Improving Municipal Resource Allocation: Recommendations for Integrating Strategic Portfolio Management, Joined-Up Governance, and Emergent Strategies in the Municipality of Eindhoven

Author:
Michelangela Sappia (6094988)

Supervisors :
First supervisor: Hans de Bruijn
Second supervisor: BinBin Pearce
Company supervisors: Robert Elbrink and Anna van Houten-Slump

June 5, 2025

Contents

Abstract

The Municipality of Eindhoven faces growing strategic challenges due to rapid urban development, ambitious climate goals, and increasing demand for housing and transport. Achieving these objectives simultaneously requires effective allocation of limited resources. However, siloed departments, inconsistent coordination, and the growing complexity of projects and stakeholders complicate this process.

This research explores how integrating the structured decision-making of Strategic Portfolio Management (SPM) with the collaborative practices of Joined-Up Governance, and the adaptive behaviors needed for emergent strategies to emerge, can improve resource allocation in Eindhoven. Using a case study approach, the research combines 14 semi-structured interviews and document analysis to examine current decision-making processes and identify governance barriers.

The findings reveal a fundamental mismatch between Eindhoven's existing governance structure and the complexity of the challenges it faces. This mismatch manifests in three underlying causes: (1) a lack of measurable, shared goals; (2) fragmented, sector-driven prioritization; and (3) the absence of consistent portfolio and capacity management.

Because traditional SPM models do not fit Eindhoven's political and organizational context, this study develops a tailored conceptual framework that combines practices from SPM, Joined-Up Governance, and enabling conditions for emergent strategies to form. This framework led to tailored recommendations of tools and practices for Eindhoven inspired by these three theories: the implementation of Objectives & Key Results (OKRs), a cross-sector Portfolio Steering Committee, implementing linking pins, a weighted-shortest-job-first (WSJF) scoring method, and a shared digital dashboard. These recommendations aim to improve strategic direction while preserving municipal flexibility and political autonomy.

This research contributes to the limited literature on adapting SPM for municipalities or, more broadly, the public sector. Additionally, it offers actionable guidance for municipalities seeking to allocate resources more strategically in complex and dynamic environments.

Keywords: Strategic Portfolio Management (SPM), Municipal Governance, Resource Allocation, Project Prioritization, Decision-Making Processes, Joined-up Governance, Emergent Strategies, Case Study Analysis.

Executive Summary for Senior Management

The following one-pager serves as an executive summary of this thesis, tailored specifically for senior decision-makers within the Municipality of Eindhoven. It presents the core problem, the three key organizational challenges (which are later discussed in the thesis as root causes), and five actionable recommendations in a concise and accessible format. The aim is to communicate the main findings and proposed solutions of this research in a way that is both compelling and relevant for political and strategic leadership.

 While the rest of the thesis provides in-depth analysis, this summary is intended to spark interest, clarify that a problem exists today, and demonstrate how these recommendations can help address it. The goal is to improve Eindhoven's organizational readiness and governance capacity in light of its rapid growth. This one-pager does not go into the technical details of how each recommendation works, but instead highlights why they are relevant and briefly outlines what they entail.

From Siloes to Strategy: Building Eindhoven's Organizational Readiness

Eindhoven is growing, and with that growth comes bigger and more complex societal challenges. The municipality's ability to prioritize, align, and allocate resources effectively is increasingly being stretched. To ensure Eindhoven is future-ready, the organization must build up its internal alignment, agility, and coordination capacity. This research identifies three organizational barriers that limit strategic responsiveness and contribute to misalignment, and proposes five mutually reinforcing solutions that strengthen strategic governance without requiring major structural reforms.

Three Core Challenges

Vision Without Clear Direction	Siloed Working	Misaligned Priorities Across the Organization
The Bestuursakkoord outlines strong ambitions, but goals are often too abstract to guide decisions and create alignment throughout the organization	Portefeuilles work in parallel with limited shared visibility or coordination. Projects with shared goals are often developed independently, and informal collaboration is not enough to ensure alignment.	No common framework exists for comparing initiatives. Portfolio and capacity data are fragmented, making it difficult for leaders to make well-informed trade-offs across portfolios.

Recommendations

1 Translate Visions into Shared Direction and Organizational Alignment

The current high-level visions must be translated into measurable objectives that clarify everyone's role in the long-term goals. Using OKRs (Objectives and Key Results) is a simple yet effective way to create alignment by establishing a shared direction and showing how everyone contributes to broader ambitions. It creates cohesion, sharpens focus, and fosters accountability. OKRs involve translating the Bestuursakkoord's visions into qualitative objectives, each supported by 2–5 key results. S&O can help cascade these OKRs across the organization. It is important to note that OKRs are not hard targets but guiding goals to give direction and can evolve or change over time.

2 Strengthen Strategic Coordination and Cross-Sector Prioritization

To break through siloes and ensure the municipality acts as one organization, strategic coordination must improve at the top. A Portfolio Steering Committee (PSC) can support this by reviewing and advising on key projects across portefeuilles. The PSC (consisting of sector heads and S&O representatives) reviews progress, identifies coordination gaps and resource constraints, and provides guidance on project prioritization. It ensures that the municipality's most strategic efforts are supported and contributes to more consistent, transparent, and strategic decision-making. It also fosters collaboration and communication between sectors, which strengthens overall strategic alignment.

3 Connect the Dots Between Portefeuilles and Improve Collaboration

Eindhoven's strategic goals often span multiple teams, yet coordination is informal or sometimes missing altogether. To overcome fragmentation, strategic linking pins should be assigned to connect teams working toward shared goals. These individuals do not manage delivery, but act as brokers of information and alignment. They strengthen operational coordination and enable faster learning loops between silos.

4 Focus on What Matters Most, When It Matters Most

Resources are limited, so prioritizing projects based on urgency, strategic impact, and effort required matters more than ever. Applying a prioritization method like an adapted Weighted Shortest Job First (WSJF) brings structure and transparency to difficult trade-offs. It helps each sector adjust its priorities in a structured way when new projects are added or situations change. This enables portefeuilles to react quickly and make informed, strategic re-prioritization decisions. As a result, decision-makers can allocate limited time and money more effectively.

5 Visualize Project Contributions to Strategic Goals

Decision-makers need insight into how projects contribute to the long-term vision and where coordination may be falling short. A strategic dashboard can provide this visibility by showing project alignment with goals, highlighting bottlenecks, and tracking progress across portfolios. This shared view supports more informed decision-making, improves accountability, and enables the municipality to continuously learn and adapt. Ensuring that all levels of the organization actively use the dashboard further strengthens strategic decisions by grounding them in shared, up-to-date insights.

Eindhoven does not need a new system. It needs better alignment, coordination, and collaboration—these recommendations help make that happen.

1 Introduction

1.1 Context and Problem Statement

Eindhoven is one of the fastest-growing municipalities in the Netherlands. It is facing rapid urban and economic growth. The city has positioned itself as the leading innovation hub in the Netherlands. Consequently, many companies are choosing to settle, and grow in Eindhoven. This has resulted in a substantial increase in population in recent years, which is only expected to continue growing. This growth has put a strain on the demand for municipal resources.

Since Eindhoven's population is expected to continue growing, it is vital for the municipality to allocate its resources effectively to manage this expansion. Efficient resource allocation and project prioritization are now more critical than ever to ensure the sustainable growth of the city. However, currently there are no formal procedures on how to allocate resources in line with long-term strategic goals. Similar to most multiplicities, Eindhoven's current governance structure presents barriers to implementing a structured strategic decision-making approach. Nevertheless, given the municipalities current rapid growth, and their interest in becoming a more strategic organization, the need and benefits of this are growing. Therefore, this research explores the possibility of how a more structured and strategic resource allocation is possible.

Before exploring how strategic resource allocation in the municipality can be improved, it is important to first understand the governance-related inefficiencies that currently hinder it. Eindhoven, like many municipalities, faces increasing complexity in balancing competing priorities, coordinating across portfolios, and responding to shifting political demands. Decision-making is often reactive rather than strategic, collaboration remains informal, and prioritization differs widely between clusters. These inefficiencies point to deeper structural issues. The findings of this research reveal a fundamental mismatch between Eindhoven's existing governance model and the complexity of the challenges it faces. This mismatch is rooted in three underlying causes: a lack of measurable, shared goals; fragmented, sector-driven prioritization; and the absence of consistent portfolio and capacity management.

In attempts to address these challenges to resource allocation, literature has begun to explore Strategic Portfolio Management (hereafter SPM) as a way to structure resource allocation based on long-term priorities, help balance trade-offs, and achieve strategic alignment. Nevertheless, SPM in its traditional form assumes a stable top-down decision-making environment with clear long-term strategic objectives. Therefore, while SPM offers a structured way to make decisions in line with long-term objectives, it does not address or complement the inherent siloed nature of municipalities and their dynamic political nature. This suggests that the traditional form of SPM is not perfectly suitable for the municipality of Eindhoven, or other municipalities.

Eindhoven requires an adapted SPM model. One that incorporates flexibility, adaptability, and stimulates cross-sector collaboration to function effectively, given the city's governance constraints. This research project explores the applicability of SPM-inspired practices for the municipality of Eindhoven, which has been adapted using practices from joined-up governance and the conditions necessary for emergent strategies to form. Joined-up governance is a framework for collaborative municipal governance that can address Eindhoven's soiled structure by fostering interdepartmental collaboration. Emergent strategies, on the other hand describe the importance of institutions being adaptable and allowing a new way of working to emerge based on practice. Using concepts from these theories, this research project explores if and how SPM can be adapted to achieve strategic resource allocation.

1.2 Research Gap

SPM offers a potential solution to the resource allocation challenges faced by municipalities. It is a framework often used in the private sector as it provides tools for aligning objectives, optimizing resource use, and making informed trade-offs between competing priorities (Killen et al., 2012; Bozeman and Rogers, 2001; Maceta and Berssaneti, 2019). By introducing a structured decision-making approach, SPM could help Eindhoven overcome its governance and prioritization challenges. However, research on adapting SPM to the public sector is limited, particularly in municipal contexts (Baškarada and Hanlon, 2018a; Roberts and Edwards, 2023). Its implementation in municipal governance remains underdeveloped due

to the challenge of overcoming the nature of municipalities facing political shifts and fragmented governance structures. Decisions in municipalities are not purely data-driven but are influenced by political and social factors, making it hard to implement SPM effectively in this context.

A particular limitation of traditional SPM is its assumption of stable long-term goals, which contrasts with the dynamic and politically volatile environment of municipalities. Priorities frequently shift based on electoral outcomes, stakeholder demands, or emergent societal issues, creating a volatile decision-making landscape. To address the need for a more dynamic and adaptive form of decision-making, this thesis explores the possibility of incorporating the conditions necessary for emergent strategies to form, with practices from SPM. Emergent strategies describe an adaptive way of strategy creation that is formed through reacting to situations in real-time and incorporating a philosophy of iterative learning. By allowing strategic goals to evolve in light of changing realities, as done in the forming of emergent strategies, municipalities can retain the benefits of a disciplined portfolio-management process without sacrificing responsiveness.

Furthermore, Eindhoven's governance structure, like other municipalities, is characterized by fragmentation and vertical silos. This makes it difficult to implement a uniform strategic decision-making process like in SPM. Incorporating practices from Joined-up Governance, a framework that proposes cross-sector collaboration and shared decision-making, has the potential to strengthen and support the implementation of SPM by embedding collaboration structures and behaviors into the municipality's overall management.

This research addresses the clear gap in literature regarding the implementation of SPM in municipal contexts. Despite the promising outcomes of SPM in certain public-sector contexts, there is no well-established framework or recommendations that detail how to implement SPM practices in municipalities in a way that overcomes their challenges of political volatility and siloed structures. Furthermore, there is no literature integrating SPM with Emergent Strategies and Joined-Up Governance to accommodate the complex realities of municipal environments.

This research aims to address this research gap by developing and evaluating the feasibility of an adapted SPM framework that integrates the conditions necessary for Emergent Strategies to form and practices from Joined-Up Governance to better fit municipal realities. By using Eindhoven as a case study, this thesis explores whether an adapted SPM framework can be feasible municipal context. Eindhoven's political volatility and organizational silos are not unique in the public sector or municipalities. However, the urgency of its situation, due to rapid growth and fragmented decision-making, makes it a timely and valuable context for exploring whether an integrated, adaptive approach to SPM can enhance municipal resource allocation and strategic alignment.

1.3   Research's Link to COSEM

This thesis reflects both the CoSEM perspective and approach by tackling a complex socio-technical challenge at the intersection of governance, strategy, and technology. It focuses not just on designing tools, but on understanding how decisions are made in a system with many actors, siloed structures, and different interests. This thesis combines systems thinking and process management to develop solutions that are both technically feasible and practical within Eindhoven's existing governance setup.

In line with COSEM's methods, a conceptual model was developed to connect elements of SPM with practices from Joined-Up Governance and the conditions needed for emergent strategies to form. This model was used to create design criteria and shape a set of tailored recommendations that fit the specific context of the municipality.

Additionally, the CoSEM perspective comes through in how the thesis brings together public and private sector ideas, technical methods, and political realities, to form structured practices with an element of flexibility. It also shows how engineering and management approaches can be applied together in a way that works for complex, real-world problems. By involving different stakeholders and validating findings along the way, the thesis stays close to CoSEM's goal of designing solutions for multi-actor socio-technical problems that work in practice, not just in theory.

2 Literature Review and Problem Conceptualization

In the following section, the challenges regarding resource allocation in municipalities explored in literature are presented. Additionally, the current approaches to improve resource allocation and their limitations are discussed. These limitations highlight the need for a more adaptive governance framework that supports strategic decision-making, while maintaining flexibility and improving standardization of processes in municipalities.

In attempts to achieve an adaptive governance framework that provides structure, and promotes unity and collaboration, three governance frameworks or concepts are introduced: SPM, Joined-Up Governance, and Emergent Strategies. SPM is a structured decision-making tool that helps prioritize projects according to long-term municipal goals. However, its applicability in municipal governance is questioned due to the dynamic nature of municipalities and SPM's inherently structured approach. Emergent strategies are introduced as an approach to accommodate political shifts and uncertainty, ensuring that long-term planning remains adaptable to changing governance priorities. Lastly, Joined-Up Governance, on the other hand, is explored as a mechanism to break down silos and enhance cross-departmental collaboration.

Finally, this section highlights a gap in literature. Literature lacks a cohesive framework that addresses the resource allocation challenges for municipalities as well as the practical steps for its implementation. Additionally, whilst SPM, emergent strategies, and Joined-Up Governance offer a potentially cohesive and promising solution to overcome the political and siloed nature of municipalities, there is no literature linking these governance theories. This knowledge gap gives rise to the research questions that guide this study, ensuring a structured approach to investigating how the municipality of Eindhoven can improve their resource allocation process.

2.1 The Challenge of Resource Allocation in Municipalities

One of the primary challenges in municipal governance is the effective allocation of resources. This challenge is one that the municipality of Eindhoven in particular is facing. Due to their rapid population growth, long-term strategic planning is essential. Unlike private sector organizations that prioritize financial returns and efficiency, municipalities must manage their resource, and make decisions shaped by political influences, social obligations, obligations set by the government, and long-term strategic goals. Therefore, they must manage their resources carefully to deliver the broad range of services they provide effectively.

However, resource allocation in a municipal context is inherently complex. Municipalities must balance the current needs and wants of their citizens with their long-term strategic goals, while also operating on tight budgets, and having limited personnel (Seetha, 2023). The combination of these factors makes it difficult for municipalities to allocate resources strategically in order to stimulate coordinated development across all projects.

Three overarching challenges hinder a municipalities ability to allocate resources strategically: the absence of a standardized and structured prioritization framework, the influence of political and stakeholder dynamics on decision-making, and the fragmented governance structure and siloed municipal operations. These challenges must be considered when designing a solution for a more structured and strategic resource allocation process. The following sections elaborate on these challenges and their implications.

2.1.1 Lack of Standardized Prioritization Methods

One of the core challenges municipalities face regarding resource allocation is the absence of a standardized prioritization method. Having a clear prioritization framework can help municipal officials identify which projects should receive funding based on factors such as strategic relevance, societal impact, or urgency. This not only simplifies the decision-making process but also results in more strategic investments of resources.

In most municipalities, project prioritization occurs without a unified framework, leading to slower, more reactive decision-making and inefficiencies in execution. This is reflected in literature as studies

state that ineffective prioritization can lead to reactive rather than proactive decision-making and responses, resulting in misalignment with long-term strategic goals. (Thesari et al., 2021; Alotaibi and Abdelmegeed, 2023). The increase in reactive decision-making, can also be linked to the political nature of municipalities. Without a structured prioritization procedure, resource allocation becomes dependent on negotiations between political actors rather than on evidence-based evaluation of a project's contribution to society or long-term goals (Ferreira et al., 2020). This makes it difficult to ensure decisions are optimized for the long-term sustainable growth of the municipality, rather than for short term political gains.

Ultimately, the lack of a clear and standardized prioritization criteria means that decision are made through political negotiation rather than being evidence-based. Therefore, trade-offs between projects are not systematically assessed, but rather done in an ad hoc way, creating an inability to ensure that decisions align with long-term strategic objectives. Decisions become largely reactive, resulting in inefficiencies and misalignment with long-term objectives.

2.1.2 Political Influence and Shifting Priorities

The political nature of municipalities complicates resource allocation by introducing reactive decision-making that disrupts long-term strategic alignment. Although democratic processes and public input are essential, frequent leadership changes and shifting political agendas often undermine continuity in planning.

