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SYNERGISING RESOURCES AND CONTROL: THE INTERACTION OF MANAGEMENT CONTROL SYSTEMS AND INTELLECTUAL CAPITAL IN PUBLIC SECTOR PERFORMANCE

K. T. C. Priyangani[1],
G. A. T. Kaushalya[2i],
Ananda K. L. Jayawardana[3]
[1,2]University of Sri Jayewardenepura,
Sri Lanka
[3]University of New South Wales,
Canberra, Australia
Postgraduate Institute of Management,
University of Sri Jayewardenepura,
Sri Lanka

Abstract:
This theoretical paper explores the synergistic relationship between Management Control Systems (MCS) and Intellectual Capital (IC) in driving public sector performance. Despite their individual importance, the interaction between MCS and IC remains understudied, particularly in public institutions. The study argues that specific MCS levers dynamically interact with core IC elements, creating a synergy that enhances organizational performance. Grounded in the Resource-Based View (RBV), this research investigates how the integration of MCS and IC influences public sector performance, addressing a critical gap by examining their interactive relationship. The primary theoretical contribution extends the RBV into the public sector context, demonstrating how organizations integrate MCS to translate IC into sustainable performance. This bridges the theoretical divide between control and knowledge-based strategic assets. The paper aims to enhance public organization performance through MCS by leveraging the interaction of IC components: human, structural, and relational capital. The research will help managers identify weaknesses in their MCS and optimize resource utilization in terms of efficiency, effectiveness, and economics. It offers practitioners a validated framework for designing MCS tailored to the unique value-creation processes of public organisations. The findings have significant implications for public sector policy-making and management practices, providing evidence-based strategies for optimizing organizational performance through the strategic alignment of MCS and IC. By uncovering the complex relationship between MCS and IC, this study contributes to a more nuanced understanding of performance drivers in public organisations. It

[i] Correspondence: email gatkaushalya@sjp.ac.lk

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highlights the importance of considering both control systems and intellectual assets in tandem, rather than as separate entities. The insights gained from this research can guide public sector leaders in developing more effective strategies for leveraging their organization's intellectual resources through appropriate control mechanisms, ultimately leading to improved public service delivery and organizational effectiveness. Further, this offers practitioners a validated framework for designing MCS that tailors to the unique value-creation processes of public organisations.

Keywords: management control systems, intellectual capital, public sector performance, resource-based view

1. Introduction

Public sector organisations face unique challenges in achieving their goals, confronting increasing pressure to deliver not only efficient services but also outcomes that align with public expectations and regulatory mandates (Felicio *et al.*, 2020). The landscape in which these organisations operate is often complex, influenced by political, social, and economic factors that can impede effective performance management. Inefficiencies are frequently intrinsic to public administration, which has been criticised for issues such as bureaucracy, corruption, and a lack of accountability, making it inadequate to address evolving socioeconomic demands. Achieving operational excellence and strategic objectives requires a structured approach to performance management that integrates diverse resources, capabilities, and stakeholder considerations. In this context, the adoption of Management Control Systems (MCS) has emerged as a critical mechanism for enhancing performance and facilitating goal achievement in the public sector (Felicio *et al.*, 2020).

MCS serve as a vital framework for structuring planning, evaluation, and control processes within organisations, thereby guiding employees towards strategic objectives. These controls include budgeting systems, performance evaluations, internal audits, and adherence to legal frameworks, which work to prevent the misuse of public funds and promote good governance (Asare, 2009). By establishing clear performance indicators, fostering accountability, and promoting strategic alignment, MCS are essential for effectively executing complex strategies. However, while existing literature acknowledges the significance of MCS for public sector performance, it leaves the underlying mechanisms of MCS largely unexplored. It provides little insight into how these systems directly drive goal achievement within public organisations.

This oversight in the literature stems from two ways: first, the nuanced effects MCS have on tangible performance, and second, the pivotal role played by intangible assets like Intellectual Capital (IC). Crucially, the design of MCS itself determines its impact. Following the framework of Adler and Borys (1996), MCS can be categorised as either coercive, designed to enforce compliance and standardise procedures for efficiency, or enabling, designed to be adaptable and foster collaboration and learning

(Ahrens & Chapman, 2004). It is this enabling type of MCS that is instrumental in building IC, as it cultivates an environment conducive to knowledge sharing, creative problem-solving, and skill development (Coyte, 2019). Consequently, while the individual potential of MCS and IC is acknowledged, a significant gap remains in understanding their interactive dynamics, specifically, how enabling MCS fosters the IC that collectively drives organisational performance outcomes.

