

MEASURING DIGITAL GOVERNMENT AT THE LOCAL LEVEL

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Digital government is now inseparable from the idea of a modern and efficient public administration. Although the conceptual framework of digital government is still a matter of debate, national and international programmes and action plans have identified the use of digital tools in almost all areas of public administration as a priority worldwide. In order to be able to analyse the impact of digital public administration tools on operational efficiency, it has become necessary to establish international comparative performance measurement frameworks (benchmarking reports).

These measurement frameworks, which typically include rankings based on complex indicator systems, usually include scores that identify which countries have successfully met the expectations of the framework. These types of reports are therefore well suited to indirectly influence the digital government developments in each of the countries measured. Consequently, it is important to study the frameworks and monitor changes in measurement techniques. In this paper, I attempt to describe the changes in the most relevant macro-level analyses over the last five years, focusing mainly on local governments, which are less in the centre of interest.

1. Introduction

The local level of public administration or in other words the world of municipalities, plays a key role in the lives of citizens. The relationship between local government and the local population is crucial in two ways. On the one hand, local public affairs, which are carried out by local municipalities, have a major impact on our daily lives. For a significant proportion of people (particularly in rural areas), local government is also the closest 'physical' administrative location to their homes, making it a key place of personal contact in many countries, including Hungary as well.

Local government administration is an integral part of public administration and is considered to be its other major subsystem, alongside state administration. The effective functioning of local government as an administrative body or organisational structure is therefore no less important than that of the central government's institutions and authorities. Despite this, the possibilities, the theoretical and practical issues of improving effectiveness or efficiency through the use of infocommunication technologies (hereinafter: ICT) tools were not, or only partially, addressed in the early international documents on the subject.

In 2018, I conducted a comprehensive research project with the primary aim of identifying the main international digital public administration benchmarking reports that also cover the local government level. Five years ago, I found that, although there was a need for a methodology specifically focused on the local



level in the documents, only the United Nations E-government Survey and the Rutgers University's Global E-Government Survey had a real indicator system.

In this paper, I will describe the changes that have taken place in recent years, while also trying to point out the reasons for these changes.

2. Defining the research goal, hypotheses

My paper focuses on whether digital government as understood at the local government level is evaluated and compared internationally in defining and most frequently cited Digital (electronic) Government reports.

The biggest crisis in recent years, which has undoubtedly affected the day-to-day operational functioning of public administrations, was the COVID-19 pandemic. The emergency measures imposed in the context of the pandemic (general curfew, quarantine obligations for infected persons) led me to the following hypothesis:

H1: As the recent COVID-19 pandemic has highlighted the importance of digital public administration tools for local governments, I expect more and more reports and benchmarking methods to explore and analyse the use of digital government at the local level to identify good practices.

My second hypothesis can be tested partially independently of the first one.

H2: I expect that the local government specific benchmarking frameworks, and in their absence the general digital government ranking indicators for local governments, have undergone significant changes compared to the 2018 indexes, as the pandemic has changed the requirements and expectations for digital public administration at the local level.

An important aim of this research is to explore and present these new approaches.

3. Methodology

In the first part of my paper, I will examine the concept of digital (electronic-) government and the different meanings of the term, as comparative reports can only be subjected to a consistent analysis if this is known. By clarifying the concept, I also set out a framework for interpretation.

In an international comparative study, it is also useful to define the meaning of the local level. Is there an internationally agreed, uniform definition of local government? If not, how can we determine which bodies are considered to be local government? This will be examined in the second part of this paper.

In the third part of the research, I present and typify the digital government benchmarking reports. In the typification, I define the scope of the reports to be examined.

In the fourth part, I examine the existence of local government indices and the major changes in the indices identified.

Based on these analyses, I attempt to confirm or refute my preliminary hypotheses. In the concluding part of my study, I present my research findings and outline possible directions for future research.

4. The concept of digital government and its interpretative framework

4.1. The reasons for the difficulties in defining

Electronic government, electronic governance or electronic (public) administration. All of these terms are used regularly, but defining their meaning is far from easy. The scope of electronic public administration is constantly evolving and nowadays, from a procedural point of view, it can include all procedural provisions that involve the use of advanced technology to make the performance of the procedural act to be carried out by the parties concerned more efficient¹.