One of the primary reasons that the political nature of municipalities is a challenge for resource allocation is the electoral cycle. In the Netherlands, every four years, there is a leadership change in municipalities, which can trigger changes in policies and long-term visions. This can result in an altered prioritization of goals, and therefore, different projects getting funding. Due to the four-year electoral cycle, there is a focus on achieving goals in the short term, and it becomes more difficult to invest and focus on a long-term strategy or vision. This occurs as elected officials are often not as concerned with the long-term goals of the municipality, as they may not be in office then.

Additionally, political agendas and the pressure on elected officials to show quick, tangible results often contribute to reactive governance. Leaders tend to prioritize short-term, highly visible projects that appeal to their voter base, rather than long-term investments with broader strategic value. Differing party priorities and the diversity of voter interests make it difficult to build a shared, long-term vision for the municipality. As a result, resource allocation decisions frequently shift with each electoral cycle, making it hard to maintain continuity and follow a structured path toward long-term goals.

Lastly, municipalities also have to cater to a diverse range of stakeholders. They must take into account the needs of residents, local businesses, and other organizations who lobby for different, and sometimes conflicting, interests. So while they must accommodate political opinions, they must also ensure that these political decisions reflect citizens' views. As a result, resource allocation is rarely anchored in long-term objectives alone. It must also respond to immediate citizen demands or emerging crises, further complicating the pursuit of strategic alignment of resource allocation with long-term goals. The need to satisfy multiple stakeholder groups makes it difficult to implement a structured and consistent resource allocation strategy.

Ultimately, politics will always play a role in municipal decision-making. Therefore, regardless of what strategy or method is developed to achieve a more structured and strategic allocation of resources for municipalities, an element of flexibility and adaptability is vital to accommodate the political nature of the institution.

2.1.3 Fragmented Decision-Making and Siloed Structures

The siloed governance structure in municipalities is another challenge to strategic resource allocation. In municipalities, departments often operate largely independently. Each department has its own budgets, priorities, and decision-making protocols. This siloed departmental structure allows for specialization and, therefore, can result in an increase in efficiency within departments. However, it often leads to fragmented decision-making at a higher municipal level (Molen et al., 2023). This fragmentation is caused by a lack of coordination between departments, creating barriers to effective resource allocation and

strategic planning as it reduces opportunities for pooling of knowledge and resources (Plant, 2009).

Due to the siloed governance structure, departments may overlook the broader implications of their decisions, or fail to recognize synergies that a project may have with those of other departments. Furthermore, studies indicate that siloed governance hinders the development of a clear organizational strategy. Departments operating independently often end up focusing on short-term, department-specific objectives that may conflict with the overarching municipal goals (Baškarada and Hanlon, 2018b). This highlights the challenge municipalities face of balancing their long-term goals and the short-term needs of citizens (Alotaibi and Abdelmegeed, 2023).

Additionally, a lack of departmental coordination and a clear overview of projects across departments may result in certain goals being addressed more thoroughly, while other objectives receive insufficient resources. Limited information sharing, due to silos, prevents municipal leaders from having a comprehensive overview of the status of all projects, reducing their ability to make informed trade-offs. In other words, limited cross-departmental coordination can lead to duplicated efforts and resource inefficiencies.

Ultimately, the fragmented structure creates a lack of coordination between departments, limiting a municipality's ability to allocate resources effectively. It hinders the department's ability to align projects with overarching city priorities, further complicating efforts to create a standardized prioritization framework. Given the diverse and complex range of projects municipalities need to carry out, operating in silos is the most effective way to govern the municipality. While stimulating better communication and information flow between silos is beneficial, any intervention designed to improve strategic resource allocation must acknowledge the vertical silos in the municipality and work with it, rather than assume the governance structure can significantly change to accommodate the intervention.

2.1.4 Conclusion of Main Challenges of Resource Allocation in Municipalities

The combination of these three challenges to achieve strategic resource allocation in municipal governance creates an environment where resource allocation decisions are often reactive rather than strategic. Without clear prioritization criteria, municipalities struggle to align investments with long-term goals. At the same time, political pressures and siloed governance structures further complicate the ability to implement a structured resource allocation process that enforces the consideration of long-term goals.

Addressing these challenges requires a governance model that balances structure with adaptability. SPM can provide the necessary structure, while Joined-Up Governance can reduce fragmentation and improve interdepartmental coordination. Finally, incorporating principles from Emergent Strategies allows municipalities to remain responsive to changing political and social dynamics without losing sight of long-term priorities.

The following sections will explore what these concepts and frameworks are, and how they might be beneficial and adapted to improve resource allocation in the municipality of Eindhoven.

2.2 Current Practices and Attempts to Improve Resource Allocation

The challenge of how to improve the effectiveness of resource allocation or how to strategically allocate resources is not new to municipalities. Municipalities have experimented with various approaches to try and improve resource allocation. Similarly, researchers have also developed different frameworks, and strategies on the topic. These strategies include digital governance tools, portfolio management techniques, as well as monitoring and evaluation frameworks. Nevertheless, despite these efforts, challenges in implementing these strategies still exist due to bureaucratic inertia and the nature of a politically run institution being volatile. There is an inherent lack of stable goals and vertical silos. Hence, while these strategies have been developed and researched, challenges remain with respect to their implementation.

In the following section, the main and most promising strategies reported in literature will be summarized, and their common limitations highlighted.

2.2.1 Common Themes Regarding Current Resource Allocation Practices

Literature reports that municipalities have attempted to improve resource allocation through digital governance, project prioritization frameworks, and portfolio management techniques. While each of these approaches provides valuable mechanisms for structuring decision-making, they face critical limitations that hinder their widespread and effective adoption.

Literature indicates that digital governance tools, project prioritization frameworks, and portfolio management techniques are techniques that improve municipal resource allocation. Digital tools support real-time monitoring and, in turn, evidence-based decision-making. While prioritization frameworks provide structure for assessing competing projects, and portfolio management helps align investments with long-term objectives. Each approach presents its own challenges, such as data security concerns and methodological inconsistencies between departments. However, collectively they provide insights on possible practices to improve the effectiveness of the municipal resource allocation process.

While these methods have benefits, they do not provide solutions for all of the previously discussed challenges in municipal resource allocation. Additionally, each of them also presents limitations and new challenges. A key shared limitation of these approaches is the difficulty of obtaining and utilizing high-quality data in municipal contexts. All three approaches emphasize the importance of data-driven decision-making, yet they also acknowledge that municipalities often struggle with data fragmentation and privacy concerns, making it difficult to gather the necessary data in a standardized form and in real time (Bektas et al., 2023; Fan et al., 2022). Meaning that real-time monitoring and predictive analytics become difficult to implement. This links back to the fact that municipalities are inherently siloed, and when designing solutions for municipalities, the solutions need to be compatible with the siloed nature.

Moreover, political volatility and bureaucratic inertia further complicate the implementation of these tools. Decision-making in municipalities is often reactive and not strategic, so while these tools help achieve long-term goals, they may not be used properly, or the outcomes of the tools may not be implemented due to short-term political interests (Nagorsky et al., 2016; Ortega et al., 2014).

Ultimately, while digital tools, prioritization frameworks, and portfolio management provide valuable tools for improving resource allocation, they are not standalone solutions. They have their own limitations, such as requiring accurate real-time data and a united and enthusiastic workforce to be successful, two factors that are hard to overcome in municipalities due to fragmentation. Moreover, due to the political nature of municipalities and their bureaucratic inertia, these tools are often not implemented or used to their fullest extent. Therefore, the effectiveness of these practices is constrained by structural, political, and bureaucratic barriers that prevent municipalities from capitalizing on their benefits. A gap in literature remains regarding how municipalities can more holistically improve resource allocation to be in line with long-term strategic goals.

2.3 SPM's Applicability to Municipalities

Given the challenges of fragmented decision-making, siloed departments, and political volatility, portfolio management techniques have gained attention as a holistic method for allocating resources and guiding project portfolios. However, SPM takes the portfolio management techniques to a new level by combining them with strategic objectives.

SPM is extensively researched in the private sector and has also been tested in specific municipal departments, such as infrastructure and real estate management. Its structured approach provides a clear criteria for project prioritization, investment alignment, and performance tracking, making it an attractive governance tool. This section explores the role that SPM can take in addressing the municipal challenges in resource allocation. First, the key principles of SPM and how it works is discussed, followed by its benefits and limitations.

Following this section, emergent strategies and joined-up government are also discussed. This is because, while SPM offers a structured method for resource allocation, it does not account for political dynamics, evolving strategic priorities, or the challenge of interdepartmental coordination, all of which are critical in municipalities. Therefore, Emergent Strategies is explored as a potential theory to address the need for adaptive decision-making in municipalities where political volatility and changing priorities

require flexibility. While emergent strategies can't be implemented or designed, their formation can be enabled. While Joined-Up Governance is explored for potential practices to tackle siloed governance structures, which hinder collaboration and reduce strategic alignment across municipal departments.

Therefore, SPM is explored first because it appears to offer a systematic, structured solution to resource allocation challenges. However, due to limitations of SPM given the municipal environment, emergent strategies and joined-up governance are discussed as complementary approaches to address the aforementioned challenges to resource allocation that municipalities face.

2.3.1 Introduction and Key Principles of SPM

SPM involves the coordinated management of a collection of projects to achieve a specific strategic objective. It is a systematic approach for managing a portfolio of projects to align investments with strategic objectives, balancing competing demands and optimizing resource allocation (Martinsuo and Killen, 2014). Therefore, it guides decision-making by managing trade-offs between competing objectives, to improve resource allocation and, in turn, portfolio management and performance. Prioritizing projects based on their potential contribution to organizational objectives, as well as continuously evaluating project outcomes, results in maintaining alignment with long-term goals.

The key principles of SPM include strategic alignment and portfolio balancing. Strategic alignment ensures that all projects directly contribute to overarching municipal goals (Kester et al., 2011). Portfolio balancing involves maintaining a mix of projects with varying risk levels and resource requirements to optimize overall investment effectiveness (Baptestone and Rabechini, 2018). While these principles are well-established in private-sector applications, municipal settings present distinct challenges that require adaptation, as explored in the next section.

2.3.2 Process of SPM

The process of SPM involves several steps that facilitate effective decision-making and project selection. This section outlines the various steps in the SPM process and their significance.

1. Establishing Strategic Objectives
At the core of SPM are clear and well-communicated strategic objectives. These objectives guide project selection and prioritization. SPM assumes a strong top-down approach. Therefore, it assumes that goals and decisions are solely made by higher-level management. Clear SMART goals can help translate the vision that top-level managers have into project-level outcomes or actions. Having clear goals ensures alignment throughout the organization by making it clear to all levels of the organization what part they play in achieving these goals.

2. Identifying and Evaluating Projects
Once strategic objectives are established, organizations create their portfolio. The portfolio consists of the projects they choose to carry out and fund. However, before creating the portfolio, first information about the potential projects that align with the long-term goals of the organization need to be collected. This involves gathering project proposals from across the organization. These projects are then evaluated against a predefined criteria to assess their alignment with strategy, as well as performance against certain metrics such as expected ROI, risk level, and resource requirements (Benaija and Kjiri, 2014).

3. Prioritizing Projects
After the initial identification of possible projects, the next step is to evaluate and grade the projects. This creates a ranking of the projects based on their impact, urgency, and feasibility. By evaluating the projects against a predetermined criteria it ensures projects are ranked so that the most critical and valuable projects receive the necessary resources. Many different models can be used to score the projects, such as, evaluation frameworks, scoring models, or decision matrices.

4. Portfolio Selection and Optimization
The projects that score the highest are at the top of the prioritization. The organization then evaluates which projects from these it will execute. This involves considering not only the individual value of each project but also the overall balance of the portfolio in terms of risk, resource allocation, and strategic fit.

5. Implementation and Monitoring

Once the projects are selected and the portfolio is formed the organization must also monitor the progress of these projects regarding their contribution to long-term goals. This ensures that the selected portfolio does indeed lead to the achievement of long-term strategic objectives.

6. Adapting and Continuous Improvement

The final step in the SPM process is to regularly review the portfolio's performance and make necessary adjustments. This is an iterative process that allows organizations to respond to changing market conditions and emerging opportunities.

2.3.3   SPM in the Private Sector vs Public Sector

SPM is a tool that helps organizations select the right projects, set priorities, and allocate resources to achieve their goals. While this approach fits naturally in the private sector, it is more complicated to apply in the public sector, mainly because they operate with very different objectives. In the private sector, projects can be prioritized based on their ability to generate financial returns, creating a clear metric to evaluate trade-offs by (Maceta and Berssaneti, 2019). The public sector, on the other hand, values social impact more than financial metrics (Ring and Perry, 1985). Municipalities also have to deal with political influence, legal constraints, and input from many different stakeholders. Each of these factors further complicate choosing and prioritize projects in a straightforward and strategic way (Knies et al., 2014). Unlike in the private sector, where higher-level management can set long-term strategic directions relatively independently, municipal decision-making is shaped by electoral cycles, policy changes, and evolving public demands which makes long-term planning much less stable.

One of the biggest challenges for municipalities is the integration of public value into decision-making. While SPM in the private sector focuses on maximizing economic returns, municipal governance must balance financial sustainability with broader societal benefits such as improved services, social equity, and citizen well-being (Huijbregts et al., 2021). This complexity requires a tailored approach to implement SPM for municipalities. Public value is a subjective metric, and therefore, cannot be integrated in the same way as financial metrics (O'Flynn, 2007). For example, some projects may be financially costly but essential for basic public services, such as low-income housing or infrastructure maintenance, making their value difficult to quantify through traditional SPM metrics(Roberts and Edwards, 2023). Therefore, it is difficult to integrate public value into the decision-making process, and give it sufficient importance, due to the difficulty in defining the concept.

Public institutions also face more complexity in decision-making because they need to balance the interests of many different groups (Elbanna et al., 2016). This can dilute the focus required for effective portfolio management as it results in less focus on the long-term strategic direction. This difference in objectives and nature of the organizations makes it challenging to apply SPM frameworks in public sector organizations as SPM is designed for profit-oriented environments.

Lastly, the bureaucratic nature of public sector organizations can slow down the decision-making processes, which hinders the effectiveness of SPM. Regulations and compliance requirements add extra layers of complexity that private companies usually do not have to deal with. Although there have been efforts to apply SPM in the public sector, most research and tools are still focused on private firms (Knies et al., 2014). This highlights a gap in understanding how similar strategic frameworks can be effectively implemented in the public domain.

2.3.4   Benefits and Potential of SPM in the Public Sector

Even though applying SPM in the public sector comes with challenges, it still has strong potential to improve how municipalities make strategic decisions and allocate resources over the long term.

While the practical applicability of SPM in the public sector has received little attention in literature, the structured and integrated approach that SPM provides is considered beneficial for municipalities with diverse portfolios and long-term goals (Johnsen, 2017; Tria and Valotti, 2012). SPM can help improve resource allocation in the municipality by providing a more structured framework for project evaluation and selection. This helps create more consistency and direction in decision-making, because projects are

chosen based on strategic goals rather than short-term needs or political pressure.

Some key benefits of using SPM in municipal governance include better resource allocation, stronger alignment with long-term goals, increased transparency, and more consistent decision-making. SPM introduces an evidence-based approach to project evaluation, ensuring that investments reflect strategic importance rather than immediate political gains. Additionally, the structured nature of SPM helps municipalities avoid fragmented decision-making and supports a more coherent and coordinated governance approach.However, a major gap in literature is how to take the political nature of municipalities into account when applying SPM.

Nevertheless, studies have begun to explore the potential of SPM in the public sector. Stentoft Arlbjørn et al., 2015 investigated the coordination and management of development projects aimed at improving administrative processes in Danish municipalities. He highlights the potential of SPM in streamlining decision-making and improving outcomes. Similarly, Baškarada and Hanlon, 2018a conducted a study on the potential application of SPM in a government agency and reported positive results in terms of aligning objectives and resource management. Lastly, Tjeerdsma and Veuger, 2016 explores how municipalities in the Netherlands are professionalizing real estate management by aligning their property portfolios with strategic and policy goals. While they are not implementing SPM fully, their approach closely mirrors the core principles and steps of SPM.

These studies highlight the potential of SPM in the public sector, but they also reveal a gap: a lack of research on how SPM can be adapted for municipal governance structures. As mentioned above, the principles of SPM being used in individual departments in a municipality are studied, namely real estate and infrastructure; however, literature lacks information on implementing SPM into other departments or sectors in municipalities, it mainly focuses on the potential benefits.

2.3.5   Critiques and Limitations of SPM

Although the structured, top-down approach SPM offers has resulted in literature being positive about its implementation into municipal contexts, SPM also rests on several key assumptions that may not hold in municipal environments.

The first assumption that does not hold in municipal contexts is that SPM assumes that organizational goals and strategies can be clearly defined and remain stable over the medium to long-term. In municipalities, this is not the case. They often face rapidly changing societal needs, such as sudden infrastructure demands or new social issues. This can result in a change in focus or priorities in the municipality, rendering the previous goals and the projects based on them obsolete (Mintzberg and Waters, 1985). The duty of a municipality is to cater to its citizens needs. However, the volatility of these needs undermines one of SPM's core assumptions- that projects can be prioritized based on static, well-communicated goals.

Another assumption of SPM is that strategic objectives can be SMART and have corresponding KPIs, or quantitative metrics. However, municipalities handle a very wide range of objectives, including economic growth, social equity, and environmental sustainability. These objectives are often more complex to measure and less straightforward than ROI or profit margins. This complicates the process of creating an evaluation framework based on the strategic goals of the organization, as well as the process of scoring the projects to create a prioritization.

