The Contribution of Knowledge Management to the Co-creation of Sustainable Public Value

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Abstract: In recent years, public sector performance assessment has shifted beyond financial metrics to include Environmental, Social, and Governance (ESG) considerations, aligning with the sector's focus on creating public value (PV) rather than maximizing profit and guided by a Knowledge Management approach (KMA). Increasing stakeholder demands for transparency and sustainability have rendered traditional financial indicators inadequate for evaluating public resource use. In this context, Sustainability Accounting and Reporting (SAR) has emerged as a key framework, combining social and environmental accounting with formal reporting to enhance accountability and stakeholder engagement. SAR functions as an integrated mechanism for measuring and communicating progress toward sustainability goals, reinforcing transparency in public organizations through the leverage of KMA. Despite growing interest in both SAR and public value co-creation, which involves active stakeholder participation in shaping public services, their academic development has remained largely separate. This study seeks to bridge that gap by applying Mark Moore's strategic triangle (1995) to SAR in the public sector, aiming to synthesize existing literature, identify research gaps, and examine how SAR supports the co-creation of public value.

Keywords: Sustainable public value, Knowledge management, ESG

1. Introduction

In recent decades, the assessment of organizational performance—particularly within the public sector—has evolved to encompass not only financial outcomes but also environmental, social, and governance (ESG) dimensions. Public sector organizations, oriented toward the creation and co-creation of public value (PV) rather than profit maximization, are increasingly subject to demands for greater sustainability and accountability (Cifolelli et. al, 2025, Cepiku et al., 2022.

Contemporary public sector organizations face increasing expectations to deliver value that is sustainable across economic, social, and environmental dimensions, extending beyond traditional mandates of financial performance. In response to heightened accountability demands from a diverse set of stakeholders, financial data alone is now viewed as insufficient for assessing the legitimacy and effectiveness of public resource use (Ansell et. al, 2022).

In this context, Sustainability Accounting and Reporting (SAR) has emerged as a central framework in academic discourse. SAR integrates various strands of sustainability-related accounting—such as social and environmental accounting—into a comprehensive system for measuring and communicating organizational performance. While Sustainability Accounting focuses on generating information that tracks progress toward sustainability goals, Sustainability Reporting formalizes the disclosure of this information to stakeholders (Bryson et. al, 2022).

Together, these processes constitute a unified accountability mechanism that reinforces organizational transparency and supports informed stakeholder engagement. The convergence of these previously distinct concepts under the SAR umbrella reflects a growing scholarly consensus on the importance of holistic, non-financial performance measurement in the public sector (Talbot, 2011; Papi et. al, 2018).

An emerging yet underexplored dimension of SAR is its role in public value co-creation, which involves the active participation of stakeholders—such as citizens and private entities—in the design, implementation, and evaluation of public policies and services. Despite parallel scholarly interest in SAR and PV co-creation, these two domains have largely developed in isolation.

To bridge this conceptual and empirical divide, the study undertakes a re-frame of Mark Moore strategic triangle (1995) applied on SAR in the public sector to synthesize the current body of knowledge, identify

research gaps, and explore the extent to which SAR contributes to PV co-creation, thereby offering new avenues for integrated future research.

2. Process of Creation and Co-Creation of PV, a Literature Framework

The aim of co-creation in the public sector is the generation of public value (Ansell & Torfing, 2021). To establish a foundation for this concept, the discussion begins with an exploration of public value itself. Since Moore's seminal work in 1995, public value has gained significant traction across multiple disciplines, functioning as a concept, theoretical lens, and analytical framework. It is commonly understood as the production of benefits for the public sphere that are recognized and appreciated by the public (Ansell & Torfing, 2021; Hartley et al., 2017; Benington, 2011; Moore, 1995).

To effectively create public value, practitioners must first identify what different segments of the public value. This process—referred to by Moore (1995) as defining public value—involves engaging with a diverse array of public stakeholders to determine shared or contested priorities. Given the heterogeneity of the public, this process is inherently complex and democratic in nature (Hartley et al., 2017). Nailer et al. (2019) further distinguish between anticipated public value (what is expected or hoped for) and realized public value (what is achieved through action).