Nor is it helped by the fact that the range of phenomena that can be linked to electronic (or digital-) government is expanding day by day as technology develops. Digitalisation is a dominant phenomenon of our time, with the consequence that many areas of community life are being restructured around electronic communication and media infrastructures.² In the age of digitalisation, the understanding of concepts related to eGovernment poses many difficulties for practitioners and researchers alike.

Despite all these difficulties, in my paper I will outline a possible interpretative framework, but underlining that this framework is certainly not the only possible way to decipher the meaning behind the phenomena.

4.2. Distinguishing between electronic government and electronic administration

The term 'electronic government' is probably the oldest term for the use ICT in public administration. It should be approached from the perspective of the legal institutions of Anglo-Saxon public administration. In the United States, the term 'government' covers all public authorities, therefore the term should be understood as public administration in the European legal scientific literature and legislation.³

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¹ CSÁKI-HATALAVICS Gy. B.: *Új trendek Európában az elektronikus közigazgatás területén*. In: *Glossa Iuridica*, IV. évfolyam, 3-4. szám, 2018, pp. 73-74.

² TILSON, D., LYYTINEN, K., & SØRENSEN, C.: *Research commentary—Digital infrastructures: The missing IS research agenda*. *Information systems research*, 2010/4, pp. 748-759.

³ Osborn – Gaebler, 1994.

One of the oldest and perhaps most frequently cited definitions of electronic government (or eGovernment) is that of the OECD, which was adopted in 2003. It defines eGovernment as the use of information and communications technologies. (ICTs), and particularly the Internet, to achieve better government.⁴

In its international comparative report on eGovernment, published just a year earlier in 2002⁵, the United Nations included all the ICT tools, platforms and applications used by public administrations under the umbrella of eGovernment. The fundamental merit of the document is that it distinguishes eGovernment from eGovernance and eAdministration. Within the narrow definition of eGovernment, the report has included the following activities:

- (1) policy coordination, ensuring online access to services;
- (2) developing citizen-centred programmes;
- (3) encouraging citizen participation;
- (4) improving online services, measuring effectiveness and efficiency; and
- (5) portals, testing and evaluation.⁶

According to the World Bank,⁷ eGovernment is defined as the use by public administrations of information technologies that can transform the way government interacts with citizens and businesses, as well as with each other.

Generally speaking, eGovernment can be considered as a generic term focusing on the use of new technologies within public administrations. In other words, eGovernment can be understood as the interaction between administrative activities and ICT tools and technologies.⁸

The term "governance" is best understood as a set of governmental activities. In the UN's understanding, governance does not necessarily refer to the activities of a government in the public law sense, but rather to a process.⁹ Its fundamental objective is to provide citizens with improved services, more reliable information, broader knowledge and knowledge that facilitates access to governance processes and broadens citizen participation, using the most innovative information communication technologies. Thus, eGovernance is not tool-centric, but activity-centric, as opposed to eGovernment.

⁴ OECD: *The E-government imperative, OECD E-Government Studies*. Paris, 2003

⁵ United Nations, 2002. 1.

⁶ United Nations (2002). *Benchmarking E-government: A Global Perspective*. New York, United Nations – DPEPA, p. 45.

⁷ The World Bank: *E-government, 2015.*, 2015, <https://www.worldbank.org/en/topic/digitaldevelopment/brief/e-government>

⁸ CSÁKI-HATALOVICS, Gy. B.: *A digitális közigazgatás* in: Miskolci Jogi Szemle, 16. évfolyam 1. különszám, 2021, pp. 56.

⁹ United Nations: *ibid.* pp. 53-54

The definition of eAdministration can be problematic, as the grammatical meaning of the term does not necessarily imply that the phenomenon can be understood only in the context of public administration. Is eAdministration also the use of online banking services or online shopping? Some authors consider eGovernment as a set of tools aimed at achieving the ideal of a paperless office. A widely used definition of eGovernment is that it refers to a mechanism that transforms traditional paper-based office processes into electronic processes, i.e. ICT tools that aim to improve the efficiency and performance of different organisations¹⁰.