Recent research provides empirical substantiation for this theoretical distinction, yet it also highlights the persistence of the gap. For instance, Fachrudin *et al.* (2024), in a bibliometric analysis, confirmed that the connection between MCS and IC, while established, remains narrow and is often explored within broader areas like performance management, rather than being studied as a direct, interactive relationship. This finding aligns with Coyte's (2019) exploration of how enabling MCS stimulates IC development, a study which crucially noted that the outcomes are contingent on the specific design of the MCS. Therefore, despite recognising the potential of this integrated, knowledge-driven framework, a significant research gap endures: a lack of understanding of how the design of MCS, specifically enabling controls, interacts with and fosters IC to influence performance outcomes in public sector contexts.

The incorporation of IC elements into the MCS allows for more comprehensive performance management. Galabova and Daskalova (2020) explored the integration of IC elements within MCS. Their research highlighted how organisations can leverage IC components, such as human, structural, and relational capital, to enhance their overall performance and strategic decision-making processes. Integrating IC into MCS enables organisations to capture and evaluate both financial and non-financial indicators that are crucial for long-term success, such as employee skills and knowledge, organisational processes and customer relationships (Dana *et al.*, 2020).

This study explores how the design of MCS integrates with IC development to influence the performance outcomes of public sector organisations, defined as a combination of efficiency, effectiveness, and innovation. By examining this intersection within government agencies and public institutions, this study aims to uncover unique insights into how public administrators can tailor MCS to leverage IC effectively in bureaucratic environments. The findings contribute to a more comprehensive understanding of MCS and IC dynamics across different organisational contexts, potentially informing policymakers and public sector managers of strategies to enhance institutional performance through improved knowledge management and control systems.

The Resource-Based View (RBV) provides the necessary theoretical framework to investigate these precise mechanisms. RBV posits that sustainable organisational advantage is derived from unique, valuable, and inimitable internal resources and capabilities (Black & Boal, 2007; Newbert, 2008). Through this lens, IC is positioned as a strategic intangible resource, and enabling MCS can be conceptualised as dynamic capabilities. These organisational and strategic routines effectively develop, leverage, and protect that resource. Therefore, by applying the RBV lens, this research moves

beyond establishing a mere link to providing a deeper understanding of how the design of MCS serves as a capability to systematically foster IC, thereby optimising organisational performance and public value creation.

Guided by this theoretical framework, this study extends the current body of knowledge by investigating the complex interplay between MCS and IC and their combined impact on public sector performance. While previous research has established individual connections, the intricate relationships among these elements and their collective influence remain largely unexplored (Kamaruddinah & Abeysekera, 2021; Guthrie & Dumay, 2015; Farah & Abouzeid, 2017). By delving into this underexamined area, this study seeks to provide a comprehensive understanding of how MCS and IC interact synergistically to drive organisational outcomes.

The remainder of this paper is structured as follows. Section 2 synthesises the extant literature on MCS and IC, establishing the theoretical foundation and culminating in the development of a proposition. Section 3, conceptualise the synergistic interaction between MCS and IC as a critical mechanism for enhancing public sector performance. Finally, Section 4 concludes by articulating the study's theoretical and practical contributions, acknowledging its limitations, and suggesting productive avenues for future research.

2. Literature Review

2.1 Public Sector Organisational Performance

Public sector organisations are, without question, under increasing scrutiny to improve their performance and genuinely serve the public interest, a pressure that has increased in recent years (Vignieri, 2018; Thusi, 2023). Evaluating organisational performance in this context is uniquely challenging, mainly because the sector's core responsibility is to address the often-competing interests of various stakeholders. Historically, performance evaluations have been limited to objective and quantifiable data. However, subjective assessments, such as perceptions and stakeholder satisfaction, have gained traction, offering a more nuanced, multidimensional view of organisational outcomes (Thusi, 2023; Helden *et al.*, 2012). Consequently, performance measurement frameworks have evolved to embrace both internal and external factors, moving beyond reductionist and single-metric approaches (Umans *et al.*, 2018).

