

DOI <https://doi.org/10.30525/2592-8813-2026-1-7>

CITIZEN-ORIENTED DIGITAL PLATFORMS AND THE CREDIBILITY OF PUBLIC SECTOR PERFORMANCE ASSESSMENT

Mammadov Vagif Farid,

Postgraduate Student, Azerbaijan Tourism and Management University

(Baku, Azerbaijan)

ORCID ID: 0009-0001-1611-2045

vagifmammadov23@gmail.com

Abstract. Public sector performance assessment has traditionally relied on internally generated administrative data and managerial reporting systems, often producing opaque evaluation processes that insufficiently reflect citizens' lived experiences and raise concerns about transparency and credibility. More recently, the expansion of digital data ecosystems and citizen-oriented platforms has transformed the informational foundations of public governance by enabling multi-source data integration, real-time monitoring, and citizen participation in performance assessment. Despite this shift, existing scholarship remains fragmented and offers limited analytical insight into how these digital and participatory arrangements concretely enhance transparency and reliability.

This article addresses this gap by examining the mechanisms through which digital data ecosystems and citizen-oriented platforms reshape performance assessment in public sector organizations. Adopting a qualitative and analytical approach, the study synthesizes insights from the literatures on public sector performance measurement, co-production, digital governance, and accountability. Rather than viewing transparency and reliability as purely technical attributes, the article conceptualizes them as institutionally and socially constructed outcomes shaped by data plurality, verification mechanisms, and structured government–citizen interaction.

The analysis shows that digital data ecosystems enhance transparency through standardization, traceability, and open access to performance information, while citizen-oriented platforms strengthen reliability by introducing alternative sources of validation and continuous public scrutiny. The interaction between administrative data and citizen-generated feedback reduces information asymmetries, constrains opportunistic reporting, and enhances the legitimacy of performance results. By linking transparency and reliability to public trust, the article reframes performance assessment as a governance mechanism rather than a narrowly managerial tool, offering theoretical and practical insights for digitally mediated public administration.

Key words: public sector performance measurement; digital data ecosystems; citizen-oriented platforms; transparency; reliability; public trust.

Introduction. Performance measurement has long been regarded as a cornerstone of public sector governance, functioning as a key instrument for managerial control, accountability, and service improvement. Traditionally, public organizations have relied on internally generated administrative data, formal reporting procedures, and standardized indicators to assess organizational effectiveness and efficiency. While these approaches have contributed to managerial rationalization, they have also been widely criticized for producing inward-looking and opaque evaluation systems that insufficiently reflect citizens' lived experiences and provide limited assurance of transparency and credibility (Esden, 2001; Ömürgönülşen, 2002; United Nations Development Programme, 2009).

The rapid expansion of digital government initiatives has fundamentally altered the informational foundations of public administration. Digital data ecosystems—characterized by the integration of administrative records, open government data, real-time digital traces, and citizen-generated feedback—have introduced new possibilities for monitoring, evaluating, and communicating public sector performance. At the same time, citizen-oriented digital platforms such as feedback portals, service rating systems, and co-production tools have enabled citizens to move beyond passive service con-

sumption toward active participation in performance assessment processes (Khine, Mi, Shahid, 2021; Woolum, 2011). These developments challenge conventional performance measurement paradigms and raise critical questions about how transparency and reliability are produced and sustained in digitally mediated governance environments.

Despite growing scholarly interest in transparency, citizen participation, and digital governance, existing research remains conceptually fragmented. One strand of literature concentrates on performance indicators and measurement techniques, primarily emphasizing technical validity, efficiency, and administrative control (Tomorri, Keco, Mehmeti, 2020; Thijs, 2011). Another strand focuses on citizen satisfaction and co-production, highlighting democratic legitimacy and service quality outcomes (Li, Wu, Zhang, Han, 2023; Voet, Bekerom, 2025). A third body of work examines digital tools and open data as mechanisms for accountability and public scrutiny (Scott, 2007; Baredes, 2022). However, these strands are rarely integrated into a coherent analytical framework capable of explaining how digital data ecosystems and citizen-oriented platforms jointly enhance both transparency and reliability in public sector performance assessment.

