Public Services Client-Accordance Through Coproduction and Digitalization

Romans Putans*, Zane Zeibote**

Summary: The role of the societies and their interaction with public administration is changing toward ever closer co-operation. Since 2009 scientific literature and the public administrations themselves have been increasingly exploring the changing and dynamic role of the recipient of public services, a client or a customer, as that of a partner in the provision of public services. In this article the authors propose a policy client-accordance index (PCAX) methodology to measure the relevance of a) policy planned results and policy-makers' expectations in relation to b) clients' intentions, and explore the co-production in the age of digitalization based on a case study. The idea of the article is to contribute to this necessity of new tools and approaches to facilitate the co-operation and co-production between policy makers and society. The main goal of the research is to analyse the applicability and challenging aspects of the feasibility of PCAX and to test the possible transfer of the developed methodology model for evaluating the relevance of any public administration policy to the intentions of the policy's respective target group, i.e., the client-accordance index of a given public policy. In the first and the second chapters of the article, mostly based on the findings of scientific literature analyses, the authors explore the increasing topicality and the need of changing awareness of a public a service and its provision. Further in-depth analyses are conducted on the possible methodological tool to measure the relevance between the policy makers' decisions (expectations) and society's needs

- * Romans Putans, Dr.sc.admin, is the head and full-time lecturer at the Department of International Business and Economics in Riga Stradins University (Latvia). He obtained doctoral degree in Business Management from the University of Latvia in 2016. His scientific interests and research lie in the field of societal governance, its conceptual developments and currently particularly co-production. Contact: romans.putans@rsu.lv
- ** Zane Zeibote, Dr.oec. is the Project Manager at the Centre for European and Transition Studies of the University of Latvia. She has PhD in Regional Economics from Latvia, M. A. in the Economic Policy Management from the McGill University of Canada and Master's degree in Economics from the University of Latvia. Her research interests and work are focused on the economic competitiveness of regions, cluster development, digitalization and improved governance. Contact: zane.zeibote@lu.lv

and intentions. In the concluding chapter of the article the authors summarize the development dynamics of societal reforms towards co-production, main implementation aspects of the concept and remarks on PCAX backed up by the findings of the approbation of PCAX elements in the actual case study.

Keywords: co-production, public governance, social participation, digitalization, public services

1. Introduction: the ever-increasing topicality and paradigm shifts

The role of the societies and their interaction with public administration is changing toward ever closer co-operation. Society becomes more and more empowered and more aware that public institutions are reflection of society and its values, i.e., the institutions are also part of the society and that public governance, state governance, societal governance may and possibly should mean the very same thing - a joint, common system of the society, which includes state, businesses, people. The official and the citizen carry the same values in the respective society¹. Having more opportunities of participation, the democratic societies are having an increasing impact on the public policy planning, design and implementation. In scientific literature one of the newest approaches in the development of public governance is described as the concept of co-production and co-creation of public services. It is foreseen as the next stage of evolution in both, the public administration reforms and in the relationship between public administration and society. Public administration reform in the world's democratic states is a continuous process and its development is, of course, also foreseen in the future^{2,3} and more often in the direction of the strengthened societal participation in public policy making thus paving the way towards the

RAJNEESH, S. Value Creation in Citizen Services: Sakala as India's Most Effective Citizen-first Public Engagement Model. *Journal of Creating Value*, 2015, vol. 1, no. 2, pp. 275–291. https://doi.org/10.1177/2394964315604096>

² European Commission. (2015). Proposal for a Regulation of the European Parliament and of the Council on the establishment of the Structural Reform Support Programme for the period 2017 to 2020 and amending Regulations (EU) No 1303/2013 and (EU) No 1305/2013, COM(2015) 701 final, 2015/0263 (COD), Brussels, 26.11.2015.

³ OECD (2019), Digital Government Review of Sweden: Towards a Data-driven Public Sector, OECD Digital Government Studies, OECD Publishing, Paris, https://doi.org/10.1787/4daf932b-en>

approach of co-production^{4,5,6}. Within the growing concept of co-production, the society not only changes its roles⁷, but holds an equally important role as the very public administration does⁸. At the same time, of course, the scientists are working on the theory of this relatively new conceptual phenomenon of co-production^{9,10,11,12}, analysing the conceptualisation, development, impact, classification and other aspects to fit into the conceptual model of co-production, from which the concept theory is formed.

Co-production of public services has gained recognition not only in scientific literature¹³, but also in national, international and supranational public administration institutions¹⁴ and more importantly also in the society, among the people, and different businesses, e.g., in spatial planning of a city¹⁵, municipal school

⁴ WILLIAMSON, B. Knowing public services: Cross sector intermediaries and algorithmic governance in public sector reform. *Public Policy & Administration*, 2014, vol. 29, no. 4, pp. 292-312. DOI: https://doi.org/10.1177%2F0952076714529139

⁵ MCNEII, J. Enabling social innovation assemblages: Strengthening public sector involvement. Doctoral Thesis at Institute for Culture & Society, Western Sydney University, 2017, p. 306.

⁶ ALFORD, J. Engaging public sector clients: From service-delivery to co-production. *Public lecture at the Copenhagen University, Denmark*. 24.04.2014. Copenhagen, Denmark.

⁷ BRIGGS, L. Citizens, Customers, Clients or Unwilling Clients? Different and effective strategies for citizen-centric delivery. In: Lindquist, E. A., Vincent, S., Wanna, H. (eds) *Putting Citizens First. Engagement in Policy and Service Delivery for the 21st Century*. Canberra: The Australian National University, 2013, pp.83.-94, 220.

⁸ RAJNEESH, S. Value Creation in Citizen Services: Sakala as India's Most Effective Citizen-first Public Engagement Model. *Journal of Creating Value*, 2015. vol. 1, no. 2, pp. 275-291. https://doi.org/10.1177/2394964315604096>

⁹ OSBORNE, S.P., RADNOR, Z., NASI, G. A New Theory for Public Service Management? Toward a (Public) Service-Dominant Approach. *American Review of Public Administration*, 2012, vol. 43, no. 2, pp. 135-158.

¹⁰ BRANDSEN, T., HONINGH, M. Distinguishing Different Types of Coproduction: A Conceptual Analysis Based on the Classical Definitions. *Public Administration Review*, 2015, vol. 76, no. 3, pp. 427–435. DOI: https://doi.org/10.1111/puar.12465

¹¹ SICILIA, M., GUARINI, E., SANCINO, A., ANDREANI, M., RUFFINI, R. Public services management and co-production in multi-level governance settings. *International Review of Administrative Sciences*, 2016, vol. 82, no. 1, pp.827.

¹² ALFORD, J. Co-production, interdependence and publicness: Extending public service-dominant logic. *Public Management Review*, 2015, vol. 18, no. 5, pp. 673–691.

¹³ JUKIĆ, T., PEVCIN, P., BENČINA, J., DECMAN, M., VRBEK, S. Collaborative Innovation in Public Administration: Theoretical Background and Research Trends of Co-Production and Co-Creation. *Administrative Sciences*, 2019, vol. 9, no. 4, p. 90. DOI: https://doi.org/10.3390/admsci9040090>

¹⁴ OECD (2011), Together for Better Public Services: Partnering with Citizens and Civil Society, OECD Public Governance Reviews, OECD Publishing, Paris, https://doi.org/10.1787/9789264118843-en>

¹⁵ BARTENBERGER, M., SZCESCILO, D. The Benefits And Risks Of Experimental Co-Production: The Case Of Urban Redesign In Vienna. *Public Administration*. 2015, vol. 94, no. 2, pp. 509–525. DOI: 10.1111/padm.12233

meal services¹⁶, tourism services¹⁷, even electricity services¹⁸ and many other. Furthermore, the concept of co-production is being analysed not only from the perspective of its impact on societal organisation and governing processes, but also vice-versa, i.e., the developments in societal organization and governing processes, e.g. information technologies, are being analysed from the perspective of their impact on the co-production¹⁹, which additionally indicates that the new concept has rooted in many aspects of our lives and is likely to stay. Information technologies foster the co-production concept through enabling the social participation in new aspects of economy, the sharing economy, in which members of society can sometimes even self-organize in such areas that used to be solely state or business managed and governed, of which most common examples are transportation and accommodation, but also other areas in resource sharing, waste management to certain extent and other. This derivation from sharing economy and co-production using information and communication technologies marks even greater shift than public governance reforms and is called platform society^{20,21}, which in the last chapter of this article links to the authors' proposal of mediation between policy makers and society in co-production approach in public services.