Another critique is SPM's top-down orientation. SPM assumes that senior leadership decides on a clear strategy, which cascades down the organization into project selection and execution. While in principle this happens in municipalities, the siloed structure combined with the lack of clear SMART goals means that different departments operate independently and make decisions in different ways. They interpret the goals in different ways and have the autonomy to do so. This means that decisions may not always be aligned throughout the municipality. Furthermore, Mintzberg indicates that many effective strategies emerge from iterative, bottom-up processes,as frontline staff are better able to adapt to on-the-ground realities (Mintzberg and Waters, 1985). This is often true in municipalities, as employees working on projects, or lower in the organizational structure, may be more aware of the current environment and the changing needs of citizens. This means that new strategies, or an altered set of

priorities, are likely to start due to bottom-up information streams. However, in traditional SPM, this is not easily supported. Therefore, the top-down and inflexible assumption of SPM is a potential critique for its suitability in municipal contexts.

Finally, SPM assumes that functional cross-departmental collaboration is already in place. However, municipal structures are often siloed, and therefore, cross-departmental communication and collaboration can be difficult (Plant, 2009). It can be difficult to implement portfolio-level management because each department tends to operate independently. Without mechanisms to break down departmental silos, it is difficult to have a fully aligned organization, as there is a lack of information sharing and coordination.

These critiques highlight the mismatch between SPM's underlying assumptions and the challenges faced by municipalities. They emphasize the barriers to, or potential unsuitability of, SPM in municipal contexts. Additionally, it implies that to be implemented into a municipality, adaptations of SPM must be made to account for both the instability of public-sector environments and the collaborative deficits that many cities experience.

2.4 The Need for Adaptability in SPM: The Role of Emergent Strategies

2.4.1 What are Emergent Strategies

Emergent strategy is defined as a pattern of strategic behavior that unfolds over time in response to real-world conditions, rather than a formal, rigid plan (Mintzberg and Waters, 1985). They arise from day-to-day practices and social interactions that are often not labeled as "strategic" until patterns are later recognized (Vaara and Whittington, 2012).

The development of emergent strategies is influenced by the cultural and behavioral processes that are embedded in an organization. MacKay et al., 2020 describes how, in organizations, people often follow unwritten rules and habits, which eventually create a sense of culture or new customs. These routines influence how decisions are made and what actions are taken over time. While these actions may not be identified as strategies at first, over time, if people consistently respond in the same way, a strategy can emerge from these habits and shared behaviors. For example, if a municipality starts to identify the needs of citizens, particularly students, by reading university news articles, this habit may slowly become a strategic pattern for how they identify student concerns, even if it was never formally decided to make this a strategy.

Another way strategies emerge, according to Guérard et al., 2013, is through repeated everyday actions. He explains that strategies are often things people do in their daily work, actions, interactions, and decisions. The pattern of these actions is what forms a strategy. For example, if people from different teams continually get together informally to share ideas on sustainability-related projects, the repeated behavior of talking informally may eventually become a strategy of collaboration and shared concern.

Lastly, literature states that emergent strategies also develop through digital technology and knowledge sharing (Dunn and Salazar, 2004). They point out that digital tools and IT systems help information flow within an organization. This allows people to notice trends, respond to problems more quickly, and coordinate actions more effectively. The ability to make decisions in real time supports the development of emergent strategies.

Emergent strategies, therefore, offers a useful contrast to rigid strategic planning models. Rather than following a fixed, top-down roadmap, they emphasize situational awareness, responsiveness, and learning through iteration (Bodwell and Chermack, 2010). However, emergent strategies cannot simply be implemented or designed in advance. They arise organically from real-world practice, often without being labeled as strategy at all until patterns begin to emerge. This makes them particularly relevant to municipal contexts like Eindhoven, which are characterized by political sensitivity, multi-stakeholder demands, and continuous change. However, this is also a challenge, as while the way emergent strategies evolve is beneficial for municipalities, they can't simply be designed and implemented. Therefore, to benefit from the formation and adoption of emergent strategies, municipalities must focus on creating the right conditions for emergent strategies to take shape, such as enabling collaboration, decentralizing decision-making, and learning from experience.

In the following sections, the development, benefits, and limitations of emergent strategies will be further explored, along with their relevance for adapting SPM to local realities.

2.4.2 Why SPM Should Allow for Emergent Strategies in Municipalities

Municipalities operate in a dynamic environment, therefore, decision-making needs to be responsive and accommodate shifting priorities, stakeholder demands, and unexpected crises. Unlike private sector organizations, municipalities are unable to have such structured and stable decision-making. The adaptive reality of decision making in municipalities contrasts with the assumption of SPM that organizations have a fixed set of strategic objectives and a stable and consistent decision-making environment. The rigidity in SPM is not suitable for municipalities, as it can hinder their ability to govern effectively.

Emergent strategies offer an alternative approach to traditional strategy development. It emphasizes the ability to learn from practice and adapt accordingly. Therefore, it allows processes to adapt to real-time situations and for subsequent refining of objectives. Organizations that enable emergent strategies and incorporate them into their decision-making frameworks tend to become more resilient, responsive, and able to navigate the complex and dynamic world they operate in (Termeer et al., 2013). This contrasts with the rigid, top-down process that relies on predefined objectives, which traditional SPM says is necessary.

Therefore, the conditions necessary for emergent strategies to form allow for adaptability in decision-making and support the evolution of strategic goals. Given the political nature of municipalities, an SPM framework that not only provides structure but also allows for flexibility in decision-making and shifting priorities is necessary. This can serve as inspiration for an adapted SPM suitable for the municipality of Eindhoven.

2.4.3 How Emergent Strategies Develop

Emergent strategies evolve through feedback loops, iterative learning, and the process of understanding and reacting to a situation (Leitner, 2019; Barasa et al., 2017). Unlike traditional strategies, they are not formally planned from the start. Instead, they arise through repeated behaviors, informal practices, and adjustments to the local context. These strategies often begin as isolated initiatives, pilot programs, or small context-specific adaptations. Over time, they can grow into broader patterns that are later recognized as strategic.

Emergent strategies cannot be designed or implemented in the way deliberate strategies are. In fact, the idea of planning for them goes against what they are. They form through practice. However, organizations can still support their development by creating the right conditions for them to form (Leitner, 2019). These conditions can be things such as, encouraging reflection, sharing practices, giving teams room to act, and making space for ideas to surface and evolve. Strategic learning and open communication are especially important for the new behaviors to grow and be recognized as emergent strategies.

Emergent strategies usually tend to show up in environments where traditional planning falls short. This includes situations with a lot of complexity, uncertainty, or fast change (Patel et al., 2019). Situations where the prescribed route of action no longer matches the current reality of the situation. For municipalities, this might happen during political transitions, when there is rapid urban development, or when a topic cuts across multiple portfolios.

These strategies usually do not emerge on their own. They are often shaped by people inside the organization who notice patterns and help them grow (Kopmann et al., 2017). In municipalities, this might be civil servants who learn from local projects, or Aldermen who support bottom-up ideas. These people are important. They help connect informal practices to the bigger picture and can play a key role in turning small experiments into shared approaches.

Emergent strategies do not come from top-down planning but develop through practice. However, they can be encouraged by creating the right conditions. Municipalities that foster a collaborative culture, support cross-team learning, and use tools for reflection and feedback are more likely to identify and act on emerging strategic opportunities (Thomas and Ambrosini, 2015). For Eindhoven, this means

that an adaptive SPM model should combine clear structure with the flexibility to allow new strategic initiatives to take shape and be integrated over time.

2.4.4 Benefits of Facilitating Emergent Strategy in Municipal Governance

The adaptive nature of emergent strategy offers multiple benefits to municipalities facing complexity and unpredictability. These benefits do not arise solely from the conditions that enable emergent strategies to form, but also from the way strategies themselves emerge through interaction with the environment and continuous adaptation. It is important to distinguish between benefits that come from creating the right conditions for emergent strategies to arise, and those that stem from the nature of emergent strategies as they form through iterative, responsive processes. This section discusses and clarifies both.

First, the conditions necessary to allow emergent strategies to form help municipalities stay flexible by making it easier to adjust when political priorities shift, new stakeholder demands arise, or resources become constrained. This kind of adaptability is especially valuable in complex environments. Performance measurement systems can support this by offering real-time feedback and helping municipalities learn and adjust as they go. While most research on this comes from the private sector,Teeratansirikool et al., 2013 show that these systems can make organizations more responsive, which is a benefit that likely also applies to public institutions. This benefit reflects both the enabling condition of having feedback mechanisms in place and the value that arises when municipalities actively adjust their behavior in response to evolving circumstances.

Second, emergent strategies foster innovation by encouraging experimentation and bottom-up problem-solving. For this to work, municipalities need to foster a culture that is open to new ideas and actively involves stakeholders. Inclusive communication practices and participatory structures are critical for fostering an innovation-friendly environment and facilitating emergent strategies to form. This suggests that municipalities can benefit from emergent strategies by creating the right cultural conditions for collaboration and creativity. This benefit primarily reflects the conditions required for emergent strategies to arise, as openness and participation enable new ideas and practices to surface and evolve over time..

Emergent strategies also promote collaborative governance by enabling institutions to work across boundaries in response to evolving risks. Tavares et al., 2017 shows inter-municipal strategies that emerged in response to local needs often led to better coordination, shared resources, and more learning between municipalities. This illustrates how emergent strategies can form through real-time, bottom-up responses to shared challenges, generating tangible improvements in governance outcomes. In this case, the benefit lies in the nature of the strategy itself, which arises through interaction, experimentation, and cooperation across different actors.

Lastly, emergent strategies improve strategic learning by embedding continuous feedback and stakeholder engagement into the policy process. Public service effectiveness improves when decisions are informed by real-time data and local knowledge. Therefore, iterative learning mechanisms are central to emergent strategies and allow governments to refine and adapt their approaches over time. This benefit reflects both the structural conditions that support emergent strategy, such as iterative learning mechanisms, and the outcomes that result from ongoing adjustment and reflection in practice.

Ultimately, integrating emergent strategies into SPM enables a structured resource allocation to be implemented that accommodates the political and dynamic nature of a municipality and maintains the necessary flexibility to navigate the complexity of urban governance.

2.4.5 Challenges and Limitations of Emergent Strategies

Despite these benefits, emergent strategies present several implementation challenges. Firstly, they are inherently difficult to plan, control, measure, and replicate, due to the fact that the strategy emerges through practice rather than design(Leitner, 2019). Therefore, municipalities may struggle to coordinate efforts, justify decisions, or demonstrate progress without formal benchmarks. Hence, while emergent strategies can be useful in responding to short-term changes, they still need support and structure to bring long-term value. At the same time, they need the flexibility to adapt if the environment changes.

Another challenge is that the formation, identification, and adoption of emergent strategies depends on a supportive organizational culture. If there is no shared mindset around learning, experimenting, or trusting each other, people are more likely to resist change or fall back on routine or current protocol. In the absence of a culture that encourages openness and collaboration, these strategies can lead to scattered actions instead of a shared direction. Therefore, for emergent strategies to be effective, there needs to be a culture of trust and collaboration in the municipality already.

In political environments like Eindhoven, emergent strategies may also raise questions about legitimacy. Leaders and elected officials might hesitate to support informal, bottom-up processes that are harder to control or evaluate. Without some form of oversight and alignment, these initiatives can seem disconnected from broader goals. Therefore, while being responsive to the municipality's surroundings and making decisions based on that is beneficial, without the structures and processes in place, municipalities may risk fragmentation, inconsistent decision-making, and a loss of political or public trust in the legitimacy of emergent initiatives.

Finally, for emergent strategies to take shape and improve over time, municipalities must invest in concrete mechanisms for reflection and feedback. This includes tools such as dashboards or monitoring systems that track project performance and strategic alignment, as well as structured moments for reflection. Without these practices in place, new approaches may remain isolated, uncoordinated, or fail to inform future decisions. Iterative learning, and the identification of an emergent strategy and its consequential widespread adoption does not happen automatically. It requires deliberate time, space, and routines for recognizing patterns in behavior, reflecting, and adjusting accordingly.

2.5 Overcoming Fragmentation in Decision-Making: The Role of Joined-Up Governance

2.5.1 Why SPM Needs to Address Fragmented Decision-Making

Traditional SPM assumes a centralized and cohesive governance structure. One that assumes that the way in which projects are evaluated throughout an organization is the same and based on the same criteria. While large private companies also have multiple departments, they typically operate under a clear and unified mission, guided by a central leadership that can enforce alignment.

Municipalities, by contrast, are shaped by a more complex reality. Each department, or portefeuille, may respond to different political goals, public mandates, or legal responsibilities. Rather than working toward a single bottom line, municipalities often have to balance a range of public values, some of which may conflict. This makes coordination and alignment across departments more difficult to achieve in practice.

Vertical silos are a defining feature of modern municipalities, especially in cities like Eindhoven that have grown rapidly. This growth has led to an inherently fragmented organizational structure, where departments operate independently and manage their own projects and resources. While this siloed setup supports specialization and can ensure operational efficiency within departments, it also makes collaboration more difficult.

As the challenges faced by municipalities, like Eindhoven, increase in number and complexity, the need to work across departmental boundaries becomes more urgent. Many urban issues, such as, housing, sustainability, or infrastructure, can no longer be addressed in a single department. Therefore, methods that encourage cross-sectoral collaboration are becoming increasingly necessary and beneficial. In terms of resource allocation, this fragmentation creates inefficiencies, as it does not allow for the broader implications of a project in a sector to be considered. It also limits the ability for synergies between projects to be identified, which may optimize resource allocation.

Ultimately, the following two key issues arise due to fragmentation. Firstly, the lack of coordination and communication regarding what projects are being executed, may result in duplicate efforts. Multiple departments may pursue similar initiatives without consulting one another or aligning, resulting in wasted resources. Secondly, fragmentation results in limited cross-sector collaboration and information sharing. Multi-sectoral input, in municipalities where projects and problems are often complex, can be beneficial. However, without the structure in place to facilitate and encourage information flow and

communication between departments, this may result in inefficiencies.

Therefore, to implement SPM in municipalities, improving the interdepartmental coordination and information sharing can provide benefits as well as facilitate and support SPM's implementation. The practices from Joined-up Governance may be helpful in achieving improved coordination between departments. Moreover, because SPM relies on a cohesive and organization-wide decision-making structure, applying it in a municipal setting, where such cohesion is often not present, requires complementary practices to ensure effective implementation. Joined-up Governance not only addresses fragmentation but also creates the collaborative conditions that make the structured approach of SPM viable within municipal governance.

2.5.2 What is Joined-up Governance

Joined-up Governance is a governance approach and conceptual framework aimed at fostering collaboration and coherence across government sectors. It recognizes that the challenges governments face often require cross-sector collaboration or a collective response. Therefore, Joined-up Governance aims to create a coordinated approach to action to improve public service (Basanya et al., 2011; Pollitt, 2003; Karré et al., 2013). It aims to align structures in public institutions through shared goals, strategic coordination, and inter-organizational collaboration (Khan and Musarrat, 2016; Pollitt, 2003; Ling, 2002). Literature indicates that Joined-up Governance is particularly beneficial when addressing problems such as social inequality, climate change, and healthcare reform due to its emphasis on creating a collective and coordinated response (Bianchi, 2015; Carey and Crammond, 2015).

To do this, the following elements need to be implemented according to Joined-up Governance principles. Firstly, a formalized coordination mechanism between departments needs to be established. This ensures that effective information sharing is possible and that decision-making processes are structured to encourage collaboration. Facilitating horizontal collaboration is a key aspect of joined-up governance. Secondly, Joined-up governance believes it is important to have clear municipality wide strategic priorities. Having shared strategic priorities helps coordinate the projects in different departments. Additionally, it encourages collaboration and information sharing, as departments are aware of each other's role in achieving the municipality's strategic goals. Lastly, integrated resource management is important to avoid duplication of efforts and to ensure that resources are allocated optimally across departments. Keeping track of resources and the progress of interrelated projects is important to ensuring optimal resource allocation and improving collaboration across the municipality.

These principles of Joined-up Governance can support the implementation of SPM in municipalities by helping decrease fragmentation and the inefficiencies that come with vertical silos, while still allowing departments to operate within their own areas of specialization. In this thesis, Joined-up Governance is not applied as a complete framework, but rather as a selection of principles and practices that complement SPM. The combination of SPM and key elements of Joined-up Governance, such as formal coordination mechanisms, shared strategic priorities, and integrated resource management, helps create a more integrated and cooperative approach to municipal decision-making. In particular, these collaborative practices support the successful implementation of SPM in municipalities, ensuring that strategic prioritization can still take place even within a siloed structure.

2.5.3 Benefits of Joined-up Governance

Joined-up Governance is based on the idea that working in silos does not work when dealing with complex and interconnected societal challenges. It aims to improve coordination, avoid overlap, and make public services more integrated and effective (Pollitt, 2003). When Joined-up Governance is successfully implemented, it fosters efficiency through resource sharing, enabling cross-sector collaboration and innovation, and incorporates multiple stakeholders in the decision-making process (Bryson et al., 2006; Emerson and Gerlak, 2014).

Municipalities in particular can gain a lot from this approach. Many local governments are still organized in vertical structures, with departments working separately from each other. But as the issues municipalities face become more connected, this way of working leads to inefficiencies and miscommunication. Joined-up Governance encourages more horizontal collaboration between departments, and

better coordination with higher levels of government. This helps municipalities respond more effectively to what citizens need and to design policies that are more coherent and consistent (Hyde, 2008).

2.5.4   Challenges and Limitations of Joined-up Governance

While Joined-up governance offers promising ideas on how to overcome fragmentation and improve interdepartmental collaboration, there are also challenges in its implementation.