Previous research offers a broad definition of performance to the extent to which an organisation achieves its intended goals, encompassing both financial and non-financial dimensions (Diefenbach, 2009). This multidimensional approach is crucial because public sector organisations must balance a range of stakeholder concerns, making it necessary to assess outcomes that extend well beyond financial results (Lapsley & Wright, 2004). Kloot and Martin (2000) reinforced the idea that organisational success is inherently multifaceted and dynamic, evolving as organisations engage with different stakeholder groups. Atkinson *et al.* (1997) further categorised performance objectives into two domains: externally oriented primary objectives, focused on measurable

deliverables, and internally oriented secondary objectives, which relate to the organisation's service delivery processes. Kaplan and Norton's (1996) framework is also frequently cited, introducing four key performance dimensions: financial outcomes, customer satisfaction, internal business processes, and innovation and learning (Helden & Reichard, 2018).

Contemporary discussions continue to emphasise that organisational performance and success depend on the extent to which both financial and non-financial goals are achieved (Ahenkan *et al.*, 2018). While earlier research tended to focus on profitability, there is now a broader recognition of organisational goals that encompass social and economic objectives (Pikos, 2012). The literature consistently argues for embedding social outcomes within performance measurement, recognising that a meaningful assessment must be context-specific and aligned with the organisation's stated objectives. Furthermore, Felicio *et al.* (2021) and others (Verbeeten & Speklé, 2015) highlighted the importance of robust MCS in driving public sector performance. Effective MCS serves as a bridge between organisational goals and tangible performance outcomes, underscoring the need for evaluation systems that adequately capture both financial and non-financial dimensions of success.

2.2 Management Control System (MCS)

The concept of Management Control Systems (MCS) has evolved substantially, leading to various definitions and interpretations in academic literature. Central to most discussions is the relationship between MCS and the actions of individuals, groups, or organisations. For instance, Malmi and Brown (2008) characterise MCS as more than just administrative formalities; they see them as integrated frameworks of rules, values, and practices intentionally developed by Management to shape behaviour within an organisation. Similarly, Merchant and Van der Stede (2007) emphasise that MCS goes beyond simple oversight. They encompass the planning, control, and Management of resources and personnel within the broader social context of the organisation. This perspective highlights the dynamic interaction between formal systems and human behaviour, which is particularly relevant in public sector organisations where organisational performance is under constant scrutiny.

A considerable body of research has highlighted the impact of MCS on organisational performance. Goh (2012) argued that a well-structured MCS can significantly enhance the effectiveness of performance management, especially in public institutions where accountability and constraints are pronounced. Kazho and Atan (2022) contend that robust measurement systems are indispensable for achieving organisational effectiveness, particularly in the public sector. Given the complex realities of public administration, the development of a resilient MCS is not just advantageous but essential. Stakeholder interests often conflict, necessitating multidimensional performance evaluations that go beyond financial outcomes to include the social and environmental considerations of the company. Gond *et al.* (2012) stressed the importance of adaptive management strategies that can meet the changing demands and sustainability

challenges faced by modern organisations today. In conclusion, MCS are foundational mechanisms that help public sector organisations align their strategic goals with operational realities. Their integration into management practices is critical for ensuring that organisations can efficiently and effectively fulfil their objectives, even in increasingly complex and dynamic environments.

2.2.1 Coercive vs. Enabling MCS: Implications for Public Sector

The distinction between coercive and enabling MCS in public sector organisations has significant implications for organisational resilience and management efficacy. Coercive MCS often impose strict regulations that limit managerial autonomy, potentially leading to disengagement and resistance among staff, which can hamper an agency's overall effectiveness (Beuren & Santos, 2019). Conversely, enabling MCS is characterised by flexibility and support, fostering an environment in which managers feel empowered to make decisions that align with the organisation's objectives while still adhering to necessary protocols (O'Grady, 2019). This duality is essential for understanding how organisations respond to challenges, as enabling systems are posited to enhance resilience through adaptive capabilities in turbulent times, contrasting with the rigidity often introduced by coercive controls (Beuren & Santos, 2019).

Recent research highlights that public sector entities can benefit from a balanced integration of both MCS types to optimise performance and adaptability (Farwitawati, 2025; Sánchez-Expósito & Naranjo-Gil, 2017). Enabling MCS can lead to higher levels of innovation, as it encourages an environment where staff are motivated to generate new ideas and implement them without excessive administrative barriers (Farwitawati, 2025). However, public organisations face the challenge of maintaining sufficient oversight to prevent misreporting and control failures, tasks typically fulfilled by coercive systems (Sánchez-Expósito & Naranjo-Gil, 2017). Therefore, the synthesis of coercive and enabling MCS is crucial. In contrast, coercive elements can help structure and guide organisational efforts, enabling components that are necessary for nurturing creativity and resilience, resulting in a more holistic management approach that addresses the complexities inherent in the public sector (Sánchez-Expósito & Naranjo-Gil, 2017).