The 'older' concepts of the client as the focus of public administration from the New Public Management is generally not as much losing its 'fashion' as it is starting to gain some vibes of even negative or politically incorrect connotation, implying that the label of a client is diminishing the actual role of a civic society member in public governance which is more important than that of a client

¹⁶ GALLI, F., BRUNORI, G, DI IACOVO, F., INNOCENTI, S. Co-Producing Sustainability: Involving Parents and Civil Society in the Governance of School Meal Services. A Case Study from Pisa, Italy. *Sustainability*, 2014, vol. 6, no. 4, pp. 1643-1666. DOI: 10.3390/ su6041643

¹⁷ TROCCIOLA, G., PALUMBO, R. Co-producing services to enhance cultural heritage. The role of co-production in improving the quality of tourism services. *Sinergie – Italian Journal of Management*, 2015. DOI: https://doi.org/10.7433/SRECP.2015.05

¹⁸ PILO, F. Co-producing affordability' to the electricity service: a market-oriented response to addressing inequality of access in Rio de Janeiro's favelas. *Urban Research & Practice*, 2016, vol. 10, no. 1, pp. 86–101. DOI: 10.1080/17535069.2016.1154101

¹⁹ LEMBER, V., BRANDSEN, T., TÕNURIST, P. The potential impacts of digital technologies on co-production and co-creation. *Public Management Review*, 2019, vol. 21, no. 11, pp. 1665-1686, DOI: https://doi.org/10.1080/14719037.2019.1619807>

²⁰ BERNARDI, M., DIAMANTINI, D. Shaping the sharing city: An exploratory study on Seoul and Milan. *Journal of Cleaner Production*, 2018, no. 203, pp. 30–42. DOI: https://doi.org/10.1016/j.jclepro.2018.08.132>

²¹ SCOGNAMIGLIO, F. The New Public Governance in the platform society: Co-productive networks for a new public administration. Ph.D. research proposal at UK Open University, 2019, p. 8.

or customer; instead the partner is more correct terminology^{22,23,24}. At the same time, some of the most often cited authors in scientific literature in field of public administration reforms, e.g. Stephen P.Osborne with his team, argues²⁵ that *the new public management has been a flawed paradigm for public services delivery that has produced very internally efficient but externally ineffective public service organizations and developed the SERVICE framework for sustainable public services and public service organizations, emphasizing the need for a focus on external value creation rather than internal efficiency alone.*

In many countries, co-production is increasingly perceived as a new public administration paradigm as it involves a whole new thinking about public service delivery and policy development. Co-produced public governance clashes with the classical view that the public sector is the sole provider of public goods.²⁶ The concept of co-production, as introduced by John Alford, professor of Public Sector Management at the Australian and New Zealand School of Government, emphasises the co-operation between producers (state and public institutions) and receivers or beneficiaries of public services where the latter is taking an increasing role participating in the creation of the public good.²⁷ Service- and client-oriented approach in public administration is one of the milestones of good public governance, because it focuses on governing efficiency, transparency and responsibility to the clients. Service-oriented development of public administration is one of the main principles reflected in development planning documents of the UN, WB, IMF, OECD and other international organisations as well as the EU. The significance of the client, the recipient of public services, and efficient provision and delivery of public services as well as the client service itself is

FOTAKI, M. Towards developing new partnerships in public services: Users as consumers, citizens and/or co-producers in health and social care in England and Sweden. *Public Administration*, 2011, vol. 89, no. 3, pp. 933–955. DOI: https://doi.org/10.1111/j.1467-9299.2010.018 79.x>

²³ THOMAS, J.C. Citizen, Customer, Partner: Rethinking the Place of the Public in Public Management. *Public Administration Review*, 2013, vol. 73, no. 6, pp. 786-796. DOI: https://doi.org/10.1111/puar.12109>

²⁴ MONRAD, M. Self-Reflexivity as a form of Client Participation: Clients as Citizens, Consumers, Partners or Self-Entrepreneurs. *Journal of Social Policy.*, 2019, pp. 1-18. DOI: https://doi.org/10.1017/S0047279419000655>

²⁵ OSBORNE, S. P., RADNOR, Z., KINDER, T., VIDAL, I. The SERVICE Framework: A Public-service-dominant Approach to Sustainable Public Services. *British Journal of Management*, 2015, vol. 26, no. 3, pp. 424-438. DOI: https://doi.org/10.1111/1467-8551.12094>

²⁶ TORFING, J., SØRENSEN, E., RØISELAND, A. Transforming the Public Sector Into an Arena for Co-Creation: Barriers, Drivers, Benefits, and Ways Forward. *Administration & Society*, 2016, vol. 51, no. 5, pp.795-825. https://doi.org/10.1177/0095399716680057>

²⁷ ALFORD, J. Engaging public sector clients: From service-delivery to co-production. Basingstoke, UK:Palgrave, 2009, p.28, 272.

defined in various development planning documents including their aims and tasks, which emphasise the intentions of widening the accessibility of public services and the simplification of bureaucratic procedures in the delivery of public services. To ensure the systematic improvement of the provision of public services through client satisfaction surveys, it is equally essential to understand not only the failures in public service provision, but also the reasons of clients being satisfied with the service and its delivery; this will allow applying the good practices for other services and clients' target groups.²⁸ As a result, the overall clients' satisfaction and a state's image in society will improve. Performance of the public institutions is heavily affected by the number of economic, political, technological, social and other factors, which may increase the amount and variety of the public administration's functions and tasks. In fulfilling only the instructed bureaucratic functions, and not planning and implementing the changes, high risks may occur to fall behind the developments in rapidly progressing and changing private business and NGO sectors.

2. The need of change in the awareness of a public service

Provision of public services derives from the realisation of the public administration functions – it is one of the forms, set in the legislation, of realisation of public administration functions in interactions with the recipients of public services, the clients. Public services are characterised by complete or partial public funding, however its implementation can be delegated or outsourced to a third party, mostly the private sector, or less often the NGO sector, e.g. such public services are social care, public transportation, public road maintenance and others are often outsourced to private companies or NGOs.

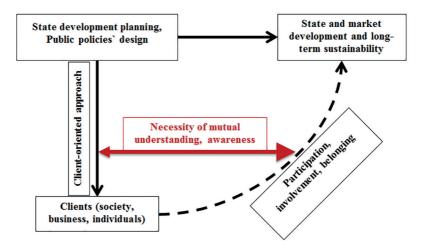
The definition of public service proposed in, e.g. Latvian legislative acts and drafts, emphasises the public service being a *benefit to the client*. This is an arguable contradiction to other definitions and descriptions of administrative public service²⁹, also those proposed in the same legal acts, as it encompasses the execution of the client's obligations towards a public person – "… *these services are nudged upon its specific recipient while the actual beneficiary is the society*".

²⁸ HERTOG, Den P., AA, Van Der W., JONG, De M. W. Capabilities for managing service innovation: towards a conceptual framework. *Journal of Service Management*, 2010, vol. 12, no. 4, pp. 490–514.

