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## INNOVATION AS A TOOL FOR IMPROVING PUBLIC SERVICES QUALITY

Abstract: The aim of the article is to diagnose citizens' expectations regarding innovations implemented in the public services sector. The authors present the results of survey research conducted among students of Krakow universities. Respondents answered questions about the need for innovation in the public sector and the purposes they should serve. Based on the obtained results, the conclusion was drawn that an increasing number of citizens expect innovative activity in the public services sector. Therefore, the action of demand factors can be observed, although the mechanisms of their influence on the course of innovative processes in this sector are different from those in companies. The empirical research presented in the article was preceded by a theoretical introduction in which the authors describe the essence of innovation in the public sector, the conditions for their implementation, and the importance of citizens' participation in this process.

Keywords: innovation, public services, citizen participation

## 1. Introduction

The scope and costs of operating the public sector, as well as the quality of services it provides, have been an important topic of scientific discourse and public debate for many years. Determining the appropriate size of this sector and its role in meeting the needs of citizens will likely remain a controversial issue. However, there is consensus in the literature that as economic and social development progresses, citizens' expectations for the quality of public services continue to rise. Therefore, diagnosing these expectations, identifying trends, and even shaping attitudes in this area is becoming an increasingly challenging task for public authorities, including at the local level (James, 2009; Song, An, Meier, 2021). Public opinion research typically focuses on diagnosing citizens' needs, while expectations for problem-solving their

methods are less frequently studied. This creates an information gap in this area, particularly regarding the diagnosis of residents' expectations for the innovativeness of the public sector. Public management specialists have long listed innovation as a tool for improving the quality of public services (Gallouj, Savona, 2009), but social perceptions of these innovations are rarely studied.

The aim of this article is to partially fill this gap by diagnosing the expectations of Krakow residents regarding innovations implemented in the public sector. The authors present the results of survey research conducted among students at Krakow's universities, which is one of the largest groups of recipients of public services available in the city. The authors of the study aim to justify the thesis that social support for innovations implemented in the urban

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space is showing a growing trend. The empirical research presented in the article is preceded by a theoretical introduction in which the authors describe the essence of innovation in the public sector, the conditions for their implementation, and the importance of citizen participation in this process.

## 2. Theoretical background

For several decades after the concept of innovation became widespread in the literature on economics and management, it was primarily used in the context of the private sector. The public sector was mentioned in discussions on innovation, but in a specific role - as a component of the innovation process (basic research) and as a conditions conducive creator of to innovation in businesses (innovation policy). Individual public institutions, both government and local, were not seen as active agents in implementing innovative services for customers. However, this approach has been gradually changing. About four decades ago, the problem of innovation began to be discussed in the context of public sector entities. This was largely inspired by criticism of traditional management methods in public administration and the emergence of concepts for its reform (e.g. New Public Management) (Hughes 1994, Ferlie et al. 1996). The growing interest in innovation in the public sector was also influenced by the popularization of the concept of Corporate Social Responsibility (CSR), which emphasizes the social dimension of innovation (McGregor, Fontrodona 2008, Luo, Du 2012). Recently, a systemic approach to implementing innovation in public services has become increasingly popular, developed within the concept of smart cities (Ratten 2017).

The definition of innovation in the public sector does not differ significantly from the typical approaches used in business analysis. Regardless of whether the private or public sector is being considered, innovation is defined as changes that have certain characteristics. Firstly, an innovation is a change that has been implemented in practice (a project or concept is not yet an innovation). Secondly, innovation requires positive effects. For entrepreneurs, these are primarily economic benefits (cost reduction, sales growth, improved profitability). In the case of public entities, the focus is primarily on social benefits, such as improving the quality of life of stakeholders (e.g. through streamlining administrative services. optimizing public transportation, etc.). Economic benefits (e.g. cost reduction) in the public sector are also desirable, but they do not have to be of primary importance (Mulgan, Albury 2003).

The private and public sectors differ in terms of the types of innovations that are most commonly implemented. In the private sector, new products and services are important. Public sector entities introduce new services relatively infrequently, and new products are exceptions. The public sector is fundamentally service-oriented, and the range of tasks it performs is limited or closed (e.g. local government tasks may arise directly from legal regulations). Therefore, innovations in the public sector are focused more on improving the quality of services provided, rather than expanding their range (Walker 2006, Thenint 2010). The specificity of the public sector also means that it rarely develops technological usually innovations. These arise in commercial entities, while the public sector is their recipient.

Although the nature of innovation in the private and public sectors is similar, the set and significance of factors influencing the implementation process can vary significantly. The basic difference concerns the impact of demand determinants on innovative activity. In companies, demand factors affect their economic condition in a quite obvious way, through the market mechanism. Innovations that reduce costs allow for price reduction, and as a result, increase sales and market share; product differentiation provide innovations а advantage resulting in high demand and profit, and this effect is supported by image public benefits. In the sector. the implementation of innovations meeting stakeholders' expectations does not bring such economic effects. While cost benefits may arise, satisfaction with the quality of public services does not always translate into the number of customers or revenue growth. For example, a satisfied customer of an office will not visit it more often than necessary, nor will they leave more funds than, for example, a legally established administrative fee.