2.3 Intellectual Capital (IC)

Intellectual Capital (IC) has become non-negotiable in today's knowledge-driven economies. It is not just about what you can see or touch; the real value lies in the intangible assets that organisations rely on for a competitive edge. Scholars (Youndt *et al.*, 2004; Cheng *et al.*, 2010) typically divide IC into three main categories: human capital (people and their expertise), structural capital (systems and routines that hold everything together), and relational capital (networks, partnerships, and goodwill). Each category plays a critical role in enhancing organisational capabilities and nurturing innovation.

Scholars widely agree that knowledge has surpassed physical assets as the primary source of competitive advantage (Bollen *et al.*, 2005). There is a fair amount of evidence that organisations that manage their IC see improvements in performance, profit, and

market value (Fitriaty *et al.*, 2022; Chiriac *et al.*, 2019; Khalique *et al.*, 2015). However, measuring and managing intellectual capital is challenging. That is a puzzle. Many organisations are still struggling to determine how to factor these intangibles into their broader strategies (Marr, 2004; Li *et al.*, 2008). The challenge arises from the dynamic nature of IC, which changes as organisations evolve and their external relationships shift (Arief & Anisah, 2024). What works today may not work tomorrow; therefore, a nuanced and adaptive approach is essential (Kondratiuk & Haman, 2023; Elwaakeel & El-Khweet, 2020).

In conclusion, IC is a cornerstone of modern business success, shaping profitability and market position. Effectively managing these resources is essential for organisations hoping to carve out a lasting place in a rapidly changing environment (Bronisz *et al.*, 2012; Brătianu, 2018). Organisations that engage thoughtfully with IC can gain sustainable advantages, provided they are willing to integrate it strategically and remain agile (Bose & Oh, 2003).

2.4 Integrating Intellectual Capital and MCS

Integrating IC in the context of MCS presents transformative potential for public sector organisations, especially as they navigate the dichotomy between coercive and enabling controls. Coercive MCS, characterised by strict regulations, may limit the ability to leverage IC effectively (Beuren & Santos, 2019). Such systems can restrict creativity and hinder knowledge sharing among employees, ultimately diminishing the potential for innovation and resource integration, which are critical for long-term success (Alemu, 2025). In contrast, enabling MCS facilitates an environment where IC can thrive, allowing for greater autonomy, collective problem-solving, and the holistic application of knowledge assets (Mulyasari & Murwaningsari, 2019). Research indicates that when organisations foster an empowering atmosphere by enabling MCS, they can enhance their innovative capabilities and achieve superior performance outcomes by maximising their IC (Wang *et al.*, 2025).

Moreover, the effective integration of IC through enabling MCS can lead to improved financial performance and competitive advantage. Studies suggest that organisations rich in intellectual capital enhance their resource utilisation and decision-making processes, particularly in turbulent environments (Zhang *et al.*, 2017; Alhassan & Asare, 2016). This is particularly relevant for small and medium-sized enterprises, where top management involvement in resource integration and strategic decision-making plays a crucial role (Wang *et al.*, 2025). The balance of both coercive and enabling MCS can thus be vital in public sector operations, as enabling systems not only promote a culture of learning and adaptability but also allow organisations to retain the necessary controls to ensure accountability and integrity in their financial reporting. The interplay between these two types of MCS creates a robust framework for leveraging IC, ultimately leading to sustainable performance and enhanced organisational resilience (Hia & Kusumawardhani, 2023).

2.5 Public Sector Performance and Management Control System (MCS)

The public sector consists of organisations predominantly owned and operated by the government, with their central priority being the provision of essential services to the public rather than generating profits (Rashed & Shah, 2020). Unlike their private sector counterparts, which tend to focus on maximising financial returns, public sector entities are driven by objectives such as public welfare, equity, and broader social development (Arfeen, 2022). Ensuring transparency and accountability remain paramount, particularly as these organisations aim to guarantee fair and accessible services for all citizens. However, public sector organisations routinely grapple with limited funding and resource constraints, making their missions more challenging to achieve (Boyne, 2002). Under increasing pressure to deliver results and maintain accountability, some firms have adopted management practices that are more commonly associated with the private sector. Notably, MCS have gained traction; these frameworks are implemented to align activities with strategic objectives better, make optimal use of resources and systematically monitor performance.