We may not be wrong to define the essence of eAdministration in our public administration researches as a specific interaction between public authorities and their customers, typically in paperless or digital form, and typically aimed at producing legal effects. However, it should be underlined that there is another understanding of eAdministration, which focuses on the internal processes of the organisation. In this sense, e-government refers to the process whereby paper-based administration (e.g. construction) within an organisation becomes electronic.¹¹

4.3. From eGovernment to digital government

Since the mid-2010s, we have witnessed a particular phenomenon. In the literature, the prefix 'electronic' has increasingly been replaced by the more established but less pronounced term 'digital', so that instead of electronic government or electronic governance, we now often speak of digital government (or dGovernment) or digital governance (or dGovernance).

At this point, the question arises as to whether we can identify any distinction between the concepts defined by the two different prefixes. On the surface, the terms appear to be identical and have been used synonymously in the past¹² while others, especially more recently, have come to understand digital government and digital governance as qualitatively different and more complex.

The OECD, which has developed perhaps the most widely used definition of eGovernment mentioned above, issued its Recommendation on Digital Government Strategies in 2014.¹³ The document clearly states that e-government and digital government are coexisting and coextensive concepts. Digital Government refers to the use of digital technologies, as an integrated part of governments' modernisation strategies, to create public value. It relies on a digital government ecosystem comprised of government actors, non-

¹⁰ KHOROW-POUR, M. (Ed): *Encyclopedia of Information Science and Technology, Third Edition*, IGI Global, Hershey, 2015, p. 5301

¹¹ ZSOM, B.: *Az elektronikus közigazgatás és a területi kutatások kapcsolatáról* in: *Tér és Társadalom* 2014/3.

¹² CHEN, Y.: *E-Government for Current and Future Senior Citizens*. In: Christopher G. Reddick (Ed.). *Handbook of Research on Strategies for Local E-Government Adoption and Implementation: Comparative Studies*. Hershey, Information Science Reference, 2009

¹³ OECD: *Recommendation of the Council on Digital Government Strategies*, 2014, <https://www.oecd.org/gov/digital-government/Recommendation-digital-government-strategies.pdf>

governmental organisations, businesses, citizens' associations and individuals which supports the production of and access to data, services and content through interactions with the government.¹⁴

In the Recommendation, the OECD calls for the development and adaptation of government digital public administration strategies that address the following key objectives:

- (1) ensuring greater transparency, openness and inclusiveness of government processes and operations;
- (2) encouraging engagement and participation of public, private and civil society stakeholders in policy making and public service design and delivery;
- (3) creating a data-driven culture in the public sector;
- (4) reflecting a risk management approach to addressing digital security and privacy issues, and include the adoption of effective and appropriate security measures;
- (5) ensuring coherent use of digital technologies across policy areas and levels of government;
- (6) establishing effective organisational and governance frameworks to co-ordinate the implementation of the digital strategy within and across levels of government;
- (7) ensuring that general and sector-specific legal and regulatory frameworks allow digital opportunities to be seized.¹⁵

Taking the above together, we can see that digital government, like electronic government, also starts from the application of modern technologies in government, with the aim of creating some value, but that digital solutions are already seen as an integral part of government strategies.

4.4. Conclusion

The terms 'eGovernment', 'dGovernment' and the definitions of the phenomena they cover are difficult to grasp. Throughout this paper, where I do not specifically indicate this, I will accordingly apply the terms eGovernment and dGovernment to the same set of phenomena (the various manifestations of the use of modern technologies in government and public administration). By eAdministration I mean a narrower set of phenomena than those described above, primarily the interactions outlined in 4.2.

5. What do we mean by local government?

¹⁴ OECD, *ibid*, p. 6.

¹⁵ OECD, *ibid* pp. 6-8.