Public value outcomes encompass contributions across economic, social, cultural, ecological, and political dimensions (Bovaird & Loeffler, 2012; Benington). These outcomes, although central to public sector missions, are often challenging to quantify (Alford & O'Flynn, 2009). Several of these dimensions align closely with the concept of sustainability. For instance, Benington (2011) equates ecological public value with efforts that promote sustainable development and mitigate environmental harm such as pollution and climate change essentially echoing principles of environmental sustainability.

Similarly, social sustainability is interconnected with the social, cultural, and political dimensions of public value. In the context of urban development, it typically refers to equitable access, safety, social cohesion (social and cultural dimensions), and participatory democracy (political dimension) (e.g., Granath Hansson, 2020; Eizenberg & Jabareen, 2017). Candel (2023) shows that municipalities strive to achieve these varied public value outcomes—ecological, social, cultural, political, and economic—through sustainability-oriented land development projects. However, further research is needed to understand how these outcomes are individually or collectively (co-)created.

Closely related to the idea of public values is the concept of public values, which are normative principles realized through effective governance rather than direct creation (Bryson et al., 2017; de Graaf & Paanakker, 2015; de Bruijn & Dicke, 2006). Public values can be procedural—such as transparency—or performance-based, relating to efficiency and effectiveness in service delivery (de Graaf & Paanakker, 2015; de Bruijn & Dicke, 2006). Core public values identified across countries like the US, UK, and those in Scandinavia include human dignity, sustainability, citizen participation, openness, integrity, compromise, and resilience (Jørgensen & Bozeman, 2007).

Because of value pluralism, tensions often arise when public values conflict, necessitating prioritization (Aschhoff & Vogel, 2018; de Graaf & Paanakker, 2015; van Gestel et al., 2008). This is especially evident in contested land-use decisions, where economic development goals frequently clash with environmental protection, highlighting the need for more participatory and informed decision-making processes (Tudor et al., 2014; Wittmer et al., 2006). In co-creation contexts, the challenge becomes even more complex, as multiple public and private actors may pursue divergent value creation objectives. Thus, a critical issue in these collaborative processes is determining how to uphold and reconcile the array of potentially conflicting public values.

The concept of co-creation originated in marketing, where it referred to the collaborative process in which consumers contribute to value creation alongside service providers or producers (Vargo & Lusch, 2004, 2008). Over time, co-creation has expanded into other domains, particularly public management (e.g., Ansell & Torfing, 2021; Torfing et al., 2019), where it has become increasingly influential. In this context, Torfing et al. (2019) define public sector co-creation as a collaborative process involving multiple public and private actors working together to address shared problems by exchanging knowledge, resources, skills, and ideas to enhance the creation of public value.

Although often used interchangeably, co-creation and co-production are conceptually distinct. Co-production typically emphasizes service delivery with less focus on value creation, whereas co-creation emphasizes both

collaboration and innovation (Torfing et al., 2019; Voorberg et al., 2015). Furthermore, co-creation differs from concepts such as collaborative governance or network governance, which focus more on consensus-building and policymaking. Co-creation, by contrast, explicitly seeks to link collaboration with innovation to address complex public challenges in transformative ways (Ansell & Torfing, 2021).

In the context of urban flagship developments, which often function as testbeds for innovation, public value co-creation is proposed as a particularly suitable conceptual framework. According to Voorberg et al. (2015), co-creation may involve stages such as co-initiation, co-design, and co-implementation. This study focuses on the latter two, as the developments under investigation have already been initiated by municipalities.

Co-design entails collaborative planning processes where public institutions involve other stakeholders in designing public services, including jointly identifying problems, defining desired outcomes, and co-developing solutions. In co-creation literature, the goals that providers intend to deliver are referred to as value propositions, while the benefits that users derive from services are termed value-in-use (Grönroos, 2017; Skålen et al., 2015; Vargo & Lusch, 2008). Co-implementation, on the other hand, refers to the collaborative execution and delivery of public services.