One of the core limitations of Joined-up Governance is its conceptual vagueness. The term "joined-up" lacks a clear, operational definition and is often interpreted differently within and across organizations. This ambiguity makes it difficult to translate Joined-up Governance into concrete structures, tools, or practices (Carey et al., 2014; Carey et al., 2015). It is often presented as an ideal that organizations should strive for, rather than as a clearly defined approach. This can create unrealistic expectations about how easily cross-sector collaboration can be achieved, especially when the complexity and friction of bureaucratic systems are not taken into account. Joined-up Governance also introduces institutional and procedural complexity that is difficult to manage in the everyday reality of municipal organizations (Pollitt, 2003). As a result, initiatives may fail when they are confronted with the practical constraints of governance.

Another challenge is that it increases the number of people and departments involved in decision-making. This can result in blurred lines of accountability and introduce new forms of complexity (Pollitt, 2003). Departments often have different goals, ways of working, and timelines, which makes it hard to align planning. Coordinating across teams also takes more time and effort. Staff need to devote time to joint working groups, alignment meetings, and shared reporting formats (Ling, 2002).In many municipalities, IT systems, legal frameworks, and financial processes are not aligned across departments, further complicating efforts to integrate governance practices (Klievink and Janssen, 2009). Therefore, while the idea of Joiend-up governance is beneficial, implementing it in practice takes time and money, as well as overcoming a substantial level of complexity.

Joined-up Governance can also meet resistance from departments or political actors who feel they are losing control or visibility (Karré et al., 2013;Ling, 2002). In local governments, short-term political priorities often take precedence over long-term coordination goals, which can make the implementation of joined-up governance complicated. As Carey et al., 2014 argues, top-down Joined-up governance reforms that lack stakeholder engagement is prone to superficial adoption or resistance. It can result in symbolic compliance.

Even when structural reforms are implemented, cultural and behavioral obstacles often persist. Departments may operate within distinct professional cultures, leading to misunderstandings, competition, or misaligned values (Bryson et al., 2006). A lack of trust between teams or sectors can inhibit information-sharing and coordinated action (Carey and Harris, 2015). In organizations where informal norms and personal networks dominate, efforts to standardize procedures, such as, the introduction of shared planning tools or performance targets, may be met with passive resistance or quiet non-compliance.

Another challenge to the implementation of joined-up governance is that initiatives risk becoming symbolic or superficially implemented. Committees or coordination roles may be created to show progress, but without the power or resources to make a real impact (Carey et al., 2015). Without meaningful follow-up, reflection, or adaptation, these structures often exist in name only. Furthermore, when the same actors repeatedly see initiatives come and go without real impact, trust in future reforms decreases, making subsequent change more difficult.

Lastly, joined-up governance assumes a context or initial conditions that are often absent in practice. It assumes the existence of clear shared goals, high-level leadership, aligned incentives, and robust information systems (Emerson and Gerlak, 2014). In environments where political influence is high, data is fragmented, or leadership lacks collaborative capacity, joined-up governance can be difficult to implement and sustain. It is therefore not a quick fix, but a long-term investment that requires sustained effort to turn into reality.

Therefore, although Joined-up governance provides a promising framework for addressing fragmentation in governance, it remains difficult to implement effectively. Its success depends not only on structural innovation but also on the alignment of incentives, the reshaping of organizational cultures, and sustained leadership over time. These limitations should be considered when assessing the feasibility of joined-up governance reforms in the context of municipalities.

2.6 The Need for an Adapted SPM Model: Integrating Joined-up Governance and Emergent Strategies Practices into SPM

The findings from the literature review highlight that while SPM brings benefits to municipalities by providing a structured approach to managing trade-offs and achieve long-term goals, it also highlights the limitations of SPM in municipalities. It does not allow for the flexibility necessary in municipal governance. Additionally, it assumes that there is cohesion in the decision-making process across the municipality, and that silos do not exist. Therefore, an adapted SPM for municipal application is needed.

2.6.1 Conceptual Framework: The Adapted SPM Model

Given Eindhoven's governance challenges, the municipality requires an SPM framework that retains the structured decision-making benefits of traditional SPM while integrating mechanisms for flexibility and interdepartmental collaboration. The adapted model must account for political volatility, stakeholder dynamics, and vertical silos.

Incorporating Joined-Up Governance principles will help improve coordination between departments, enhance cross-sectoral collaboration, and establish a shared framework for prioritization. Joined-up Governance provides the foundation for a more integrated governance approach, ensuring that municipal projects are selected based on municipality-wide priorities rather than department-specific interests.

Incorporating the enabling conditions of Emergent Strategies into SPM practices enhances its applicability for municipalities by supporting continuous prioritization and adaptive decision-making. This will enable Eindhoven to maintain strategic alignment while remaining flexible enough to navigate political shifts and evolving stakeholder demands.

By balancing structure (SPM), collaboration (Joined-Up Governance), and adaptability (Emergent Strategies), the adapted SPM model explored in this research provides a promising solution for improving Eindhoven's resource allocation process to be both strategic and responsive.

2.7 Research Gap and Resultant Research Questions

Despite literature stating that municipalities require structured yet adaptable governance models, existing research has not adequately addressed how SPM can be modified for municipalities. Most studies on SPM focus on private-sector settings, where governance structures are more stable and decision-making processes are less politically influenced. While Joined-Up Governance and Emergent Strategies have been discussed in the context of municipal governance, they have not been systematically integrated into an adapted SPM framework.

This gap in the literature highlights the need for a governance model tailored specifically to municipal contexts, like Eindhoven, where political volatility, fragmented decision-making, and dynamic stakeholder relationships complicate resource allocation. Eindhoven serves as an ideal case study due to its rapid urban growth, decentralized governance structure, and evolving strategic priorities. By developing an adapted model that integrates SPM, Joined-up governance, and Emergent Strategies, this research contributes to literature by exploring a new framework that aligns with the realities of municipal decision-making.

2.7.1 Research Questions

Building on the identified research gap, this study seeks to answer the following main research question:

How can Strategic Portfolio Management (SPM) be adapted to integrate practices from Joined-Up Governance and enable the formation of Emergent Strategies to improve resource allocation and project prioritization in the Municipality of Eindhoven?

To explore this question, the research will explore the following sub-questions:

- What are the symptoms and causes of inefficient strategic resource allocation and prioritization in the Municipality of Eindhoven?

- What are the limitations of SPM in Eindhoven's governance structure?

- How can Joined-Up Governance improve the implementation of SPM by addressing Eindhoven's interdepartmental fragmentation and coordination challenges?

- How can facilitating Emergent Strategies make SPM more adaptable to Eindhoven's political and operational constraints?

- What practices can Eindhoven implement, inspired by SPM, Joined-Up Governance, and Emergent Strategies, to improve its resource allocation process?

By answering these questions, this research bridges the gap between structured resource allocation frameworks and the complex realities of municipal governance, proposing a flexible, integrated approach to strategic decision-making in Eindhoven.

3 Case Study: The Municipality of Eindhoven

Before exploring the current decision-making processes and challenges in the Municipality of Eindhoven, or diving deeper into the potentially relevant practices of SPM, Joined-Up Governance, and Emergent Strategies, a general understanding of the Municipality of Eindhoven is needed first. Therefore, this chapter presents an overview of how the municipality is organized, its governance structure, current resource allocation practices, and the relevance and current level of SPM practices.

3.1 Introduction to Eindhoven

The Municipality of Eindhoven, located in the Brainport region, is experiencing rapid population and economic growth, creating increasing complexity in urban development and resource needs. The city expects to grow to 300,000 residents by 2040, requiring an estimated 62,000 new homes (*Bestuursakkoord 2022-2026*). This expansion places significant pressure on municipal services, infrastructure, and housing, and demands more strategic, long-term, and evidence-based resource allocation.

The rapid growth of the city is driven by several factors. Eindhoven's economic expansion and growth is a primary driving factor. Eindhoven is a core city in the Brainport region and, therefore, has become a global hub for high-tech innovation. This has attracted many large companies to be based within the city's limits, leading to increased congestion and housing demand due to employees relocating to live in Eindhoven. Additionally, the economic growth of the region attracts both domestic and international residents due to the increasing employment opportunities. This further increases the demand for housing and municipal services.

With the increasing number of residents, Eindhoven must ensure that it is preparing for these new residents already. Therefore, long-term planning and strategic decision-making is essential when it comes to choosing what projects to fund and how to allocate resources.

3.2 Municipal Bodies and Responsibilities

The governance structure of Eindhoven consists of multiple interrelated bodies, each with distinct roles and responsibilities.

The highest governing body is the Gemeenteraad (Municipal Council). This is composed of elected representatives who set the city's long-term vision, overarching priorities, and strategic goals. They focus on strategic decisions such as urban planning, sustainability goals, and major infrastructure projects. The Gemeenteraad also oversees the work of the executive board to ensure accountability.

After each municipal election, the political parties negotiate a coalition agreement known as the *Bestuursakkoord*. This agreement outlines the shared priorities and ambitions of the majority parties for the coming council period. Once a majority is formed and the Bestuursakkoord is accepted by the council, the coalition parties appoint their Aldermen. These aldermen receive the Bestuursakkoord as their assignment and are politically responsible for its execution.

The Gemeenteraad is also responsible for approving overarching budgets. This includes the annual municipal budget, which outlines expected revenues and expenditures across all sectors. It also includes the long-term strategic budget, which covers multi-year investments in infrastructure and social services. In addition, the Gemeenteraad approves special project budgets for large-scale, city-wide initiatives such as the energy transition or housing development.

The next highest governing body is the College van B&W (Executive Board). This consists of the *burgemeester* (mayor) and the *wethouders* (aldermen). The mayor is appointed by the national government, while the aldermen are appointed by the municipal council after the coalition is formed. In the current board there are seven aldermen.

The College van B&W is responsible for translating the policy goals and priorities outlined in the Bestuursakkoord into operational plans and overseeing daily municipal operations. Each alderman has their own portfolio (e.g., housing, sustainability, or mobility). The board also makes decisions about tactical and operational aspects such as resource allocation, project prioritization, and departmental

coordination. The mayor serves as chair and has specific duties related to public safety and emergency management.

The College van B&W approves more tactical and operational budgets. These include sectoral budgets, which detail the resources allocated to different municipal sectors such as social services or spatial planning. They also include departmental budgets, which ensure that day-to-day operational costs are aligned with strategic objectives. In addition, the College approves contingency and emergency budgets, which provide financial flexibility for unforeseen events.

Lastly, there is the Directieraad (Municipal Organization's Board of Directors). This is composed of sector directors and led by the algemeen directeur (municipal secretary). This body ensures operational alignment with strategic goals. It functions as the administrative link between the College van B&W and the municipal departments, providing advice on policy implementation and monitoring progress.

The Directieraad primarily oversees operational budgets, which are used by teams for routine activities. It is also responsible for project-specific budgets within sectors, based on the guidance provided by the executive board.

Ultimately, the relationship between the three bodies is as follows: the municipal council primarily focuses on policy development, strategic vision, and budget approval, representing the interests of residents. In contrast, the executive board focuses on implementing these policies, managing resources, and addressing day-to-day governance challenges. The Directieraad ensures these decisions translate into practical actions.

3.3 Municipality Sector Structure

The municipality of Eindhoven is organized into 20 sectors, along with the Van Abbemuseum, and is overseen by the Directieraad, which consists of five members. The Directieraad oversees all clusters and ensures cohesion between the operational, tactical, and strategic levels.

These clusters are referred to as *portefeuilles*. Each portefeuille is led by a member of the Directieraad and groups together multiple sectors that work on related policy domains. For example, the REO portefeuille (Ruimtelijk Economische Opgaven) includes sectors responsible for spatial planning, mobility, energy transition, and urban development. Similarly, the SMO portefeuille (Sociaal Maatschappelijke Opgaven) oversees sectors focused on social services, public health, and equal opportunity. The portefeuille structure helps align strategic priorities across sectors and enables more integrated decision-making and coordination within thematic domains.

Each portefeuille contains sectors that collaborate closely to achieve shared municipal objectives while maintaining sector-specific expertise. In the figure below, you can see the structure of the municipality, its different portefeuilles, and what sectors are in each cluster.
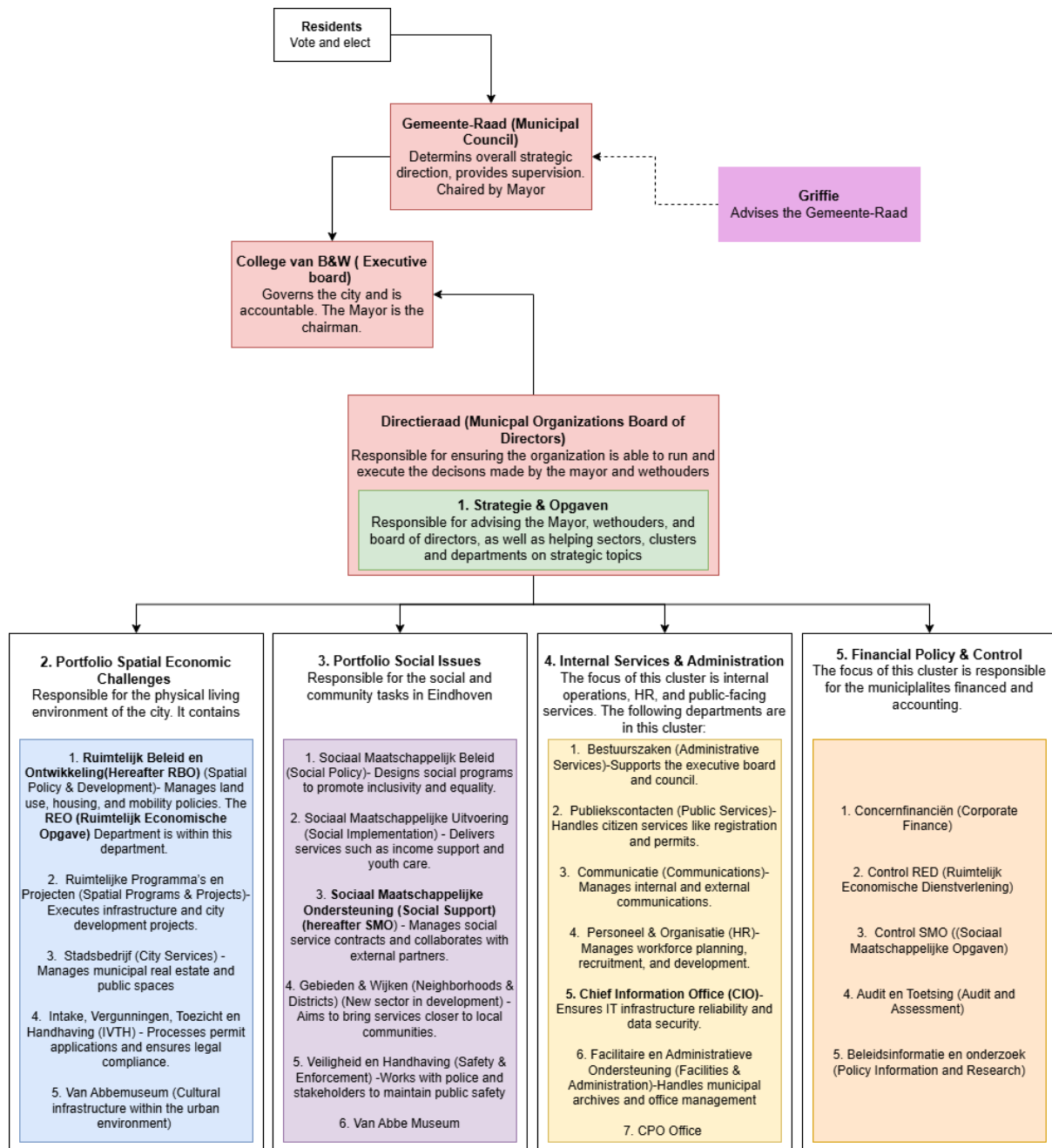
Figure 1: Organizational Structure of the Municipality of Eindhoven ("Gemeentelijke organisatie | Gemeente Eindhoven", 2022)

Each sector within a portefeuille is overseen by a sector head and subdivided into departments. Departments are specialized units within sectors, and while many are focused on operational execution, some also focus on policy development, strategy making, or other responsibilities. The last level of the organizational structure is teams.

The decision-making in Eindhoven follows a hierarchical but collaborative structure. The level and type of decisions made at each level are as follows:

- Strategic Level (College van B&W & Gemeenteraad): Sets long-term policies, allocates resources, and evaluates municipal performance based on reports.

- Strategic and Tactical Level (Directieraad): Translates political strategy into organizational direction, monitors municipal performance, resolves inter-sector issues, and provides strategic guidance to management.

- Operational Level (Sector Heads and Department Managers): Handle day-to-day operations, ensure compliance with performance targets, and participate in thematic working groups.

3.4 Current Understanding of SPM

In light of Eindhoven's rapid growth and ambitious development goals, the need for a more integrated and strategic approach to resource allocation is clear. However, SPM is still in its early stages of implementation, and there is no formalized process or agreed-upon methodology guiding its application across municipal sectors.

Over the past two years, Eindhoven has begun laying the groundwork for portfolio-based decision-making by introducing the role of portfolio managers in key portefeuilles(clusters of related sectors): Sociaal Maatschappelijke Opgaven (SMO), Ruimtelijk Economische Opgaven (REO), Chief Information Office (CIO). These roles were established to initiate strategic thinking within portefeuilles and to facilitate structured decision-making regarding resource distribution. However, due to the lack of standardized procedures, each portfolio manager currently operates independently, and there is no formalized SPM framework or clear governance model guiding their activities.

In parallel, the department of Portfolio management within the S&O cluster has also been developing SPM practices at the organizational level. Positioned under the portefeuille of the general director, this department plays a key role in coordinating cross-cutting initiatives and supporting the development of more coherent and centralized portfolio governance across the municipality.

Eindhoven has further initiated efforts to improve their portfolio management practices by encouraging collaboration and knowledge exchange between the different portefeuille-level portfolio managers, as well as through the hiring of Intermedius, a consultancy specialized in portfolio management.

