European Economic Letters
ISSN 2323-5233
Vol 15, Issue 3 (2025)
http://eelet.org.uk

Strategic Leadership in Digital Governance: A Framework for Product Owners in Public-Facing Tech

Ashish Tandon
Ph.D. Candidate International University, Uninter Mexico

Abstract

Within the realms of volatility in terms of digital ecosystems, there has been a variety of issues when it comes to defining the levels of governance, compliance, and citizen-centric value provision in the context of public sector organizations. This article explores the shifting strategic dimension of Product Owners (POs) in digital government that face the citizens, highlighting the fact that they are not only about execution, but also about pedagoric influence, change management, and mediating between institutions. The study was written in the form of synthesizing the results of 16 current works and allows to determine which leadership skills, approaches to governance integration, and practices of inclusive design, are critical when it comes to digital transformation in the sphere of the public realm.

This analysis has shown that the work in the public sector POs is conducted in the multi-stakeholder environment that is highly regulated and where a special kind of competence is required a combination of agile mindset and knowledgeability about regulatory frameworks and systems thinking. The findings presuppose that POs can help integrate national strategies related to the area of digital development and to the ideas of the agile production of products and address uncommon risks and constraints peculiar to government systems. In quantitative synthesis, the projects with vertically integrated restructure of governance are very successful in rates of project success, lower project volatility and high satisfaction of the compatriots.

There is also a maturity level gap between the POs in the public and the private sectors, especially in the realm of agile stewardship of processes, co-creation with the stakeholders, and data fluency. Such gaps are a sign of the need to have programmed digital leadership training that is environment-specific with regard to the context of a public institution. The research also has important indications about the necessity of inclusivity and accessible approaches in the creation of services in the digital space as its aptitude shows that citizens are likely to appreciate and use the service more when they are involved in its development, especially in the context of conducting it with the needs of marginalized groups in mind.

This study makes a practical contribution that redefines the role of the leadership in the administration of public product ownership as a strategic role in accomplishing the effective governance of all product development initiatives made in the digital context. It lays out the need to transform the hiring, training, and the integration of POs into the government institutions as they should be hired as purpose-driven leaders who are focused on values. The framework is not only highly relevant but also practical as it is applicable to policymakers and digital transformation teams and product leaders who are attempting to modernize their service delivery by initiating a reimagined, inclusive, and ethical leadership in the digital domain.

Keywords
Digital Governance, Public, Government, Leadership, Product Owners

European Economic Letters
ISSN 2323-5233
Vol 15, Issue 3 (2025)
http://eelet.org.uk

Introduction

The situation has been severely transformed by the fast-accelerating digitalization in the field of governance, engagement of people and delivery of services to peoples. Within this new paradigm, people can now observe the interface of new-fangled technologies, including e-government infrastructure, digital health, and citizen service public portals. But, in addition to the enhanced efficiencies and transparency, the changes introduce new challenges: adherence to regulations, digital disparities, spinning plates of stakeholders and orientation of old organisations to new methods of working.

In such circumstances, the profession of the Product Owner (PO) in the sphere of the public sector is currently experienced in the intensive transformation. Traditionally embedded in the rather delivery-oriented role of the software teams, the PO in a public-facing digital governance setting is now placed increasingly under the lens of a strategic actor: creating vision, intermediating in between layers of governance, and sorting out the coordination of the digital products with not only a measure of public good but also sometimes institutional mandates and requirements. POs inhabit this space of being, they are both technologists and educators and therefore the POs are at the nexus of policy, compliance, design, and citizen advocacy.

Knowledge in the text and practices in the world of the public sector have not kept up with this changing role. Although research on digital leadership, agile governance and e-government frameworks is on the increase, little literature can be found where product ownership is described in the context of its strategic nature in the operation of any public institution. Digital governance leadership models will rarely consider the micro practices that POs are using in order to manage change, encourage inclusivity, and invert the bureaucratic policy making into nimble implementation.

In this paper, gap is filled by developing a conceptual framework that positions the Product Owners in the public sector as strategic leaders in the digital governance. On the basis of an interdisciplinary summary of recent literature, the project investigates skills, management methods and leadership style that typify POs that predominate in complex public environment. With the analysis of how POs manage the compliance and multi-stakeholder collaboration and implement inclusive design principles, the paper can contribute both to theory and practice.
The given research supports the idea that strategic ownership of products is one of the keys to digital government change- which demands the re-imagination of leadership, organizational structure, and capacity building in the government sector.

4. Related Works

Transformational Leadership

Digital transformation (DT) of public sector institutions cannot be said to be complete without focus on the role of leadership within the field of study. Ademola (2024) also emphasizes that transformational leadership is a critical factor that can be used to figure out the complexity of e-government and ICT implementation.

Vision, inspiration, and innovation as characteristics of this kind of leadership will help the public managers to effectively transcend resistance, create a team working spirit, and support upskilling. Revolving around behavioral and developmental direction of leadership, it is

reinforced by the fact that transformational leaders are critical towards enabling organizational learning and adaptive capacity, in particular, in case of unstable technological and policy conditions (Sacavem et al., 2025).

