings, and shape collaborative dynamics and actions as a result of these democratization and empowerment processes. In the research, the latter thus suggested four main building blocks of a framework that would make this possible. It consists of the building blocks of strategic dynamics, cross-sectoral collaboration, inter-institutional collaboration, and citizen empowerment. In his most recent assessment on the conceptual framework of smart public governance, Lin (2018) adds two building pieces to Bolivar and Meijer's study model of smart public governance, namely context and information and communication technology. The author says that in the development of such a model, one of the important aspects determining the success of the use of digital tools is in enabling collaboration and participation in the technological background.

The question of when smart public governance is beneficial frequently remains unanswered. The concept of generating public value is becoming more significant in the digital age, and as a result, social science writers are paying more attention to it (e.g., Criado & Gil-Garcia, 2019; Ferro & Osella, 2019; Pereira et al., 2016; Dameri & Rosenthal-Sabrouy, 2014). In the social science literature, the notion of public value is frequently referenced in conjunction with a better understanding of the socio-political impact of information and communication technologies on public sector management. This view is based on Moore's standard approach, which considers public value to be a composite value of socially sanctioned outcomes achieved with present technologies (Cordella and Bonina, 2012). After reviewing the literature, we found two studies (Castelnovo, Misuraca, & Savoldelli, 2016; Bolivar & Meijer, 2015) that provided conceptual frameworks for the level of local government relevant to our conference paper, despite their varied foci. Their pioneering efforts to create a conceptual framework highlight the fact that smart governance, in the context of smart cities, is a sociotechnical phenomenon that requires more attention from social actors. The phenomenon has an impact on the creation of public value when combined with information and communication technologies (Estavez et al., 2021; Meijer, Gil-Garcia, & Bolívar, 2016). The new generation of social and smart technologies is, in a sense, altering the landscape of public governance and public institutions' ability to generate public value (Criado & Gil-Garcia, 2019).