More critically, the concept of reliability remains under-theorized in the public administration literature. Reliability is often treated implicitly as a methodological or technical attribute of indicators, rather than as an institutional and socially constructed outcome shaped by data plurality, verification mechanisms, and structured government–citizen interaction (Kareithi, Lund, 2012). As a result, transparency is frequently promoted as a normative ideal without sufficient attention to the mechanisms through which transparent information becomes credible, trustworthy, and publicly legitimate—particularly in digital and participatory contexts.

Against this background, the object of this study is public sector performance assessment systems operating within digital data ecosystems and citizen-oriented platforms. The study addresses the following research question: How, and through which mechanisms, do digital data ecosystems and citizen-oriented platforms enhance transparency and reliability in public sector performance assessment processes?

The primary purpose of this article is to analytically examine how digital data ecosystems and citizen-oriented platforms transform performance assessment from a closed, managerial exercise into an open, multi-source, and legitimacy-oriented governance process. Adopting a qualitative and analytical approach, the study synthesizes insights from public administration, co-production, digital governance, and performance evaluation literatures to develop an integrated conceptual understanding of transparency and reliability in digitally enabled performance measurement.

The contribution of this research is threefold. Theoretically, it reconceptualizes reliability as a relational and institutional construct rather than a purely technical property of indicators. Analytically, it bridges previously disconnected literatures on performance measurement, citizen participation, and digital data governance. Practically, it offers policy-relevant insights for governments seeking to design performance assessment systems that not only measure outcomes but also foster accountability, credibility, and public trust in an era of increasing transparency demands and declining institutional confidence.

By doing so, the article positions performance assessment not merely as a managerial tool, but as a central mechanism through which modern states negotiate accountability, legitimacy, and citizen trust in digitally mediated governance environments.

Classical Approaches to Public Sector Performance Measurement and Their Limitations

Early approaches to public sector performance measurement emerged largely from managerial and economic rationales that prioritized efficiency, output control, and compliance with predefined administrative standards (Esdén, 2001; Ömürgönülşen, 2002; Álvarez-Otero S., Álvarez-Valle, Arenas-Parra, Quiroga-García, 2024). Rooted in New Public Management principles, these frame-

works conceptualized performance primarily as the relationship between inputs and outputs, emphasizing quantifiable indicators that could be monitored through hierarchical reporting systems. In this model, performance measurement functioned as an internal control mechanism aimed at improving managerial efficiency and resource allocation rather than as a tool for public accountability or democratic legitimacy.

Comparative analyses reveal that while such systems achieved a degree of managerial standardization, they also produced structurally closed evaluation regimes. UNDP (2009) and Thijs (2011) acknowledge that classical indicator-based systems improved internal learning and benchmarking capacities within public organizations (United Nations Development Programme, 2009; Thijs, 2011). However, they simultaneously underline a critical limitation: performance indicators were largely detached from citizens' lived experiences and social outcomes. As a result, what was measured often reflected organizational convenience rather than public value, leading to a misalignment between reported performance and perceived service quality.

Evidence from transition and post-Soviet contexts further exposes the limitations of these approaches. Tomorri et al. (2020), examining public service performance in Albania, demonstrate that the proliferation of indicators did not enhance evaluative precision; instead, it encouraged compliance-oriented behavior and formalistic reporting (Tomorri, Keco, Mehmeti, 2020). Similarly, Suleymanlı (2018) argues that in post-Soviet administrative systems, performance measurement often reproduces Soviet-era control logics under the guise of modern management reforms. In such contexts, indicators serve symbolic and political functions—signaling reform without substantively improving transparency or accountability (Suleymanlı, 2018).

A critical comparison across these studies reveals a shared structural weakness: classical performance measurement frameworks rely on unilateral information production. Performance data are generated, interpreted, and reported almost exclusively by the organizations being evaluated. This creates information asymmetries that limit external verification and undermine the credibility of reported outcomes. Citizens, when considered at all, appear as passive recipients of services rather than as epistemic contributors to performance knowledge. Consequently, transparency becomes procedural rather than substantive, and credibility is assumed rather than demonstrated.

From an analytical perspective, this literature exposes a fundamental conceptual gap. While traditional frameworks are institutionally functional—supporting managerial coordination and control—they are normatively weak in environments characterized by increasing demands for openness, participation, and trust. They lack mechanisms for multi-source validation, continuous scrutiny, and interactive feedback, which are essential under conditions of digital governance and declining institutional trust.