For every citizen, the meaning of local government seems obvious, but if we were to grasp its essence with scientific rigour, we would have a difficult task. This is mainly due to the diversity of organisational and legal arrangements. It is therefore unnecessary to look for a specific legal definition, since the legal rules governing the status of local authorities vary from country to country. In the following, I will therefore describe in detail the concepts of a few leading international organisations.

5.1. Local governments in the European Union

Eurostat uses the following, relatively general and easy to apply definition of local governments: „Local government consists of all types of public administration whose responsibility covers only a local part of the economic territory, apart from local agencies of social security funds¹⁶”. A key element of the wording is the geographical limitation of responsibility. According to the definition „the local government consists of government units having a local sphere of competence (with the possible exception of social security units). Local governments typically provide a wide range of services to local residents, some of which may be financed out of grants from higher levels of government.”

The ESA 2010 defines the local governments as: „The local government (excluding social security) subsector (S.1313) consists of government units having a local sphere of competence (with the possible exception of social security units). Local governments typically provide a wide range of services to local residents, some of which may be financed out of grants from higher levels of government. Statistics for local government cover a wide variety of governmental units, such as counties, municipalities, cities, towns, townships, boroughs, school districts, and water or sanitation districts.¹⁷” The core elements of the concept, beyond the limited geographical operation, are the typically wide range of services to be provided to local residents. The definition also specifies that municipalities may be associated with several units of government, so that a municipality may be considered a unit of local government, but may also be a region or country in whose territory the municipality is located.

Studies of local government in the European Union tend to highlight two additional features: democratic participation, decentralisation and subsidiarity, which are typical features of local government¹⁸. The European Charter of Local Self-Government¹⁹ sets out these principles for local authorities. These requirements are in fact standards which describe the essential elements of the European concept of local

¹⁶ Eurostat: *Glossary European system of national and regional accounts* (ESA 2010), 2023 [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:European_system_of_national_and_regional_accounts_\(ESA_2010\)](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:European_system_of_national_and_regional_accounts_(ESA_2010))

¹⁷ Eurostat: *Statistics Explained. Glossary: Local Government*, 2023 https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Local_government

¹⁸ KARAYİĞİT, M. T.: *The EU and Local Governments*. *Strategic Public Management Journal* (SPMJ), 2016/4., November 2016,

¹⁹ European Charter of Local Self-Government Strasbourg, 15.X.1985

government.²⁰ The Charter's basic principles of local self-government set out the aspirations for the role of local governments in the organisation of the state:

- a) self-governments should have a democratically elected decision-making body should be elected by their elected representatives,
- b) have a wide range of responsibilities and powers to take decisions affecting the local community,
- c) which have a significant degree of autonomy; and
- (d) have adequate financial resources and revenue.

5.2. Local governments as understood by the UN

According to one UN definition „local government is a result of decentralization, a process of transferring political, fiscal, and administrative powers from the central government to sub-national units of government to regulate and/or run certain government functions or public services, on their own, in the administrative-territorial areas of a country.”²¹

Local government consists of local government units, defined in the SNA as “institutional units whose fiscal, legislative and executive authority extends over the smallest geographical areas distinguished for administrative and political purposes” What constitutes the local government of a given country is defined by that country’s national legal framework, including national constitutions and local government acts or equivalent legislation.

5.3. The World Bank’s attempt at conceptualisation

In 2008, the World Bank and United Cities and Local Governments jointly published a unique global volume, *Decentralization and local Democracy in the world*. Although this initiative did not result in a unified concept, the research concluded with the conviction that the democratic model of self-governance is now commonplace and that decentralisation is well established in most places in the world. Despite some surviving customs, the general trend is towards the election of local government bodies and to the development of instituted forms of popular participation.

5.4. Common characteristics of local governments

In the absence of a single definition, I shall confine myself to identifying the common points of the definitions described above. Local authorities are essentially representative bodies established in the spirit of decentralisation, with public responsibilities in a defined geographical area.

²⁰ SZENTE, Z. (2014). Az Európai Önkormányzati Charta értelmezése az Európa Tanács gyakorlatában in: Új Magyar Közigazgatás 2014/1. szám, pp. 24–34.