A comprehensive analysis of co-creation must account for several key components: the involved actors, their practices, the institutional arenas where interactions occur, the functional roles of co-creation activities, and the underlying challenges or tensions that shape public value creation (Bryson et al., 2017). The range of actors includes public officials and politicians, as well as private entities such as businesses, non-profits, and citizens (Torfing et al., 2019). Their roles vary depending on their institutional positions and objectives. Practices essential for co-creation include policy analysis, participatory leadership, strategic management, design and evaluation, democratic dialogue, and both formal and informal institutional design (Bryson et al., 2015).

The arenas for co-creation are collaborative spaces where stakeholders engage in dialogue and joint problem-solving. These are understood as generative institutions that facilitate co-creative practices (Ansell & Torfing, 2021). Their continued development is supported by platforms, which provide broader systemic infrastructure for ongoing collaboration through networks, projects, and programs.

The functions of co-creation in these arenas include not only the improvement of outcomes but also the transformation of how problems are understood and addressed (Torfing et al., 2019). A growing body of research explores co-creation, co-production, and co-design within urban planning, highlighting the potential of collaborative approaches to foster innovation and improve outcomes (e.g., Brokking et al., 2021; Bisschops & Beunen, 2019; Puerari et al., 2018; Teder, 2019).

However, much of this literature remains focused on citizen participation, aligning it closely with participatory planning traditions, often neglecting collaboration with other relevant stakeholders. The advantage of employing public value co-creation theory in urban planning lies in its broader scope—it accounts for diverse actor involvement and emphasizes collaborative innovation (Ansell & Torfing, 2021; Torfing et al., 2019).

Moreover, the process of co-creation is strictly engaged with ESG Agenda. As a matter of fact, the integration of Environmental, Social, and Governance (ESG) principles into organizational strategy has become increasingly pivotal in contemporary public administration and corporate governance. ESG frameworks serve as normative guidelines that inform ethical and sustainable decision-making processes across sectors. Concurrently, the concept of public value co-creation, rooted in public value theory (Moore, 1995), emphasizes collaborative engagement among governmental entities, private actors, and civil society to generate outcomes that are valuable to the public sphere. The theoretical correlation between ESG and public value co-creation lies in their mutual commitment to long-term societal well-being, participatory governance, and sustainable development.

ESG can be understood as a mechanism through which organizations internalize externalities and adopt a stakeholder-oriented approach to governance (Rodriguez Muller et al, 2024). This perspective aligns with the co-creation paradigm, which posits that value is not solely produced by the state or market actors but emerges from dynamic interactions among stakeholders (Osborne, 2006; Li et al 2025). The governance dimension of ESG, for instance, resonates with the principles of accountability, transparency, and inclusiveness, which are foundational to co-creation processes. Similarly, the environmental and social components of ESG reflect a commitment to sustainability and equity, core tenets of public value creation.

From a theoretical standpoint, co-creation theory (Ege et. al, 2025) and stakeholder theory provide useful lenses to understand this correlation. ESG-driven organizations, shaped by normative and coercive institutional

pressures, often engage in collaborative arrangements with public and civil society actors to enhance legitimacy and responsiveness. These interactions foster environments conducive to co-creation, wherein the ESG agenda becomes a vehicle for addressing collective challenges such as climate change, social inequality, and systemic governance failures.

In essence, the intersection of ESG and public value co-creation reflects a convergence of normative ideals and practical imperatives. It underscores the evolution of governance models toward more integrative, participatory, and sustainable paradigms, where public value is no longer solely the remit of the state but a shared responsibility among diverse societal actors.

Nonetheless, with the rise of collaborative urban governance and growing private sector influence, concerns have emerged regarding the legitimacy and inclusivity of these processes (Mäntysalo & Bäcklund, 2018). Scholars warn that such collaboration can lead to the dominance of powerful interests, often at the expense of long-term sustainability goals (Fox-Rogers & Murphy, 2015; Palmås & von Busch, 2015; Parker et al., 2015). For example, Solly (2021) found that in Sweden, the shift towards collaborative, market-driven spatial planning has hindered planners' capacity to prioritize sustainable development, instead favoring private developers' short-term interests.