So, the absence of citizen-generated data and digital verification mechanisms renders traditional systems incapable of producing credible and legitimate performance assessments. Addressing this gap requires moving beyond indicator proliferation toward digitally enabled, citizen-inclusive data ecosystems that reconfigure performance measurement as an open, multi-actor governance process. This reconceptualization directly responds to the literature's unresolved question of how transparency and reliability can be institutionally generated rather than administratively presumed.

Performance Information, Transparency, Public Trust, and Citizen Participation: From Normative Ideals to Epistemic Mechanisms

Recent scholarship on public sector performance measurement increasingly shifts attention from purely managerial concerns toward the relationship between performance information, transparency, and public trust. van der Voet and van den Bekerom (2025) demonstrate that performance information affects citizen satisfaction not only through service outcomes but also by shaping expectations regarding what public organizations can and should deliver (Voet, Bekerom, 2025). This insight

marks an important departure from earlier output-oriented models by highlighting the perceptual and relational dimensions of performance assessment. Similarly, Barbera et al. (2025) conceptualize performance assessment as an interactive arena in which governments and citizens engage in continuous sense-making processes, suggesting that transparency is not a neutral technical condition but a socially mediated practice capable of generating both cooperation and conflict (Barbera, Sicilia, Steccolini, 2025).

Complementary studies emphasize the role of open performance data in strengthening accountability beyond formal state control. Scott (2007) shows how civil society actors use official statistics to scrutinize public sector performance, while Baredes (2022) argues that user-centered performance information improves service experience by making evaluation processes more intelligible to citizens (Scott, 2007; Baredes, 2022). Taken together, these studies suggest that transparency can function as a bridge between performance measurement and public trust—yet they stop short of explaining under what conditions transparency produces credibility rather than skepticism.

A critical limitation of this literature is its tendency to equate transparency with data openness alone. Performance information is frequently treated as inherently trust-enhancing once disclosed. However, empirical and conceptual contributions rarely address whether the disclosed data are reliable, interpretable, or contextually meaningful to non-expert audiences. As a result, transparency risks becoming performative rather than substantive, reinforcing information overload or selective interpretation rather than informed trust. This gap is particularly salient in digital governance environments, where vast quantities of data are made available without corresponding mechanisms for validation or integration.

The literature on co-production and citizen participation further complicates this picture. Co-production scholarship emphasizes citizens' active involvement in both the delivery and evaluation of public services. Empirical studies consistently find that citizen participation enhances satisfaction and perceived service quality, especially in domains such as environmental governance. Woolum (2011) extends this argument by suggesting that involving citizens in performance measurement strengthens democratic accountability and responsiveness. In these accounts, participation is largely framed as a normative good—valuable because it empowers citizens and democratizes governance processes [5].

However, more recent contributions introduce a note of caution. Barbera et al. (2025) warn that citizen-generated performance data may introduce subjectivity, contestation, and even conflict if it is not institutionally structured and analytically integrated (Barbera, Sicilia, Steccolini, 2025). This observation reveals a key tension in the literature: while citizen participation is celebrated for its democratic virtues, its implications for the credibility of performance information remain underexplored. Participation alone does not automatically improve performance assessment; without clear rules of aggregation, verification, and interpretation, it may even undermine confidence in official evaluations.

Building on these insights, this article advances the argument that transparency and citizen participation should not be understood merely as normative or democratic ideals, but as epistemic mechanisms within performance assessment systems. I argue that citizen-oriented platforms acquire their analytical value not simply by enabling participation, but by functioning as alternative sources of validation that can corroborate, contextualize, or challenge administrative performance data. When embedded within digital data ecosystems that allow for cross-verification and traceability, citizen feedback enhances reliability by reducing information asymmetries and constraining opportunistic reporting. This perspective directly addresses the literature gap by shifting the focus from whether transparency and participation matter to how they produce credible and trustworthy performance information—thereby aligning performance measurement with the broader governance objective of public trust formation.

Digital Data Ecosystems, Multi-Source Performance Evaluation, and the Conceptualization of Reliability

Digital data ecosystems have emerged as a defining feature of contemporary public sector performance assessment, enabling the systematic integration of administrative records, open government data, and citizen-generated feedback within unified evaluative frameworks. International organizations such as the OECD (2022) and UNDP (2009) emphasize that digital tools significantly enhance the technical dimensions of performance measurement by improving indicator standardization, real-time monitoring, data accessibility, and cross-organizational comparability (United Nations Development Programme, 2009; Baredes, 2022). In contrast to traditional, silo-based reporting systems, digital ecosystems facilitate continuous data flows and reduce temporal and informational gaps between service delivery and evaluation.