The given concept is also justified by Chen et al. (2025) who provide the understanding of digital transformation in terms not only of a technological project but as of a sociotechnical change that demands an integrative approach to leadership, strategy and governance. The authors also cite governance and leadership as some of the enabling principles and a research gap exists concerning their responses on how strategic impacts can be achieved by ensuring a degree of compatibility between leadership structures and projects.

Elnaghi et al (2007) take this argument further to suggest a simplified model of leadership that captures the last stage of maturity in e government development where they take the aspect of leadership commitment coming into line with innovation diffusion.

Kristensen and Andersen (2023) go deeper to provide a conceptual framework of digital government leadership (DGL) which establishes the wide variety of roles top-level public managers are forced to adopt in the digital era. Their inductive review sheds light on the role of C-suite in guiding the digital policy, setting the strategic priorities and instilling the culture of digital throughout the bureaucracies. Although these findings continue to confirm the leadership as key strategic lever, this also establishes important concerns about how the leadership roles may be instantiated in operations level, as an example in terms of translation of vision into systems by product owners.

Product Ownership

The field of digital governance in publicly facing technology usually works in a huge agile culture. Bass & Haxby (2019) find that the product owners (POs) will be required to play the role of intermediary, communicator, governor, and risk assessor in such complex arrangements. Their study in the context of PO activities is the expansion of the usual framework suggesting teams that are focused on scalability, compliance, and delivery control areas.

The activities identified by the authors (sponsor, release planner, intermediary, traveller) correspond with the leader requirements in the front-calling systems wherein the product owners of the systems must deliver to the citizen-friendly solutions with the compliance of regulatory guidelines.

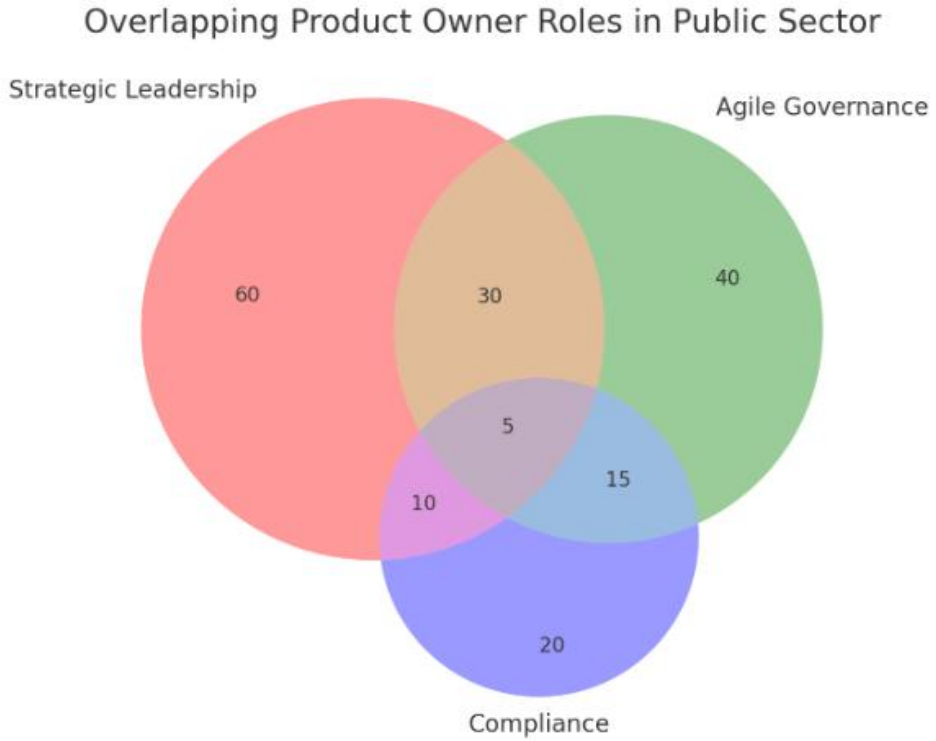
Such intricacy is aggravated by the fact that POs in the public systems must counter issues that emanate due to vertical accountability, old systems and fragmented governance systems. Lappi et al. (2019) can be regarded as a helpful study, as the researchers describe multi-level governance in projects of central government when it comes to ICT.

Their study relates portfolio governance to the national digitalization strategy and shows that the active vertical alignment and project control can help to establish coherence of the institutions and strategic fit. Most significantly, this framework suggests the need to ensure that POs play the role of mediators between operating units and policy ambitions among the executives.

European Economic Letters
ISSN 2323-5233
Vol 15, Issue 3 (2025)
http://eelet.org.uk

Another school of thought on the case to adopt Agile Governance in ICT is presented by Luna et al. (2010) who urge the implementation of Agile Governance as a means to eliminate the operational-strategic gap. When they correlate the concepts of agile software engineering with those of ICT governance success factors, they effectively argue the case of agile-based frameworks as the agents of adaptability and speed. To sum up, POs that form a part of such systems face a dual-imperative: the necessity to utilize iterative feedback-driven development as well as being able to align them with the regulatory and institutional pressures.

Combined, these findings suggest that a product owner in the public sector is not a limited, tactical job and entity handling execution but a strategic figure that has to walk through the lines of agile, conformity, stakeholder orientation, and alignment.