Similarly, Palmås and von Busch (2015) argue that citizen input gathered early in participatory processes is often diluted as projects progress and negotiations evolve. Despite urban planners' generally high aspirations and good intentions (Metzger & Lindblad, 2021), these critiques highlight the need to remain vigilant about potential imbalances and exclusions within co-creation frameworks.

3. The Contribution of KM in Public Value Co Creation

In an increasingly complex and dynamic governance landscape, knowledge management (KM) has emerged as a critical enabling of public value creation. Public sector organizations are facing rising demands for transparency, responsiveness, and innovation from diverse stakeholders. Against this backdrop, KM provides the tools and frameworks necessary for harnessing institutional knowledge, facilitating organizational learning, and enabling collaborative problem-solving. These functions are essential for creating public value, which involves delivering outcomes that are meaningful and beneficial to society, encompassing economic, social, political, and environmental dimensions (Moore, 1995; Benington, 2011).

At its core, knowledge management refers to the systematic process of acquiring, organizing, sharing, and applying knowledge to improve organizational effectiveness (Nonaka & Takeuchi, 1995; Davenport & Prusak, 1998). In the public sector, this translates into improved policy formulation, evidence-based decision-making, and enhanced service delivery. By managing both explicit knowledge (e.g., data, documents, procedures) and tacit knowledge (e.g., expertise, skills, institutional memory), public organizations are better equipped to respond to societal challenges, reduce inefficiencies, and innovate in ways that generate long-term public value. For instance, knowledge repositories and decision support systems allow public managers to draw upon past experiences, reducing redundancy and enabling more strategic resource allocation.

Knowledge management contributes to public value creation by enhancing internal organizational learning and fostering a culture of continuous improvement. This is particularly crucial in the context of adaptive governance, where public institutions must be able to learn from feedback, assess performance outcomes, and adjust their strategies accordingly (Argyris & Schön, 1978). KM systems facilitate this learning loop by capturing and analyzing performance data, enabling public servants to understand what works, under what conditions, and why. This supports more effective program design and implementation, thereby improving the quality and impact of public services. Moreover, the ability to learn and adapt is fundamental to building trust and legitimacy among stakeholders, which are themselves essential components of public value.

Another significant contribution of KM lies in its capacity to support collaborative governance and co-creation processes. Public value is increasingly recognized as the result of joint efforts among public institutions, private sector actors, civil society organizations, and citizens (Bryson et al., 2017; Ansell & Torfing, 2021). In such multi-actor environments, the exchange and integration of diverse forms of knowledge—technical, experiential, contextual—are indispensable for collective problem-solving. KM tools such as knowledge-sharing platforms, digital collaboration spaces, and inter-organizational knowledge networks enable the flow of information and foster mutual understanding among actors with differing goals and perspectives. By breaking down silos and facilitating cross-boundary learning, KM enhances the potential for co-designing and co-implementing policies and services that are more responsive, inclusive, and sustainable.