While SPM is seen as a potential solution for Eindhoven's resource allocation challenges, it is evident that additional capacity building and tracking, procedural formalization, and structure are necessary before adoption can be realized.

3.5 Conclusion: Why Improving Resource Allocation Matters for Eindhoven

Eindhoven's rapid development places significant pressure on its governance systems to make forward-looking decisions. While the municipality has taken steps to strengthen strategic resource allocation, such as appointing portfolio managers and implementing a strategic investment team, its current approach to resource allocation remains fragmented, reactive, and insufficiently standardized.

The analysis in this chapter reveals key barriers: a lack of shared prioritization criteria, limited cross-departmental collaboration, and the absence of integrated tools for capacity tracking and project monitoring. Furthermore, political cycles and siloed governance structures continue to hinder long-term strategic alignment. Improving resource allocation in Eindhoven is not a matter of starting from scratch, but of building on existing practices and informal coordination mechanisms. By formalizing and integrating these efforts through a more structured yet flexible governance approach, the municipality can better align its investments with long-term goals, adapt to changing demands, and make more efficient use of its resources.

Although this thesis focuses only on the municipality of Eindhoven, the challenges described here are not unique to this municipality. Many local governments struggle with similar issues, such as fragmented decision-making, shifting political priorities, and a lack of consistent prioritization methods. What makes Eindhoven a particularly interesting, and therefore the subject of this research, is the urgency and visibility of these problems due to its rapid growth and strategic ambitions. This creates a valuable and interesting setting to explore whether more integrated and adaptive approaches to portfolio management can improve resource allocation where traditional methods fall short. The inefficiencies in their current process are becoming more visible due to their rapid growth.

The following chapters explore how Eindhoven can address these challenges by adapting SPM and complementing it with principles from Joined-Up Governance and Emergent Strategies.

4 Research Approach and Methods

This section outlines the research design chosen, the data collection and analysis methods, and the steps taken to gather results and derive conclusions.

4.1 Research Approach

The aim of this study is to explore how SPM can be adapted and implemented to improve resource allocation in the Municipality of Eindhoven. To do this, an adapted SPM framework is developed that builds on traditional SPM principles and integrates elements of Joined-Up Governance and Emergent Strategies, making it more suitable for the municipal context. The research follows an exploratory approach based on a single case study.

The study focuses on understanding the current decision-making processes in Eindhoven, identifying their strengths and weaknesses, and evaluating what practices from SPM, Joined-Up Governance, and Emergent Strategies could support better resource allocation. Insights were gathered through document analysis and semi-structured interviews and were combined with findings from literature. This allowed for a well-rounded analysis that forms the basis for developing tailored recommendations.

A case study approach allows for detailed, context-specific insights and ensures that the recommendations are grounded in the reality of a rapidly growing municipality. While the use of a single case study limits generalizability, this is appropriate given the goal of developing a deep and practice-oriented understanding of one municipality. Future research may explore how these findings apply to other municipal contexts.

4.2 Research Phases

This research project was conducted using six interconnected phases:

- **Initial Literature Review:** This research began with a preliminary literature review to gain an understanding of the current challenges regarding resource allocation in municipalities.

- **Problem Investigation (Interviews and Document Analysis):** Following the initial literature review, interviews were conducted with municipal officials to gain an understanding of the current situation in Eindhoven and its challenges. Interviewees were selected to ensure a broad understanding of the municipality's governance, including those working at strategic, tactical, and operational levels. The sample included portfolio managers (directly involved in prioritization processes), sector heads (responsible for decision-making within departments), policy advisors, members of the strategic investment team, and personal assistants to the Directieraad. This diversity enabled a well-rounded view of internal decision-making from multiple perspectives. Internal documents were also analyzed to gain insight into its structure, decision-making processes, and challenges in resource allocation.

- **Problem Analysis:** Notes from the 14 interviews were synthesized into structured insight sheets. These were analyzed to identify recurring patterns and themes such as political influence, siloed structures, lack of strategic alignment, and challenges in cross-department collaboration that impact the resource allocation process.

- **Conceptual Framework Creation:** Once the underlying challenges in Eindhoven were identified, an additional literature review was done and a conceptual framework was made. It became clear that SPM in its current form was not a suitable tool to target the current challenges the municipality was facing, and was not compatible with the municipality's current governance structure. Emergent strategies were identified as a perspective of strategy forming that could foster beneficial behaviors that can help SPM be successful. Additionally, Joined-up Governance was identified as a framework that contains practices that can target one of the core issues of the municipality-fragmentation-and in turn support the implementation of SPM. Once a deeper understanding of these three concepts was attained, a conceptual framework on how to make SPM compatible and effective in the Municipality of Eindhoven was created.

- **Practice and Compatibility Exploration:** Following the conceptual framework, the specific behaviors required for emergent strategies to develop, and the practices from Joined-Up Governance that could benefit Eindhoven's current situation, were identified. In addition, their compatibility with SPM was explored. This formed a solid foundation for answering the final research question, which focuses on recommendations for implementing an adapted version of SPM in the Municipality of Eindhoven.

- **Final Recommendations:** Following the identification of possible practices that can be integrated into traditional SPM to make it more successful in Eindhoven, a final design criteria was created for the recommendations. The criteria is based on the key challenges that SPM needs to tackle which the municipality is currently facing. Multiple practices for each criterion were explored until the most realistic and cohesive solution was identified.

4.3 Data Collection Methods

The following sources of information were used to collect the data and insights for this research paper.

- **Document Analysis:** Foundational understanding was built through the review of internal and public documents, including:

  - The *Organisatiehandboek* (to understand the municipality's organizational structure),
  - The *Bestuursakkoord* (to identify political priorities and long-term goals),
  - Internal report *Verkenning Stavaza PFM voorjaar 2024*,
  - Workshop presentations related to portfolio management developed for the CIO domain.
  - Prioritization framework from SMO and REO portefeuille's
  - Article 213a-report done by Auditors in the municipality on the realization of spatial projects

- **Semi-Structured Interviews**: 14 interviews were conducted with municipal officials, selected to represent different domains (e.g., social and spatial sectors) and governance layers. The semi-structured format provided consistency across topics while allowing flexibility to follow relevant lines of inquiry based on each participant's role.

- **Observational Insights**: The researcher attended two meetings of the Long-Term Strategic Investment Team. These meetings offered additional, real-time insights into how prioritization decisions are made, how political considerations influence resource choices, and how investment trade-offs are debated.

4.4 Limitations of Approach

Like most qualitative case studies, this research has some limitations. First, it is based on a single case. The findings are shaped by the specific structure, culture, and decision-making processes of the Municipality of Eindhoven. This means the insights may not apply to other municipalities in the same way. However, this is in line with the goal of the research, which is to develop a focused and practice-oriented understanding of one case. Future research could explore how these findings apply elsewhere.

Second, the conceptual framework developed in this study is exploratory. It was created in response to specific challenges observed in Eindhoven and builds on ideas from SPM, Emergent Strategies, and Joined-Up Governance. It has not yet been tested or applied in other contexts. Therefore, the framework should be seen as a starting point for further thinking, not a fixed solution.

Third, the study is based on 14 semi-structured interviews. While interviewees were selected to reflect different roles across strategic, tactical, and operational levels, the number of interviews was limited by time. Some perspectives may be missing, and the results depend on how openly participants shared their views. Interviews may also reflect personal biases, overstate successes, or understate difficulties. To reduce this risk, the interviews were combined with document analysis and observations to include multiple viewpoints.

Lastly, the nature of this research is exploratory. Rather than aiming for accuracy or hypothesis testing, the goal of this research is to uncover governance challenges, identify potential principles from

theory, and generate directions for improvement. Whilst this includes suggesting some practical imple-
mentations, the goals of this research is not to develop a holistic solution to the current resource allocation
challenges in Eindhoven. As such, the resulting recommendations are not definitive solutions but should
be viewed as a starting point for further discussion and experimentation within the municipality.

Despite these limitations, the approach fits the purpose of the research. It offers a solid foundation for
future work, including testing the framework, comparing municipalities, or applying the recommendations
in practice.

5 Current Governance Practices and Barriers to Strategic Resource Allocation in Eindhoven

This chapter answers the first research sub-question of this paper: *What are the symptoms and causes of inefficient strategic resource allocation and prioritization in the Municipality of Eindhoven?* It presents findings from interviews and internal documents, structured in five parts. First, it explains how decision-making flows through Eindhoven's formal structures and informal practices. Second, it identifies five recurring challenges that prevent strategic resource allocation. Third, it reveals three underlying governance barriers that connect these challenges. Fourth, it reflects on the implications of these barriers. Finally, it summarizes key inefficiencies and strengths to inform the rest of this research.

5.1 Decision-Making Flows in Eindhoven

Understanding the barriers to resource allocation first requires a clear view of how decisions are made in Eindhoven- both formally through hierarchical processes and informally through relationships and workarounds.

The governance of Eindhoven follows a hierarchical decision-making process in which decisions cascade from the municipal council down to operational project execution. However, interviews indicate that despite the formal structure, decision-making at times follows slightly different paths, skipping some steps, due to political interventions. Moreover, interviews indicate a need and want for more horizontal collaboration. However, the current decision-making process does not allow for this. This section explores the different paths that decision-making takes and the resultant effects of these paths.

5.1.1 Overview of Decision-Making Hierarchy and Flow

Decision-making in the municipality follows a hierarchical structure. The formal decision-making structure involves the following actors:

- **Gemeenteraad(Municipal Council)** – Sets overarching strategic goals or direction and budget allocations. Oversees the College van B&W, and approves projects over 1 million euro.

- **College van B&W (Executive Board)** – Responsible for executing the Bestuursakord. They implement policy, approve project funding, and balance political and operational priorities. They decide what projects will be carried out in each strategic category to achieve the Bestuursakkord vision.

- **Directieraad (Municipal Organization's Board of Directors)** – Ensures operational execution of decisions, and running of the municipality. Communicates the decisions from the College van B&W , to the employees of the municipality and translates them into actions for the municipality's employees.

- **Departmental Sector Heads** – Manage resource distribution within their respective sectors, and ensures the sector is contributing to the long-term goals of the executive board and council.

- **Portfolio Managers** – Creates and uses prioritization frameworks for sector heads, advising on project selection. Gathers information on the status and needs of projects in the sector.

- **Project Owners and Managers** – Implements and executes approved projects.

In the following two sections, more details on the formal vertical and horizontal decision-making in the municipality are given.

5.1.2 Hierarchical Decision-Making (Vertical Flow)

The Gemeenteraad is at the highest level in the organizational chart. It is responsible for defining the city's long-term strategic vision and approving projects that require over a certain amount of funding. The Gemeenteraad also approves the general budget and how municipal funds are distributed across sectors. Yet, it does not directly oversee which specific projects will be executed within that budget. The decision for more detailed budget allocation is made by the College van B&W.

The College van B&W is responsible for deciding which projects are carried out within each budget category. They play a pivotal role in translating the strategic directions of the Gemeenteraad into concrete actions. Their decisions are guided by the Bestuursakkoord, which outlines the political goals and priorities agreed upon by the majority coalition in the Gemeenteraad after municipal elections. Once the coalition agreement is finalized and accepted by the Gemeenteraad, the coalition parties appoint their Aldermen. The College van B&W receives the Bestuursakkoord as its assignment and is politically responsible for its execution. Therefore, this level involves political decision-making. While some efforts have been made to base decisions on evidence, such as establishing a strategic investment team, the process remains influenced by politics.

Whilst there is a desire to act strategically at this level, achieving this is difficult due to the political nature of the level and due to the lack of project performance available to measure a project's contribution to goals. Therefore, having objective and evidence-based conversations about the long term progress of the municipality is difficult. Providing Aldermen with clear evidence-based information on projects and their contribution to goals can improve strategic resource allocation by allowing them to make more informed decisions, rather than just politically motivated decisions.

Below the College van B&W is the Directieraad. This is the municipality's board of directors. While they are not political officials, they are responsible for ensuring that the municipality's organization can carry out the decisions made by the Aldermen. Therefore, the political goals of the municipality are often at the center of their discussions, making it difficult to fully separate strategic management from political influence. They serve as a bridge between the political directives and the technical implementation within the municipality. They are responsible for filtering and informing the sector heads of the decisions made by the executive board. Therefore, it is difficult to filter out politics and adjust the mentality to be operational and strategic when they are involved and surrounded by political decision-making.

The S&O sector, while a department of its own, functions as a cross-cutting body that advises the Directieraad, Aldermen, and sector heads. This sector researches long-term trends and provides strategic advice to help the municipality prepare for emerging challenges. It straddles both political and non-political functions, aiming to maintain objectivity while supporting decision-making. Whilst the S&O department doesn't make decisions, it can help give information up and downstream that can influence decisions. This level of the organization cannot make decisions, but can start initiatives to help information transfer to help the organization become more strategic or to help the organization improve collaboration. Therefore, it functions mainly as an advising body to different levels of the organization.

Sector heads act as critical higher-management and decision makers. They are responsible for overseeing the implementation of approved projects and making resource allocation decisions within their departments. To make informed decisions, they use information from their portfolio or program managers regarding which projects need more funding, and which projects should be prioritized. Sector heads also communicate upward when they identify the need for new initiatives. Being closer to citizens and operational realities, they often see emerging needs before higher-level officials do. That said, any new project proposals still require College van B&W approval, meaning strategic suggestions must flow back up the hierarchy.

In theory, sector heads are expected to align departmental operations with the broader directives of the College van B&W. However, as things stand now, this can be a bit difficult as these directives are quite broad and therefore can't offer practical guidance. This vagueness creates both a challenge and an opportunity: sector heads have the autonomy to manage their departments and sectors flexibly, but also struggle to make decisions in the absence of clear strategic priorities. However, interviews revealed that sector heads often lack visibility of the status of projects, all of their projects, and the impact they have on one another, as well as the availability of capacity and resources to execute new or updated projects.

To address these issues and enhance strategic alignment, some portefeuille's have introduced portfolio managers. Their role is to communicate with the project or product owners, and determine a prioritization of where resources should be allocated to best meet strategic objectives and based on needs. However, no formalized process has been introduced on how to do this. Each portefeuille has allowed portfolio managers to develop their own methods, leading to inconsistencies. For example, the REO portefeuille uses a structured approach to prioritization, whereas the SMO portefeuille applies a more

politically influenced and flexible method. Portfolio managers themselves acknowledged the need for more uniform processes, though they also noted that department-specific differences make standardization difficult. A clearly defined overarching strategic vision would help create more synergy between departments and improve alignment across the organization.

At the most operational level are project managers or owners responsible for the day-to-day implementation of approved initiatives. However, the reporting practices regarding progress, capacity usage, and resource needs vary significantly between departments. Tools like the product toolbox exist to support this work, but they are used inconsistently. This inconsistency in data collection and reporting makes it difficult for higher management to access the information they need to make informed, evidence-based decisions. As a result, the flow of crucial information upward through the hierarchy is often fragmented. This is a major weak point in the vertical decision-making structure of the municipality.

5.1.3 Formal Cross-Sector Decision-Making (Horizontal Flow)

Unlike hierarchical decision-making, horizontal decision-making involves cross-sector collaboration. Currently, the municipality lacks strong mechanisms for interdepartmental or intersectoral cooperation, leading to inefficiencies when projects require collaboration across multiple sectors. When a project falls under two departments or sectors, only one can be the budget holder and execute the project. This structure prevents the goals and perspectives of the other relevant departments or sectors from being adequately represented in project outcomes.

For major overarching initiatives, such as the energy transition, a dedicated program is often created within the S&O department. These initiatives, classified as A-level programs, are long-term and operate almost as independent departments. However, for smaller cross-sector projects, there is no formalized structure to guide collaboration. Instead, temporary arrangements (B-level programs) are established. The process of identifying how to set this up, making agreements regarding personnel availability, and how to manage the temporary program is not standardized and established. This informal setup leads to inefficiencies. Time and resources are spent negotiating roles and responsibilities without a standard protocol in place. Departments or sectors temporarily lose staff to cross-sector projects without a clear strategy for managing the impact on their regular operations. Given the municipality's existing challenges with information flow and continuity, this lack of structure further increases operational inefficiencies.

Although the need for cross-sector collaboration is widely recognized across the organization, it is not yet embedded in the institutional behavior. Weekly meetings between sector heads, facilitated by the Directieraad, serve primarily as update sessions to communicate decisions made at higher levels. These meetings also include some sharing of best practices. However, they are not used as forums for joint planning, coordination, or decision-making. A missed opportunity for meaningful collaboration emerged during the recent initiative for the development of sector plans. Each sector independently created its own plan, which was then shared with others. Upon review, the CIO department realized it was expected to support many projects across other departments, yet it lacked the resources or planning capacity to do so. This exemplifies that although there are horizontal meetings in the organization, where information is shared, they are not effective. There is no behavioral tendency to collaborate. Having these weekly meetings would have been a perfect place to first discuss the primary projects, priorities, and needs of each department, identify if there are inter-dependencies, and collaborate and coordinate in the second step of the creation of the plan.

Additionally, portfolio managers from different portefeuille's have recently begun having meetings to share best practices in hopes of improving the portfolio management process. Through these meetings, they can get inspiration from one another regarding what is working and what is not. According to interviews, these meetings have been positive. Although sectors and portefeuilles have different needs, there are also ideas and concepts that they can share. However, changing their process to be more similar is a slow and long process, as there is still no consensus on whether they should aim to have a similar process, if they should prioritize in the same way, or if they should collaborate in some way regarding the prioritization process.