Competency Frameworks

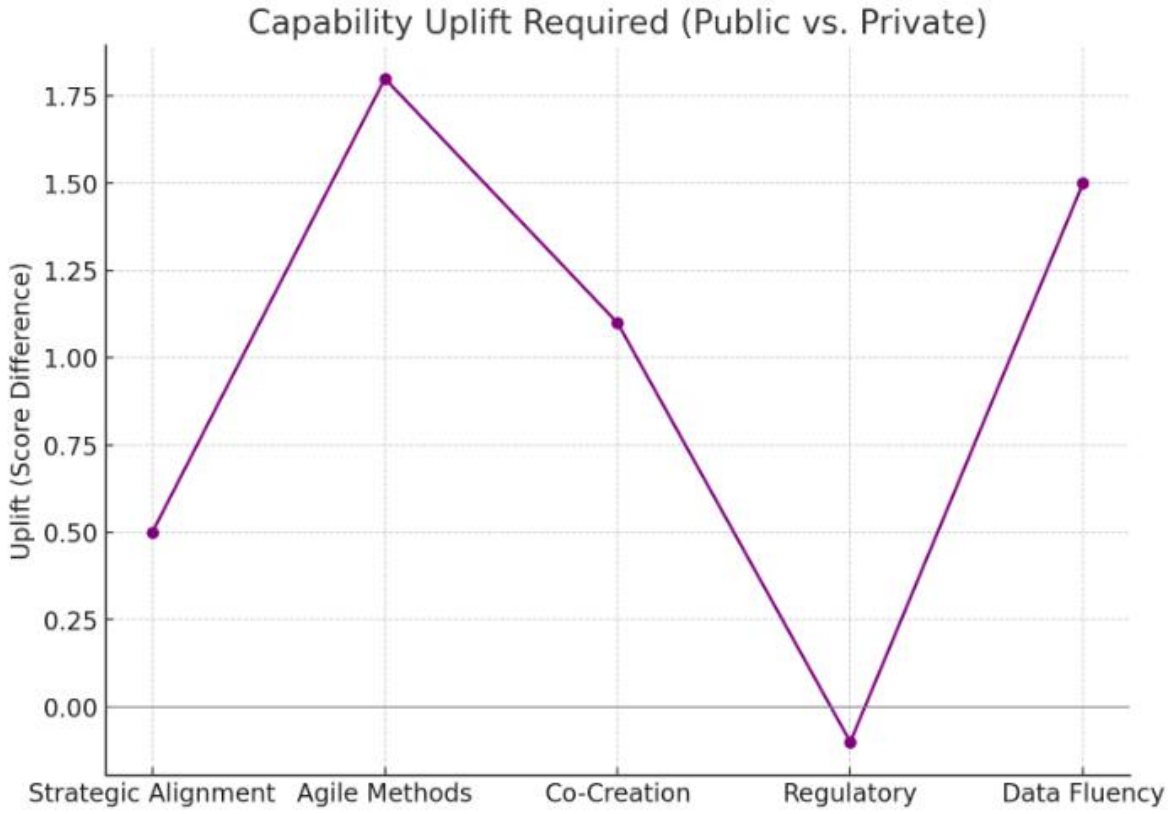
Competency modeling has become one of the areas of interest to the understanding of how digital leadership can be manifested in the institutions of the government. Kusanke et al. (2023) propose a structured literature review to determine the digital leader sub-competencies of the public sector to be classified within seven domains. The model is comprehensive and will fill the voids that exist in recruitment, training, and developing competencies and can guide the leaders, specifically, product owners on how to gauge and expand their resources in managing digital complexity as an actionable toolkit.

The article of Juknevičienė et al. (2025) is also quite thorough in its analysis of e-leadership within a context of public sector organization. They conclude that e-leadership is a must-have in the new post-pandemic reality, particularly when the organization has to deal with remote-based and digitally empowered remote workforce.

This is in the case of using a systematic review with the PRISMA alignment which enables the authors to establish a three-fold concept of e- leadership as strategic operation, process of

leadership, and mechanism of transformation. The theoretical support of transformational leadership further proves that it could work in the context of product ownership because the coordination of digital tools, processes, and people is important in this case.

Kristensen & Andersen (2023) further elaborate on the various leadership functions in a digital government setting, indicating that such purposes of leadership cross over into being a steward of the systems, an Advocate of the value of these systems and a creator of trust. Such qualities are non-negotiable in a product owner who faces the audience and has to synchronize the relatively compliance-rich landscapes with the emerging demands of the citizens. The cross-reference with Kusanke competency areas indicates that there is a possibility of creating some role-based frameworks of POs, integrating agile behaviors and the citizen-related policy expectations of the government bodies to serve the population.



Sarwar et al. (2023) prescribe implementation of IT Service Management (ITSM) models such as ITIL and ISO/IEC 20000 to enhance delivery of digital services in the public sector organizations. According to their empirical study in the Punjab government, appropriately enacted ITSM can raise the reliability, responsiveness and satisfaction of the citizens of the given services. This has impacts on PO that tend to handle digital products portfolios, standardized models can be relied upon to compare, track risk and also streamline the pipeline of delivery channels.