Empirical evidence from civil society and non-governmental organization (NGO) performance research further reinforces the value of multi-source evaluation frameworks. Studies demonstrate that combining internal administrative indicators with external stakeholder data strengthens organizational accountability, learning capacity, and legitimacy (Álvarez-Otero, Álvarez-Valle, Arenas-Parra, Quiroga-García, 2024; Hanay, Uzun, Özder, 2020; Gholipour, Sadeghi, Qolipour, Haeri, Hamrahi Yengejeh, Mohammadi, 2025). Importantly, Cooke (2019) and Scott (2007) argue that such ecosystems reconfigure power relations in performance assessment by enabling non-state actors—civil society organizations, researchers, and citizens—to interrogate and challenge official performance narratives (Scott, 2007). In this sense, digital data ecosystems do not merely improve measurement accuracy but also alter the governance logic of evaluation by expanding who can observe, interpret, and contest performance information.

Despite these advances, the existing literature remains analytically incomplete. While the benefits of multi-source data integration are well documented, most studies treat digital data ecosystems as neutral technical infrastructures rather than as institutional arrangements that actively shape credibility and trust. The dominant focus remains on efficiency, indicator quality, or data availability, with limited attention to how reliability is constructed, stabilized, and recognized within these systems. This limitation reflects a broader conceptual gap in public sector performance literature concerning the meaning and role of reliability.

Reliability is rarely theorized as an independent analytical category. Instead, it is implicitly equated with methodological rigor, indicator validity, or organizational evaluation capacity (Esdén, 2001). Research on NGO evaluation capacity suggests that institutional learning and professionalization improve evaluation outcomes (Cooke, 2019; Ngai, Cheung, Ng, Li, Chen, Wang, Yu, 2025; Golini, Landoni, Kalchschmidt, 2017; TÜSEV. Monitoring matrix on enabling environment for civil society development: 2020–2021 Türkiye report, 2023), yet these insights are seldom extended to digitally mediated or citizen-centered performance assessment contexts. As a result, reliability is treated as an internal technical property of measurement systems rather than as an outcome shaped by institutional design, data plurality, and public scrutiny.

This article advances a different analytical perspective by conceptualizing reliability as a socially constructed and institutionally mediated phenomenon. From this viewpoint, digital data ecosystems contribute to reliability not simply by increasing data volume or precision, but by embedding verification, traceability, and cross-validation mechanisms into performance assessment processes. The coexistence of administrative data and citizen-generated feedback enables continuous comparison between official representations of performance and lived service experiences. This interaction constrains opportunistic reporting, exposes inconsistencies, and enhances the perceived credibility of performance results.

By integrating digital infrastructures with citizen-oriented platforms, performance assessment systems move beyond closed managerial control toward open, reflexive governance architectures.

Reliability, in this context, emerges from visibility, contestability, and sustained public engagement rather than from technical sophistication alone. This reconceptualization directly addresses a key gap in the literature by explaining how digital data ecosystems institutionalize reliability and link transparency to public trust—thereby supporting the article’s broader aim of reframing performance assessment as a legitimacy-producing mechanism in contemporary public administration.

Illustrative Cases of Citizen-Oriented Digital Platforms

To illustrate how digital data ecosystems and citizen-oriented platforms operate in practice, this section briefly discusses two well-documented platforms—FixMyStreet in the United Kingdom and the NYC 311 Open Data and Feedback System in the United States. These cases exemplify how multi-source data integration, citizen validation, and continuous public scrutiny enhance transparency and reliability in public sector performance assessment.

The UK-based FixMyStreet platform enables citizens to report local public service issues such as road damage, street lighting failures, and waste management problems directly to local authorities through an open digital interface. Submitted reports are publicly visible, allowing other users to track the status of each request and observe official responses. Importantly, citizens can confirm whether an issue has been satisfactorily resolved or challenge its closure, introducing a feedback-based validation mechanism. Through the integration of citizen-generated data with administrative response records, FixMyStreet institutionalizes transparency and reliability by reducing information asymmetries and enabling continuous public scrutiny of local service performance (Report, view, or discuss local problems, 2025).

