DOCTORAL CONSORTIUM

THE OVERVIEW OF THE SMART PUBLIC GOVERNANCE CONCEPT

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Abstract Purpose - the purpose of this conference paper is to present to the reader a systematic overview of the definitions of the smart public governance (SPG) concept in the presented literature. In the field of social sciences, it is possible to find various definitions of the concept, however, their number is scarce, since the concept is relatively new in the literature and still in development. The main objective of this conference paper is, therefore, to provide a thorough theoretical overview of the definitions of SPG in the available literature, and on this basis, upgrade the existing table of definitions and attributes of the concept from 2015. Design/methodology/approach— the approach of this conference paper is to provide a comprehensive theoretical overview of the definitions of the SPG concept in the literature in the field of social sciences between 2015 and 2021. Findings— when interpreting the concept of SPG, most scholars do not rely on just one attribute but interpret it on the basis of various attributes. The review of the papers has shown that the scholars relate the concept of SPG mostly with the attributes of external collaboration and participation, the decision-making process, and information-communication technology.

Keywords: public governance,

governance, smartness, smart public governance.

1 Introduction

This conference paper is conceptual in nature, and its purpose is to raise interest and support a developing discourse on the complicated topic of smart public governance (hereinafter referred to as SPG) concept. In doing so, this input is based on the existing research from 2015 by Bolivar and Meijer, which has theoretically and empirically explored the concept of SPG over the past decade.

Since the beginning of the 21st century, government and politics globally have been facing several complex and closely tied challenges such as the third industrial revolution, lack of effective and timely interventions, increasingly rapid changes, and high prices of government expenditures together with public debt financing. In their efforts to address these dynamic economic or societal pressures associated with the complex challenges of public policies, governments and societies around the world are gradually seeking strategies to address them, with the desire to be able to respond as quickly as possible. An important aspect of this scenario in recent years is SPG, a vital governance system for these pressures (Scholl & Scholl, 2014, pp. 163-164; Šiugždinienė, Gaule, & Rauleckas, 2017, p. 1). In this context, the concept of SPG has begun to be applied in the field of social sciences in various aspects. Despite the significant interest in SPG over recent years, in fact, the definition of what this concept refers to remains an open research topic. Scholars lack a general view of the concept of SPG, which integrates different contexts in the field of social sciences (Bolivar & Meijer, 2016). This is not surprising, as the term has only been present in the scientific literature for a short time. In general, several research papers exploring the concept of SPG can be found in the literature related to the local government level, especially in cities and regions (Meijer & Bolivar, 2015). Nevertheless, most papers do not consider a general view that is independent of the local government level. Coming to a decision on the definition of the SPG concept is quite challenging, as the latter represents the entire governance process, including government structures and their processes (Šiugždinienė et al., 2017) (in Vujković et al., 2022).

In short, to our best understanding, there is no consensus on the conceptualization of SPG as well as its attributes with respect to common points regarding how they are used in different contexts in the scientific literature. The first step to achieving the key objective of the conference paper was clearly to capture an understanding of the two key concepts that make up the concept of SPG. Therefore, in the

continuation of the introduction, we present the building blocks upon which the concept of SPG is constructed: the concept of (public) governance (1.1.), and the notion of smartness (1.2.).

1.1 The concept of (Public) Governance

Like most concepts that can be found in literature in the field of social sciences, the concept of governance is not new and is now a well-accepted concept in the social sciences (Bovaird & Löffler, 2015, p. 163; Osborne, 2010, p. 6; Turnšek -Hančič, Červ, & Bačlija, 2013, p. 12) - despite the first limited role in shaping debates within the social sciences (Levi-Faur, 2014, p. 5). While nowadays the term is indeed found in many fields, the term was first introduced to the social sciences by researchers of international relations (Bačlija, 2013, p. 7). In the 1950s and 1960s, the concept of governance was considered as a marginal term that had only recently reached its present glory (Torfing, Guy-Peters, Pierre & Sørensen, 2019, p. 12). The few papers classified under this topic in the social sciences during this time focused mainly on higher education. Later (that is, in the late 1970s), the situation changed radically, with the emergence of the term governance in private sector debates (Levi-Faur, 2014, p. 5).

In recent decades, the concept of governance has become one of the most commonly used terms in the social sciences (Katsamunska, 2016, p. 133; Torfing et al., 2019, p. 2), which Levi-Faur (2014, p. 7) attributes to the fact that the scholars began to study changes, thus becoming more open to new paths, concepts and questions. Notwithstanding the fact that the concept of governance can be seen today in countless titles of books and articles, as well as in the names of academic journals and educational institutions, it is practically impossible to find a common consensus among scholars on its definition (Offe, 2009, p. 554).