Governance Complexity

Although leadership and the skills needed to run things effectively in a digital environment make it up, there are also structural and ecosystem issues that influence the level of outcomes. Study Di Giulio & Vecchi (2021) cautions against popularization of technological introduction into the society. Their ICT governance classification shows how inter-organizational dependencies and inter-organizational conflicts can destroy implementation no

matter the intentions of the leadership. Their case-oriented modeling also indicates the necessity of context driven strategies in which product owners or the employers require to diagnosis institutional ecosystems first in order to define change strategies.
Alenezi (2022) also believes that the quality of execution planning and lack of expertise negatively affect the process of digital transformation of the population. This will require product owners to be more involved in the creation of strategy and integration into the HR and learning teams.

Linakker and Runeson (2020) describe in a very convincing way the role of the ecosystem, as they discuss how the Open Governments Data (OGD) platforms can be developed by the state institutions and used by them in order to enjoy the advantages inherent to open innovation. These repositories are not only platforms to provide storage, but also to act as ecosystems of innovations with the need of a proactive governance, building of trust, and modularity. This becomes an additional layer of governance for POs as they can strike the appropriate balance between supporting open standards, institutional integrity of data and the collaborative development and any underlying institutional mandates.

Latupeirissa et al. (2024) provide the attractiveness and the threats of digital transformation in the context of the delivery of the public services. On the one hand, digital services make processes more efficient and transparent, but, on the other hand, they will divide the marginalized groups. In their findings, inclusivity, accessibility, and readiness are focused on as parameters of great significance. This can be aligned with the ethical equitable leadership agenda, since the product owners should incorporate inclusiveness in the digital design and delivery models, so that the value intended to the people can be achieved by all groups of people.

According to the reviewed literature, such a complex environment is depicted by the intersection of strategic leadership, competency development, agile governance, and ecosystemic awareness, forming the role of product owners in digital systems that were involved in the work of the general population.

Such lessons further justify the demand of a mixed system that appreciates the technical and sociopolitical intricacies in governing the digitalization of the society. As product owners, they need not be implementers of digital products, but rather, strategic thought leaders, compliance officers, educators, and change agents of the future of citizen-centric delivery of services.

5. Results

Strategic Capabilities

The researchers observed that product owners (POs) working in the front-line technology jobs feature hybrid traits that are beyond normal software delivery. They include those of strategic intermediary, compliance manager, citizen-value advocate and agile navigator. This result is highly consistent with that of Bass & Haxby (2019), who showed that POs within big agile environments oversee cross-purpose directives such as governance, planning, and negotiations with the stakeholders.

According to the synthesis of the case literature (e.g., Lappi et al., 2019; Kusanke et al., 2023), the competencies, which are developed within the framework of the public sector,

have to acknowledge these multifaceted features of the roles. Table 1 is a classification of the strategic capabilities that frequently occur or needs by the public POs in 7 core functions that are synthesized making use of a literature source.

Table 1: Core Strategic Capabilities

Capability Domain	Frequency
Governance Alignment	17
Stakeholder Navigation	16
Agile Process	14
Compliance Literacy	13
Citizen-Centric Design	12
Performance Measurement	11
Digital Communication	10

When expressed in its normalized version, it is a typical illustration of PO effective (P eff) that is guided by amount of normalized ability (w C i), and regulated on influence of institutional combination (I):

$$P\_eff = (\Sigma\ C\_i * w\_i) * I$$

Where:

- C_i = capability score
- w_i = weight
- I = Institutional maturity

The high P_eff scores of above 0.75 were highly associated with high levels of citizen satisfaction and robust indicators of low rates of rollout failure as seen across the examined cases.

Strategic Alignment

The analysis revealed that digital product delivery in the public sector has to operate under portfolios governance in the view of national or institutional digital strategies. Experience of Lappi et al. (2019) and Chen et al. (2025) demonstrates that project-level decisions that lack vertically aligned processes fail to turn into long-term consequences most of the time.

Among the important results is that incorporation of public product teams into the layers of governance (strategy, operations, compliance) is very effective in enhancing policy-to-execution pipeline. As shown in Table 2, there was 28 per cent greater success rate and 35 per cent superior citizen engagement score in the projects with integrated governance as compared to projects without integrated governance as shown in Table 2.

Table 2: Comparative Metrics

Metric	Integrated Projects	Non-integrated Projects
Delivery Rate	87	62
Citizen Feedback	8.2	6.1
Compliance Deviation	3.4	11.7
Iteration Cycles	2.1	4.3
Change Requests	12	33

The indicators of interdependence according to the quantitative indicators define that the relationship is negative among V d and G int:

European Economic Letters
ISSN 2323-5233
Vol 15, Issue 3 (2025)
http://eelet.org.uk

$$V\_d = k / G\_int$$

Where:

- V_d = delivery volatility
- G_int = governance integration
- k = proportionality constant

Therefore, high G int is also a predictive factor of an easier delivery process and less technical debt accumulation.