Within the public sector, MCS plays several vital roles: formalising accountability procedures, improving the quality of decision-making, and driving operational efficiency. Scholars have identified two primary types of MCS: coercive and enabling. Coercive MCS are characterised by rigid structures that limit employee autonomy, whereas enabling MCS provides staff with the flexibility to apply their judgment and expertise when facing various challenges in their work environments. This distinction is especially significant for public organisations, which must balance resource management with stakeholders' diverse needs. The current literature underscores the importance of adopting management structures that ensure accountability while empowering employees to innovate and adapt to changing circumstances (E.g. Vu, 2020; Erickson *et al.*, 2003). In summary, as the public sector continues to evolve, the adoption of sophisticated management practices, such as MCS, is becoming increasingly essential. The effective implementation of these systems can help public organisations achieve their missions and respond to the complex interplay of performance, resources, and public accountability.

2.6 Intellectual Capital and Organisational Performance

Baker (2008) underscores the significance of IC as a central driver of organisational value creation. He asserts that to sustain competitiveness amid evolving economic conditions, firms must actively identify, measure, and manage their IC. This perspective is echoed by Kamaluddin & Ramadan (2013), who noted the growing recognition of IC as a strategic resource for maintaining a competitive advantage. Their findings indicate that companies adept at leveraging their IC are often rewarded with higher investor valuations.

Therefore, efficient Management of IC is not merely advantageous in the short term; it also lays the groundwork for ongoing profitability and revenue growth in the long term. Literature consistently supports this perspective. For instance, Sucena *et al.*

(2023) demonstrated that effective IC management, particularly when combined with strategic partnerships, substantially improves organisational performance in the construction sector, resulting in sustained growth and competitive advantage. Tangngisalu (2022) also affirmed these conclusions, highlighting a positive correlation between human capital efficiency and corporate profitability, thereby emphasising the pivotal role of human resources within the broader IC framework. Khalique *et al.* (2015) reinforce these arguments by identifying human and intangible resources as essential strategic assets that high-performing firms leverage to achieve superior outcomes.

2.7 Management Control Systems, Intellectual Capital, and Organisational Performance

Organisational performance is closely tied to the design and implementation of MCS. In simple terms, MCS are a set of rules, practices, and activities that guide what happens inside a company to keep things aligned with strategic goals. There are two main types of power: coercive and enabling. Coercive MCS focuses on strict control and is designed to ensure that top Management's priorities are met, with little flexibility for employees (Englund & Gerdin, 2015). In contrast, enabling MCS are built to be more adaptable, allowing employees to adjust processes as needed, especially when unique challenges arise (Adler and Borys, 1996).

Enabling systems allow employees to use their expertise and creativity when unexpected issues arise, rather than merely following preset routines (Earl & Hopwood, 1980). By making internal procedures more transparent, MCS helps employees form a clear understanding of how work systems function, which, in turn, improves their ability to manage and control these systems. This flexibility is particularly valuable because it helps organisations respond more effectively to changes (Adler & Borys, 1996).

Furthermore, enabling MCS supports the development and use of IC, which is the collective knowledge, skills, and relationships that give organisations an edge. Inkinen (2015) described IC as consisting of three elements: (1) human capital, or individual knowledge and skills; (2) relational capital, involving internal and external relationships; and (3) organisational capital, which refers to knowledge embedded in structures, routines, and culture (Beattie & Smith, 2013). The manner in which these components interact has a substantial impact on organisational performance.

Research suggests that organisations with more mature IC tend to achieve better outcomes. The evolution of IC highlights its significance as a driver of firm performance in the digital era. MCS serves as a mechanism for leveraging IC, and studies show that enabling controls are generally more effective than coercive controls in fostering IC (Coyte, 2019). Enabling MCS also makes it easier to share and use knowledge, further supporting the success of the organisation (Veen-Dirks *et al.*, 2021).

2.8 Theoretical Background

This study applies the Resource-Based View (RBV) to dissect how IC within public sector organisations mediates the effectiveness of MCS, offering a novel lens through which to

view organisational performance. RBV helps increase organisational performance through value-based assets, including MCS and ICs, and shapes MCS across public organisations to contribute to value creation. By integrating these theories, this study provides a comprehensive understanding of how MCS and IC development occur within public-sector organisations.