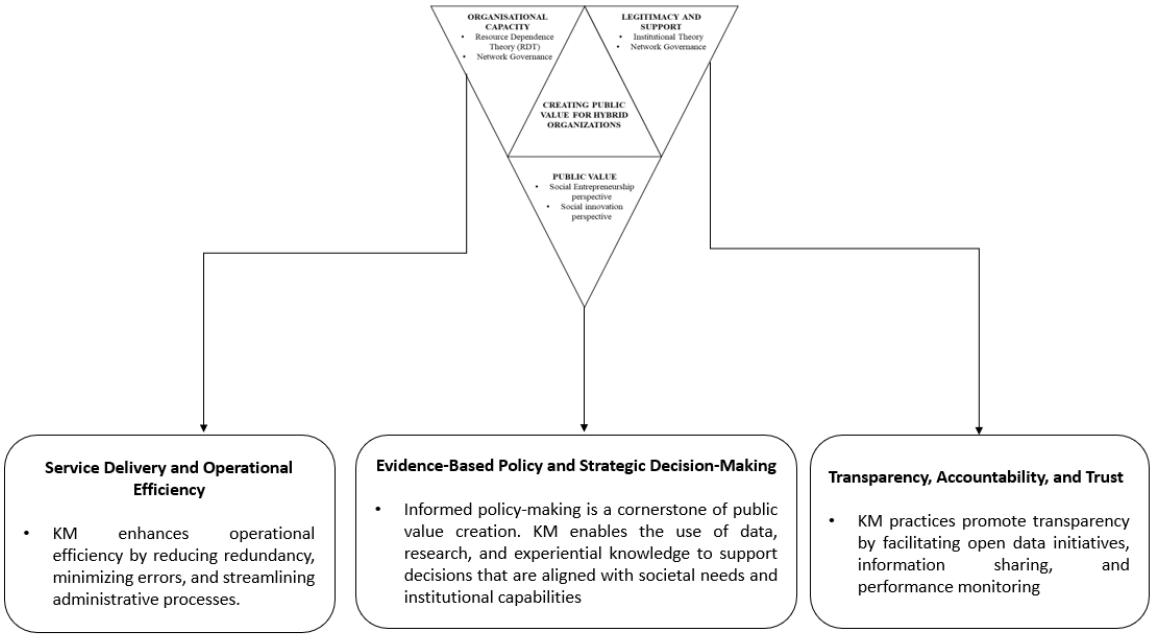
Importantly, KM also contributes to the democratization of knowledge, thereby promoting equity and participation in public decision-making. Access to relevant, timely, and understandable information empowers citizens and stakeholder groups to engage more meaningfully in policy deliberation and service design. This participatory aspect of KM aligns closely with the political dimension of public value, which emphasizes democratic governance, accountability, and civic engagement. Through open data initiatives, knowledge portals, and participatory knowledge platforms, KM helps bridge the gap between institutions and citizens, enabling a more informed and empowered public. Furthermore, by incorporating diverse voices and forms of knowledge into public discourse, KM contributes to the legitimacy and relevance of public policies and services.

Despite its potential, the integration of KM into public sector practices is not without challenges. Organizational resistance to change, lack of technological infrastructure, data silos, and weak knowledge-sharing cultures are among the key barriers. Moreover, the success of KM initiatives depends heavily on leadership commitment, adequate resources, and alignment with strategic goals. Addressing these challenges requires a holistic approach that combines technological solutions with cultural and institutional reforms. Building a knowledge-centric public sector involves fostering an environment that values learning, incentivizes collaboration, and recognizes the strategic role of knowledge in achieving public missions.

Moreover, KM in the public sector encompasses processes that enable the identification, capture, distribution, and application of knowledge to improve public service outcomes. Unlike private organizations that focus primarily on competitive advantage and profitability, public sector entities aim to deliver societal benefits and improve citizens' quality of life (Wiig, 2002). Public institutions rely heavily on knowledge to formulate policy, design services, and engage with stakeholders. Effective KM practices help retain institutional memory, foster innovation, and prevent knowledge silos within government agencies (Cong & Pandya, 2003).

By enabling the systematic reuse of lessons learned and best practices, KM supports adaptive governance and organizational learning (Argote & Ingram, 2000) so public managers can leverage KM systems to align internal processes with strategic goals, improving responsiveness to complex social challenges. Moreover, KM enables cross-agency collaboration and data integration, both of which are critical in addressing interconnected issues such as climate change, public health, and digital transformation.

On this topic academic literature (Cifolelli et. al, 2025; Cepiku, 2022) highlighted that according with Moore (1995) strategic triangle, KM has a leverage effect on the public value creation through several interrelated mechanisms: improved service delivery, evidence-based policymaking, increased transparency, and citizen engagement (Graph. 1)



Graph 1: KM levers in the public value (co)creation process inspired by Ziruolo et al. (2023)

As shown by literature, in terms of service delivery and operational efficiency, KM enhances operational efficiency by reducing redundancy, minimizing errors, and streamlining administrative processes. Public organizations that harness KM tools—such as knowledge repositories, intranet platforms, and decision-support systems—can reduce time spent on repetitive tasks and reallocate resources more effectively (Alavi & Leidner, 2001). For example, municipalities that apply KM to manage service requests and feedback loops have been shown to significantly improve response times and citizen satisfaction (Mas-Machuca & Martínez Costa, 2012). These efficiency gains translate directly into public value by increasing accessibility and reliability of public services.