The development and growing use of the term governance in the current literature are associated with globalization, public sector reforms and changes in the relationship between the state and civil society (Bačlija, 2016, p. 23). The term is often used today by both policymakers and international institutions (Guy-Peters: in Levi-Faur, 2014, pp. 19–44), which links the concept of governance to the interaction between policymakers and stakeholders, the knowledge-based decision-making process, smarter policy solutions and coordinated policy implementation.

Both Katsamunska (2016, p. 133) and Bačlija (2013, p. 7) attribute the popularity of the term governance in contrast to its related (but narrower) term government to the fact that the term governance encompasses many institutions and relationships involved in the governance process and has recently become significantly more attractive and useful than the concept of government.

In Slovenia, a single naming solution has not yet been established for the concept of governance. The Dictionary of the Institute of the Slovenian Language states that governance is a verb for governing but explains it as an activity that deals with arranging and directing life in a social community (in Fran SSKJ; Pečarič, 2011, p. 39). In this conference paper, the translation of public governance will be used as an appropriate translation of the term governance. It will be understood as a decision-making process or activity of society and organizations in public affairs, within which goals are set and decisions are made, and people are coordinated in order to achieve the set goals. Nevertheless, the concept of public governance has several meanings in the domestic (that is Slovenian) literature. In the following Table 1, the reader can read some selected definitions of the concept of public governance by Slovenian scholars.

Table 1: Selected definitions of the concept of public governance by Slovenian social science authors

Author/s	Public governance definition
Bučar (1969, p. 11)	Public governance is »// deciding on needs and on the
(legal sciences)	manner of satisfying these needs. «
Lorbar & Stare (1998, p. 14)	Public governance is »// directing or setting the direction
(administrative sciences)	[] and is always linked to a specific goal, and it is also an
	activity that enables the achievement of a specific goal. «
Virant (2004, p. 16)	Public governance is »// determining the goals of the
(legal and administrative sciences)	organization and directing the activities of the organization
	towards achieving these goals. «
&	Public governance is »/ / the process of leading and
p	guiding organizations from goal setting to their realization
(administrative sciences)	and feedback. «
Grafenauer & Brezovnik	Public governance is »// an activity the essence of which
(2006, p. 37)	is in directing, setting the direction for achieving a certain
(legal sciences)	goal. «
Pečarič (2011, p. 22)	Public governance is »// deciding on goals and using the
(legal and administrative sciences)	most appropriate means to meet them. «
6p	Public governance is »/ / the process or manner of
(political sciences)	decision-making in society. «

Source: Author's own table.

According to the interpretations of public governance in Table 1, we can see that scholars in the field of social sciences in Slovenia use different methods of translating and defining the concept. Interpretation of the concept of public governance is most often associated with a) setting objectives, and b) directing the work of organisations towards the set goals.

1.2 The concept of Smartness

We may observe that in the last two decades the term smart has become extensively used in various sources by academics and practitioners. Both the frequent use of the term and all its derivatives can be attributed to the fact that in different sources term reflects different meanings (Juceviciene & Juceviciene, 2014, p. 911; Gil-Garcia, Pardo, & Nam, 2015, p. 63). 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 a 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, Zhang, & Puron-Cid, 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) (in Murko & Vujković, 2022).

However, in the beginning, smartness emerged as a desired feature of cities and devices afterwards government and governance, leading to many different perspectives of the concept itself in the present literature (Gil-Garcia et al., 2014; Gil-Garcia, Pardi, & Tuja, 2021). The expansion of the study of smart technologies to other scientific fields and sciences (although still primarily a technological concept) has given the concept of smartness its multidimensional features (Criado & Gil-Garcia, 2019; Gil-Garcia et al., 2016). By this logic, the growing role of smart technologies today is considered as the technologies that allow users to connect to Internet networks (Papadopoulou & Maniou, 2021). Despite this very simplistic definition of smart technologies, the artificial intelligence, the Internet of Things, blockchain technology, cloud computing and machine learning are nowadays considered ambassadors of smart technologies, sometimes in present papers referred to as emerged or disruptive technologies (Kankanhalli, Charalabidis, & Mellouli, 2019; Wirtz & Müller, 2019) (in Vujković et al., 2022).