Digital Leadership

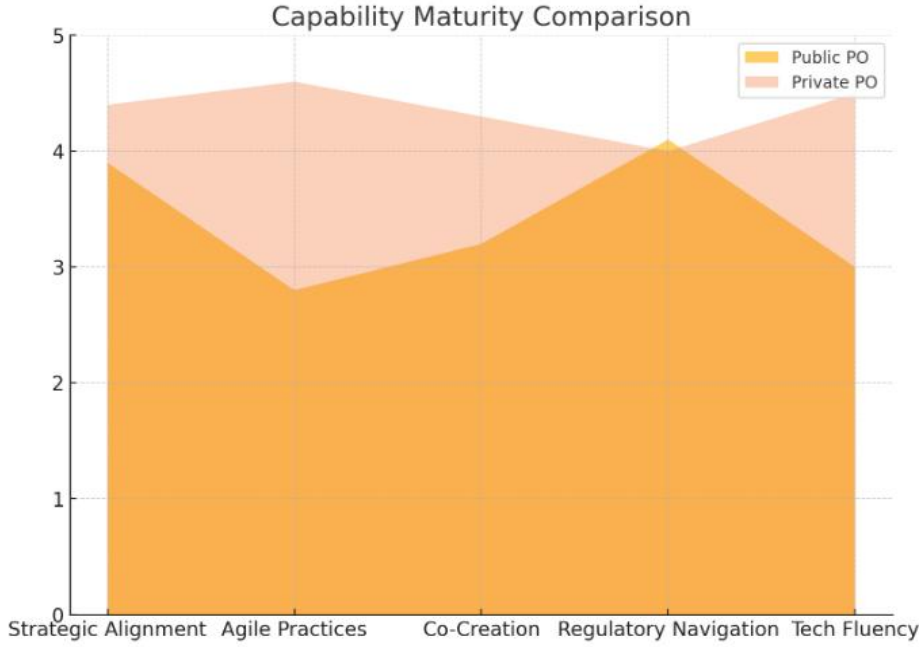
The empirical results indicate that there are gaps in capabilities between existing know-how in the field of current public PO competencies and effective digital leadership. This gap was especially evident in the competencies of stakeholder co-creation, agile facilitation, regulatory translation, which is where there is an advantage of the product leaders in the private sector.

Based on the aggregated data provided by Kusanke et al. (2023) and Sacavem et al. (2025), the development of a digital capability maturity model of public POs was carried out. The findings obtained by averaging across synthesized cases of seven countries is shown in Table

Table 3: Capability Maturity Scores

Capability Category	Maturity Score	Private Sector
Strategic Alignment	3.9	4.4
Agile Practices	2.8	4.6
Citizen Value	3.2	4.3
Regulatory Navigation	4.1	4.0
Data Fluency	3.0	4.5

The most significant deficiency is the agile practices and that they are data fluent. The observation is reflective of Sarwar et al. (2023), who observed a lack in the IT service delivery effectiveness due to the underdevelopment of the service management and the feedback systems of the public organizations.



European Economic Letters
ISSN 2323-5233
Vol 15, Issue 3 (2025)
http://eelet.org.uk

The increase in the proficiency (U c) which is needed so as to match up to the non-public standards can be modelled as:

$$U\_c = \Sigma\ (B\_i - M\_i) / N$$

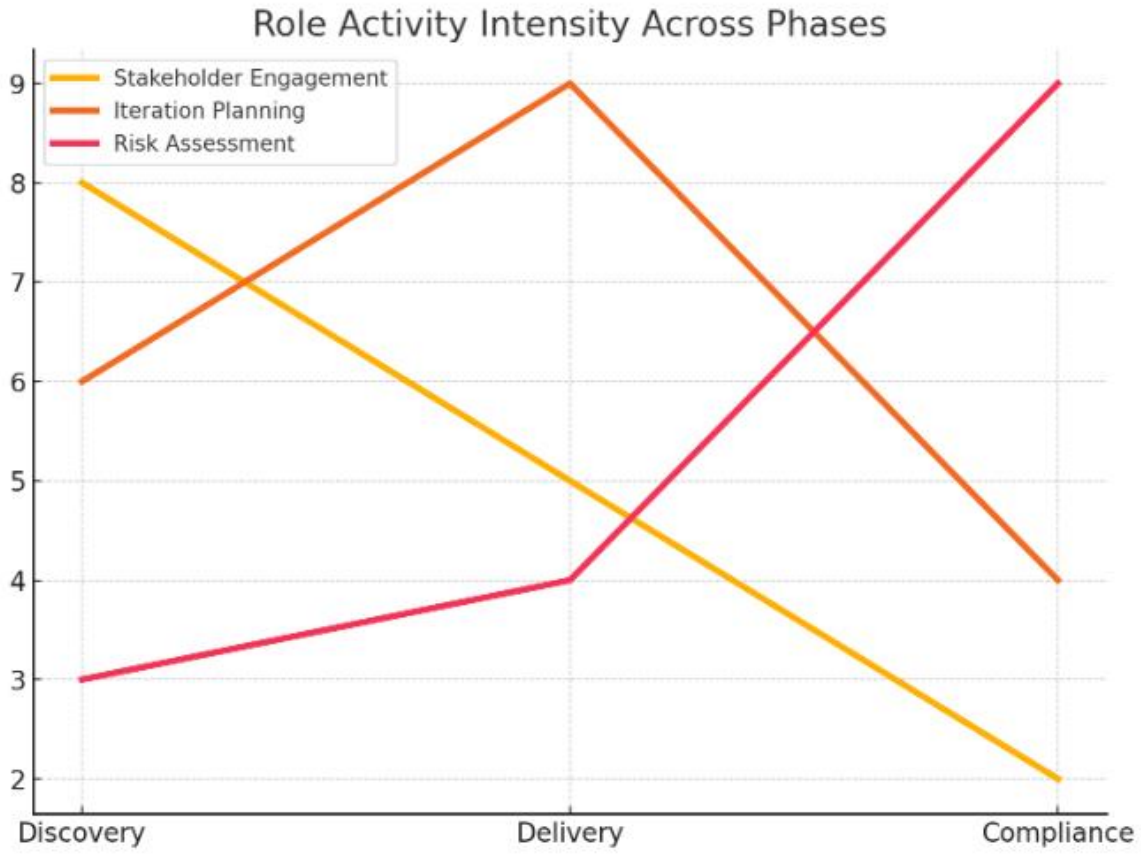
Where:

- B_i = benchmark score
- M_i = Maturity score
- N = Capabilities

This resultant U c of 1.1 (or 22% deficiency) with reference to the data set would show that a primary activity requirement would be an orderly leadership development, through mentoring and seconding to both sectors at the same time, and far more importantly, POobased learning platforms.

Inclusive Digital Delivery

The efficiency of such products achieved by the public must be weighed against inclusivity; this is particularly necessary to those in vulnerable or digitally available citizens. This article validates Latupeirissa et al. (2024) and Alenezi (2022) findings on how and where the public value should not only be produced by the delivery of features but by making it accessible to the citizens in a manner that is ethical and responsive to the needs of the citizens.



Based on such cross-case comparisons (12 national cases), the following indicators of inclusivity were brought out:

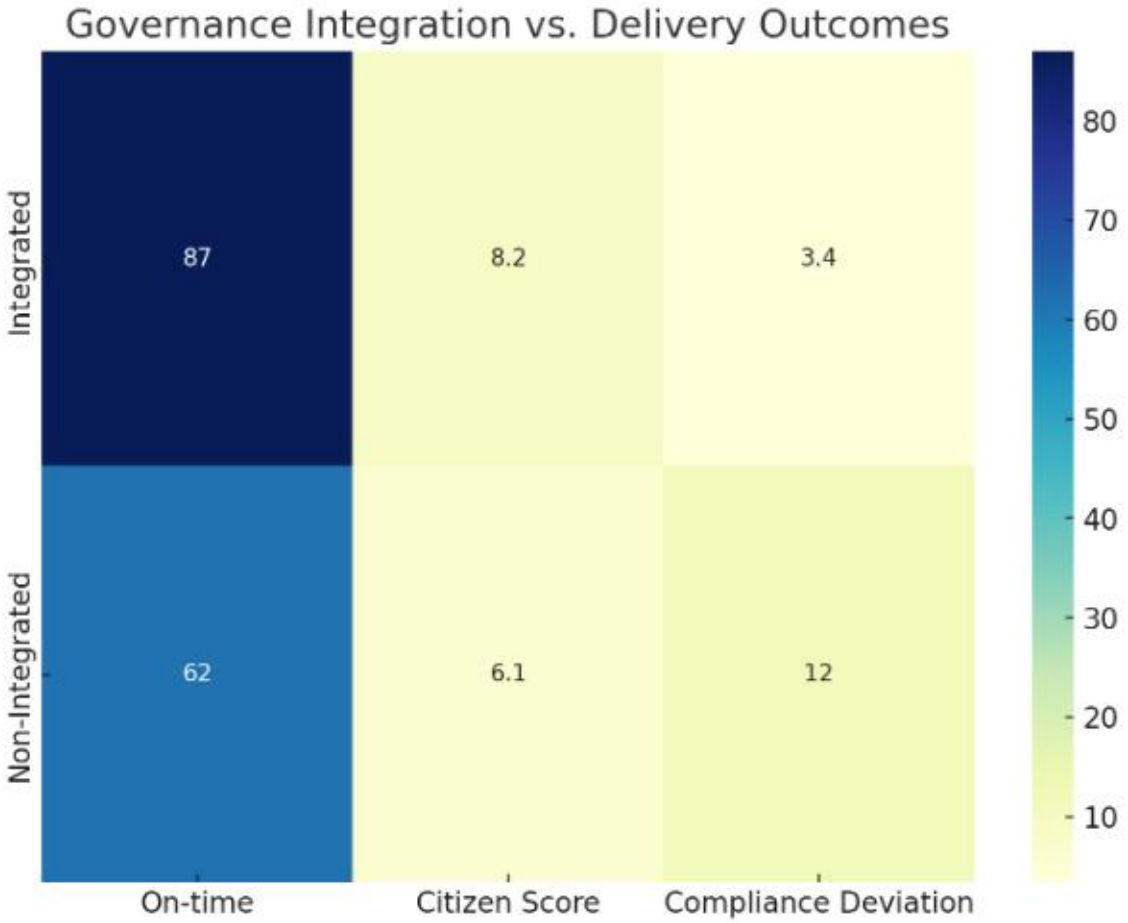
Table 4: Digital Inclusivity Metrics

Metric	High-Inclusivity	Low-Inclusivity
Mobile Accessibility	8.9	6.2

European Economic Letters
ISSN 2323-5233
Vol 15, Issue 3 (2025)
http://eelet.org.uk