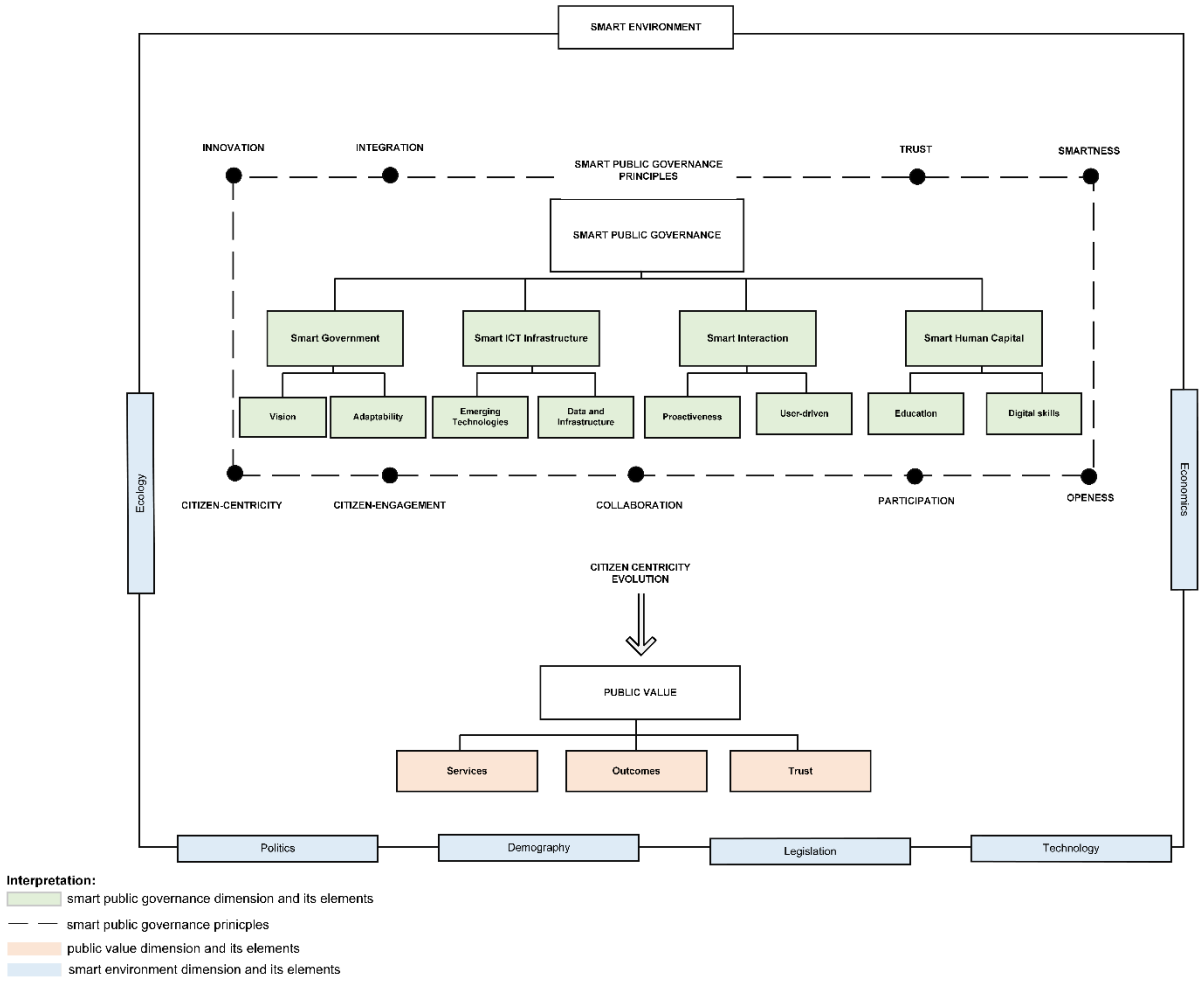
2.2 Proposed conceptual framework

Theoretical lenses, theoretical grammars, conceptual frameworks, roadmaps, and a variety of other comparable conceptions and descriptive phrases, such as conceptualizing and theorizing are used nowadays by academic researchers to explain the starting point, main focus, and/or outcome of an academic report. The majority of such frameworks and concepts appear to choose the latter two approaches, namely, developing and presenting conceptual/theoretical frameworks and roadmaps rather than using them as a vehicle for presenting empirical findings (Estavez et al., 2021). We wanted to construct a conceptual framework for the purpose of this conference paper which would show the interplay between three main dimensions namely, smart public governance, public value, and the smart environment.

Smart Public Governance: The importance of the context of smart public governance is becoming increasingly apparent in publications addressing smart cities. This isn't the case in publications on smart states. Regardless of whether the concept of smart public governance is applied to the state or the city, systematic examination of its role is scarce (Meijer et al., 2016). After reviewing the relevant literature, we note that some scholars (for example Lin 2018; Šiugždiniene et al., 2017; Bolivar & Meijer, 2015; Scholl & Scholl, 2014) have already tried to classify the concept into (sub)elements when developing pioneering conceptual frameworks. Nevertheless, there is no consensus among the scholars in the scientific literature regarding which characteristics define smart public governance and how significantly they influence it. A review of the literature on smart public governance has led us to the conclusion that if we want to achieve smart public governance, we must consider four (sub)elements, namely (1) smart government, (2) smart ICT infrastructure, (3) smart interaction, and (4) smart human capital. All (sub)elements are equally important in our conceptual framework, and their synergy leads to the successful establishment of smart public governance.

Smart Public Governance Principles: After analysing the scientific literature, we discovered that scientists have yet to identify the principles of smart public governance. Nevertheless, in their research, Gil-Garcia and co-authors (2016) came the closest to identifying such principles. They proposed a framework for understanding and measuring government smartness, as well as proposals for smart government development as a whole. On the other hand, ideas of good public governance are better documented in the present literature. International organisations all around the world were actively applying the concept of good public governance by the end of the twentieth century, both in specific policy areas such as international environmental legislation and in a broader policy context. The need for good public governance is thus much larger today than it was twenty years ago, and its implementation can be seen at national, regional, and global levels, where good governance principles have been further developed. In light of the diverse roles of national authorities, implementation of good public governance in the EU Member States has also been addressed through interpretation and application (Addink, 2019a; 2019b). By analysing the literature on the principles of good public governance and by attempting to understand smartness, we were, for the purposes of our conceptual framework, able to emphasise the principles that, in our opinion, impact the development of smart public governance at the national level. We suggest nine principles of smart public governance based on what has been stated, namely (1) innovation, (2) integration, (3) trust, (4) intelligence, (5) openness, (6) collaboration, (7) participation, (8) citizen engagement, and (9) citizen centricity.