This does not mean that customer expectations regarding the innovation of public services should not be taken into account as a factor stimulating the innovative activity of public entities. These expectations are important, but the way they influence innovation is different than in the private sector. Demand for innovation expressed by citizens indirectly affects the decisions of public sector entities, using mechanisms. This concerns political involvement in the framework of representative democracy (choice of authorities demonstrating an innovative attitude), as well as direct participation (e.g. decisions on the implementation of specific projects innovative made using the procedure of participatory budgeting).

The political pressure exerted on the authorities, especially local ones, is just one of the channels through which citizens influence innovation processes in the public sector. Equally important is non-political which participation, means direct involvement of citizens in the process of developing and implementing innovative solutions (Dameri, Ricciardi. 2015: Berntzen, Johannessen, 2016; Grab, Ilie, 2019). The form of citizen participation may vary. The most obvious form is citizens' participation in the evaluation of introduced solutions. They do this while using them, providing feedback that is useful for making corrections and modifications. Residents can also be involved a bit earlier by acting as testers in the implementation phase of an innovative solution. The most advanced and increasingly popular formula for such participation is the so-called living labs, in which citizens are engaged in designing and testing innovations even before they are fully implemented (Nguyen, Marques, Benneworth, 2022). Citizens can take on even more creative roles by co-creating innovative ideas, for example, through cityinitiated crowdsourcing platforms (Gooch, Wolff, Kortuem, Brown, 2015; Shahrour, Xie, 2021). The extent of citizen participation in innovative projects depends on whether they are convinced of the benefits of the projects being implemented. Therefore, it is important to monitor their opinions and take informational action in this regard.

## 3. Research methods

Information on the expectations of Krakow residents regarding innovation in public services available in the city was obtained through survey research (questionnaire interview). The respondents were students from Krakow universities. Such a selection of respondents resulted from several premises. Firstly, Krakow is an academic city, so students constitute a large percentage of public sector clients. Secondly, their high and diverse activity means that they commonly use the full range of public services in the city. Finally, thirdly, students can be considered a group fully aware of the currently ongoing technological changes, which increasingly affect the public sector.

The survey was conducted in three rounds: in 2019, 2021, and 2023. In the first round, respondents filled out a traditional paper questionnaire, and in the two subsequent rounds, an online questionnaire. To ensure similar conditions, each time the survey was completed during teaching sessions in the presence of lecturers. In this study, information from the 1st and 3rd rounds of research was used (in the 2nd round, the questionnaire was modified to take into account circumstances related to the pandemic, so it contained fewer questions about innovation). In the first round. 1750 people completed the questionnaire. The third round is still ongoing, and so far, 501 questionnaires have been collected. This analysis can therefore be treated as preliminary. However, it should be emphasized that for a population of 143,000 students at Krakow universities, the required sample size is 383 people (assuming the following parameters: 95% confidence level, maximum error of 5%, fraction size of 0.5).

## 4. Results

The survey results indicate that already in 2019, over half of the respondents

recognized the need for implementing innovation in the public sector. Over 42% even stated that they should be implemented unconditionally. The percentage of people who claimed that there was no room for innovative solutions in the public sector was negligible (3.1%). It is noteworthy that almost one-third of the respondents had no opinion on this matter (see Table 1). Therefore, it can be concluded that there was no clear division between supporters and opponents of innovation in the public sector, but rather a division into engaged and indifferent individuals. This information can be seen as a signal of the challenges facing the city in terms of education and promotion innovative solutions. It is worth of emphasizing that Krakow is involved in many such projects, and one of the strategic of its development is goals the implementation of the smart city concept.

**Table 1.** Expectations of respondents regarding innovation in the public sector

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Innovation in the public sector:	2019	2023
should be absolutelyintroduced	42.5%	61.3%
are needed, but not necessary in this sector	12.6%	17.9%
are indifferent to the functioning of this sector	10.7%	4.0%
are undesirable in this sector	3.1%	1.0%
I have no opinion	31.2%	15.7%

The results of a later round of research (in 2023) indicate clear changes in the attitudes of the respondents. The direction of these changes is in line with expectations. In terms of their scale, they can be considered radical. The proportion of students supporting innovation in the public sector has increased by almost one-third. As a result, almost 80% of respondents currently expect innovative activity from the public sector, and almost 2/3 believe that such innovations should be introduced unconditionally. The percentage of students who have no opinion on this subject has dropped by half. Only 1% of respondents described innovation in the public sector as undesirable.