In summary, the vital objective of this study is to give rise to accurate basis for debate by presenting an overview of what is known about the SPG concept. We extensively read the definitions of the SPG concept presented in scientific papers and put a specific focus to group them in terms of the attributes that showed the similarities. To that end, we have conducted a Systematic Literature Review aiming to retrieve papers that contain definitions of the SPG concept. The search is carried out depending on the social science field in which the definitions are presented. The definitions are then manually extracted from the collected papers to obtain the results.

The conference paper is organised in four sections, including this introduction section. The rest of the paper is structured as follows: in the next section, we introduce our problem definition. Section three describes the methodological approach used for our theoretical overview. In the last section, we present what the existing literature reveals about the SPG concept and highlight the major contextual factors.

2 Problem definition

The purpose of this conference paper is to present to the reader a systematic literature review of the definitions of SPG concept in the present literature relating to social sciences. Accordingly, the conference paper aims to provide a thorough theoretical overview of the definitions of the term in the available literature as well as to update the existing table of attributes of the SPG concept from 2015. For this reason, the following research question has been formulated to guide our research:

1. How is the concept of smart public governance understood in research papers published between 2015 and 2021? This research will not create a single definition but will include an overview of the different definitions of the SPG concept. The papers from the field of social sciences will be examined in order to further differentiate the defining attributes of the SPG concept.

3 Methodology

Intending to address the research question formulated above, we carried out the analysis of the content of the records in the Scopus database. The steps of the systematic review are presented in Figure 1. Since we have a small sample of records, we have applied a qualitative research approach to the conference paper. The following two subsections give a detailed description of the methodological steps.

3.1 Inclusion and exclusion criteria

To extract definitions of the concept of SPG from the existing literature, we conducted a content analysis of records in the Scopus database. First, in the query title, we used the terminology of "smart public governance" or "smart governance" as titles, abstracts, and keywords. After the initial search, the records were further selected according to the following criteria:

- time of the records: between 2015 and 2021,
- category: social sciences,
- written in English.

3.2 Data collection

The detailed search resulted in 143 records. The next step was to review the records, which included reading the titles, abstracts, and keywords of the records. In this part, we excluded from further analysis those records which did not address the concept of SPG. A systematic review of the literature enabled us to identify 15 records, which we read completely. 3 more records were excluded (those that did not include any explanation of the concept of SPG after 2015 – which is the subject of this conference paper). Finally, 12 records (Figure 1) were included in an in-depth analysis. These are articles, conference contributions and book chapters based on which we have established a table with the definitions of SPG (Table 2).

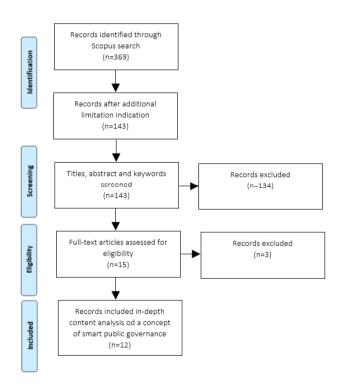


Figure 1: Flow diagram representing the collection of articles in databases and filtering process

Source: Author's own figure.

4 Preliminary results

Table 2 below shows different interpretations of the concept of SPG in the social science literature, which consists of 12 records published in studies that have been written on various topics (especially topics related to smart cities) and covered the operationalization of the concept. The conference paper aims to provide a comprehensive theoretical review of the definitions of SPG in the available literature; and also, to upgrade accordingly the existing table of definitions and the attributes of the concept of SPG by Bolivar & Meijer (2016). According to the study, the innovation attribute was recognised (by representatives of the European local government) as a new attribute. Furthermore, the authors explain that, while it is an attribute that is often mentioned concerning smart cities, it is not perceived in literature as one of the attributes of SPG. We have decided to include the latter in the table as well.

Table 2: Definitions of SPG concept from available literature published in the period between 2015 and 2021

Author	Definition (object)		Level		Attributes of the Smart Public Governance							
		City	Public Administration /Public Sector	State	Based on ICT	Based on External Collaboration and	Based on Internal Coordination	Based on Decision- Making Processes	Based on e- Administration	Based on the Outcomes	Based on the Innovation	
(Recupero et al., 2016) in (Anthopoulos, 2017, p. 269)	»// smart (public) governance is a dimension of smart city, which measures local smart government performance with the following indexes: participation in decision making; public and social services; transparent governance; and political strategies and perspectives.«											
(Glasmeier & Christopherson, 2015) in (Paskaleva et al., 2017, p. 4)	»// smart (public) governance is considered core to smart cities and includes citizen participation in sustainable collaborative processes based on ICT.«											