Figure 1: Interplay between smart public governance, smart environment, and public value



Source: Author's own figure.

Public value: In the past, traditional public administration has offered a unique set of government solutions. In addition, it relied heavily on Weber's perception of the world. Later, we may observe in the scientific literature a transition to the new public management paradigm, which somehow deconstructed the Weberian paradigm of

the bureaucratic pillar of traditional public administration. Over time, the paradigm of new public management has been supplanted in the theory and practice of public administration. Today, there is a growing emphasis on public value in the scientific literature. Thus, according to some writers, public value has become a newly emerging paradigm of governance. It does not seek to limit policy, as traditional public administration and the new public management have done, but considers it a key management task (Stoker, 2006; Smith, 2003; Goss, 2001; Moore, 1995). Kelly, Mulgan, and Muers (2002) recognised three fundamental components of public value: services, outcomes, and government trust, legitimacy, and confidence. Stoker (2006) recently attempted to outline a public value management model, an "alternative paradigm," or "generic framework" for post competitive, collaborative network forms of governance based mainly on Moore's and Kelly et al. (2002) research. In our conceptual framework, public value is a result that can be obtained only if the smart environment enables it and is especially essential if smart public governance is oriented toward citizens. As a result, a citizen-centric approach is critical for establishing public value. However, in order to focus on citizens and achieve a goal, such as the public value, our conceptual framework includes three major (sub)elements that must be adjusted, namely (1) services, (2) outcomes, and (3) trust.

Smart Environment: We live in an age of rapidly evolving smart technologies that are changing our environment and making it more interactive and informative (Gubbi et al., 2013). The development of smart technologies has been primarily strongly influenced by digitalisation. The convergence of these technologies, as well as improved availability, has further sparked interest in creating smart environments (Rashidi & Holder, 2011). The identification of general (sub)elements that lead in the direction of the development of a smart environment has thus become a fairly evolving topic in the existing literature. The consideration of smart environment is most frequently seen in the literature on smart cities (Zhuang, Lu, & Huang, 2017; Caragliu, Del-Bo, & Nijkamp, 2013; Giffinger et al., 2007). As a result, smart environments are frequently mentioned in these contributions as a potential for users to collaborate and interact with their immediate surroundings in a seamless manner. Technological advancements and the advent of smart technologies, as well as services, have made this possible. In our conceptual framework, the development of a smart environment at the national level consists of five sub-elements, namely (1) economics, (2) technology, (3) legislation, (4) demography, (5) politics, and (6) ecology. These are categories that Rainey (2014) already recognized as important in his work. Taking the (sub)elements into account, the state is further able to create a smart environment that impacts not only smart public governance but also creates a citizen-centric orientation of public value.