Overall, while vertical communication channels in the municipality are well-established, horizontal collaboration remains underdeveloped. The siloed nature of the organization continues to hinder strategic

resource allocation. To address this, more structured cross-sector meetings and coordination mechanisms are necessary. Encouraging dialogue around shared objectives, interdependencies, and common priorities would help departments align their efforts and deliver more coherent and effective outcomes.

Additionally, although formal horizontal mechanisms are underdeveloped, informal collaboration does occur. Many employees use their personal networks and mutual trust to align initiatives. This is a strength, but it is not scalable. Given the projected growth of Eindhoven as a city, and in turn the municipality, this is also not sustainable long term. Without formal institutional backing, these efforts are inconsistent and rely heavily on individual initiative.

5.2 Governance Challenges in the Municipality of Eindhoven

5.2.1 Why Governance Structure Matters for Strategic Decision-Making

Eindhoven, like many municipalities, is facing increasingly complex and interconnected challenges ranging from urban growth to sustainability transitions and mobility redesign. However, just like other rapidly growing municipalities, its current governance structure has not evolved to match this complexity. Changing the governance structure of a municipality requires a lot of time, and is a complex and risky thing to do. Therefore, the current governance structure of Eindhoven remains built for a more stable and vertically organized environment. This has resulted in the municipality relying heavily on informal networks, siloed departments, and reactive political processes to tackle the increasingly complex challenges it is facing.

This structural mismatch leads to visible governance challenges that are not isolated but rather symptoms of a deeper misalignment between the city's governance model and the demands of its environment. In the following sections, we first outline five recurring governance symptoms observed in practice. We then identify the underlying root causes that explain why these symptoms persist and how they interact.

5.2.2 Symptoms of Structural Misalignment in Eindhoven's Governance

Having explained how decision-making unfolds in Eindhoven, we now discuss the specific patterns that signal misalignment between governance practices and the needs of a growing municipality. The following section discusses five inefficiencies in the current resource allocation process of the municipality. These inefficiencies can be characterized as symptoms of misalignment. These are not isolated issues; rather, they are systemic effects that consistently hinder Eindhoven's ability to plan effectively, align resources with goals, and adapt to emerging priorities.

Symptom 1: Strategic Goals are too Vague to Guide Prioritization

One of the most recurrent themes across interviews is the absence of well-defined, actionable strategic goals. While high-level political visions exist (such as Koers 2040 and the Bestuursakkoord), the goals in these documents are often described as vague. They are not translated into clear objectives for departments to work towards. For example, the Koers 2040 document contains goals relevant to the social sector, such as, *"Every Eindhoven resident should have meaningful social connections"*, or *"A solid institutional foundation should be present in every neighborhood, but the exact setup will differ per neighborhood"*. These statements, while aspirational, lack the specificity needed to develop a structured prioritization framework. The current project grading criteria attempts to reflect these goals with the following criteria: *"Strengthening citizen networks"* or *"Institutional social base"*. While the link to the original goals can be seen as a project grading criteria, there is a lack of specificity, resulting in an inability to provide critical assessment mechanisms for prioritizing projects effectively. Evaluating projects is difficult with no clear scale or metrics.

As a result of the lack of clear long-term strategic goals, sector heads or portfolio managers struggle to align their department's priorities with overarching municipal objectives. While they try to create prioritization criteria in line with the municipal goals, the vagueness of the goals results in a criteria that is open to interpretation. This leads to a subjective project selection. The broad nature of the strategic goals allows for multiple interpretations, and projects are not assessed consistently, even within the same department, let alone across the municipality. This results in the absence of a standardized prioritization mechanism and a lack of confidence in the prioritization process.

Article 213a-report on the execution of spacial sector projects highlights how this misalignment contributes to delays, unclear scopes, and politically driven last-minute changes. Without specific, shared objectives, portfolio managers and department heads lack the tools to prioritize effectively, which erodes confidence in the process and creates room for subjectivity.

Symptom 2: Political Input Overrides Structured Decision-Making

Political influence frequently overrides structured portfolio management processes. Interviewees mentioned the difficulty in sticking to the portfolio management procedures that have been created in individual departments, due to needing first to satisfy new or changing requests from Aldermen.Due to the inherently political nature of a municipality, Aldermen can push projects forward regardless of long-term strategic goals or prioritization criteria. As a result, projects that align with overarching municipal objectives are often sidelined in favor of those driven by short-term visibility or citizen concerns. This reactive approach makes it difficult to maintain strategic direction, leading to inconsistencies in project selection and execution.

The Article 213a-report from the control sector on spatial project execution illustrates the impact of this. The document highlights that one reason for 77% of spatial projects not being completed on time and on budget is due to mid-project scope changes initiated politically. It also outlines how these interventions result in additional pressure, force overly optimistic planning, and ultimately cause execution complications.

Symptom 3: Departments Work in Silos With Little Coordination

Eindhoven's departmental structure promotes silos, with each sector operating largely independently. Although these silos make sense for most projects, as they are unique for each department, currently there is no established process for communication and information transfer between departments. This means that departments are unable to know what projects other departments are working on, the status of these projects, and whether they affect their own projects or not.

While this does not impact their performance directly, it does mean there is a lack of overall understanding of the synergies between projects being done throughout the organization. This can be seen as an inefficiency, as resources could be allocated more strategically if the interrelation between projects were better understood.

An example of how the siloed nature of municipalities inhibits effective resource allocation can be seen between the CIO department and other departments. If other departments decide to carry out a project that requires IT to create a dashboard or any sort of IT assistance, they need to request it from the CIO department. However, the CIO department has its own goals and priorities. So while this project may be very important to the REO portefeuille in contribution to the municipal goals, the CIO department may not know that and therefore delay the project. The lack of communication and shared understanding of goals and priorities due to the siloed nature of the department can therefore inhibit effective resource allocation.

Symptom 4: Resource Availability and Capacity Are Not Systematically Tracked

Capacity constraints are a recurring symptom of misalignment in the municipality's governance system. While each sector tracks its own projects and resources to some degree, these practices are not standardized or formalized across the municipality. There is no single, reliable source of real-time data on available capacity or ongoing project progress.

Interviewees explained that the extent to which capacity planning is practiced varies widely by project and by project owner. This inconsistency severely limits evidence-based decision-making. Article 213a-report confirms that the municipality underutilizes the Project Toolbox (PTB) and that its data quality is poor. Given Eindhoven's growth trajectory and increasing investment volume, effective capacity planning is essential, but it is currently underdeveloped.

Most resource allocation decisions focus primarily on budget availability, rather than whether there are sufficient personnel to implement the projects. The lack of a municipality-wide capacity tracking system means that projects may be approved without the ability to staff them, leading to delays and rework.

Symptom 5: Portfolio Management Practices are Inconsistent

Several interviewees acknowledged that elements of SPM are already in place, but they are not used consistently or effectively. Portfolio managers have been hired for three different departments. However, how portfolio management is done in each department is different. The criteria used to assess projects is based on different documents, and there is no consideration of what other departments are prioritizing.

The absence of a unified SPM approach results in poor coordination across departments. For example, if REO prioritizes a project that requires CIO's support, that project may still be delayed if it does not align with CIO's own internal priorities. A more standardized and organization-wide portfolio management process could help departments align their plans and allocate resources based on shared priorities.

Again, Article 213a-report reinforces this. It highlights that delays in the spatial sector stem not only from capacity issues but also from inconsistent project management cultures and a lack of standardization. The report emphasizes that a more uniform and accountable approach to project and portfolio management is essential for Eindhoven to achieve its 2040 ambitions.

5.2.3 Root Causes of Structural Misalignment

While the five symptoms of structural misalignment above are highly visible, there are underlying root causes. This section introduces three underlying root causes that explain why strategic resource allocation is so difficult to achieve in municipalities.

Root Cause 1: Lack of Strategic Clarity and Leadership Alignment

The first root cause is the difficulty of achieving strategic alignment, leadership clarity, and consistency across the municipality. This issue stems directly from two symptoms discussed earlier: Symptom 1 (Strategic Goals are too Vague to Guide Prioritization) and Symptom 2 (Political Input Overrides Structured Decision-Making).

Interviewees from various levels of the organization expressed a strong need for more concrete, actionable strategic goals. These are essential to provide portfolio managers and sector heads with direction and clarity on how to prioritize, as well as confidence that their work contributes to broader municipal objectives. However, these goals must originate from a high level within the organization. Currently, strategic decision-making relies on broad political visions, which are not translated into measurable objectives that departments can operationalize.

This gap leads to demotivation, uncertainty, and a reliance on reactive or politically driven decision-making rather than evidence-based prioritization. The shifting nature of strategic focus also undermines trust in the decision-making process and weakens the municipality's ability to maintain long-term focus.

Ultimately, this root cause reflects a deeper need for a shared strategic agenda that can endure across political cycles, foster a sense of ownership, and provide a collective direction. Without this, departments and portfolios struggle to coordinate their efforts and align with the municipality's long-term ambitions.

Root Cause 2: Fragmentation and Silos Undermine Collaboration

The second root cause is the difficulty of overcoming structural and cultural barriers to cross-departmental collaboration. This is the underlying explanation for Symptom 3 (Departments Work in Silos With Little Coordination).

While the municipality is divided into specialized sectors, this structure encourages departments to operate in silos with limited coordination or transparency. As citizen needs become increasingly complex, it is no longer feasible for projects to be executed within a single department. This fragmentation hinders both strategic coherence and operational efficiency.

The siloed structure is reinforced by Eindhoven's informal governance culture, which relies heavily on tacit knowledge and interpersonal relationships for collaboration. While this fosters adaptability and trust, it also makes it difficult to introduce shared tools, evaluation frameworks, or consistent practices across the organization.

Employees often value their autonomy and the informal ways of working. However, in the absence of formal mechanisms for collaboration and alignment, this leads to duplicated efforts, friction between departments, and missed opportunities for synergy.

Ultimately, this root cause reveals a need for shared systems and structures that support cross-departmental coordination and mutual accountability. Without these, the municipality will struggle to manage increasingly complex projects and deliver services in a coherent and integrated way.

Root Cause 3: Absence of Consistent Portfolio and Capacity Management
The third and last root cause is the difficulty of creating consistent, organization-wide approaches to resource planning and portfolio management. This root cause underpins both Symptom 4 (Resource Availability and Capacity Are Not Systematically Tracked) and Symptom 5 (Portfolio Management Practices are Inconsistent).

On the operational level, the municipality lacks the integrated tools and processes needed to make evidence-based decisions about projects, resource allocations, and performance metrics. Capacity is tracked inconsistently, both between departments and within departments themselves. Tools such as the product toolbox are available but not used consistently, and therefore are not beneficial and lead to unreliable data and difficulty in tracking capacity.

Similarly, there is no clear standardized approach for project evaluations or prioritization. Each department creates and applies its own criteria, and few mechanisms exist to regularly review these criteria or align the criteria between departments. This undermines both transparency and efficiency. However, this also reflects that there is an unmet need for structure. Interviews have mentioned the need for a strategic and structured procedure for resource allocation and portfolio management, to help effectively track progress and make decisions confidently, and most importantly, to understand how their work fits into the larger picture.

5.2.4 How Symptoms and Causes Reinforce Each Other - A Vicious Cycle

While these root causes each reveal unmet needs from members of the municipality, they do not exist in isolation. They exist in a negative reinforcing cycle that increases as the municipality grows and more projects are needed, and more people are needed in the municipality. A lack of strategic clarity (root cause 1) leads to departments defining their own sector plans and priorities in isolation, which reinforces the fragmentation and further reduces the incentives to collaborate (root cause 2). In turn, this fragmented structure makes it difficult to implement shared operations tools or processes (root cause 3). Additionally, without reliable planning and data on projects, it becomes harder to align projects with long-term goals, further increasing the need for clear strategic goals to help guide decision-making (root cause 1). Similarly, the informal governance culture, while offering flexibility, undermines attempts to professionalize planning and evaluation, weakening cross-sectoral coordination(root cause 2).

Ultimately, these root causes point not only to operational inefficiencies and complexity in the organization but a deeper cultural and structural misalignment. There is an absence of an integrated governance approach that connects vision to execution across the municipality.

5.2.5 Connection Between Symptoms and Root Causes

How these root causes link to the aforementioned symptoms is summarized in the table below. The table distinguishes between root causes that are the main driver behind a symptom, and those that reinforce the symptom indirectly. A "main" link indicates that the root cause is the primary explanation for why that symptom occurs. If addressed, it is likely to significantly reduce the issue. A "reinforces" link reflects that the root cause amplifies or sustains the symptom, but is not the core driver. These reinforcing causes typically interact with the main drivers, making the symptoms more persistent or complex to resolve.

By differentiating between these two types of relationships, the matrix helps clarify where interventions should be prioritized. Tackling the main causes offers the highest leverage, while addressing reinforcing causes in parallel can prevent issues from re-emerging or escalating. Establishing these causal

connections between symptoms and root causes lays the foundation for realistic and targeted recommendations. It also increases the likelihood of success, as it accounts for the interlinked nature of the identified problems.

Table 1: Matrix of Symptom–Root Cause Relationships

Symptom	Cause 1: Strategic Clarity and Leadership Alignment	Cause 2: Fragmentation and Silos	Cause 3: Portfolio and Capacity Management
1- Strategic goals are too vague to guide prioritization	Main		
2- Political input overrides structured decision-making	Main	Reinforces	
3- Departments work in silos with little coordination		Main	
4- Resource availability and capacity are not systematically tracked		Reinforces	Main
5- Portfolio management practices are inconsistent	Reinforces		Main

5.2.6 The Deeper Problem: A Governance Model Unsuited to a Increasingly Complex Environment

While the previous section outlined three root causes that help explain Eindhoven's persistent governance challenges, these causes themselves are not the most fundamental issue. They are, in turn, driven by a deeper structural problem: Eindhoven's current governance model has not evolved in line with the increasing complexity, scale, and interconnectedness of the challenges it faces.

While in the past, this governance structure has been successful, as the municipality grows, and the environment in which it operates becomes more complex, the current governance style leads to inefficiencies. With projects and programs the municipality is executing becoming bigger, and requiring input and expertise from multiple departments, the need for an adapted governance structure is clear. Today's challenges, such as urban growth, climate transitions, mobility systems, and social equity, cannot be allocated to a department alone. They require a governance model that connects people, processes, and purpose in a more systematic and scalable way.

The mismatch between Eindhoven's governance structure and its strategic challenges is not unique. Municipalities rarely have the time, space, or stability to redesign their operating models to be in line with their current environment. By the time a more appropriate structure has been designed. let alone implemented, political and societal conditions may already have shifted again. As a result, we begin to see the symptoms discussed earlier, strategic misalignment, fragmentation, lack of capacity insight, not as isolated problems, but as signs of an outdated operating model struggling to keep up.

Yet, despite this misfit, the municipality has continued to run, grow, and deliver services. This is largely due to the strong informal governance that has grown in the municipality. In Eindhoven, people always follow formal procedures and guidelines. New paths or processes have been developed informally that are seen to be more effective and efficient. This informal structure has grown in parallel to the city itself and has become a critical enabler for getting things done in Eindhoven. Employees rely on networks of trust, mutual understanding, and a shared drive to get things done, to overcome formal bottlenecks or bureaucracy and move initiatives forward. While this enables a flexible and responsive municipality, it means that the municipality is often executing projects not following guidelines, and established processes so certain things can be overlooked and lead to problems or inefficiencies.

To address the deeper governance misfit, what is needed is not simply a new set of tools or rigid frameworks. Instead, Eindhoven requires mechanisms that align with its existing informal culture. These should enhance coordination, support shared decision-making, and help scale what already works well. The goal is not to replace informality with formal procedures, but to strengthen it by introducing structures that promote collective direction, mutual accountability, and greater operational clarity. People in the municipality want to understand what they are working toward, how their efforts connect to others, and whether the organization is learning and improving over time. Any improvement strategy must support this need for autonomy, adaptability, and a shared sense of purpose.

However, changing the governance style to accommodate these needs, and to be able to withstand large, cross-departmental projects in a collaborative and structured way, will take multiple years and is an extremely large challenge. It is not realistic. Therefore, the remainder of this thesis explores in more detail the current decision-making process in the municipality, identifies some inefficiencies, and discusses the current portfolio management techniques used. Additionally, towards the end of this thesis, how Eindhoven can begin to address these root causes by building on its existing strengths such as, its informal networks and in turn flexible work culture, while introducing elements of SPM, as well as Joined-Up Governance, and Emergent Strategies. While these frameworks and concepts are not solutions to the underlying problem, they can help the municipality move toward a governance system that is more cohesive, responsive, and capable of steering complex transitions over time.

5.2.7   Why is Eindhoven's Informal Culture both a Strength and a Limitation

One of the most important contextual factors that shapes both the symptoms and the deeper governance problem is Eindhoven's informal governance culture. This cultural dynamic acts as both an enabler and a constraint for change, especially when introducing a structured approach like SPM.

The way things get done in Eindhoven often depends on personal relationships, informal agreements, and ad-hoc conversations, rather than formal processes. This helps the municipality stay flexible and adapt quickly to political changes. However, it also makes it harder to introduce a structured, data-based approach like SPM.

Several interviewees pointed out that staff value their independence and are often skeptical of strict frameworks or top-down systems that limits their autonomy. However, SPM by nature requires clear strategic goals, formal decision-making processes, and a consistent way to evaluate and prioritize projects. This can clash with Eindhoven's preference for decentralized and flexible ways of working. Furthermore, the popularity of terms like "strategy" and "innovation" within the municipality has led to many departments informally engaging in strategic discussions without a structured governance framework, or a structured uniform procedure applied to the whole municipality. As a result, introducing a more systematic approach to prioritization could be met with skepticism or reluctance.

This shows that implementing SPM in Eindhoven cannot just be about adding new tools or processes. It will also require strong leadership and a focus on guiding cultural change. People will need to understand how SPM can support, rather than limit, the way they already work.