2.8.1 Resource-Based View (RBV) and Intellectual Capital (IC)

RBV theory has evolved since its early conceptualisation, providing a foundational framework for understanding how internal resources contribute to sustained competitive advantage (Barney, 1991). Rooted in Penrose's (1959) work, which emphasises the role of firm-specific knowledge and capabilities in driving growth, the RBV was later formalised by Wernerfelt (1984), shifting the strategic focus from external market positioning to internal resource configuration. Barney (1991) extends this theory by introducing the VRIN framework, which is valuable, rare, inimitable, and non-substitutable, allowing for a more structured evaluation of strategic resources.

In the contemporary context, the RBV has been expanded through the development of the knowledge-based view (Grant, 1996) and dynamic capabilities perspective (Teece, Pisano, & Shuen, 1997), acknowledging that intangible assets such as intellectual capital (IC) and firm-specific knowledge are central to competitive advantage in knowledge-driven economies. IC, which includes human, structural, and relational capital (Stewart, 1997), is considered a strategic resource. In contrast, management control systems (MCS) are viewed as dynamic capabilities that enable firms to integrate and operationalise IC. By applying an evolved RBV theory lens, this study explores how the integration of MCS enhances organisational performance.

The assertion that "RBV and IC are theoretically intertwined, with IC operationalising RBV's focus on intangible resources" is well-supported in the literature. The Resource-Based View (Barney, 1991) established the theoretical importance of unique internal resources. This propostion was extended to intangible assets by scholars like Hall (1992). The Intellectual Capital framework (Edvinsson & Malone, 1997) then provided a pragmatic model for categorising and managing these resources, effectively operationalising the RBV's principles. This integration is most explicitly articulated by Reed *et al.* (2006), who propose an "Intellectual Capital-Based View of the Firm," arguing that IC is the paramount resource orchestrating competitive advantage in the knowledge economy. Consequently, RBV and IC are theoretically intertwined; IC effectively operationalises RBV's theoretical emphasis on intangible resources by providing a structured lens through which to identify, manage, and measure them (Murale *et al.*, 2010).

3. Conceptualisation and Preposition Development

3.1 IC and MCS Interplay

The synergistic interplay between MCS and IC drives public sector performance, a relationship manifested through the distinct, dynamic interactions of specific MCS levers with core IC elements. Specifically, the MCS acts as a dynamic leveraging mechanism wherein: (1) Beliefs Systems cultivate Human Capital (HC) and Relational Capital (RC) by inspiring mission alignment and stakeholder commitment; (2) Diagnostic Controls interact with Structural Capital (SC) to codify knowledge, ensure efficiency, and validate performance; and (3) Interactive Controls engage dynamically with all IC components (HC, SC, RC) to foster adaptation, learning, and innovation. It is this multifaceted activation and integration of resources and controls that ultimately generates superior public performance, transcending the contribution of any individual element alone.

Unlike traditional views that regard MCS primarily as compliance or monitoring tools, the RBV perspective positions MCS as a dynamic organisational capability that is valuable, rare, inimitable, and non-substitutable (VRIN), particularly when tailored to organisational objectives and cultural contexts (Davila *et al.*, 2009). Effective MCS contribute to an organisation by enhancing decision-making and aligning activities with the organisation's goals (Widner, 2007). Thus, in this study, MCS are conceptualised as firm-specific capabilities that play a significant role in driving organisational performance through their interactions with internal resources, such as IC.

> **P1:** The distinct interplay between specific Management Control System (MCS) elements and Intellectual Capital (IC) components drives the synergistic effect of MCS and IC on public sector performance.

3.2 Integration of MCS, IC, and Performance in Public Sector Organisations

The integration of MCS and IC influences public sector organisations' performance. The RBV posits that internal resources and capabilities serve as the foundation for achieving a sustained competitive advantage (Barney, 1991). This theoretical framework is relevant in the context of MCS, as it is increasingly recognised as a strategic capability that enables firms to coordinate, integrate, and apply other key resources, particularly intangible assets such as intellectual capital, to improve organisational performance (Chenhall, 2005; Henri, 2006). Furthermore, MCS plays a dynamic role in organisations.

Furthermore, the significance of knowledge assets, such as IC, which encompasses human, structural, and relational capital, is essential for fostering innovation and adaptability in public organisations (Galabova & Daskalova, 2020). Effective IC management enhances public sector organisations' capabilities as unique assets. For instance, the development of human capital through training and knowledge-sharing initiatives can empower employees to improve organisational performance. Additionally, relational capital, which includes the relationships and networks that organisations maintain, facilitates collaboration and resource sharing, further enhancing performance.