²⁹ WILLIAMSON, B. Knowing public services: Cross sector intermediaries and algorithmic governance in public sector reform. *Public Policy & Administration*, 2014, vol. 29, no. 4, pp. 292–312. DOI: https://doi.org/10.1177%2F0952076714529139

The emphasis on the public service as a *benefit to the client* also contradicts widely reviewed cases in scientific literature about nudged public services, i.e., such services which according to the respective client do not provide individual or private benefit to him or her, for instance, imprisonment for prison's "client", various fines and penalties or payment of taxes.

Based on the research and analysis of the scientific literature and legal acts, the authors proposes to improve the definition of public service as follows: *Public service is, in pursuing public administration's functions, ensured or delivered material or non-material, direct or indirect benefit to the client or to the society as a whole.* The authors also suggests adding to the definition of a public administration client the aspect of society being the beneficiary as a whole of the public services: *the client of the public administration is any person or entity that has the rights to receive any public service, and society as a whole* (see Figure 2).



The collaborative planning of public policy as an integral part of national strategic development planning; the formation of public administration attitudes towards society; the changing role of the public administration clients to partners, the strive for maximal but balanced satisfaction of public policies, as well as the awareness and respect for clients' intentions – all of these aspects frame an important basis for smart and modern development of the state, its public administration and the society. The meaning of the society is increasingly broadening its scope to cover all groups involved – the administration, and the society, the latter including separately people and businesses. As a result, also the understanding

of public service is under change as society is not only receiving a service but is also taking part in the planning of it.

3. Improving public services through digitalization and co-production

The trend of digitalisation is transforming both manufacturing and services. As a result, societies and citizens in the EU face significant opportunities and challenges. According to Eurostat, Europe's high- tech industry and knowledgeintensive services are increasing with record levels of investment in 2016.³⁰ Many parts of the EU led the world in e-government, demonstrating high levels of electronic engagement with their citizens and in using digital technology to update public services.³¹ However, there are high regulatory impediments that do not allow EU Member States to reach the levels of many world economies.³² More broadly, the EU should emphasise the role of openness and collaboration by providing open access to the results of publicly funded research, promoting open science, engaging more transparently with citizens and endorsing open innovation models to tackle societal challenges and long-term goals.³³ Although the EC promised to create a SDM as one of the Commission's priorities, estimating that it could boost the EU's economy by 415 billion euros annually³⁴ there is a little optimism among stockholders about achieving this goal. However, the critics see the digitalisation and DSM measures favouring traditional corporatist old industries despite the fact that high quality public services constitute the backbone of citizens' social welfare as well as a region's competitiveness and entrepreneurship, which currently faces significant challenges. This is acknowledged in the European Digital Progress Report: Review of Member States' Progress Towards Digital Priorities.35

Another significant factors that influences social development and wellbeing in the digital era and new business environment in the DSM is the social investment and innovation as well as co-production concepts, which is the subject of

³⁰ Eurostat 2017, Digital Economy and Society Statistics- Households and Individuals, Eurostat.

³¹ European Commission 2017, Europe's Digital Progress Report 2017, European Commission.

³² European Commission 2018, *Science, Research and Innovation Performance of the EU. Strengthening the foundations for Europe's future*, European Commission, pp.431–433.

³³ European Parliamentary Research Services (EPRS) 2014, *Briefing*, 25 March, 2014, pp. 2–4.

³⁴ European Commission 2015, A Digital Single Market Strategy for Europe, COM/2015/0192 final.

³⁵ European Commission 2017, Europe's Digital Progress Report 2017, European Commission.

current discussions at the EU level. Recent studies^{36,37} have indicated the potential for social investment and social innovation as well as highlighted differences in outcomes across EU Member States that have implemented different welfare state models. The main comparative theoretical approaches employed regarding the emerging of the social investments paradigm are Neo Keynesianism and Neo Liberalism.³⁸ Social investment should contribute to the development of innovative approaches related to the social innovation and competitive business environment of the digital market in the EU. It also should contribute to regional cohesion. An in-depth analysis of the scientific literature, legal and policy documents of international institutions elucidating the various versions and meanings of social investments, such as the paradigm of New Institutional Economics, the World Bank's Social Capital Initiative and others. The mainstream scholars view social investment as a strategy highlighting the shifting internal equilibrium between: public expenditure, private expenditure and banking tools that are identified as "social investments". The above approach to social investment is fundamental for the EU social innovation and regional cohesion policies. The most important instruments in reducing regional disparities are the European Commission's funds such as the European Fund for Strategic Investments and the Employment and Social Innovation Programme³⁹. However, the contribution of these funds to reduce regional disparities in the current context of digitalisation and high unemployment in EU economies and associated social risks requires new actions by governments and social partners.

Today governments are looking for new sources of growth to boost the productivity and competitiveness of their economies and industries, to generate jobs and to promote the wellbeing of their citizens. As highlighted in the OECD Ministerial Council Statement⁴⁰, governments have to respond to the rising inequality as it could endanger social cohesion and hamper the economic resilience and inclusive societies. Furthermore, governments will need to anticipate and address the need for regulatory structures development to minimize disruptive effects

³⁶ GROOTAERT, CH., Van BASTELAEER, T. Understanding and Measuring Social Capital: A Synthesis and Findings from the Social Capital Initiative, 2001, *Working Paper 24*, Washington DC, World Bank

³⁷ HUNG, SY, CHANG, CM and KUO, SR. User acceptance of mobile e-government services: An empirical study, *Government Information Quarterly*, 2013, vol. 30, no. 1, pp. 33–44.

³⁸ HEMERIJCK, A., VANDENBROUCKE, F. Social Investment and the Euro Crisis: The Necessity of a Unifying Social Policy Concept". *Intereconomics*, 2012, vol. 47, no. 4, pp. 200–206.

³⁹ European Commission 2015, "European Fund for Strategic Investments". Official Journal of the European Union, L 169/1 Regulation (EU) No 2015/1017 of the European Parliament and the Council of 25 June 2015.

⁴⁰ OECD 2016, "Digital Government Strategies for Transforming Public Services in the Welfare Areas," OECD Publishing, Paris.

of challenges in the digital environment such as privacy, new jobs, intellectual property rights, competition and taxation.

The relationship between information technologies (IT) and economic development of peripheral territories and industrial areas has been of interest for scholars. In this respect, more attention should be given to a digital regional divide existing in many economies. The term "digital divide" refers to the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard to both their opportunities to access information and communication technologies and to their use of the Internet for a wide variety of activities.⁴¹ The digital assessment of regional development has been subject of scholarly articles⁴² with the main conclusion that the lack of digitalisation is not necessarily the cause of social and economic under-development phenomena of regional geography and wellbeing. The lack of information technologies and digital infrastructure as well as digital literacy such as digital knowledge, skills and practices are likely to reinforce initial social inequalities.

The notion of co-production emerged in the private sector by motivation to increase high quality service associated with corporate profits. However, the concept is relevant to the public sector. As was noted by scholars⁴³ the public sector is dominated by the production of services that due to their discretionary and intangible character, the simultaneous process of production and consumption and the service recipient's central role in the process provide excellent conditions for co-production.⁴⁴ Providers and consumers of public services bring together different resources and capabilities in the joint creation of the value of the service in question and both parties have an interest in maximizing public value_creation.⁴⁵ It is important to stress that the role of a citizen as a client and a partner in the provision of public is known as a concept of co-production and/ or a concept of co-production of public services and is foreseen as the next stage

⁴¹ OECD 2001, "Understanding the Digital Divide", OECD, Paris.

⁴² BRIGGS, L. Citizens, Customers, Clients or Unwilling Clients? Different and effective strategies for citizen-centric delivery. In: Lindquist, E. A., Vincent, S., Wanna, H. (eds). *Putting Citizens First. Engagement in Policy and Service Delivery for the 21st Century*. Canberra: The Australian National University, 2013, pp.83–94, 220.

⁴³ OSBORNE, SP., RADNOR, Z. AND STROKOSCH, K. Co-Production and the Co-Creation of Value in Public Services: A suitable case for treatment? *Public Management Review*, 2016, vol. 18, no. 5, pp. 639–653.