Considering, "Evidence-Based Policy and Strategic Decision-Making", informed policymaking is a cornerstone of public value creation. KM enables the use of data, research, and experiential knowledge to support decisions that are aligned with societal needs and institutional capabilities. Through knowledge sharing and organizational learning, public agencies can anticipate risks, evaluate policy alternatives, and assess long-term impacts (Heisig, 2009). For instance, during the COVID-19 pandemic, governments that employed robust KM practices—such as real-time data dashboards and inter-agency knowledge exchange—were more effective in implementing timely and coordinated responses (Berardi et al., 2021).

Finally, "Transparency, Accountability, and Trust" shows that public value is closely linked to trust in government and the legitimacy of public institutions. KM practices promote transparency by facilitating open data initiatives, information sharing, and performance monitoring. When knowledge is made accessible to citizens and stakeholders, it enhances accountability and fosters civic participation (Nam, 2012). Knowledge-based governance models also encourage ethical conduct and reduce the risk of corruption by creating traceable and auditable decision-making processes (Weber et al., 2009). These factors contribute to building a resilient social contract between the state and its citizens.

Over this framework, empirical studies provided by literature strong evidence KM's role in improving public sector performance and public value. A study by Lee and Choi (2003) found that knowledge sharing significantly enhances organizational performance in the public sector by fostering innovation and responsiveness. Similarly, research by Mas-Machuca and Martínez Costa (2012) in Spanish local governments revealed that KM practices positively influence both internal efficiency and citizen-centered service outcomes.

The OECD (2021) shows that one prominent example is Estonia's e-Governance model, which has become a global benchmark for digital innovation in the public sector. Through the implementation of interoperable data systems and secure digital platforms, Estonia has institutionalized KM to provide seamless public services, such as e-taxation, e-residency, and e-health (OEC. These KM efforts have not only streamlined administrative processes but also increased citizen trust and satisfaction by ensuring transparency, data security, and participatory governance.

On the other hand, the United Kingdom's National Health Service (NHS) Knowledge and Library Services, developed a comprehensive KM framework to support evidence-based decision-making across the healthcare system. The service provides healthcare professionals with access to clinical evidence, case studies, and digital learning tools. By embedding KM into medical practice, the NHS enhances the quality of care and enables more effective resource allocation—both of which are critical to generating public value (Ward et al., 2014).

Meanwhile In ASIA (Philippines), the "Knowledge Management Portal for Climate Change" was created to centralize information related to climate adaptation and mitigation. This portal, developed by the Climate Change Commission, provides policymakers, researchers, and local governments with data, toolkits, and best practices. By facilitating knowledge sharing among stakeholders, the platform strengthens policy coherence and improves the country's resilience to environmental risks, thereby contributing to public value in the form of environmental security and sustainable development (UNDP, 2016).

Last but not least, during the COVID-19 Emergency OMS used the KM leverage creating an academic repository including all the academic contributions on the topic "Healthcare emergency" including over 1.000.000 scientific contribution from all over the world and different academics disciplines (Medicine, economy, engineering, math, social services, financial distress, enterprises organizations, OMS, 2025).