²¹ UN System of National Account Metadata. <https://unstats.un.org/sdgs/metadata/files/Metadata-05-05-01b.pdf> (Retrieved: 11/07/2023).

6. About digital government benchmarking report in general

6.1. The role of the benchmarking reports

International reports on eGovernment, and often the associated rankings of the eGovernment development of the individual countries in the survey on which the report is based, emerged in the early 2000s. Those Benchmarks of eGovernment tend to consist of a combination of broad macro-factors (e.g. internet infrastructure, levels of education in the population, quality of webpages and online services, etc.), and besides being called benchmarks they can also be referred to as surveys, readiness and/or maturity indexes.²²

It is therefore not surprising that the number of organisations producing and publishing reports has increased dramatically over the last two decades. This is due to several factors. If one accepts Heeks' definition of eGovernment reports²³ as a performance measurement of the subject matter of each nation, it is easy to determine their significance. By publishing their findings, the organisations that produce the reports are in the spotlight and their professional prestige is clearly enhanced. Perhaps even more important, however, is the fact that the governments of the countries concerned have also achieved a positive rating in an international comparison, thus demonstrating that the reports have the potential to influence not only the academic discourse but also the direction of concrete government investment in eGovernment.²⁴ However, it is not sufficient for widespread dissemination if only issuing organisations are interested in publishing reports on a regular basis. Although benchmarking reports were originally designed to identify best practices, it became clear early on that the reports could be used to improve the relevant practices of the countries involved. This process was named "Benchlearning" by Freytag and Hollensen.²⁵

Perhaps this is why a study have already identified 16 organisations that have published at least one international comparative analysis on electronic public administration by 2017.²⁶ Since the scope of this study is in itself too narrow to examine in depth all the reports that have been published over the years, I must necessarily narrow down the scope of the study by selecting those documents that may be of particular relevance to the basic purpose of my writing.

To this end, in my previous research in 2018, I typed the reports according to four criteria. Firstly, I identified the organisations that produce them, then I looked at the regularity and timeliness of the publication of the reports, their geographical coverage, the number of countries covered by the report and

²² SKARGREN, F.: *What is the point of benchmarking e-government? An integrative and critical literature review on the phenomenon of benchmarking e-government* in: Information Polity, 2020/25, pp. 67-89. DOI: 10.3233/IP-190131

²³ HEEKS, R.: *Benchmarking eGovernment: Improving the National and International Measurement, Evaluation and Comparison of eGovernment*, 2006, p.2.

²⁴ LNĚNÍČKA, M.: (2015). *E-government Development Index and its Comparison in the EU Member States*, Scientific Papers of the University of Pardubice. Series D, Faculty of Economics & Administration. 2015/22, p. 75.

²⁵ FREYTAG, P.V., HOLLENSSEN, S.: *The process of benchmarking, benchlearning and benchaction*. in: The TQM Magazine, 2001

²⁶ AİYONLUOĞLU, M. – ALKAR A. Z.: *Comparison and Evaluation of International e-Government Benchmarking Studies*, 2017

finally the subject of the reports. On the basis of the above criteria, I have selected those organisations whose reports seem to be the most suitable for a more comprehensive international comparative study of the relationship between local government and digital government.

6.2. Typification of international comparative reports

As I noted earlier, the first reports (UN, EU, Brown University, Accenture, World Economic Forum) were published around the turn of the millennium. By the mid-2000s, the list had grown: Waseda University published its first report in 2005, while the OECD published its own in 2006. In the years since then, other organisations (e.g. Deloitte, Asian Development Bank) have joined the ranks.

It can be seen that the issuers of the reports include or have included international organisations (UN, OECD), universities (Brown University, Rutgers University), non-profit organisations (World Economic Forum), international consultancies (Accenture, Deloitte) and even media companies (The Economist Intelligence Unit).

The frequency of publication of reports varies considerably between the organisations surveyed. Some organisations (UN, Waseda University, OECD, Deloitte, World Economic Forum) publish their results on an annual or biannual basis, while others publish less frequently or only occasionally. It is worth noting that several formerly regular publishers have ceased or at least suspended this type of activity over the years (e.g. Brown University, Asian Development Bank, and from 2019 Rutgers University no longer publishes this type of report, focusing exclusively on the US).