⁴⁴ Ibid.

⁴⁵ TORFING, J., SØRENSEN, E., RØISELAND, A. Transforming the Public Sector Into an Arena for Co-Creation: Barriers, Drivers, Benefits, and Ways Forward, *Administration and Society*, 2016, vol. 51, no. 5, pp. 795–825. https://doi.org/10.1177/0095399716680057>

of evolution⁴⁶ in the relationship between public administration and society.⁴⁷ Both concepts involve active participation of citizens in public service delivery by creating sustainable partnerships with citizens. However, the literature makes a distinction between three types of involvement: 1) citizens as co- implementer of public policy, 2) citizens as co-designer and 3) citizens_as co-initiator.⁴⁸ According to the scholars, the first type is the most frequently represented.

The post-industrial civil society paradigm is increasingly strengthening in modern democratic public administration system; among other principles, is also characterized by societal equality and participation opportunities; as a result state power is focusing more on the needs of society, is in turn, is reacted in broad public administration reforms⁴⁹ carried out to improve the efficiency of the state power implementation according to the needs of society.

To ensure the systematic improvement of the provision of public services it is essential to understand why citizens as clients are satisfied or not satisfied by public services and its delivery, which allows applying the good practices for other services and clients' target groups. The main critique of the concept related to the definition of a citizen as a client of public administration services relay on the diminished role of the citizens' civic participation and thus positioning the individuals of the society as passive services recipients.⁵⁰ This situation can be often crucial for better-informed decision-making. Besides, the often-uncertain variability of the public administration's client's roles has a negative impact on the work motivation of civil servants⁵¹ within the implementation of public functions and delivery of public services.

⁴⁶ PETRESCU, M., POPESCU, D., BARBU, I., DINESCU, R. Public Management: between the Traditional and New Model" *Review of International Comparative Management*, 2010, vol. 11, no. 3, pp. 408–415.

⁴⁷ VERSCHUERE, B., BRANDSEN, T., PESTOFF, V. Co-production as a maturing concept". In: PESTOFF, V., BRANDSEN, T., VERSCHUERE, B. (eds) *New Public Governance, the Third Sector and Co-Production*. New York, Routledge, 2012, pp. 1–12, 424, 66.

⁴⁸ VOORBERG, WH, BEKKERS, VJJM and TUMMERS, LG. A Systematic Review of Co-Creation and Co-Production: Embarking on the social innovation journey. *Public Management Review*, 2015, vol. 17, no. 9, pp. 1333–1357.

⁴⁹ DAGLIO, M., GERSON, D., KITCHEN, H. Building Organisational Capacity for Public Sector Innovation. Background Paper, OECD Conference "Innovating the Public Sector: from Ideas to Impact", Paris, 12–13 November 2015, p. 40.

⁵⁰ BRIGGS, L. Citizens, Customers, Clients or Unwilling Clients? Different and effective strategies for citizen-centric delivery. In: LINDQUIST, E. A., VINCENT, S., WANNA, H. (eds) *Putting Citizens First. Engagement in Policy and Service Delivery for the 21st Century*. Canberra: The Australian National University, 2013, pp. 83–94, 220.

⁵¹ ANDREWS, C. Integrating Public Services Motivation and Self-Determination Theory: A Framework. *International Journal of Public Sector Management*, 2016. vol. 29, no. 3, p. 12, 1–34.

Public administration reforms are continuously taking place in many countries implementing new ideas, changing and improving policies, processes, structures and other management mechanisms and instruments, boosting efficiency and solving problems and challenges.⁵² The concept of co-production is strongly connected to the concept of co-production and these two concepts complement each other well. The close interaction between these two concepts to a large extent changes the roles of contemporary public service provision system's participants – politicians, officials of the governmental institutions and the recipients of public services. However, most studies focus on the identification of influential factors with little attention given to the results of the two concepts interaction, which needed_to be in the centre of future research. Furthermore, quantitative studies are badly needed relying on that more qualitative and case studies approach is prevailed.⁵³

These changing roles are defined by both the characterizing principles and values of the respective public administration model as well as by the mechanisms of cooperation among the participants of the process of the "producing" and receiving of public services.⁵⁴

National and local governments increasingly aim to involve citizens actively in proving public welfare services and in solving social and political problems and challenges. National governments forge networks of public and private actors that produce and monitor regulatory policies and standards and the European Union supports regional partnerships aiming to stimulate growth and employment in rural areas.⁵⁵ In addition, the new public governance is based on innovation and the digitalization of public services' provision that ensures wider and easier accessibility of public services as well as saves clients' resources.

4. Public policy client-accordance index

The essence of authors' proposed PCAX – the policy-client-accordance (PCA) index – is first to identify the policy makers' expectations contained in policy planning documents and second – identify (survey, observe, collect, extract – the

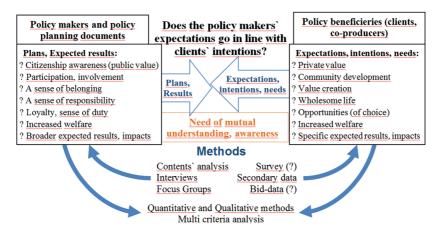
⁵² DAGLIO, M., GERSON, D., KITCHEN, H. Building Organisational Capacity for Public Sector Innovation. Background Paper, OECD Conference "Innovating the Public Sector: from Ideas to Impact", Paris, 12–13 November 2015, p. 40.

 ⁵³ MURAVSKA, T., STACENKO, S., ZEIBOTE, Z. Digitalization in the Regional Context: The Case of E-Government Services in Latvia. *Studies in European Affairs*, 2018, no. 4., pp. 251–267.
 ⁵⁴ ibid.

⁵⁵ FOTAKI, M. Towards developing new partnerships in public services. *Public Administration*, 2010, no. 89, pp. 933–955.

method still under research) the very policy's target audience's (beneficiaries, clients, co-producers) intentions in respect to policy makers' expectations (see Figure 3). The PCAX research design essentially consists of 1) selection of public policy areas, 2) identification of main policy intentions and expectations, including the review of methodologies to do so, 3) categorising the segments of the respective policy's clients' target groups. To conduct the research on these stages, the contents analysis of respective legislative acts and expert interviews are to be conducted. The fourth stage of research design shall be 4) setting of the methodologies to collect the respective policy's clients' target group intentions and evaluations regarding the co-production process in the public governance in the respective policy area. Large focus of the research is to be put on the usage of existing data or collection of data for clients'/co-producer's profiling – their interests, intentions, needs. The uncertain concept of the big data, the risks of the surveillance state as well as the certain concerns of data privacy issues in relation to state information registers shall be reviewed.

Figure 3. Principal Policy Client-Accordance seeking scheme



Source: Authors' construction based on conceptual research analysis

For instance, in terms of active participation and involvement in state development which was one of the main policy makers' expectations in authors' casebased Latvian youth policy, the result of research led to conclude that Latvian youth policy PCA index is 40% meaning that there is a space for improvement. The later conducted feasibility study – to identify the applicable and challenging aspects of the application of youth policy case-based methodology model for evaluating the relevance of any public administrations' policy to the intentions of the policy's clients' group - showed that the model is feasible in wider public administration area however it requires specific adjustments.⁵⁶ The major findings led the authors to conclude that from the perspective of the state the policy makers' expectations towards youth are rather clear and structured while the youth's perspective is still developing through interacting, reasoning, adjusting ambitions to expectations, etc. Given the limitless needs of the society, which is one of the economic development pillars, the same pattern of structured policy versus undefined needs of its clients can be applied also in other fields of public policies. Another consequent conclusion was that the state and its governing institutions, as well as the society, places and treats the youth as a separate group of state clients and society members. The attitudes alter from socially marginalised citizens-in-waiting to the youth as a crucial asset of state development. Youth as a separate state client's group can be identified in various policy areas e.g., in education system, justice system, socio-economic area. This pattern, in its turn, cannot be placed upon policy in its client's relationships in most of other public policies due to the uniqueness of youth as sociodemographic group and generality of other sociodemographic groups. The summarizing conclusion of the feasibility study showed that the youth policy based PCA evaluation model is feasible in wider public administration area, however, it requires specific adjustments. The methodological approach is directly applicable to other policy areas, i.e., it is possible to identify the client's groups for each of public policy areas once they are defined. Thus, it is possible to identify the respective policy's client orientation aspects and expectations towards its client's group. Accordingly, it is possible to research the intentions and perceptions of the policy's clients subsequently providing the PCA index. However, the challenging aspects of the feasibility of the case based PCA evaluation model in wider public administration area relate to different features of the public policies and their clients' groups. It means that the factors used for PCA index in different policy areas shall differ considerably and thus the PCA indexes shall not be compared among different policies. Nevertheless, the compilation of all PCA indexes can be used for the overall public administration system itself.