The interplay between MCS and IC is significant within the RBV framework, as both elements can be viewed as internal, firm-specific capabilities that specify the VRN

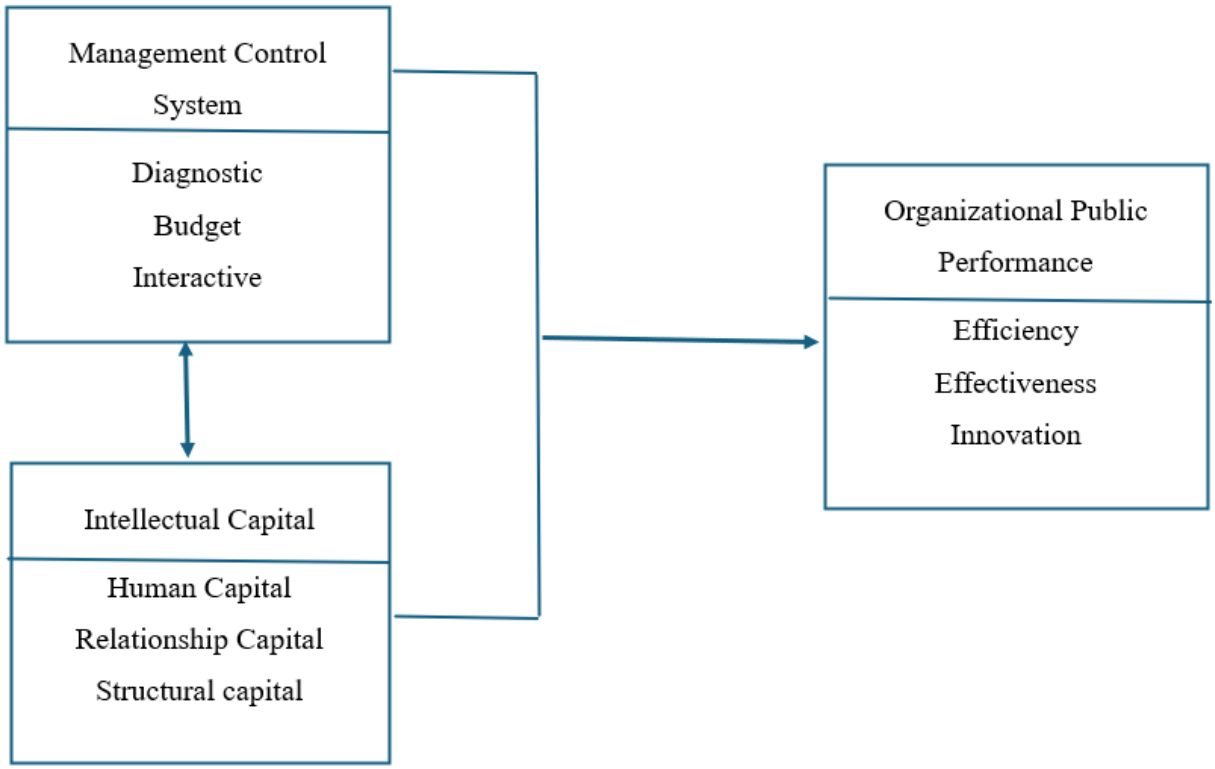
criteria (Barney, 1991). IC encompasses human, structural, and relational capital (Stewart, 1997), representing strategic intangible assets, whereas MCS serves as an enabling mechanism that facilitates the coordination, monitoring, and strategic alignment of resources (Chenhall, 2005). When MCS are effectively integrated, they comply with the governing behaviour of the organisation and support the mobilisation and deployment of IC for active organisational performance (Widener, 2007). In conclusion, the combined influence of MCS and IC, viewed through the lens of the RBV, provides a robust framework for understanding the performance of public-sector organisations. The effective use of these elements can improve organisational performance. Therefore, this study proposes the following proposition:

> **P1:** The interaction between enabling Management Control Systems (MCS) and Intellectual Capital (IC) generates a synergistic effect that significantly enhances public sector performance, surpassing the impact of either factor alone

3.2 Conceptual Indicator Model

This study proposes a conceptual model, grounded in the Resource-Based View (RBV), wherein public sector performance emerges from the synergistic interaction of three components: IC base, MCS, and public performance. The IC Base, which constitutes the organisation's stock of strategic intangible assets - human, structural, and relational capital; the MCS, which functions as a dynamic leveraging mechanism comprising beliefs, diagnostic, and interactive controls to mobilise and amplify the IC base; and Multidimensional Public Performance, where the effective interaction between the MCS and IC generates superior outcomes in efficiency, effectiveness, and innovation, ultimately culminating in enhanced public value creation. Thus, the model posits that performance is not a direct result of assets or systems alone but is an emergent property of their strategic interaction, positioning the MCS as the crucial mechanism that transforms static resources into a sustainable performance advantage.