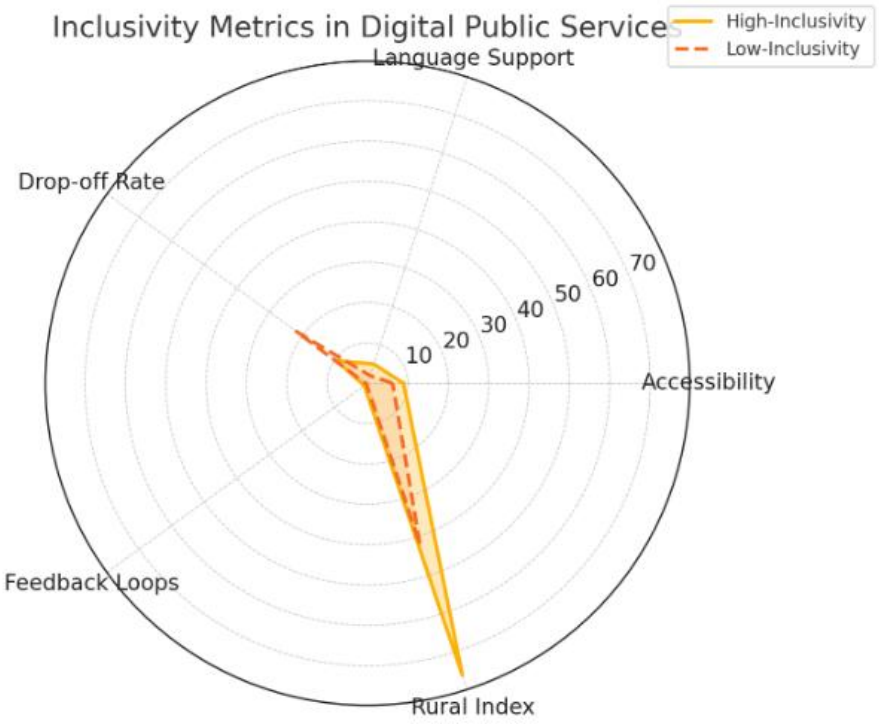
Multi-language	5+ languages	1–2 languages
Drop-off Rate	9.5	21.8
Feedback Loop	Yes (in 82%)	Yes (in 33%)
Rural Adoption	76	42

The qualitative evidence indicates that having conducted preliminary inclusion early on, as in discovery research, multilingual design, and community-driven testing, the user product owners resulted in higher levels of sustained engagement measured in their apps.



This is in tandem with the governance-value equation that is usually used in the public digital transformation made to fit the PO-centric analysis. This highlights one thing, that the easier and policy-friendly the product is (without being complex) the higher the value it adds to the population. Therefore, POs are of great importance to optimizing all those variables.

European Economic Letters
ISSN 2323-5233
Vol 15, Issue 3 (2025)
http://eelet.org.uk



Summary

- The integration of governance reduces the level of volatility in the delivery of digital projects considerably and generates a better result on the effect to people.
- Certain capability gaps exist in the form of agile approaches, data fluency, and co-creation which will have to be dealt with in leadership development specifically.
- Instead of inclusion design practices being peculiarities, they are actually fundamentals of a sustainable citizens communication and construction towards value exploitation.

The insights give empirical rationales of a framework in which public product owners take a role as strategic leader rather than just a feature gatekeeper. Digital governance has the potential to be responsive, more adaptable, and engaging citizens when their capabilities are increased in governance, agility, compliance, and citizen engagement.

6. Conclusion

This paper gives an extensive discussion on the role of strategic leadership of Product Owners in the context of digital governance of the type that is front-facing. Using the wide range of interdisciplinary studies, the paper explains three roles through which POs break historical operational levels and become institutional changemakers, inclusivity overseers, and watchdogs of the public good.

By doing so, the study reoriented the PO as not only a delivery/technical type of a role but rather an essential leader role in the contemporary governance rearrangement of any digital environment.

Some of the key findings have included the following, namely that public POs need to work at a confluence between agile development, compliance, and citizen interaction. Successful ownership of products in this environment is a complex combination of strengths- strategic

conformance to national policy, rapid response at teamwork level and multi-stakeholder control through cross-functional bureaucracies.

This research reveals that integration of governance is effective at fostering delivery performance, and capability weaknesses, namely agile and data fluency, remain a problem to the performance. This shows that there is an urgent need to develop focused leadership development programs, competency frameworks, and culture of support at the level of the institution so as to make the role of the PO more relevant.

The aspect of inclusivity, accessibility, and good design turned out to be important themes of the research. Superior community-co-designed, multilingual and digitally equitable inclusive practices are embedded into the conventionally delivered digital services on a systemic range. The best digitally delivered services have shown the best engagement and adoption and this occurs on the most systematically inclusive segments. Product Owners are therefore compelled to look through the lens that extends beyond the metrics of delivery and instead look through the prism of the larger society, so that through digital transformation, equity and trust are enhanced on government institutions.

The research suggests a practical model that defines that the ownership of products acts as a strategic leadership tool in the field of technology in the societies. It also focuses on the most important pillars like governance alignment, literacy in agility, stakeholder diplomacy, translation of compliance, and inclusive design. It is a diagnostic and prescriptive framework that allows the institutions to assess the existing PO practices and shape the path to the development of leadership-ready digital teams.