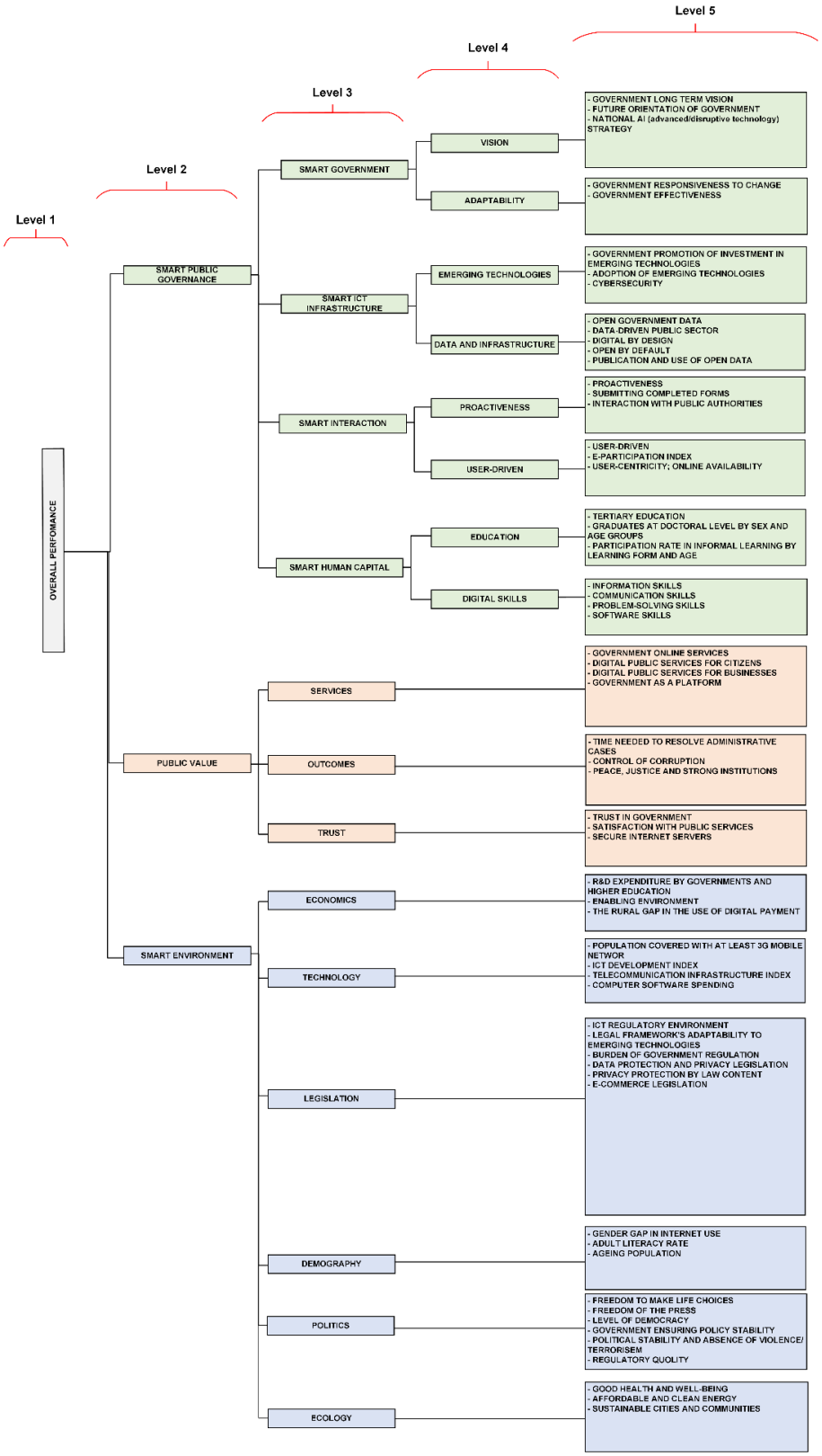
3. Methodology and findings

3.1. Methodology

After a thorough study of the relevant social science literature, we obtained a sufficient theoretical basis for building a conceptual framework. The latter uniqueness stems from a number of modifications that allow the construction of a conceptual framework that includes the most important (sub)elements related to smart public governance, public value and smart environment. We supplemented the conceptual framework with secondary data gathered from various EU (e.g., Eurostat) and OECD (e.g., Government at a Glance) data sources, as well as Government AI Readiness Index, Network Readiness Index data sources, and World Economic Forum Report in order to investigate the interplay of smart public governance, public value, and smart environment. To limit the impact of the Covid-19 pandemic on results, data were taken for the last available year. As a result, we developed a conceptual framework with three primary dimensions separated into (sub)elements (see Fig. 1) and quantitative indicators (see Fig. 2). In order to develop a conceptual framework, we had to go through three steps. First, we removed quantitative indicators with a high proportion of missing values (more than 60%). Based on this, two quantitative indicators have been removed from the conceptual framework (namely open government data and adult literacy rate). Second, we replaced the missing values with the help of the expectation-maximization algorithm. Third, we followed the structure (Fig. 2) in order to calculate the new variables. We started with the original variables at level 5 and normalized them with the relative rank method (the normalized value of the country corresponded to its relative rank (0 to 1)). The composite variables at level 4 were constructed as arithmetic means of the corresponding normalized variables (see the tree structure in Fig. 2) from level 5. The same procedure was used to construct variables at levels 3 and 2 (without normalizing the relative rank). The final variable at level 1 was constructed as a geometric mean of variables at level 2 (here you

can refer to the OECD or many others who do so. The geometric mean is always smaller than the arithmetic mean, thus having "worse" results for individual indicators significant impact on the end result).