To quantify the evaluation of policy-client accordance which would provide a comprehensive assessment and would allow policy makers, industry and society leaders to overview the state of affairs regarding the relevance of the public

⁵⁶ PUTANS, R. Modern Interactions between the Society and the State: In: Search of Clients within Public Administration. *Voices from the Sylff Community*, 2015. [online] Available at: https://www.sylff.org/wp-content/uploads/2015/09/06_SRA_Putans_Article-web.pdf>

strategy or policy to their target group, the authors propose the PCAX indicator to be calculated in the following way (see Formula 1 and 2).

(Formula 1)

$$\overline{F\iota} = \frac{\sum_{i=1}^{m} \frac{\overline{x_i} * \frac{\overline{w_i}}{10}}{max \, \overline{x_i}}}{m} (\%);$$

$$\overline{x_i} = \frac{\sum_{i=1}^{n} x_i}{n}; \ \overline{w_i} = \frac{\sum_{i=1}^{n} w_i}{n}; \ F_i = \frac{\overline{x_i} * \frac{\overline{w_i}}{10}}{max \, \overline{x_i}} (\%); \ \overline{F} = \frac{\sum F_i}{m} (\%);$$

$$\overline{ala 2}$$

(Formula 2)

$$\overline{F} = \frac{\sum_{i=1}^{m} \frac{\overline{\sum_{i=1}^{n} x_i}}{n} * \frac{\frac{\sum_{i=1}^{n} w_i}{n}}{10}}{\max \frac{\sum_{i=1}^{n} x_i}{n}}}{m} (\%);$$

, where

- \overline{F} the overall PCA index
- *i* defined policy expectation statement (factor)
- F_i mean of the factor i expressed in % of i_{max} value
- x_i individual client assessment of the factor i
- \overline{x}_{i} mean of the factor i
- $\dot{w_i}$ significance assessment of the factor i. To some factors the weighted average is not applied because it is assumed that their significance or importance in the overall assessment is undisputed, for example, factors such as bad experience with PA do not require a significance assessment
- \overline{w}_i mean of the significance assessment of the factor i
- max_i maximum possible value of the factor i
- n number of respondents (for a survey)
- *m* number of factors used in the respective PCAX calculation

Overall, this methodology and PCA index would improve the mutual understanding between policy makers and their clients, which is crucial for sustainable and all-sides' supported development of the state, its society and its communities, including the awareness of the growing importance of the client/co-producer in public administration, better customer service as well as inclusive co-produced and client-oriented public policy design positioning these as important strategic development elements in public administration. The very essence of the public administration is the efficient management of joint resources and the co-operation between the society and elected or selected public servants, where the latter are mediators and coordinators for ensuring efficient use of state recourses according to public (which they are part of) needs.

5. Case study of improving public electronic services by applying the co-production concept in the framework of the Citadel project

The use of co-production concept has been demonstrated by the CITADEL project⁵⁷ targeting the improvement of e-government services. *The CITADEL project and its objectives*

The CITADEL project was started late 2016 under the EU Research and Innovation programme Horizon-2020 under the leadership of the TECNALIA Research & Innovation, which is the first privately funded Applied Research Centre in Spain and one of the leading such centres in Europe. The project consortium involved 12 partners from five different countries, representing Northern, Southern and Eastern Europe including University of Cantabria (Spain), KU Leuven (Belgium), FINCONS Spa (Italy), IMEC (Belgium), Regione Puglia (Italy), InnovaPuglia Spa (Italy), Stad Antwerpen (Belgium), TIME LEX CVBA (Belgium), Ministry of Environmental Protection and Regional Development of Latvia (VARAM), University of Latvia, Stichting ICTU (the Netherlands). The CITADEL project was aiming at exploring, monitoring and analysing the drivers, enablers, impact, risks and barriers of open, innovative and collaborative government across a diverse terrain of PAs through an open and scalable platform based on innovative ICTs in order to understand, transform and improve by proposing recommendations to enhance the PAs policies and processes with a view to deliver effective, inclusive and high quality public services across Europe. Among CITADEL's mains objectives were to incentivize the co-production of digital public services by empowering citizens and public administrations, and to increase the participation of Citizens in the Public Administration system by improving their experience when using digital public services.

According to the description of the CITADEL project and its presentation on the project's website (see Figure 5) at least one third of the project was devoted for co-production with a purpose to transform public services.

⁵⁷ CITADEL project has been implemented under the "Horizon-2020" programme, Grant Agreement No 726755.

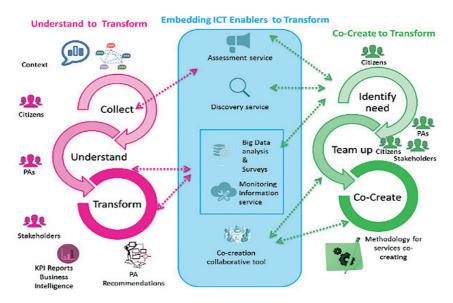


Figure 5. The CITADEL ecosystem.

Source: <https://www.citadel-h2020.eu/> CITADEL co-production definition and offered results

The CITADEL offered to provide the **CITADEL tool-supported methodology for services co-production with the expectation** that this methodology will guide and support public administrations in the co-production process. Also, the CITADEL created the **co-production collaborative tool** that should allow public administrations, private sector and citizens to co-create new public services also at a conceptual level. In addition, the CITADEL Co-creation Handbook has been provided. In relation to the usage of terminology – co-production and co-creation – the concept of co-production is strongly connected to the concept of co-production and these two concepts complement each other well.⁵⁸ Having this into account as well as given the specifics of CITADEL project planned outcomes, particularly new public services at a conceptual level, – authors found it strongly justified in this case study to use terminology of co-creation to emphasise the focus on innovation.

⁵⁸ MURAVSKA, T., STACENKO, S., ZEIBOTE, Z. Digitalization in the Regional Context: The Case of E-Government Services in Latvia. *Studies in European Affairs*, 2018, no. 4., pp. 251–267.

The CITADEL project supported the principles of collaboration, transparency and participation of the Open Government concept. In the project framework the co-production has been understood as a collective process in which government, organizations and citizens actively share ideas to reap a major benefit of that interaction. Based on the principles of collaboration and innovation systems, the Open Innovation 2.0 paradigm provides relevant insights into the capabilities to create innovation by sharing knowledge. One of the main advantages of this paradigm is the capability to create valuable ideas both inside and outside the company⁵⁹ by placing ideas from non-market institutions and individuals and introducing them into the market. This paradigm is based on the Quadruple Helix Model. This encompasses different stakeholders working together to co-create: government, industry, academia and citizens. This perspective is focused on co-creating shared value that is consisting of that a specific service does not have any intrinsic value for the user, but this depends on the total value co-created as aggregation during the co-production of the service⁶⁰; for instance, the experiences acquired by the user during the service provision.