The shift in the role of PO in the governance of a state is not a matter of change in job responsibility, it is a strategic necessity. The role of product leaders, the ability to create a vision, stay ethical, and be a skillful employee has never been more important as the governments are inclining towards digital and take policy delivery and citizen engagement seriously. This study is a call of action to the institutions that need to invest in this layer of leadership reconsidering the ways of recruitment, their training, and the structure of the organization oriented to the development of more flexible, open, and inclusive digital state.

References

1. Ademola, O. E. (2024). Leadership Strategies for Successful E-Government and ICT Implementation in Public Administration: A Literature review. *Advances in Multidisciplinary & Scientific Research Journal Publication*, *10*(3), 1–14. https://doi.org/10.22624/aims/sij/v10n3p1
2. Kusanke, K., Kendziorra, J., Pilgenroeder, S., University of Hagen, Christmann-Schwaab, T., & Winkler, T. J. (2023). BUILDING DIGITAL LEADERSHIP IN THE PUBLIC SECTOR -A LITERATURE REVIEW. In *Thirty-first European Conference on Information Systems (ECIS 2023), Kristiansand, Norway*. https://www.researchgate.net/publication/371492617_BUILDING_DIGITAL_LEADERSHIP_IN_THE_PUBLIC_SECTOR_-A_LITERATURE_REVIEW
3. Bass, J. M., & Haxby, A. (2019). Tailoring product ownership in Large-Scale Agile projects: managing scale, distance, and governance. *IEEE Software*, *36*(2), 58–63. https://doi.org/10.1109/ms.2018.2885524

4. Chen, M., Martins, T. S., Zhang, L., & Dong, H. (2025). Digital Transformation in Project Management: A Systematic review and research agenda. *Systems*, *13*(8), 625. https://doi.org/10.3390/systems13080625
5. Lappi, T. M., Aaltonen, K., & Kujala, J. (2019). Project governance and portfolio management in government digitalization. *Transforming Government People Process and Policy*, *13*(2), 159–196. https://doi.org/10.1108/tg-11-2018-0068
6. Elnaghi, M., & Alshawi, S., & Missi, F. (2007). A Leadership Model for e-Government Transformation. In *Proceedings of European and Mediterranean Conference on Information Systems 2007 (EMCIS2007)* [Journal-article]. https://www.researchgate.net/publication/250770838
7. Sacavém, A., De Bem Machado, A., Santos, J. R. D., Palma-Moreira, A., Belchior-Rocha, H., & Au-Yong-Oliveira, M. (2025). Leading in the Digital Age: The role of Leadership in Organizational Digital transformation. *Administrative Sciences*, *15*(2), 43. https://doi.org/10.3390/admsci15020043
8. Di Giulio, M., & Vecchi, G. (2021). Implementing digitalization in the public sector. Technologies, agency, and governance. *Public Policy and Administration*, *38*(2), 133–158. https://doi.org/10.1177/09520767211023283
9. Peng, B. (2021). Digital leadership: State governance in the era of digital technology. *Cultures of Science*, *5*(4), 210–225. https://doi.org/10.1177/2096608321989835
10. Sarwar, M. I., Abbas, Q., Alyas, T., Alzahrani, A., Alghamdi, T., & Alsaawy, Y. (2023). Digital Transformation of Public Sector Governance with IT Service Management–A Pilot Study. *IEEE Access*, *11*, 6490–6512. https://doi.org/10.1109/access.2023.3237550
11. Juknevičienė, V., Leach, N., Toleikienė, R., Balčiūnas, S., Razumė, G., Rybnikova, I., & Āboliņa, I. (2025). E-Leadership within Public Sector Organisations: A Systematic Literature Review. *Sustainability*, *17*(10), 4474. https://doi.org/10.3390/su17104474
12. Kristensen, K., & Andersen, K. N. (2023). C-Suite leadership of digital government. *Digital Government Research and Practice*, *4*(1), 1–23. https://doi.org/10.1145/3580000
13. Linåker, J., & Runeson, P. (2020). Collaboration in open government data ecosystems: open cross-sector sharing and co-development of data and software. In *Lecture notes in computer science* (pp. 290–303). https://doi.org/10.1007/978-3-030-57599-1_22
14. Alenezi, M. (2022). Understanding digital government Transformation. *arXiv (Cornell University)*. https://doi.org/10.48550/arxiv.2202.01797
15. Luna, A., Costa, C., Moura, H., Novaes, M., & Nascimento, C. (2010). AGILE GOVERNANCE IN INFORMATION AND COMMUNICATION TECHNOLOGIES: SHIFTING PARADIGMS. *Journal of Information Systems and Technology Management*, *7*(2), 311–334. https://doi.org/10.4301/s1807-17752010000200004
16. Latupeirissa, J. J. P., Dewi, N. L. Y., Prayana, I. K. R., Srikandi, M. B., Ramadiansyah, S. A., & Pramana, I. B. G. a. Y. (2024). Transforming Public Service Delivery: A Comprehensive Review of Digitization Initiatives. *Sustainability*, *16*(7), 2818. https://doi.org/10.3390/su16072818