Ultimately, Eindhoven's informal culture is not only a barrier. It is also an opportunity. Instead of trying to impose a rigid system, SPM should be adapted to work with the municipality's existing strengths. This includes its collaborative mindset, ability to respond quickly, and trust-based decision-making. If introduced in the right way, SPM can support these qualities rather than disrupt them. That would make the system easier to adopt and more useful over time.

Before exploring the case-specific details, we first consider the practical implications of these barriers for strategic resource allocation.

5.3   Implications of Governance Misalignment and its Affects on Strategic Resource Allocation

The previous sections identified a series of recurring governance inefficiencies in Eindhoven and categorized them as symptoms of governance misalignment. The section also explained how these symptoms

are the result of three deeper root causes. These challenges, such as unclear strategic goals, fragmented coordination, and inconsistent capacity management, are not just theoretical. They have practical consequences for how the municipality allocates its resources. This section illustrates the practical implications of the governance misalignment described earlier.

- **Decisions are reactive rather than planned due to political pressures**
  Political shifts often drive budgeting decisions, especially when Aldermen do not have access to clear or up-to-date information on project progress. Without solid data, it is difficult to make choices based on long-term goals, so decisions often end up being reactive.

- **Fragmented project oversight**
  Because vertical information flows dominate, departments have limited visibility into each other's projects and capacity needs. This leads to overlooked interdependencies, potential duplicate efforts, and department-centric prioritization. Without shared metrics or real-time capacity tracking, it is difficult to allocate resources on a municipality-wide basis.

- **Missed opportunities for cross-department collaboration**
  While horizontal collaboration is widely acknowledged as valuable, it mostly occurs through ad hoc working groups or temporary programs. If more than one department is involved in a project, usually only one controls the budget. That makes it harder for the others to influence the work or invest in shared solutions.

- **Lack of data to guide decisions**
  Both vertical and horizontal communication often rely on informal channels rather than consistent performance metrics or standardized reporting. Consequently, broader strategic visions are not always translated into quantifiable targets or tracked effectively, reducing the likelihood of evidence-based allocation decisions.

These issues illustrate that Eindhoven's governance model is not yet equipped to support integrated, strategic resource allocation. The next section (Table 2) provides a detailed breakdown of these governance breakdowns, outlining the specific causes, effects, and actors involved.

5.4 Inefficiencies in the Current State of the Municipality

The analysis of the decision-making process in the municipality of Eindhoven, as well as the analysis of the interviews, revealed a number of inefficiencies. The following table collects all of the inefficiencies into a table to create a clear picture of the points that need improvement.

It is important to note that the presence of these inefficiencies does not imply that the municipality is under performing. Eindhoven continues to grow at an impressive rate and delivers a wide range of projects. However, to further improve operational efficiency and to determine how SPM can best be tailored to Eindhoven's governance context, these areas of improvement must be acknowledged and understood. Identifying them helps pinpoint key leverage points for intervention.

Table 2: Governance Inefficiencies in Eindhoven, Organized by Category, Cause, Effect, and Actor Level

Category	Inefficiency	Cause	Effect	Where / Between Who
Strategic Alignment	No shared criteria for evaluating project alignment with goals.	Departments interpret strategic goals independently due to the absence of a centralized translation into criteria.	Departments apply different interpretations of strategic goals, making project selection fragmented and reducing alignment across the municipality.	Departments, Portfolio Managers, Strategy Advisors

<div align="right">Continued on next page</div>

Table 2 – continued from previous page

Category	Inefficiency	Cause	Effect	Where / Between Who
Strategic Alignment	Long-term planning is undermined by shifting political priorities.	Political agendas shift with new leadership or electoral cycles, creating uncertainty in execution.	Departments are forced to reprioritize frequently, undermining long-term focus and strategic continuity.	Executive Board, Directieraad, Sector Heads
Structural Fragmentation	Departments create sector plans without coordination as there no shared behavioral norm or formal expectation to align priorities or coordinate project dependencies in the process.	There is no mechanism or requirement for joint plan development or inter-departmental review.	Overlapping demands and interdependencies between departments are identified too late, causing delays and coordination problems.	All Departments, Sector Heads
Structural Fragmentation	There are no clear governance structures for shared project ownership between multiple departments.	The current organizational structure is vertically siloed, making it difficult to assign shared accountability or co-ownership across departments.	Only one department formally carries out the project, which means that other relevant departments may not be consulted or included in key decision-making.	Sector Heads, CIO, Supporting Departments
Portfolio Management	Each department uses different methods for project prioritization.	No common evaluation model has been agreed upon; departments define criteria in isolation.	It is impossible to compare or coordinate priorities across departments as prioritization remains siloed, making it difficult to align project selection across departments or with citywide strategy.	Portfolio Managers Across Departments
Data & Information Flows	Sector heads do not have real-time visibility into project status and resource availability.	Project, workload, and capacity data are scattered across systems or remain siloed within departments, with no integrated view.	Sector heads and portfolio managers make resource allocation decisions with incomplete or outdated information, leading to inefficiencies and misalignment.	Sector Heads, Portfolio Managers
Data & Information Flows	Progress and capacity tracking systems are inconsistent across departments.	Departments use different tools (or Excel) with no shared standard or integration, making data fragmented and incomparable.	Decision-makers work with incomplete or inconsistent information, reducing trust in the data and slowing down evidence-based decisions.	Sector Heads, Internal Project Teams
Organizational Culture	A strong preference for informal coordination limits the uptake of structured processes.	The organization culturally favors autonomy and flexibility over standardization and uniformity.	Efforts to standardize or professionalize practices face internal resistance.	Entire Organization, Senior Leadership

5.5 Summary of Challenges in Eindhovens Current Structure

This chapter showed that while Eindhoven has a clear structure, it still struggles with working across departments. Five recurring issues were identified, and they all point back to three main causes: unclear direction, limited coordination, and an inconsistent way of managing projects and resources.

These problems exist within a culture that values flexibility and informal ways of working. That culture helps Eindhoven respond quickly, but it also makes it harder to introduce more structured and data-driven approaches like SPM.

Regardless of these inefficiencies, Eindhoven has real strengths to build on. Its informal networks and proactive staff show that there is a strong willingness to improve. With the right approach that fits the local way of working, SPM can help the municipality become more focused, better coordinated, and more deliberate in how it uses its resources.

5.6 Strengths in Eindhovens Current Governance

While inefficiencies and potential areas for improvement have been outlined in the previous sections, it is important to emphasize that the municipality of Eindhoven also demonstrates considerable strengths. These strengths have enabled the municipality to grow, innovate, and respond effectively to its rapidly changing environment. Recognizing and leveraging these existing strengths is crucial when designing new processes or improvement strategies, so that proposed changes build on what is already working, rather than work against it.

One of the most valuable strengths of the municipality of Eindhoven is its informal network. While this network can be difficult to navigate for new employees, it plays a key role in enabling the municipality to get things done quickly and flexibly in response to changes. Decision-making in Eindhoven is often relational and adaptive, supported by informal interactions that cut across departmental boundaries. Although such informality can limit transparency and standardization, it enables a highly responsive organization. At the end of the day, the majority of decisions made in the municipality are driven by immediate needs, political developments, or shifting community priorities. Long-term planning and strategy make up only a small portion of the municipality's day-to-day decision-making. Therefore, Eindhoven's strong informal network allows the organization to move quickly and flexibly, something many other municipalities struggle with due to rigid bureaucracy and formal procedures. Any new processes or improvement strategies should therefore not ignore this informal strength, but instead build on it. It is likely to be a critical enabler for the successful implementation of change.

Another related strength is the pro-activeness of employees. The informality of Eindhoven's governance culture contributes to a sense of autonomy, where employees often feel empowered to act when they see opportunities for improvement. This results in a highly motivated workforce and a wide range of innovative ideas being explored. A good example of this is the formation of the Strategic Investment Team, which now evaluates and prioritizes long-term strategic investments each year using a grading criterion. It shows that employees are not just willing to take initiative, but also that the organization is open to change when it adds value.

This openness to improvement is a strength in and of itself. Although implementing change in any large organization takes time, interviews suggest that most employees within the municipality are generally welcoming of change, so long as they understand the added value. Despite its bureaucratic constraints, Eindhoven has shown signs of being open to innovation. This can also be seen in the recent introduction of portfolio managers in three departments, with each department taking its own initiative to develop a portfolio management approach that fits its needs. This decentralized drive to improve, even in the absence of a formal, organization-wide mandate, demonstrates a strong internal motivation to become more strategic and collaborative.

All of this points to a clear message: Eindhoven does not need to start from scratch. The mindset, the drive, and the informal systems already exist. The challenge now is to support these strengths with better tools, clearer direction, and a more consistent way to make decisions across the organization.

5.7 Chapter 5 Takeaways

This chapter directly addressed Sub-Question 1: *"What are the symptoms and causes of inefficient strategic resource allocation and prioritization in the Municipality of Eindhoven?"* The following points are the main takeaways from this chapter.

- **Decision-Making Flows:** Eindhoven's hierarchical (vertical) governance structure is accompanied by weak horizontal mechanisms, leading to siloed decision-making and limited cross-sector collaboration.

- **Five symptoms of structural misalignment, Three root causes:** The interviews revealed five specific symptoms of governance mismatch: lack of clear goals, politically driven prioritization, siloed behavior, capacity constraints and uneven portfolio management. These are results of three deeper root causes: strategic ambiguity, fragmentation, and inconsistent processes.

- **Informal Culture is both a strength and limitation :** While it fosters flexibility and autonomy, Eindhoven's informal governance style also undermines data-driven planning and consistent adoption of SPM practices.

- **Opportunities for Improvement:** Despite structural weaknesses, Eindhoven's strong informal networks and proactive workforce can serve as powerful enablers if new approaches are designed to build on existing strengths.

Following this chapter, Chapter 6 delves more deeply into how these challenges manifest in two key departments (REO and SMO) and explores how portfolio management is currently being practiced there, highlighting the difficulties of creating a standardized SPM process for the whole municipality. Chapter 7 then circles back to the research question regarding how might SPM be adapted for Eindhoven's situation.

6 Differences in Portfolio Management Across REO and SMO

This chapter is in a box as it gives additional context and depth to this research, but is not necessary for the results, findings, or understanding of the situation in Eindhoven. It simply highlights the complexity of implementing a uniform procedure for decision making and resource allocation across the municipality.

This chapter highlights how Eindhoven's REO portefeuille and SMO portefeuille each approach project portfolio management. While both portefeuille aim to allocate resources in line with municipality wide goals, their methods differ, exemplifying the aforementioned issues of siloed approaches and methods in the municipality. This analysis, therefore, serves as an example of how two portefeuilles have tried to implement portfolio management without collaboration and have established very different procedures. It highlights how Eindhoven's governance structure obstructs consistency, complicates municipal-wide prioritization, and sometimes leads to duplicated efforts. Moreover, this chapter exemplifies the challenge of implementing a standardized portfolio management practice due to the varying nature of projects the municipality addresses and executes.

6.1 REO's Approach to Portfolio Management

REO executes a wide variety of projects in the spatial and economic development field. They are responsible for housing construction, infrastructure upgrades, and urban redevelopment, as well as the environmental sustainability of these projects. Therefore, these projects involve major capital investments, close collaboration with external stakeholders such as regional government or contractors, and they operate under strict deadlines and external policy mandates. What is different about the REO portefeuille is that it receives mandates both from the municipality and the national government, which can make its policies particularly ambitious.

6.1.1 How REO Manages its Portfolio

The REO portefeuille has been developing a more formalized approach to portfolio management. In this portfolio management process, REO aims to link each major project, such as housing or infrastructure updates, to a higher-level strategic objective or program line (A or B programs). Additionally, they use an evaluation framework to rank or assess initiatives based on feasibility, alignment with overarching REO goals, resource demands, and expected benefits. They are trying to create a structured portfolio management process by collecting data on each initiative, such as timelines, budget needs, and risk levels, and linking the projects to strategic goals or programs.

REO also runs iterative portfolio sessions throughout the year, where sector heads and the portfolio manager meet to decide which projects need to be accelerated, or delayed based on changing current situations. They try to do this objectively, using the fact that each project can be linked to an overarching sector goal, which is also linked to an overarching municipal or national goal. The awareness of a project's contributions to larger goals helps them determine how to compensate for projects that are achieving less than expected, or more than expected, to still achieve the necessary goals.

Therefore, it can be said that the process being developed by REO for portfolio management is characterized by being structured, quantifiable, and involves a centralized dashboard and periodic reviews.

However, while this process may sound concrete and well thought-out not all of the elements are in place yet, it is still in the development phase. REO is still working on how to ensure projects are tracked and their contribution is recorded accurately and in one collective space. Moreover, they are trying to build this into a dashboard, via the project tool box. However, they are still in the process of designing how that should be structured, what metrics to use to evaluate projects, and conceptualizing how to scale this method for large complex problems that affect multiple strategic goals, or require cross-departmental collaboration or input.

6.1.2   Why REO Favors a Structured, Data-Driven Methods

In the REO portefeuille, the projects involve high financial stakes. They are dealing with large-scale infrastructure or urban development projects, so they need to be able to justify their project ranking and make informed decisions. A structured approach helps explain why certain projects are chosen over others.

Additionally, REO also collaborates with regional governments, private developers, and other external parties. These partnerships require clear planning, predictable timelines, and transparency around who is responsible for what. Without that, it becomes difficult to coordinate. This ensures stakeholders are aware of their roles, contributions, and deadlines.

Since REO portefeuille is responsible for long-term initiatives, having a systematic procedure and clear oversight across all projects is critical. It helps prevent duplicated efforts or overlapping budgets aimed at similar goals, which is especially important given the size of the investments involved. Finally, REO also has to deliver on national goals, such as housing and sustainability targets. Keeping track of progress and timelines is essential to make sure these goals are actually met.

6.1.3   Challenges for the REO Portefeuille

Despite the structured and formal approach that is being developed in this portefeuille, the REO portfolio managers and other employees mention a few challenges. Firstly, even within REO, political interests can shape which projects are preferred as well as slight changes to the project's scope. For instance, if a Alderman supports a housing development in a specific area, it may receive priority over other similarly worthy initiatives. Politics is still able to reroute the well-structured prioritization methods, and this may come at the cost of achieving national objectives efficiently. Nonetheless, REO aims to have objective, data-based discussions in portfolio meetings, providing a clearer rationale for how resources get allocated.

Additionally, the limited uniformity with the processes in other portefeuilles means that cross-cluster projects are difficult to manage, given REO's structured and quantifiable prioritization method. However, as mentioned, for REO this structured process is important as it interacts with developers, regional partners, and national policy frameworks. These external pressures reinforce the need for a more standardized set of evaluation criteria so REO can communicate clearly about project status, trade-offs, and timing.

Lastly, the biggest challenge is making the process they have designed come to fruition. At the moment they are still developing the dashboard on how to link projects to goals and developing the metrics to compare and determine projects' contributions to goals. However, collecting the necessary data and building the dashboard requires time and expertise.

6.2   SMO's Approach to Portfolio Management

The SMO portefeuille is responsible for a wide range of people-centric initiatives such as youth care, community development, social welfare, and neighborhood programming. Unlike REO's focus on tangible deliverables and major capital investments, SMO projects often aim to improve social well-being or foster inclusion and equity, producing outcomes that are difficult to measure in purely quantitative terms. Because these challenges are more fluid and context-dependent, SMO tends to have fewer rigid performance metrics (e.g., ROI, exact timelines) than REO, and more emphasis on policy aims and flexible responsiveness to urgent social needs.

Therefore, they have developed a more policy-oriented and politically sensitive approach. Documents such as Koers 2040 outline broad ambitions (e.g., "inclusive communities," "social cohesion," "reduced inequalities") rather than concrete, KPI-linked targets. While these overarching goals give a sense of direction, they often lack a step-by-step mechanism to prioritize or rank specific initiatives, which makes portfolio management particularly difficult in this portefeuille.

6.2.1 How SMO Manages its Portfolio

Due to the high-level goals, portfolio management in the SMO portefeuille uses less formalized criteria. They use policy documents such as Koers 2040 and Bestuursakkoord to understand the broad visions, but don't break them down into numerical targets or standardized KPIs to create an evaluation framework. The nature of these high-level goals makes it hard to translate into measurable criteria, so the evaluation process stays mostly qualitative.

To help coordinate different social initiatives and avoid duplication, SMO has introduced a more structured portfolio process. Firstly, there is the identification of a need and the creation of a project proposal. Then the portfolio manager gathers all new proposals and information on the current status of ongoing projects. Using an assessment framework, the prioritization of projects is determined. This framework assesses the strategic alignment of a project, the social impact, feasibility, resource use, and synergy within the portefeuille. Projects are graded in each criterion on a scale of 0–10, based on how well they contribute to the criterion's goal.

However, due to the subjective and vague nature of the goals, it is hard to determine what score to give a project in an objective way. If different people are to grade the same project, it will result in different scores. Nevertheless, following the assessment of the projects in each category, the portfolio manager determines which projects are high priority and which can be deferred till later. This is then provided to the sector head, who makes the final decision based on the advice from the portfolio managers.

In addition to being responsive to social needs, the SMO portefeuille also faces significant financial pressure. Due to limited funding from the national government, especially in areas such as youth care and social assistance, SMO must also pay close attention to controlling costs and managing growing social expenditures. As a result, the portefeuille is not only focused on social value but also on financial sustainability. There is a growing recognition that prioritization will need to consider not only short-term needs, but also the structural changes required to safeguard future service delivery within financial limits.