Figure 2: A conceptual framework with three primary dimensions separated into (sub)elements, and quantitative indicators



Source: Authors own figure.

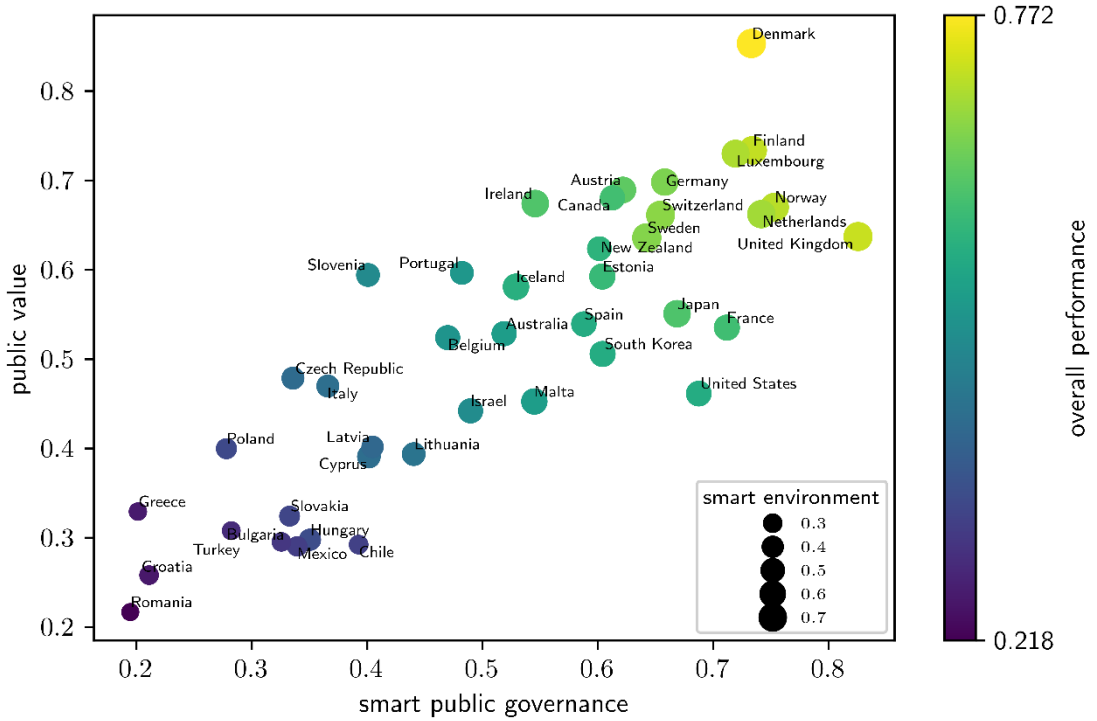
3.2. Findings

The analysis included 41 EU member states and/or organizations for economic co-operation and development (OECD). Based on the overall performance of the dimensions on the second level, we note that Denmark ranks ahead of the United Kingdom and Finland. The remaining countries that rank among the top 41 countries in terms of overall performance are mostly Scandinavian countries (e.g., Norway and Sweden), Western European countries (e.g., the Netherlands, France, and Luxembourg), North-western European countries (Ireland), and Central European countries (e.g., Germany, Switzerland, and Austria). Japan and Canada were both ranked high as well. South-western European countries (e.g., Spain and Portugal) rank towards the middle, whereas non-European countries, but members of the OECD include the United States, Korea, New Zealand, Australia, and Israel. Slovenia and its western neighbour Italy, as well as Estonia, Lithuania, Malta, and Belgium, are in the middle of the 41 analysed countries. Eastern European countries (e.g., Romania, the Czech Republic, Slovakia, Poland, and Bulgaria) and southern European countries (e.g., Greece, Cyprus, and Croatia) were the weakest performers in our analysis in terms of overall performance. Turkey, Chile, and Mexico are some OECD countries which ranked very low based on our overall performance.