The project proposed a CITADEL definition of co-production based on this Open Innovation 2.0 approach: Co-production is defined as an integrated mix of activities through which different stakeholders – government, industry, academia and groups of individual citizens – work actively and directly together towards the provision of public services. Co-production with citizens may include co-design and co-implementation of core and/or complementary services. It may take advantage of innovation ecosystems and emerging technologies but is not limited to digital tools.

- The definition of co-production adopted here is based on the paradigm Open Innovation 2.0 that is compatible with the CITADEL approach (Public Administration + Private sector + Academia + Citizens) using cultivated innovation ecosystems.
- 2. This definition reflects the idea of co-production as a mix of activities⁶¹,⁶² in which inputs are supplied by participants as an integrated process comprising both the design and the implementation of public services.

⁵⁹ CHESBROUGH, HW. Open Innovation, the New Imperative for Creating and Profiting from Technology. Boston (USA): Harvard Business School Publishing, 2003.

⁶⁰ OSBORNE, SP., RADNOR, Z. AND STROKOSCH, K. Co-Production and the Co-Creation of Value in Public Services: A suitable case for treatment? *Public Management Review*, 2016. vol. 18, no. 5, pp. 639–653.

⁶¹ OSTROM, E., PARKS, RB., WHITAKER, GP. AND PERCY, SL. The Public Service Production Process: A Framework for Analyzing Police Services". *Policy Studies Journal*, 1978, vol. 7, pp. 381–381.

⁶² PARKS RB., BAKER, PC., KISER, R., OAKERSON, R., OSTROM, E., OSTROM, V., PER-CY, SL., VANDIVORT, MB., WHITAKER, GP., WILSON, R. Consumers as Coproducers of

- 3. This is a broader definition that considers the context of CITADEL use cases and their differences and specificities to address different requirements.
- 4. Regarding the debate on voluntariness⁶³,⁶⁴,⁶⁵,⁶⁶, there are several examples in the case studies investigated showing that co-production is not exactly voluntary. Thus, we the voluntariness term has not been introduced in this definition and its preferred to refer to it as an active involvement.

5.1. Experimental application of the co-production concept by the Latvian public administration

During the implementation of the CITADEL project the importance of co-creation has been proven by the research work performed by the University of Latvia (LU) in cooperation with the Ministry for Environmental Protection and Regional Development responsible for providing e-government services. It should be noted that this was the first time in Latvia, when the co-creation approach was used by the public administration to involve citizens' in the decision making and improvement of public services.

According to the LU designed methodology 6 coproduction sessions were conducted involving 5 focus groups: NGOs; people with special needs (problems of sight); students of LU computing faculty; inhabitants – users of the latvia.lv portal; and employees of the CSC's. The main objective of coproduction sessions was to identify problems of the usability of the portal from a user point of view and to receive practical suggestions and possible solutions.

The 4 priority topics chosen for analysis during the coproduction sessions were the following: 1) life situations; 2) e-services; 3) catalogue of public services; 4) client workplace.

The main criteria for defining the usability of the portal in the context of client satisfaction:

Public Services: Some Economic and Institutional Considerations. *Rick Policy Studies Journal*, 1981, pp. 1001–1011.

⁶³ ALFORD, J. Towards a new Public Management Model: Beyond 'Managerialism' and its critics. *Australian Journal of Public administration*, 1993, vol. 52, no. 2, pp. 135–148. ">https://doi.org/10.1111/j.1467-8500.1993.tb00263.x>

⁶⁴ BOVAIRD, T., STOKER, G., JONES, T., LOEFFLER, E. AND PINILLA, R. Activating collective co-production of public services: influencing citizens to participate in complex governance mechanisms in the UK. *International Review of Administrative Sciences*, 2016, vol. 82, no. 1, pp. 47–68.

⁶⁵ BRUDNEY, JL. AND ENGLAND, RE. Toward a definition of the co-production concept. *Public Administration Review*, 1983, no. 43, pp. 59–65.

⁶⁶ OSBORNE, SP., RADNOR, Z. AND STROKOSCH, K. Co-Production and the Co-Creation of Value in Public Services: A suitable case for treatment? *Public Management Review*, 2016. vol. 18, no. 5, pp. 639–653.

- Convenience of portal's design visual perception *How visually attractive is the portal's home page? How to improve it?*
- Structure of information, transparency of placement and convenience for use (navigation) *How easy it is to understand and what and where is located in the portal? How to improve it?*
- Speed How fast it is possible to make necessary actions in a current information structure? How to improve it?
- Clearness of the description of services How clear is descriptions of accessible services? Is it possible to understand if there is information that one is looking for? How to improve it?
- Convenience of use of the search function *How convenient is the search function? Is it working precisely? How to improve it?*

The main goal of these sessions was to get insights from the end-users of the national public service portal www.latvija.lv. During these sessions, the CITAw DEL project proved itself to be a perfect environment for collaboration between academia and different levels of public administration to gain the most from the co-creation activities.

The chosen methods used for coproduction sessions with focus groups included the "*Check-in check-out*" methods to ensure precise suggestions and to be able to identify them; the "*Idea Dashboard*" method and the "*Brainstorm*" method. The greatest challenge was to choose the right method for a particular focus group, which required a combination of abovementioned methods during the session, and a flexibility for shifting from one method to another to be able to capture the ideas and suggestions in fast and easy manner. Moreover, the size of focus groups varied from five to more than 20 participants, which must be considered to make sessions efficient. Larger focus groups (students, employees of the United State and Municipal Client Service Centres) were divided into smaller working groups.

Each focus group in a coproduction session was moderated and monitored by external observers to carefully follow the processes during the sessions. The sessions were implemented in an informal working atmosphere and in a dynamic manner by exchanging view, discussing, completing special tasks in computers and on the paper. In difference from other sessions, during the session with students the mobile phones were used with a thought that young people mainly use electronic services on phone. In every session the CITADEL project was shortly presented, and ideas of the project have been addressed.

The participants' surveys with evaluation and comments about each of the tasks they had to fulfil has been collected; these evaluations and comments constituted a basis for drafting the results of the focus group co-creation sessions. Surveys of observers with comments on each of participant's involvement in common activities related to work in groups and sub-groups, as well as in

common discussions have been included in the assessment of the focus group co-creation sessions. In addition, all sessions were recorded; fixed comments and observations were added to the overall evaluation. The evaluation was performed in a structured way according to the five criteria for defining the usability of the portal for the four priority areas (life situations; e-services; catalogue of public services; client workplace). Based on a set of the structured conclusions, detailed proposals and recommendations were provided

During the co-creation sessions appeared that a lot of focus was on the search engine. Results have shown that many users rely on built-in search function in the portal and its functionality was deemed unsatisfactory because usually, when searching by keywords, search provides too many results for users to comprehend. Also, one of the identified problems was too complicated language and disparities between the language and keywords chosen by end-user when searching for a service, and the choice of words / complexity of service descriptions provided by institutions. Unfortunately, this is a very complex issue, which needs time and effort to be solved. In addition, providing services and making them simple for people, one needs to find a balance between legally correct and comprehensive descriptions, and simple way of expression. The sessions also substantiated the need for mobile-friendly version, proactive and personalized service delivery, intuitive design.

Another worth-mentioning example of a large-scale co-production and co-cocreation project involving also digitalization is the "3LoE – Three-level centres of professional excellence: *Qualification*, entrepreneurship and innovation in the Green Economy".⁶⁷ The project aims at development and implementation of dual vocational training in education, training and higher education, with an intensive partnership between the places of learning (companies - education centres). Such dual education is comparatively new concept in many European countries. It is expected that in addition to the development of competitive higher education program, which shall be novel in its contents and equally importantly in its format, a major spill-over effect of the project in the wider context of societal governance will also be the evident co-production concept put in practice - the program is being developed and will be implemented together by the service provider (universities, incl., state universities) and the service recipient (labour market, companies) thus both parties equally content-wise, format-wise and institutionally are involved, motivated and responsible for the provision of higher education according to labour market and societal needs.