As with the frequency, the range of countries covered varies widely. The UN report has the widest coverage (193 countries). The World Economic Forum compares digital government in 143 countries, the Waseda University's latest report covers 64 countries (previously 65) and the OECD studies 38 countries.

The reports published by these organisations cover several continents, regardless of the number of countries covered, unlike some organisations operating at regional level. By contrast, the annual reports of other organisations, such as the European Union, are by definition regional in nature. In other words, reports can be divided into macro, meso and micro levels according to their scope. Macro-level reports cover countries from the whole world, meso-level reports cover a continent or a federation of states, while micro-level reports compare different bodies within a country or homogeneous types of bodies (e.g. ministries or local governments of a given state).

The vast majority of reports - such as the UN, Waseda University, Brown University or the European Union publications mentioned above - are specifically on digital government, while other reports only touch on the field. The latter includes the OECD's Government at a Glance, which does not focus primarily on digital government issues, but has a more general aim: to develop indicators on how governments work in

OECD member countries, thus making it possible to compare Member States and to evaluate the performance of national governments. The OECD reports nevertheless illustrate the interconnectedness of digital government with other areas of government performance, given the inclusion of eGovernment indicators in several chapters over the years. The same is true for the European Union's Digital Economy and Society Index, which was developed in 2017. The index assesses the digital performance of the EU and its Member States along five main dimensions. Although the DESI includes indicators on digital public administration, it is not specifically a digital public administration index.

Since both the range of technologies used by eGovernment and the role of local governments in public administration, as well as the range of public tasks they perform, can vary from state to state over the years, I have excluded organisations that have not issued reports in recent years or have not issued them regularly, for reasons of timeliness.

Given that municipalities may show different characteristics from one context to another, it seemed appropriate to limit the research to macro-level reports.

The selection criteria for the reports to be examined were thus:

- (1) come from an active, regularly publishing organisation,
- (2) compare eGovernment across several continents, and
- (3) be exclusively or predominantly on digital government.

In my 2018 study, I was able to identify four such reports, which have been reduced to two by 2023. The general trend is that by the 2020s, the range of electronic administrative reports that can really shape public policy in each state will have crystallised. As an indication of this, in 2019 the Rutgers University Global E-Government Survey was discontinued and in 2016 the World Economic Forum Global Information Technology Report was discontinued.

Accordingly, I was able to examine two reports: the UN eGovernment Survey and the WASEDA-IAC Digital Government Ranking.

6.3. The UN and the eGovernment Survey

In March 2001, the third International Forum on New Foundations for Governance, which was held under the auspices of the United Nations and attended by 122 countries, was held with the specific objective of sharing good practices and ideas on eGovernment.²⁷ Based on the experience of the Forum, the United

²⁷ ROCHE, E. M.: *Evaluation of the UN E-Government Survey for the period 2003-2016*, 2017, Online: <http://workspace.unpan.org/sites/Internet/Documents/UNPAN97454.pdf>

Nations Department of Economic and Social Affairs (UNDESA) has for the first time carried out a comparative analysis of the eGovernment readiness of Member States²⁸.

The first publication was typically followed by others every year or two, with the latest report,²⁹ 2022, being the twelfth in a row. The main indicator used in the UN reports is the E-Government Development Index ("EGDI"), which is mathematically a weighted average of normalised figures from the Online Services Index ("OSI"), the Telecommunications Infrastructure Index ("TII") and the Human Capital Index ("HCI"), representing the level of online service provision. The main indicators of the OSI are the national portal, the e-government portal, the e-reporting portal and the websites of some priority ministries. The TII is defined as personal computers, internet users, telephone trunk lines, mobile phone lines and broadband internet subscriptions per 100 inhabitants. HCI indicators represent the literacy rate of the population aged 15 and over, the school enrolment rate and the expected and actual time spent in education.