4. KM as a Leverage to Co-Create Sustainable Public Value

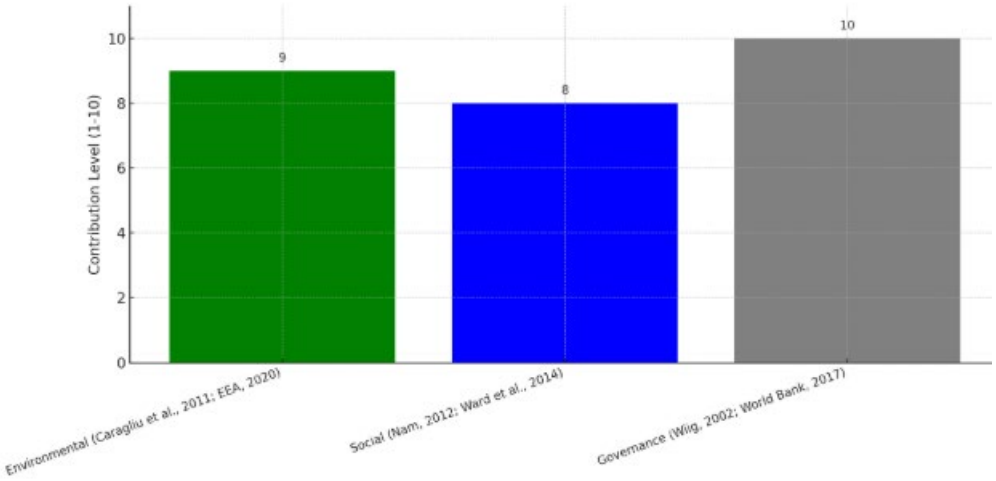
As we know, we are living in an era defined by environmental crises, social inequality, and calls for greater institutional accountability so the public sector faces mounting pressure to deliver value that is not only efficient but also sustainable. In this context, the ESG framework has emerged as a key paradigm guiding both public and private organizations toward long-term responsibility and resilience. In the public sector, the creation of sustainable public value definded as "value that benefits current and future generations" (Moore, 1995) depends heavily on the ability to generate, share, and apply knowledge effectively.

Through this paradigm we can define KM as the systematic process of acquiring, organizing, sharing, and utilizing knowledge to achieve strategic goals (Dalkir, 2017), and as previously shown, plays a critical role in supporting ESG initiatives and embedding sustainability into public governance.

While ESG originated in the corporate world, its principle environmental responsibility, social inclusion, and good governance—are highly applicable to public administration (Bovaird & Loeffler, 2016) so, KM leberages enables public organizations to systematically gather data, apply insights, and disseminate best practices in ways that align operations with ESG goals.

In this sense, literature shows that the integration of KM within sustainability governance structures supports knowledge co-production, cross-sectoral learning, and a long-term strategic orientation (Hartley et al., 2017). In fact, KM supports environmental sustainability by enabling the integration of environmental intelligence into decision-making and policy formulation. Governments and municipalities use KM systems to track climate data, environmental indicators, and ecological risks. For instance, smart city platforms that consolidate sensor data and citizen feedback can guide sustainable urban planning and reduce carbon footprints (Caragliu et al., 2011). In addition, KM facilitates the development and sharing of green innovations across agencies and jurisdictions (Shehzad et al., 2024).

As shown by many international agencies and institutions, Km contributes to ESG agenda building up extensive knowledge repositories and interactive platforms that provide stakeholders with actionable information on biodiversity, air quality, and climate adaptation strategies (EEA, 2020). These tools not only enhance the efficiency of environmental programs but also foster learning and collaboration across borders—key elements of sustainable public value. As argued by Schiuma and Lerro (2008), KM are fundamental to supporting environmental innovation by connecting dispersed knowledge assets in public sector ecosystems (Graph. 2).



Graph 2: The leverage of KM over the contribution of sustainable (co) creation of public value

The social dimension of ESG emphasizes inclusivity, equity, and community well-being. KM contributes to these goals by democratizing access to information and promoting participatory governance. Open data portals, community knowledge networks, and digital literacy initiatives allow marginalized groups to engage in decision-making and benefit from public services (Nam, 2012). Moreover, knowledge-sharing practices within public agencies improve social outcomes by making service delivery more responsive to diverse needs. KM practices such as after-action reviews, knowledge repositories, and community-of-practice models facilitate organizational learning that is critical in addressing inequality and social fragmentation (Choi & Chandler, 2015). For example, KM initiatives in public health—such as knowledge exchanges between local and national

health authorities—have proven vital in addressing health disparities and improving population-level health outcomes (Ward et al., 2014). When public knowledge is shared across institutional and societal boundaries, it helps to build equitable systems and strengthen the social fabric