⁶⁷ EU Project 3LoE "Three-level centres of professional excellence: Qualification, entrepreneurship and innovation in the Green Economy". Pilot project selected for funding under ERASMUS+ Support for Policy Reform 2020 Call. [online] https://3-loe.eu/>

6. Conclusions

- 1. The transition of the client concept from the private sector to the level of government was influenced by the development of post-industrial civil societies as well as changes in private sector management development techniques that emphasized the need to focus on the client. That created a growing public pressure for more efficient public administration and contributed to the beginning of the public administration reforms in the 1980s and 1990s, including the development of the client-oriented approach.
- 2. The development of public administration models classical (bureaucratic) public administration model, the New Public Management model and the New Public governance model and the differences they imply on public administration relationships with society reflect the socio-economic situation in a specific development stage of societies. Although these organisational models of public administration have been, and are evolving gradually one after another, they however co-exist, and in different modern public administration systems, elements from each model can be found.
- 3. Taking into account that the essence of the client concept in public administration is characterised by efficient execution of public administration functions according to the needs of society, the national and supranational development planning documents in the framework public administration reforms, emphasises the need for the client-oriented and further co-produced approach along with the realization of public administration functions, particularly where they interconnect with society.
- 4. Within the typology of the relationships between public administration institutions and their clients, two separate major roles of the clients are being distinguished depending on which of the clients' needs the relationships are targeting – public administration clients as recipients of public services when the relationship satisfies their private needs for their private value or public administration clients as citizens when, in addition to the private value, the public value is also being served.
- 5. At the same time, scientific literature does not offer any conventional definition for the public administration client and to a very little extent it studies the public services on a meta-level. Therefore, it also does not offer any conventional definition of the public service. This is recognised as one of the main challenges in the development of public services provision systems in many countries.
- 6. The concept of the co-production of public services emphasises the co-operation between the service providers and recipients, i.e., the clients' involvement

in public policies' decision-making in provision of public services mainly through the organized civil society.

- 7. The importance of social and civic participation is also supported by the prospect of negative consequences of the alternatives, i.e., the non-participation or critically low social and civic participation of people threatens the democratic public governance system. Therefore, maximizing the active social and civic participation is also a politically, socially and economically driven necessity. In this respect, the social and civic participation is not driven by society's rights or motivations, but includes number controlling and nudging elements to enhance public participation.
- 8. The important role of the client-oriented approach in the development of public administration can be justified by its positive impact on the empowerment of participation opportunities and social coproduction as well as on the strengthening of active civil society. Such a way of co-operation between public administration and society contributes to awareness-based relationship between public administration and its clients that, in its turn, ensures more tailormade provision of public services, equal distribution of responsibility about the service quality, as well as increases the legitimacy of public administration.
- 9. The authors' proposed policy client-accordance index methodology allows an identification of the strong and weak points of the public administration's client-oriented approach based on a detailed quantitative comparison of results between different factors thus allowing for planning and taking appropriate policy-making adjustments.
- 10. The feasibility study shows that the authors' proposed youth policy based PCA evaluation model is feasible in the wider public administration area, however it requires specific adjustments that are related to the identification of clients' target groups for the respective public policies as well as policy's expectations towards these target groups. For comprehensive and standardised PCA index applicability, further research is necessary.
- 11. The experience of applying the co-production concept in case of Latvia concludes that efficient decision making for improving economic development, as well as social welfare at regional, national and local levels needs implementation of digitalized services in a process of co-creation as they inevitably become more important due to the increased digital competitiveness of countries.

List of references

- ALFORD, J. Co-production, interdependence and publicness: Extending public service-dominant logic. *Public Management Review*, 2015, vol. 18, no. 5, pp. 673–691.
- ALFORD, J. Engaging public sector clients: From service-delivery to co-production. *Public lecture at the Copenhagen University, Denmark.* 24.04.2014. Copenhagen, Denmark.
- ALFORD, J. Engaging public sector clients: From service-delivery to co-production. Basingstoke, UK: Palgrave, 2009, p. 28, 272.
- ALFORD, J. Towards a new Public Management Model: Beyond 'Managerialism' and its critics. *Australian Journal of Public administration*, 1993, vol. 52, no. 2, pp. 135–148. ">https://doi.org/10.1111/j.1467-8500.1993.tb00263.x>">https://doi.org/10.1111/j.1467-8500.1993.tb00263.x>
- ANDREWS, C. Integrating Public Services Motivation and Self-Determination Theory: A Framework. *International Journal of Public Sector Management*, 2016. vol. 29, no. 3, p. 12, 1–34.
- BARTENBERGER, M., SZCESCILO, D. The Benefits And Risks Of Experimental Co-Production: The Case Of Urban Redesign In Vienna. *Public Administration*. 2015, vol. 94, no. 2, pp. 509–525. DOI: 10.1111/padm.12233
- BERNARDI, M., DIAMANTINI, D. Shaping the sharing city: An exploratory study on Seoul and Milan. *Journal of Cleaner Production*, 2018, no. 203, pp- 30–42. DOI: https://doi.org/10.1016/j.jclepro.2018.08.132
- BOVAIRD, T, STOKER, G, JONES, T, LOEFFLER, E AND PINILLA, R. Activating collective co-production of public services: influencing citizens to participate in complex governance mechanisms in the UK. *International Review of Administrative Sciences*, 2016, vol. 82, no. 1, pp. 47–68.
- BRANDSEN, T., HONINGH, M. Distinguishing Different Types of Coproduction: A Conceptual Analysis Based on the Classical Definitions. *Public Administration Review*, 2015, vol. 76, no. 3, pp. 427–435. DOI: https://doi.org/10.1111/puar.12465
- BRIGGS, L. Citizens, Customers, Clients or Unwilling Clients? Different and effective strategies for citizen-centric delivery. In: LINDQUIST, E. A., VINCENT, S., WAN-NA, H. (eds) *Putting Citizens First. Engagement in Policy and Service Delivery for the 21st Century*. Canberra: The Australian National University, 2013, pp.83–94, 220.
- BRUDNEY, JL. AND ENGLAND, RE. Toward a definition of the co-production concept. Public Administration Review, 1983, no. 43, pp. 59–65-
- CHESBROUGH, HW. Open Innovation, the New Imperative for Creating and Profiting from Technology. Boston (USA): Harvard Business School Publishing, 2003.
- CITADEL project has been implemented under the "Horizon-2020" programme, Grant Agreement No 726755.
- DAGLIO, M., GERSON, D., KITCHEN, H. Building Organisational Capacity for Public Sector Innovation. Background Paper, OECD Conference ,,Innovating the Public Sector: from Ideas to Impact". Paris: 12–13 November 2015, p. 40.
- EU Project 3LoE "Three-level centres of professional excellence: Qualification, entrepreneurship and innovation in the Green Economy". Pilot project selected for funding under ERASMUS+ Support for Policy Reform 2020 Call. [online] https://3-loe.eu/>