A complementary large-scale example is provided by New York City’s 311 Open Data and Feedback System, which functions as an integrated digital data ecosystem combining administrative service records with citizen-generated feedback. All service requests, response times, and resolution outcomes are published in open data formats and updated in near real time. This transparency enables independent verification by researchers, journalists, and civil society organizations, transforming performance assessment into a continuously verifiable governance process. Crucially, the NYC 311 model demonstrates that open data alone does not guarantee reliability; rather, reliability emerges when administrative performance information is systematically cross-checked with citizen feedback and external scrutiny. In this way, the platform embeds reliability within institutionalized verification and data integration mechanisms (311 Service Requests from 2010 to Present).

Together, these illustrative cases reinforce the article’s central argument that transparency and reliability in public sector performance assessment are not automatic outcomes of digitalization. Instead, they are institutionally produced through the interaction of administrative data, citizen participation, and digital governance architectures that enable cross-validation and sustained public oversight.

Conclusion. This article examined how digital data ecosystems and citizen-oriented platforms reshape public sector performance assessment by enhancing transparency and reliability. Drawing on a qualitative and analytical synthesis of the literatures on public administration, performance measurement, co-production, and digital governance, the study moved beyond descriptive accounts of digitalization to identify the institutional mechanisms through which performance information becomes credible, legitimate, and trust-enhancing.

The analysis confirms that traditional performance measurement systems—based on internally generated administrative data and hierarchical reporting—remain institutionally functional but normatively insufficient. While they support managerial coordination and internal control, they reproduce information asymmetries, marginalize citizen experience, and rely on presumed rather than demonstrable credibility. Digitally enabled performance assessment, by contrast, alters the epistemic foundations of evaluation by integrating multiple data sources and institutionalizing structured interaction between governments and citizens.

In direct response to the research question, the study identifies three interrelated mechanisms through which digital data ecosystems and citizen-oriented platforms enhance transparency and reliability in public sector performance assessment. First, digital data ecosystems strengthen transparency by institutionalizing data standardization, traceability, and comparability across administrative and non-administrative data sources. Second, citizen-oriented platforms enhance reliability by introducing alternative sources of validation that corroborate, contextualize, or challenge internally generated performance data. Third, the interaction between administrative data and citizen-generated feedback reduces information asymmetries and constrains opportunistic reporting, thereby strengthening the credibility and legitimacy of performance assessment outcomes.

These findings demonstrate that transparency and reliability are not automatic consequences of data openness or citizen participation alone. Rather, they are institutionally produced through the design of digital governance architectures that enable cross-verification, public scrutiny, and continuous interaction between governments and citizens. In this context, performance assessment evolves from a one-time reporting exercise into a reflexive and continuously contested governance process.

The central theoretical contribution of this study lies in reconceptualizing reliability as a socially constructed and institutionally mediated outcome rather than a purely technical attribute of indicators. Reliability emerges from visibility, contestability, and sustained public engagement enabled by digital and participatory infrastructures. By explicitly linking transparency and reliability to public trust, the article reframes performance assessment as a legitimacy-producing governance mechanism rather than a narrowly managerial tool.

From a policy perspective, the findings suggest that governments seeking to strengthen accountability and public trust should treat digitalization as an institutional redesign rather than a technical upgrade. Digital data ecosystems should be developed as governance architectures embedding clear rules for data integration, verification, and traceability across administrative records, service delivery data, and citizen feedback. Likewise, citizen-oriented platforms should be formally institutionalized within performance assessment systems, supported by standardized indicators, aggregation rules, and analytical capacities that transform citizen participation into a reliable epistemic resource.

Overall, this study contributes to closing a key gap in the literature by explaining how digital data ecosystems and citizen-oriented platforms jointly transform public sector performance assessment. By integrating transparency, reliability, and citizen participation within a single analytical framework, it advances a governance-oriented understanding of performance measurement. Future research may build on this framework through empirical investigations of specific platform designs, sectoral applications, and cross-country variations, further refining our understanding of credibility and trust in digitally mediated public governance.