The analyzed period also saw a change in respondents' preferences regarding the goals that innovation in the public sector should serve. The percentage of respondents who identified two desired effects of these innovations - improving the quality of public services and reducing the cost of providing these services - significantly increased. In 2023, over <sup>3</sup>/<sub>4</sub> of respondents pointed to the improvement of the quality of services (compared to about 46% in 2019). The percentage of respondents indicating cost reduction as the goal of innovation in the public sector increased even more. In 2019, this direction of innovative activity in the public sector was indicated by every third respondent, while in 2023, their share almost

doubled. The percentage of respondents expecting the introduction of additional, innovative public services increased from about 30% in 2019 to 40% in 2023. However, the percentage of people claiming that innovation in the public sector should have an ecological character did not change significantly over the four years. Young people are usually sensitive to environmental problems, so it may be surprising that a relatively small percentage of respondents indicate ecological effects of innovation as particularly desirable. This is probably due to the fact that Krakow is quite actively implementing and promoting such solutions (e.g., in public transport). Perhaps respondents emphasized other areas where there is more to be done. The emphasis on the need to reduce costs, especially in the last round of surveys, may result from a general belief in the deteriorating financial condition of local governments in Poland in recent years.

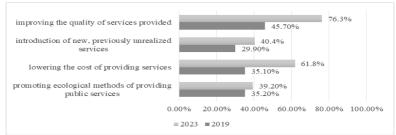


Figure 1.Expected effects of innovation in the public sector in the opinion of respondents

## 5. Conclusion

Citizens' opinions and expectations have a significant impact on the course of innovative processes in the public sector. Firstly, residents interested in innovation can exert pressure on public institutions using direct and indirect democratic tools. Secondly, citizens aware of the benefits of implementing modern technologies in the public sector can participate in the process of development, their testing, and implementation in various ways. For these reasons, it is important to diagnose public opinions on innovation in the public sector.

The research presented in this study indicates that the vast majority of surveyed residents of Krakow expect the implementation of innovations in public services provided within the city. They also have specified expectations regarding the outcomes of such innovations: they should primarily contribute to improving the quality of public services and lowering their costs. Based on this, it can be concluded that in Krakow, there are social conditions that favor the innovative activity of local authorities. This increases the chances of success for implemented projects, especially those aimed at implementing the concept of a smart city.

However, it is worth noting that only students Krakow universities from participated in the study. They were representatives of a very large but specific group of public service users. It can be suspected that support for innovation in other groups of residents, especially in the older generation, may be lower. Conducting broader research, covering the entire crosssection of society, is recommended. They could answer the question of whether the promotion of innovative solutions in the city effective and whether there is are educational needs in this area.

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#### **References:**

- Berntzen, L., & Johannessen, M. R. (2016, June). The role of citizens in "smart cities.". In Management International Conference (pp. 1-4).
- Dameri, R. P., & Ricciardi, F. (2015). Smart city intellectual capital: an emerging view of territorial systems innovation management. *Journal of Intellectual Capital*, *16*(4), 860-887.
- Ferlie E., Ashburner L., Fitzgerald L., & Pettigrew A. (1996). *The New Public Management in Action*. Oxford University Press.
- Gallouj, F., & Savona, M. (2009). Innovation in services: a review of the debate and a research agenda. *Journal of evolutionary economics*, 19, 149-172.
- Gooch, D., Wolff, A., Kortuem, G., & Brown, R. (2015, September). Reimagining the role of citizens in smart city projects. In Adjunct proceedings of the 2015 ACM international joint conference on pervasive and ubiquitous computing and proceedings of the 2015 ACM international symposium on wearable computers (pp. 1587-1594).
- Grab, B., & Ilie, C. (2019). Innovation management in the context of smart cities digital transformation. *Economic and Social Development: Book of Proceedings*, 165-174.
- Huges O. E. (1994). *Public Management and Administration. An Introduction*. The Macmillan Press Ltd., London.
- James, O. (2009). Evaluating the expectations disconfirmation and expectations anchoring approaches to citizen satisfaction with local public services. *Journal of public administration research and theory*, 19(1), 107-123.
- Luo, X., & Du, S. (2012). Good companies launch more new products. *Harvard Business Review*, 90(4), 28.
- MacGregor S. P., & Fontrodona J. (2008). Exploring the Fit between CSR and Innovation. IESE Business School Working Paper No. 759.
- Mulgan, G., & Albury, D. (2003). Innovation in the public sector. *Strategy Unit, Cabinet Office*, 1(1), 40.
- Nguyen, H. T., Marques, P., & Benneworth, P. (2022). Living labs: Challenging and changing the smart city power relations?. *Technological Forecasting and Social Change*, 183, 121866.
- Ratten, V. (2017). Entrepreneurship, innovation and smart cities (Vol. 11). Taylor & Francis.
- Shahrour, I., &Xie, X. (2021). Role of Internet of Things (IoT) and crowdsourcing in smart city projects. *Smart Cities*, 4(4), 1276-1292.
- Song, M., An, S. H., & Meier, K. J. (2021). Quality standards, implementation autonomy, and citizen satisfaction with public services: cross-national evidence. *Public Management Review*, 23(6), 906-928.
- Thenint, H. (2010). Mini Study 10 Innovation in the public sector. *Global Review of Innovation Intelligence and Policy Studies*, 18(2), 3-48.
- Walker, R. M. (2006). Innovation type and diffusion: An empirical analysis of local government. *Public administration*, 84(2), 311-335.

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