It is also interesting to see how each of the 41 countries performed in our analysis in terms of smart public governance, public value, and smart environment. The performance of countries across these elements is presented in Fig. 3. Countries are arranged along the x-axis, which represents the performance of smart public governance dimension, and along the y-axis, which represents the performance of public value. Additional information is provided by the size of a circle reflecting the performance on the smart environment dimension. The colour scale represents the performance of 41 countries according to all three main dimensions (at level two) of the conceptual framework. Significant production showed that the United Kingdom, Norway and the Netherlands are leaders in smart public governance. Surprisingly, these countries ranked much worse at creating public value. They remain in the first third of the 41 countries but have lost quite a few places. An in-depth review of measurable indicators reveals that all three countries achieved a much lower score in the public value dimension, within the measurable indicator, namely “outcomes”. As a result, these countries have fallen by a few places in terms of the overall performance compared to Denmark (which has strong results in providing public value for all three (sub)elements, namely services, outcomes, and trust). In compliance with our analysis, Denmark, Finland, and Luxembourg are among the most effective countries in implementing public values. According to the analysis, Denmark, Sweden, and the United Kingdom are in the lead in the smart environment dimension, two countries that are very strong in terms of the overall performance of the dimensions at the second level. A more detailed analysis of measurable indicators within the smart environment dimension showed that the United Kingdom performed significantly worse than the other two countries within the economy, legislation, and policy indicators. However, it performed excellently within the ecology indicator, where it took first place among forty-one countries.

Slovenia ranked significantly worse among 41 countries in the dimension of smart public governance. A more comprehensive review of measurable indicators shows that Slovenia will have to invest heavily in the long-term vision of the government and the government's response to changes – in areas where it has achieved extremely poor results compared to other countries. However, it remained ranked in the middle when it came to public value and a smart environment.

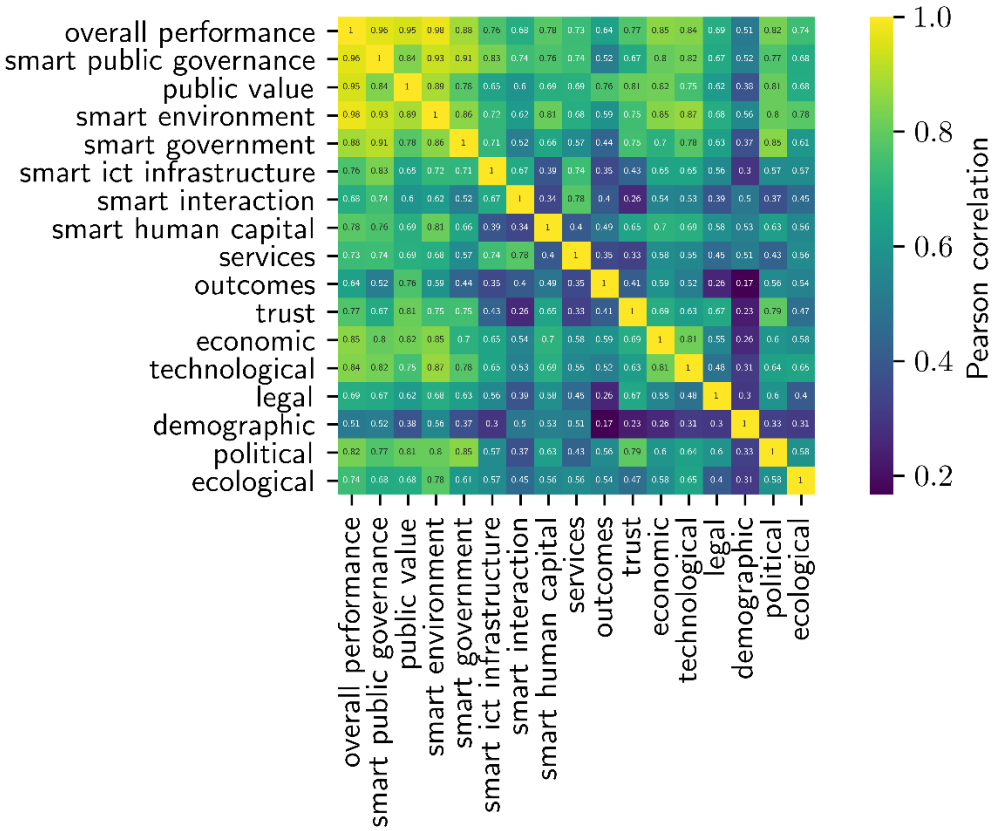
Figure 3: EU in OECD countries based on smart public governance, public value, smart environment, and their overall performance



Source: Authors own figure.