(Albino, Berardi, & Dangelico, 2015) in (Pereira et al., 2017, p. 2)	»// smart (public) governance means various stakeholders are engaged in decision-making and public services.«					
Šiugždiniene, Gaule, & Rauleckas (2017, pp. 3-4)	»// smart (public) governance is the mode of governance that relies on rationally utilizing internal and external resources, making adequate progress, and making advanced decisions relevant to specific circumstances in order to create shared value (Gaule et al., 2014), with the goal of making a social system (country, region or city) and its actors (government, citizens, communities, businesses and non-governmental organizations) operate effectively in a fast-changing and complex environment.«					
(Razaghi & Finger, 2018) in Anindra et al., 2018, p. 2)	»// smart governance is understood as an enabler to develop a smart city, where smart governance in relation to smart city is better management of data usage and community involvement for quick and effective decision making.«					
Nesti (2018)	»// smart (public) governance entails the adoption of a new approach based on experimentation, collaboration with all local stakeholders and the reorganisation of existing government structures.«					
(Scholl & Alawadhi, 2016) in (Pereira et al., 2018, p. 143)	»// smart (public) governance is defined as the capacity of employing intelligent and adaptive acts and activities of looking after and making decisions about something.«					

Webster & Leleux (2018)	»// smart (public) governance is defined as the ability of governments to make better decisions through the combination of ICT-based tools and collaborative governance. In this sense, we understand that smart governance is the use of evidence (data, people, and other resources) to improve decision making and deliver results that meet the needs of the citizens.« »// smart (public) governance is where municipalities and citizens					
	engage, interact and co-produce using ICTs and social media.«					
(Jiang et al., 2019) in (Jiang et al., 2019, p. 246)	»// smart (public) governance is a way to take advantage of various ICTs, aimed at bringing changes in public policy and government institutions from a public administration perspective.«					
Simonofski, Snoeck, & Vanderose (2019)	»// smart (public) governance is one of the key dimensions of a smart city and underlines the importance of an increased collaboration within governmental bodies and an increased co-creation of egovernment services (or smart city projects) with users.«					
(Meijer, 2016) in (Jiang et al., 2020, p. 4)	»// smart (public) governance is about developing innovative governance structures through the use of newly emerging technologies and new channels of communication to make cities smarter.«					
(Barns et al., 2017) in (Ranchod, 2020, p. 3)	»// smart (public) governance is centred on the nature, type and use of data to enhance evidence-based decision-making for improved public management.«					

(Rodriguez et al., 2015) in (Ranchod, 2020, p. 3)	»// smart (public) governance prompts greater collaborative governance through the inclusion and					
	participation of civic actors in urban decision-making processes.«					

Source: Author's own table.

A theoretical review of the literature focused on the interpretation of the concept of SPG has shown that the conceptualizations of the latter in the literature in the field of social sciences are still very sparse. It is (still) the most commonly interpreted in literature in the records dealing with topics related to smart cities (i.e., at the local government level). It was expected that the concept of SPG will be more frequently interpreted in records dealing with smart cities because, as Vujković et al. (2022) state, in the bibliometric research in the field of SPG, those studies that are related to smart cities predominate. Furthermore, the author states that also (especially in recent years), the studies relating to the smart government are coming into focus.

Bolivar & Meijer (2016, p. 9) state that in the interpretation of the concept of SPG the large majority of authors do not take into account only one attribute, but interpret the concept based on various attributes, which according to the review of the concept interpretations in the available records, we have also seen. In our case, the highest value in the interpretation of the concept of SPG was given to a) external collaboration and participation; b) the decision-making process, and c) the information-communication technology. Only three records, mention the eadministration within the interpretation of the concept of SPG, two records mention the outcomes and one record the innovation. The latter was also rated rather low by the representatives at the central government level in a study by Šiugždiniene et al. (2017, p. 17). Interestingly, in our case, internal coordination has not been mentioned at all within the interpretation of the concept of SPG. As the research contributes to a better understanding of the concept of SPG, data from various sources could be used to achieve the goal of this conference paper. Although Scopus is often considered to be the most extensive database of peer-reviewed literature in the world, it may not represent a complete research collection of interpretations of the SPG concept. Using different databases, such as Google Scholar or WoS, could

provide additional insights not found in this study. Second, the study examined only English titles, abstracts, and keywords, which could lead to bias in publishing.

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