Figure 1: Concept Indicator Model



4. Implications

4.1 Managerial Implications

This paper contributes to exploring the relationship between the management control system and the performance of the organisation. This conceptualisation will contribute to enhancing performance through management control systems, particularly by leveraging the interaction of intellectual capital, which comprises human, structural, and relational capital. Furthermore, this study will help managers identify the weaknesses of the management control system and the effective utilisation of resources in terms of efficiency, effectiveness, and economics. A further theoretical contribution of this study is that knowledge will be added by examining the relationship and influence of intellectual capital on management control systems and organisational performance.

The managerial implications of this study offer valuable insights for managers seeking to enhance organisational performance. Managers can leverage conceptualisation to implement data-driven decision-making processes, fostering a culture of innovation and adaptability. By adopting the strategies outlined in the research, organisations can improve employee engagement, streamline operations, and increase overall productivity. Additionally, this conceptual analysis suggests that investing in employee training and development programs focused on digital skills and cross-functional collaboration can lead to significant improvements in team performance and customer satisfaction. Further, managers should consider restructuring their communication channels to facilitate more efficient information flow and knowledge sharing across departments.

4.2 Theoretical Implications

From a theoretical perspective, this study contributes to the existing body of knowledge on organisational behaviour and strategic Management. The paper challenges traditional models of leadership by highlighting the importance of adaptive controls in rapidly changing business environments. Furthermore, the research extends current theories on organisational learning by introducing a novel framework for knowledge integration in complex systems. This theoretical advancement provides a foundation for future studies exploring the interplay between organisational structure, technology adoption, and innovation capabilities. The study also opens new avenues for research on the role of artificial intelligence in shaping MCS, paving the way for interdisciplinary.

IC theory often treats human, structural, and relational capital as assets to be reported. This study would reposition IC as a dynamic capability that must be actively managed and leveraged. It would provide a strong theoretical link between the stock of IC and the flow of performance, moving beyond descriptive reporting to prescriptive Management.

5. Conclusion

In conclusion, this paper demonstrates that the interaction between MCS and IC is pivotal in enhancing public sector performance, a relationship robustly explained through the dual lenses of the Resource-Based View (RBV). The research affirms that MCS, particularly enabling controls, serve as dynamic capabilities that systematically activate, develop, and deploy intangible resources encapsulated in IC (human, structural, and relational capital). Grounded in RBV, this interaction transforms IC into a strategic asset that is valuable, rare, and difficult to imitate, thereby fostering sustainable public performance advantages manifested as efficiency, effectiveness, and innovation. Simultaneously, from an IC theory perspective, this synergy ensures that knowledge-based resources are not merely present but are optimally aligned with organisational objectives through structured control mechanisms. Thus, the integration of MCS and IC provides a comprehensive framework for public organisations seeking to enhance accountability, create public value, and achieve long-term strategic goals, offering both theoretical significance and practical utility for policymakers and public administrators aiming to leverage intangible assets in increasingly complex and resource-constrained environments.

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Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Author(s)

K. T. C. Priyangani is the Bursar of the University of Sri Jayewardenepura and is a member of the management committee. She is a doctoral student at the Postgraduate Institute of Management, University of Sri Jayewardenepura, Sri Lanka.
Email: priyangani@sjp.ac.lk

Dr. G. A. T. Kaushalya is a senior lecturer at the University of Sri Jayewardenepura. Her research focuses on Intellectual Capital, Accounting, Knowledge and Sustainable Development. She plays an active role in teaching and departmental coordination of degree programs.
Email: gatkaushalya@sjp.ac.lk

Dr. Ananda K. L. Jayawardana is an adjunct senior lecturer at the University of New South Wales, Canberra, and a senior consultant at the Postgraduate Institute of Management, University of Sri Jayewardenepura, Sri Lanka. Dr Jayawardana has his teaching and research interests in a wide range of areas, including Human Resources Strategic Management, Total Quality Management, Productivity Management, and Intellectual Capital. He was a lecturer in Management and an Adjunct Fellow of the Australian National University and carries over 25 years of Industry experience. He has led and contributed to numerous research projects and authored over 40 publications.
Email: a.jayawardana@adfa.edu.au, anada.jayawardana@unsw.edu.au

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