References:

1. Esden B.P. (2001). Performance measurement in public sector organizations: Focus on local governments. *Philippine Journal of Public Administration*, vol. 45, no. 1–2, pp. 1–24. (accessed 10.11.2025)
2. Ömürgönülşen U. (2002). Performance measurement in the public sector: Rising concern, problems in practice and prospects. *Hacettepe University Journal of Economics and Administrative Sciences*, vol. 20, no. 1, pp. 99–134.
3. (2009). United Nations Development Programme. A users' guide to measuring public administration performance. UNDP.
4. Khine P.K., Mi J., Shahid R. (2021). A comparative analysis of co-production in public services. *Sustainability*, vol. 13, no. 12, Article 6730. DOI: 10.3390/su13126730.
5. Woolum J. (2011). Citizen involvement in performance measurement and reporting. *Public Performance & Management Review*, vol. 35, no. 1, pp. 79–102. DOI: 10.2307/23208808.
6. Tomorri I., Keco R., Mehmeti G. (2020). Examining the indicators of public services performance: The case of Albania. *Public Policy and Administration*, vol. 19, no. 4, pp. 183–194.

7. Thijs N. (2011). Measure to improve: Improving public sector performance by using citizen–user satisfaction information. European Institute of Public Administration.
8. Li C., Wu J., Zhang H., Han Z. (2023). Co-production and citizens’ satisfaction with public services: The case of environmental public services in China. *Lex Localis – Journal of Local Self-Government*, vol. 21, no. 1, pp. 117–142.
9. van der Voet J., van den Bekerom P. (2025). Performance information, expectations and satisfaction with public service delivery in the context of co-production initiatives. *Public Management Review*, vol. 27, no. 4, pp. 1157–1178.
10. Scott C. (2007). Figuring out accountability: Selected uses of official statistics by civil society to improve public sector performance. Q-Squared Working Paper, no. 37. University of Toronto.
11. Baredes B. (2022). Serving citizens: Measuring the performance of services for a better user experience. OECD Working Papers on Public Governance, no. 52. OECD Publishing.
12. Kareithi R.N.M., Lund C. (2012). Review of NGO performance research published in academic journals between 1996 and 2008. *South African Journal of Science*, vol. 108, no. 11–12, Article 755. DOI: 10.4102/sajs.v108i11/12.755.
13. Yu S., McLaughlin D.A. (2013). Program evaluation and impact assessment in international non-governmental organizations (INGOs): Exploring roles, benefits, and challenges. University of Saskatchewan.
14. Álvarez-Otero S., Álvarez-Valle E., Arenas-Parra M., Quiroga-García R. (2024). Analysis of the “good” performance indicators of non-governmental development organizations. *World Development Perspectives*, vol. 36, Article 100639. DOI: 10.1016/j.wdp.2024.100639.
15. Suleymanlı S. (2018). Common challenges in public sector performance measurement in post-Soviet countries. *Khazar Journal of Humanities and Social Sciences*, vol. 21, no. 1, Article 2.
16. Barbera C., Sicilia M., Steccolini I. (2025). Exploring government–citizen interaction in public service performance assessment. *Public Administration, advance online publication*. DOI: 10.1111/padm.13068.
17. Hanay U., Uzun F., Özder S.I. (2020). Sivil toplum kuruluşlarında kurumsal performans göstergelerinin karşılaştırmalı analizi. *TİDE Academia Research*, no. 2, pp. 287–322.
18. Gholipour K., Sadeghi A., Qolipour M., Haeri S.M., Hamrahi Yengejeh H., Mohammadi K. (2025). Performance evaluation and ranking of health non-governmental organizations in Iran. *BMC Public Health*, vol. 25, Article 3399. DOI: 10.1186/s12889-025-24464-8.
19. Cooke M. (2019). Strengthening collaboration between civil society organisations and the state in Ghana: Indicator tracking and strengthening. Twende Mbele.
20. Ngai S.S., Cheung C., Ng Y., Li Y., Chen C., Wang X., Yu E.N. (2025). Enhancing the organizational evaluation capacity of NGOs. *Research on Social Work Practice, advance online publication*. DOI: 10.1177/10497315251336713.
21. Golini R., Landoni P., Kalchschmidt M. (2017). The adoption of the logical framework in international development projects. *Development in Practice*, vol. 27, no. 1, pp. 145–154. DOI: 10.1080/14615517.2017.1354643.
22. TÜSEV (2023). Monitoring matrix on enabling environment for civil society development: 2020–2021 Türkiye report. TÜSEV Publications.
23. (2025). Report, view, or discuss local problems. Available at: <https://www.fixmystreet.com> (accessed 15.11.2025).
24. 311 Service Requests from 2010 to Present. Available at: https://data.cityofnewyork.us/Social-Services/NYC-311-Data/jrb2-thup/about_data, (accessed 15.11.2025).