- European Commission 2015, "European Fund for Strategic Investments". Official Journal of the European Union, L 169/1 Regulation (EU) No 2015/1017 of the European Parliament and the Council of 25 June 2015.
- European Commission 2015, A Digital Single Market Strategy for Europe, COM/2015/0192 final.
- European Commission 2017, Europe's Digital Progress Report 2017, European Commission.
- European Commission 2018, Science, Research and Innovation Performance of the EU. Strengthening the foundations for Europe's future, European Commission, pp. 431–433.
- European Commission. (2015). Proposal for a Regulation of the European Parliament and of the Council on the establishment of the Structural Reform Support Programme for the period 2017 to 2020 and amending Regulations (EU) No 1303/2013 and (EU) No 1305/2013, COM(2015) 701 final, 2015/0263 (COD), Brussels, 26. 11. 2015.
- European Parliamentary Research Services (EPRS) 2014, Briefing, 25 March, 2014, pp. 2-4.
- Eurostat 2017, Digital Economy and Society Statistics- Households and Individuals, Eurostat.
- FOTAKI, M. Towards developing new partnerships in public services: Users as consumers, citizens and/or co-producers in health and social care in England and Sweden. *Public Administration*, 2011, vol. 89, no. 3, pp. 933–955. DOI: ">https://doi.org/10.1111/j.1467-9299.2010.01879.x>
- GALLI, F., BRUNORI, G., DI IACOVO, F., INNOCENTI, S. Co-Producing Sustainability: Involving Parents and Civil Society in the Governance of School Meal Services. A Case Study from Pisa, Italy. *Sustainability*, 2014, vol. 6, no. 4, pp. 1643–1666. DOI: 10.3390/su6041643
- GROOTAERT, CH., Van BASTELAEER, T. Understanding and Measuring Social Capital: A Synthesis and Findings from the Social Capital Initiative, 2001, *Working Paper 24*, Washington DC, World Bank.
- HEMERIJCK, A., VANDENBROUCKE, F. Social Investment and the Euro Crisis: The Necessity of a Unifying Social Policy Concept". *Intereconomics*, 2012, vol. 47, no. 4, pp. 200–206.
- HERTOG, Den P., AA, Van Der W., JONG, De M.W. Capabilities for managing service innovation: towards a conceptual framework. *Journal of Service Management*, 2010, vol. 12, no. 4, pp. 490–514.
- HUNG, SY, CHANG, CM and KUO, SR. User acceptance of mobile e-government services: An empirical study. *Government Information Quarterly*, 2013, vol. 30, no. 1, pp. 33–44.
- JUKIĆ, T., PEVCIN, P., BENČINA, J., DECMAN, M., VRBEK, S. Collaborative Innovation in Public Administration: Theoretical Background and Research Trends of Co-Production and Co-Creation. *Administrative Sciences*, 2019, vol. 9, no. 4, p. 90. DOI: https://doi.org/10.3390/admsci9040090>
- LEMBER, V., BRANDSEN, T. TÕNURIST, P. The potential impacts of digital technologies on co-production and co-creation. *Public Management Review*, 2019, vol. 21, no. 11, pp. 1665–1686, DOI: https://doi.org/10.1080/14719037.2019.1619807>
- MCNEII, J. Enabling social innovation assemblages: Strengthening public sector involvement. Doctoral Thesis at Institute for Culture & Society, Western Sydney University, 2017, p. 306.

- MONRAD, M. Self-Reflexivity as a form of Client Participation: Clients as Citizens, Consumers, Partners or Self-Entrepreneurs. *Journal of Social Policy*., 2019, pp. 1–18. DOI: https://doi.org/10.1017/S0047279419000655>
- MURAVSKA, T., STACENKO S., ZEIBOTE, Z. Digitalization in the Regional Context: The Case of E-Government Services in Latvia. *Studies in European Affairs*, 2018, no. 4., pp. 251–267.
- OECD (2011), Together for Better Public Services: Partnering with Citizens and Civil Society, OECD Public Governance Reviews, OECD Publishing, Paris, https://doi.org/10.1787/9789264118843-en
- OECD (2019), Digital Government Review of Sweden: Towards a Data-driven Public Sector, OECD Digital Government Studies, OECD Publishing, Paris, https://doi.org/10.1787/4daf932b-en>
- OECD 2001, "Understanding the Digital Divide", OECD, Paris.
- OECD 2016, "Digital Government Strategies for Transforming Public Services in the Welfare Areas," OECD Publishing, Paris.
- OSBORNE, S. P., RADNOR, Z., KINDER, T., VIDAL, I. The SERVICE Framework: A Public-service-dominant Approach to Sustainable Public Services. *British Journal* of Management, 2015, vol. 26, no. 3, pp. 424–438. DOI: https://doi.org/10.1111/14 67-8551.12094>
- OSBORNE, SP., RADNOR, Z., NASI, G. A New Theory for Public Service Management? Toward a (Public) Service-Dominant Approach. *American Review of Public Administration*, 2012, vol. 43, no. 2, pp. 135–158.
- OSBORNE, SP., RADNOR, Z. AND STROKOSCH, K. Co-Production and the Co-Creation of Value in Public Services: A suitable case for treatment? *Public Management Review*, 2016. vol. 18, no. 5, pp. 639–653.
- OSTROM, E., PARKS, RB., WHITAKER, GP. AND PERCY, SL. The Public Service Production Process: A Framework for Analyzing Police Services", *Policy Studies Journal*, 1978, vol. 7, pp. 381–381.
- PARKS, RB., BAKER, PC., KISER, R., OAKERSON, R., OSTROM, E., OSTROM, V., PERCY, SL., VANDIVORT, MB., WHITAKER, GP., WILSON, R. Consumers as Coproducers of Public Services: Some Economic and Institutional Considerations. *Rick Policy Studies Journal*, 1981, pp. 1001–1011.
- PETRESCU, M., POPESCU, D., BARBU, I., DINESCU, R. Public Management: between the Traditional and New Model" *Review of International Comparative Management*, 2010, vol. 11, no. 3, pp. 408–415.
- PILO, F. Co-producing affordability' to the electricity service: a market-oriented response to addressing inequality of access in Rio de Janeiro's favelas. Urban Research & Practice, 2016, vol. 10, no. 1, pp. 86-101. DOI: 10.1080/17535069.2016.1154101
- PUTANS, R. Modern Interactions between the Society and the State: In Search of Clients within Public Administration. *Voices from the Sylff Community*, 2015. [online] Available at: https://www.sylff.org/wp-content/uploads/2015/09/06_SRA_Putans_Article-web.pdf
- RAJNEESH, S. Value Creation in Citizen Services: Sakala as India's Most Effective Citizen-first Public Engagement Model. *Journal of Creating Value*, 2015, vol. 1, no. 2, pp. 275-291. https://doi.org/10.1177/2394964315604096>

- SCOGNAMIGLIO, F. The New Public Governance in the platform society: Co-productive networks for a new public administration. Ph.D. research proposal at UK Open University, 2019, p. 8.
- SICILIA, M., GUARINI, E., SANCINO, A., ANDREANI, M., RUFFINI, R. Public services management and co-production in multi-level governance settings. *International Review of Administrative Sciences*, 2016, vol. 82, no. 1, pp.8–27.
- THOMAS, J.C. Citizen, Customer, Partner: Rethinking the Place of the Public in Public Management. *Public Administration Review*, 2013, vol. 73, no. 6, pp. 786–796. DOI: https://doi.org/10.1111/puar.12109>
- TORFING, J., SØRENSEN, E., RØISELAND, A. Transforming the Public Sector Into an Arena for Co-Creation: Barriers, Drivers, Benefits, and Ways Forward, *Administration* and Society, 2016, vol. 51, no. 5, pp. 795–825. https://doi.org/10.1177/0095399716 680057>
- TROCCIOLA, G., PALUMBO, R. Co-producing services to enhance cultural heritage. The role of co-production in improving the quality of tourism services. *Sinergie – Italian Journal of Management*, 2015. DOI: https://doi.org/10.7433/SRECP.2015.05
- VERSCHUERE, B., BRANDSEN, T., PESTOFF, V. Co-production as a maturing concept". In: PESTOFF, V., BRANDSEN, T., VERSCHUERE, B. (eds) New Public Governance, the Third Sector and Co-Production. New York, Routledge, 2012, pp. 1–12, 424, 66.
- VOORBERG, WH, BEKKERS, VJJM and TUMMERS, LG. A Systematic Review of Co-Creation and Co-Production: Embarking on the social innovation journey. *Public Management Review*, 2015, vol. 17, no. 9, pp. 1333–1357.
- WILLIAMSON, B. Knowing public services: Cross sector intermediaries and algorithmic governance in public sector reform. *Public Policy & Administration*, 2014, vol. 29, no. 4, pp. 292–312. DOI: https://doi.org/10.1177%2F0952076714529139>