Fig. 4 shows a heatmap, a graphical representation of a correlation matrix that clearly shows the strengths of the connection with respect to colour shades. As expected, the variables at levels 1 and 2 (see Fig. 2) are strongly correlated with respect to the construction of the conceptual framework (see Fig. 1). We can see that smart public governance (level 2) is significantly correlated with all of its level 3 variables, namely smart government (0.91), smart ICT infrastructure (0.83), smart interaction 0.74), and smart human capital (0.76). The same can be said for other level 2 variables (public value and smart environment), which are also strongly related to their level 3 variables. On this heatmap, it is also possible to observe variables that are not that well correlated to each other or a weak correlation between them. Smart interaction, as one of the variables of smart public governance, has a weak correlation with the variable of public value, which is trust (0.26). Also, the variable of trust is poorly correlated to demography (0.23), which is a variable of a smart environment. There is also an extremely weak correlation between the variable of public value, namely the outcome, and the two variables of the smart environment, namely legislation (0.26) and demography (0.17).

Figure 4: Pearson's correlation between main dimensions and corresponding (sub)elements



Note: The brighter the hue is, the greater the correlation between the variables is.

Source: Authors own figure.

4. Concluding remarks

The interplay between smart public governance, public value, and smart environment was the focus of this conference paper. Based on a thorough examination of the literature, we established a conceptual framework. A literature review led to the discovery of five levels in the conceptual framework. The objective of this conference paper was to look at how the three higher-level dimensions of the conceptual framework (namely smart public governance, public value, and smart environment) interplay. Their (sub)elements and quantifiable indicators were identified by using accessible literature, whilst measurable indicators were later on additionally studied with the help of empirical analysis. Supplemented by secondary data obtained from various EU (e.g., Eurostat) and OECD (e.g., Government at a Glance) data sources, as well as Government AI Readiness Index, Network Readiness Index data sources, and World Economic Forum Report we analysed 41 EU and OECD countries. Through the empirical analysis of the conceptual framework, we determined that Denmark ranks ahead of the United Kingdom and Finland based on the overall performance. Through the empirical analysis of the conceptual framework, we were in general able to discover that Scandinavian countries (e.g., Denmark and Finland) as well as Western European countries (e.g., the United Kingdom, Netherland, and France) and Central European countries (e.g. Germany, Luxembourg, and Austria), attain the best outcomes in terms of the three main dimensions, their (sub) elements, and measurable indicators. On the other hand, Eastern European countries (e.g., Romania, Poland, and the Czech Republic) and Mediterranean countries (Greece, Cyprus, and Croatia), rank lower. We can notice that all three main level 2 variables are well correlated. When examining the correlation between variables in greater detail, the picture changes. We can notice that one of the variables of smart environment, namely demography, records the worst connection with others. This is also the variable that performed the worst overall. Smart interaction (otherwise a variable of smart public governance) and trust

(which is a variable of public value) really stand extremely low as their correlation shows. A limitation of the research is that other factors not related to smart public governance, public value and smart environments are neglected in this conference paper, which is an opportunity and an idea for further research. By including/examining the selected socio-economic factors which can be relevant for supplementing the relevant model. We believe that the conceptual framework can be useful for researchers as a common language and analytical lens in (1) understanding the interpretation of the concept of smart public governance at the national level in the social science literature, (2) identifying key (sub)elements of smart public governance, public value, and smart environment, and (3) forming correlation between them.

Acknowledgements

The authors acknowledge the financial support from the Slovenian Research Agency (research core funding No. P5-0093 and project No. J5-2560).

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