Good governance, the third pillar of ESG, depends fundamentally on the transparency, accountability, and ethical functioning of public institutions. KM fosters these outcomes by enabling traceable decision-making, performance monitoring, and organizational learning. Through documentation of institutional knowledge, feedback mechanisms, and risk management frameworks, KM ensures that decisions are informed, justified, and aligned with long-term public interest (Wiig, 2002). Knowledge-based systems and performance dashboards also assist in real-time tracking of program outcomes and compliance, promoting adaptive governance (Meijer, 2014). One compelling example is the adoption of knowledge dashboards and performance analytics by public financial management systems. These tools enhance fiscal transparency and allow both officials and citizens to evaluate government spending and policy impact. The World Bank has emphasized the importance of KM in building "learning states"—governments that use evidence and institutional knowledge to continuously adapt and improve governance practices (World Bank, 2017). Furthermore, embedding KM in anti-corruption strategies, as seen in several Latin American public reforms, helps create ethical standards and institutional memory that reinforce public accountability (Perry et al., 2006).

Despite the relevance of the topic, there is still a lack of case studies highlight how KM underpins ESG-aligned public value creation. The Netherlands' National Climate Agreement, for instance, involved extensive knowledge-sharing among stakeholders, including government agencies, researchers, and civil society. KM platforms enabled collaborative policy development and tracking of sustainability goals, resulting in more inclusive and evidence-based climate action (OECD, 2020). Similarly, South Korea's Government 3.0 initiative has demonstrated how KM can enhance transparency and citizen engagement. By integrating big data analytics and knowledge portals across ministries, the initiative improved decision-making, service personalization, and citizen trust—key components of sustainable public value (Lee, 2016). The United Nations Development Programme (UNDP) also supports KM in developing countries through knowledge hubs that focus on sustainable development goals (SDGs). These platforms facilitate south-south knowledge exchange and institutional capacity-building, enabling governments to design and implement more effective ESG-oriented policies (UNDP, 2018).

5. Conclusions

Despite its potential, the contribution of KM leverages in the process of co-creation pf public value faces several challenges. Organizational culture remains a significant barrier, as bureaucratic norms may discourage open communication and knowledge sharing (Cranfield & Taylor, 2008). Additionally, many public organizations lack the technological infrastructure, or the human capital required to maintain dynamic KM systems. Data privacy, security, and the risk of overloading information are also concerns that must be managed carefully.

Moreover, public agents must address the digital divide (Berardi et al, 2021; Lee, 2016) to ensure equitable access to KM-enabled services. This includes providing training, investing in digital literacy, and designing inclusive knowledge systems. Without deliberate attention to these issues, KM may inadvertently exacerbate existing inequalities and limit the generation of public value.

The integration of KM into public governance represents a foundational strategy for advancing sustainability objectives across environmental, social, and governance (ESG) domains. As this paper has demonstrated, KM not only enhances operational efficiency and policy coherence but also enables the dynamic capabilities required to respond to the complex challenges of sustainable development. By boosting evidence-based decision-making, facilitating inter-organizational learning, and enabling participatory governance, KM serves as a catalyst for creating enduring public value.

In the environmental scenario, KM supports sustainability by facilitating the flow of climate intelligence, ecological data, and environmental best practices, which are essential for designing adaptive and resilient policies. Socially, KM promotes inclusivity and equity by expanding access to knowledge, empowering marginalized communities, and enabling more responsive public services. In governance, KM strengthens transparency, accountability, and institutional learning, reinforcing the ethical and strategic foundations necessary for long-term legitimacy and trust.

The literature and case studies reviewed underscore the pivotal role of KM in shaping "learning states" that are not only reactive but proactively aligned with ESG imperatives. However, the effectiveness of KM in public

value creation depends on overcoming key barriers such as institutional silos, cultural inertia, and ethical concerns in data usage. To address these challenges, public institutions must invest in human capital, robust technological infrastructure, and governance frameworks that prioritize knowledge ethics and stakeholder engagement.

Moreover, Knowledge Management is not merely a technical tool but a strategic governance approach that enables the public sector to co-create value with society, deliver sustainable outcomes, and meet the evolving expectations of twenty-first-century governance. As the ESG agenda becomes increasingly central to global and local policymaking, KM will remain indispensable in translating vision into action and fostering resilient, just, and sustainable societies.

Ethics and AI declaration: We authors declare ethical clearance was not required for the research and we used AI Python and ChatGPT to elaborate graph 1 and graph 2.

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