In addition to the EGDI, the e-Participation Index (EPI) is a complementary indicator whose primary function is to measure the actual take-up of e-Public Services.³⁰ The EPI is based on three secondary indices: indicators representing the availability of online information (e-information), the opportunities to express opinions online (e-consultation) and the involvement of citizens in decision-making – e-decision making.³¹

By their very nature, the above indicators have been used by the UN for the past almost two decades to benchmark the performance of individual states, but the 2016 report already highlighted the need to establish a set of indicators to measure eGovernment at the local government level in order to better understand the impact of eGovernment as a whole on sustainable development.

The Local Online Services Index ("LOSI") was included for the first time in a report published in summer 2018. The LOSI's assessment methodology focused on the official website of the municipality concerned as the primary interface for publishing information on administration and local public services. The survey covered all UN geopolitical regions. A total of 40 metropolitan websites (7 African, 6 American, 13 Asian, 12 European and 2 Oceanian) were selected and evaluated.

The websites are assessed using 60 indicators grouped into four categories (technology, content delivery, service delivery, participation).

By 2020, the report will have assessed 100 cities across 80 indicators.

²⁸ United Nations, 2001.

²⁹ UN E-Government Survey 2022 - 'The Future of Digital Government

³⁰ Tózsá, 2012. 8.

³¹ United Nations 2016, 6.

The 2022 LOSI also analyses the most populous cities in each Member State (100 cities in total), now in five categories: institutional network, content provision, services provision, participation and engagement, technology.

Although the indicator system has been changed, the starting point remains the city government websites and the information they contain or the opportunities for interaction through them.

6.4. The WASEDA-IAC Digital Government Rankings

Waseda University published its first report in 2005, making the latest from 2022, the seventeenth in a row. The report uses a relatively broad spectrum of indicators, assessing not only readiness but also other specific factors that are beyond the scope of other organisations' analysis. However, there is no separate indicator and indicator system for digital government at local level in this report. Thus, eGovernment issues in relation to local government are only touched upon in the report, including in the context of smart cities as one of the five new trends in digital governance.³²

7. Testing the hypotheses

My preliminary hypotheses were defined as follows:

H1: As the recent COVID-19 pandemic has highlighted the importance of digital public administration tools for local governments, I expect more and more reports and benchmarking methods to explore and analyse the use of digital government at the local level to identify good practices.

The hypothesis has been disproved. The number of global benchmarking reports has decreased over the last five years, and the UN eGovernment Survey remains the only report included in the study with a distinctly local government indicator.

H2: I expect that the local government specific benchmarking frameworks, and in their absence the general digital government ranking indicators for local governments, have undergone significant changes compared to the 2018 indexes, as the pandemic has changed the requirements and expectations for digital public administration at the local level.

The hypothesis has been disproved. In the case of the only framework with indicators for local government, there has been no major change in the indicators, and the report is still limited to an analysis of the websites of the largest cities in the Member States, which in itself does not provide sufficient information to assess the use of digital technologies in local government. It is particularly problematic that there are still no indicators that go beyond C2G or C2G relations, the existing ones focus on

³² WASEDA-IAC, 2017 35-43.

eAdministration, and no information at all on back-office processes (e.g. the use of new, innovative management systems).

8. Conclusion - a dead end?

Five years ago I started studying international comparative reports with high hopes. Studying the reports, I found that there was a growing need to develop a system of indicators for each municipality.

However, I must point out that the mere fact that a study does not fulfil the hoped-for results does not mean that the research has been useless. I have identified a trend towards a steady decline in the number of international comparative reports and little change in the methodology of the most popular reports.

This suggests that best practices are being summarised in other documents. Recently, a number of macro- and meso-level programmes have emerged with a strong focus on the objectives of responding to the challenges facing local and regional authorities. These are the basis for the development of national strategies, which are also gaining in importance.

The inconclusive nature of my research may also be an indication of the lack of a global comparative analysis, due to the diversity of local authorities outlined above and the lack of a coherent framework. It may be that the right way forward is to explore the need to set up a theoretical model based on the common characteristics of municipalities in the longer term to ensure comparability.

The future may hold many things, but it is likely that today it is not advisable to start from benchmarking reports alone when looking at the level of digital development in local governments.