Therefore, it can be said that SMO uses high-level goals and less formalized criteria to manage its portfolio. This is primarily due to a lack of measurable and clear strategic goals, but it also allows them to be responsive and reactive to changes in citizens' needs. Nevertheless, they acknowledge the need for a more structured process and have expressed the need for clearer goals to improve the prioritization process.

6.2.2 Why the Social Sector is More Flexible and Less Standardized

Due to this more subjective evaluation criteria and process, it means that many initiatives can be implemented and prioritized quickly in response to immediate or new challenges. Due to the nature of this portefeuille, it is essential that SMO is able to respond quickly to new challenges and needs, so rigid criteria can inhibit that. This also aligns with the political nature of the municipality.

At the same time, the portefeuille is increasingly influenced by the financial pressure to make the social domain more sustainable. There is an understanding that transformation is needed, but concrete strategies are still developing. This creates a tension within portfolio management, which must remain flexible enough to respond to immediate needs, while also keeping longer-term goals in mind.

Additionally, even if subjective at times, the evaluation criteria help managers compare projects side-by-side, rather than relying purely on ad hoc political or staff preferences. Moreover, it also fosters transparency, as there is documentation justifying why decisions were made. This is important, as the projects in this portefeuille address complex social indicators, so it is difficult to provide evidence on what is best. Therefore, having criteria justifying why projects were given funding is beneficial for improving transparency in the municipality.

Nevertheless, having subjective criteria also means that there is not a lot of confidence or evidence on how the current projects are contributing to municipal goals.

6.2.3 Challenges for the SMO Portefeuille

Even though SMO has taken steps to make portfolio management more structured, some challenges remain. One of the main issues is that social outcomes are often difficult to measure. They are not always concrete or easy to compare, which makes it hard to assess projects consistently. There is an evaluation framework in place, but it is still too general. It loosely connects to high-level municipal goals like Koers 2040 but does not provide enough specificity. As a result, teams often interpret the scoring differently, which makes the process less transparent and weakens how priorities are set.

Another challenge is the difficulty of responding to urgent or unexpected issues. The social domain often needs to act quickly when policies change or new needs emerge. In theory, the process is meant to be flexible. But in practice, it still relies on one-on-one conversations between project leads and the portfolio manager. This takes time and capacity. Because there is no formal fast-track option, some teams skip the process altogether to stay responsive. That makes it harder to keep an overview of what is happening and to coordinate efforts.

A final challenge is the lack of coordination with other portefeuilles. Many SMO projects are connected to other clusters, but each one has its own timeline and way of working. Without shared tools or common planning routines, it is hard to align efforts. This makes it difficult to manage capacity and set priorities across the organization.

6.3 Why SMO and REOs Methods Differ and Can They Align

The contrasting portfolio practices of REO and SMO stem largely from the inherent differences in the types of projects that they manage. REO projects are typically infrastructure-based, with tangible deliverables, enabling a more structured portfolio management. SMO, on the other hand, is a portefeuille that does not exactly produce any tangible outcomes. The portefeuille is very people-focused and often aims to achieve social cohesion, inclusion, or well-being of citizens, making it difficult to have a data-driven approach to portfolio management. Moreover, given the nature of the SMO portefeuille, unlike the REO portefeuille, it also needs to be extremely flexible and aware of citizens' needs. The process of making decisions needs to be flexible enough to react quickly to unforeseen issues raised by citizens. Given that the REO portefeuille is mainly concerned with long-term, capital-intensive projects that require substantial investment, it does not need to be extremely adaptable or reactive to new and unforeseen needs from citizens.

Therefore, the foundational differences in the projects and natures of these two portefeuilles exemplify the difficulty of achieving a uniform and structured SPM in the municipality. The complexity and diverse nature of the different issues they address imply that a one-size-fits-all approach to allocating resources and making decisions is not beneficial or possible. The analysis of the REO and SMO portefeuilles shows that full convergence is likely not possible or beneficial in the municipality. Nevertheless, given the respective weaknesses of each portefeuille, adapting the approaches to be a bit more similar may benefit each one respectively.

Given the political nature of the municipality, and portefeuilles needing to account for changing political opinions and requests, adopting a slightly more SMO fluid-like process can be beneficial to REO. While still bringing structure to the decision-making process of SMO, the long-term initiatives and projects in the SMO portefeuille can be evaluated against a more detailed and structured evaluation criteria to assess their progress and contribution to goals throughout time.

6.4 Needs of Portfolio Managers Across Both Sectors

Even though REO and SMO have different types of portfolios and work in different ways, portfolio managers in both portefeuilles mention similar challenges. This shows there is potential

for a more aligned approach to how portfolios are managed across the municipality.

One shared need is a clearer structure for portfolio governance. Managers from both portefeuilles said they would benefit from stronger city-wide goals to help them evaluate trade-offs more consistently. A possible option to achieve this could be a centralized portfolio board, or a team or person that oversees this process and provides portfolio managers with the desired structure and support for decision-making. These portfolio boards would help ensure that portfolio-specific goals and decisions are in line with municipality-wide priorities.

Another shared need is better access to data and more consistent metrics.Both portfolio managers acknowledge the benefits of having shared performance metrics, reporting styles, and systems, especially when collaborating, and for the sake of consistency. While they acknowledge the difficulty in achieving this, and that it takes time, having reliable and comparable performance metrics helps portfolio managers explain the trade-offs, particularly when a new prioritization must occur due to a political change or request. Having evidence of the trade-offs and need for reprioritization can help the decision-making process.

6.5 Cross-Sector Implications and Conclusion

REO and SMO have different ways of managing their portfolios, and that makes sense given the differences in their work. But these differences also show a bigger challenge: the municipality still lacks a consistent and clear way to manage resources across the organization. Both portefeuilles want more structure, more transparency, and better alignment. At the same time, the wide range of responsibilities across the municipality means that one single portfolio system will not work for everyone.

However, there is a lot of benefits from introducing shared practices. Having a common way to track and report on projects would make it easier to compare investments, monitor progress, and see how everything connects to the broader goals of the city. It would also help weigh decisions that affect more than one portefeuille.

Moreover, introducing a centralized portfolio governance mechanism, such as a cross-sector portfolio board, could provide a structured way to oversee prioritization, mitigate duplication of efforts, and aligning portefeuille activities with overarching municipal objectives. Such a body would not replace portfolio-specific flexibility but rather create a shared space for negotiation, and strategic decision-making across the entire organization.

Each portfolio needs to keep some freedom to manage its work in a way that fits its own needs. But the current lack of coordination makes it harder for Eindhoven to manage resources strategically. Fixing this will take more than new systems. It will require shared routines, leadership support, and a way of working that balances structure with the ability to adapt. The differences between REO and SMO highlight a wider issue: decisions are still being made in silos, trade-offs are unclear, and there is no full picture of what the municipality is doing as a whole. This makes it harder to plan for the future, manage capacity, and respond to both long term ambitions and local needs.

The next chapters look at how joined up governance and adaptive portfolio management can help Eindhoven move forward. These approaches offer a way to improve coordination without losing the flexibility that is already working well.

7 Towards an Adapted SPM

Traditional SPM assumes a level of clarity, cohesion, and control in an organization. This can be seen by the emphasis on stable goals, standardized evaluation criteria, and reliable data flows. Nevertheless, the analysis of the current state of decision-making and resource allocation in the municipality reveals that the organization may not have these features. Eindhoven governance is characterized by a fragmented structure, informal culture, and political fluidity. Additionally, they are also facing the challenge of inconsistent data flows. Therefore, the analysis of Eindhoven's situation, and the literature review of SPM reveals that traditional SPM may not be applicable for Eindhoven.

In the following section, the assumption of SPM, and how they contrast with the realities in Eindhoven will be discussed, addressing the second research sub-question of this paper- *What are the limitations of SPM in Eindhoven's governance structure.*

7.1 Core Assumptions of Traditional SPM Compared to Eindhoven

In this section, the core assumptions of SPM are compared to the current situation in Eindhoven to clearly outline what needs to change in the traditional SPM structure for it to be effective in Eindhoven, or what needs to be improved in Eindhoven so that SPM can be effective.

7.1.1 Assumption 1: Clear and Measurable Strategic Goals

Traditional SPM requires a clear strategic vision that can be translated to operational objectives. This is important as it helps provide a direction for the organization, and in turn guides the project prioritization process. Most importantly, SPM assumes that goals are measurable, so that when projects are being considered, the contribution a project makes towards a goal can be calculated.

However, in Eindhoven, currently, the goals are more aspirational targets, rather than operational goals. No one in the organization is responsible for translating the goals into measurable and operational goals. Department head, and portfolio managers are left to interpret them on their own and make decisions accordingly. However, this leads to subjective and inconsistent prioritization throughout the organization. Additionally, without measurable targets, it is difficult to track whether portfolios are contributing to long-term outcomes and how.

7.1.2 Assumption 2: Standardized Criteria for Project Evaluation

Projects in SPM tend to be evaluated using a common framework, often with quantified criteria such as cost-benefit ratios, contribution to strategic goals, risk level, and ROI. This enables comparison on selection of projects in an objective, organization-wide manner.

However, in Eindhoven, there is no standardized or centralized method for evaluating projects. Each portefeuille has developed its own approach based on its interpretation of municipal goals. The REO portefeuille uses a more structured system, in which the contribution a project makes to a goal is tracked. However, in the SMO portefeuille, the grading is often a lot more flexible and subjective, fitting the nature of their portefeuille. Nevertheless, the absence of a shared criteria leads to siloed prioritization. It further increases the strength of the silos in the municipality, as ensuring a project that is related to multiple portefeuilles is executed effectively and efficiently is harder when each portefeuille is grading and prioritizing projects differently.

7.1.3 Assumption 3: Centralized Portfolio Governance

Traditional SPM assumes there is a centralized authority or function, such as a portfolio board, that governs project selection, ensures alignment with strategic goals, and coordinates resource allocation across departments.

While this role is partially fulfilled by the College van B&W, which approves large projects and allocates them to departments for execution, the municipality lacks a dedicated body within the organizational structure focused on portfolio governance.

Portfolio managers have been introduced within some portefeuilles (REO, SMO), but they operate much lower in the hierarchy, don't have decision-making power, and do not need to coordinate with each other. As a result, decision-making remains fragmented across multiple actors and levels, and strategic alignment and resource coordination are not actively managed across portfolios. The absence of a central governance layer or body creates slower, more reactive decision processes.

This structure contrasts with the SPM model, which requires an empowered function to steer, monitor, and align portfolio-level decisions across the organization.

7.1.4 Assumption 4: Stable Strategic Priorities Over Time

SPM assumes that the strategic goals set by the organization are long-term, and the focus can solely be set on that. It assumes there are no short-term changes in needs and priorities, so decision-making can always be made based on the long-term strategic goals.

However, the political nature of a municipality means that in Eindhoven, the strategic direction, or more importantly, what is prioritized in decision-making, can change substantially. Every election cycle can result in a different coalition balance, and therefore different priorities on the political agenda. This means that in Eindhoven, SPM is difficult to implement as long-term goals and priorities can change. Moreover, the nature of the municipality catering to the needs of the citizens means there are often new and urgent needs that need to be attended to, which alter the prioritization of projects. This undermines long-term portfolio consistency and results in frequent re-prioritization, planning inefficiencies, and a lack of confidence in strategic direction.

7.1.5 Assumption 5: Reliable Data and Information Flows

Accurate, real-time data on project performance, capacity, and strategic alignment to guide decision-making is a clear assumption in SPM. However, information transfer and capacity tracking are currently not established processes in the municipality. This means that real-time and measurable data on a project's status and contribution to long-term goals is difficult to attain. This limits the ability of the Directieraad and Aldermen to make evidence-based decisions and contributes to unrealistic planning.

7.1.6 Assumption 6: Formalized Cross-Department Collaboration

Traditional SPM assumes interdepartmental governance processes to coordinate shared initiatives, identify dependencies, and align resources. However, in Eindhoven, cross-portefeuille collaboration is mostly informal and reactive. There are no formal procedures in place to facilitate cross-portefeuille collaboration or regular communication. Therefore, the lack of collaboration structures in the municipality means that traditional SPM is limited in the context of Eindhoven.

7.1.7 Assumption 7: Culture of Accountability and Standardization

Lastly, SPM expects that there is a culture that supports clear roles, standardized processes, and collective accountability for goal achievement. However, the informal culture in Eindhoven is not suitable to this. There is a clear favor of working outside the organizational process, and fixing problems with informal agreements. Employees favor autonomy over formalized structure. This means that employees tend to resist rigid structures when they are implemented, as it can threaten their current way of working and the flexibility of their roles. This is one reasons that portfolio management is currently seen as something internal to each department and not as a proactive strategic tool. Therefore, the cultural context in Eindhoven makes the implementation of SPM difficult without significant adaptations and change management.

7.2 Summary: Eindhoven Is Structurally Incompatible with Traditional SPM

Together, these assumptions highlight how traditional SPM which is originally designed for profit-oriented, stable organizations clashes with the political and governance context of the municipality of Eindhoven. Rather than having a clear, universally accepted set of strategic goals, the municipality faces fluctuating political agendas rather than consistent, high-quality data streams to support objective project evaluation.

The table below illustrates this misalignment by contrasting the foundational assumptions of traditional SPM with the on-the-ground reality in Eindhoven. It reveals the specific areas of structural misalignment.

Table 3: Structural misalignment between traditional SPM assumptions and Eindhoven's reality

Traditional SPM Assumption	Eindhoven's Reality
Measurable strategic goals guide prioritization	Strategic goals are vague and not operationalized
Project evaluation uses standardized criteria	Portefeuilles use different and subjective prioritization methods
A central portfolio office aligns priorities	Portfolio managers operate in isolated silos
Strategic priorities remain stable over time	Political agendas frequently shift
Reliable data supports performance tracking	Project and capacity data are fragmented and inconsistent
Departments coordinate through formal structures	Collaboration is informal and often improvised
Staff embrace accountability and standardization	Culture values autonomy and achieving standardization is hard

The table highlights a fundamental misfit between Eindhoven's current governance structure and the conditions required for SPM to be effective. It shows that applying traditional SPM would likely fail due to the structural incompatibility between SPM and Eindhoven. There are two ways to address this incompatibility, firstly, SPM can be adapted and changed, or secondly, elements of Eindhovens current governance can be adjusted. In the following sections both options will be explored.

7.2.1 SPM Is Not a Fixed Model, It Can Be Adapted

Traditional SPM is not a one-size-fits-all solution. Many of the features of SPM can be adjusted to be compatible with the organization's environment, while still providing the structural trade-off and prioritization process desired. The table below shows which core aspects of SPM can be modified and how, laying the groundwork for a more flexible and context-sensitive model.

Table 4: Which Elements of Traditional SPM Can Be Adapted

Traditional SPM Feature	Adaptable?	How It Can Be Modified
Top-down strategy formulation	Yes	Incorporate bottom-up input and emergent learning loops
Stable long-term goals	Partly	Use flexible goal-setting tools like OKRs that can be revised periodically
Standardized, quantitative evaluation criteria	Yes	Combine with qualitative, stakeholder-driven criteria in hybrid models
Centralized portfolio governance (PMO)	Yes	Replace with distributed or networked governance models
Uniform process across all departments	Yes	SPM can be designed with modular, department-specific workflows
Periodic portfolio reviews (e.g., quarterly)	Yes	Can be adapted to include faster feedback loops and iterative decision-making
Data-driven decision-making	Yes (with support)	Combine quantitative tracking with expert interpretation and contextual framing

This table highlights that it is not impossible to implement SPM into the municipality of Eindhoven, it simply needs to be adapted and redesigned to reflect the realities of the municipality.

7.2.2 What Can Realistically Change in Eindhoven?

While SPM can be adapted, another avenue for the successful implementation of SPM into the municipality is changing processes or structures in the municipality itself. However, not all aspects of Eindhoven's governance are equally flexible. Some challenges, like political volatility, must be worked around rather than overcome. The table below assesses which structural features of Eindhoven are modifiable, and what this means for adapting SPM.

Table 5: Which Elements of Eindhoven's Governance Can Be Addressed

Governance Challenge in Eindhoven	Changeable?	Implication for SPM Implementation
Vague strategic goals	Yes	While setting SMART goals is difficult for a political institution, goals can be clarifies and operationalized using KPIs or OKRs
Subjective evaluation criteria	Yes	A shared prioritization framework can be introduced however it may be difficult to create
Siloed portfolio management	Partly	Cross-sector coordination mechanisms (e.g., steering groups) can improve alignment and collaboration, but vertical silos are inherent to municipalities and will remain
Frequent political shifts	No	SPM must be designed to absorb and adapt to political volatility
Fragmented data flows	Yes (with effort)	Requires investment in integrated dashboards and capacity tracking, but it is horrible to improve
Informal collaboration culture	Partly	Can be complemented by formal linking roles or structured deliberation methods
Need for a single standardized process across departments	No	It is important to accept and support differentiated approaches due to the wide variety of projects municipalities need to execute
Resistance to standardization	Partly	Long-term cultural change and leadership alignment required

This analysis shows that there is a need for a dual approach to implement SPM in the municipality- elements of SPM need to be adapted, and certain changes need to be made in the municipality to enable the implementation of SPM. Not every challenge and misalignment can be resolved, however, many can be addressed.

7.2.3 Conclusion

The misalignment described above is not a reason to give up on SPM. Instead, it shows why the approach needs to be adapted, and why elements in Eindhoven might need to be adapted. For SPM to work in Eindhoven, it needs to become more flexible and collaborative. It should still offer structure and support strategic decisions, but it must also reflect the political and operational realities of how the municipality actually works.

7.3 Why Eindhoven Requires an Adapted SPM Model

While Eindhoven's current governance reality does not align with some of the critical assumptions of traditional SPM. The structured approach that SPM has can still provide benefits to the municipality to achieve a more strategic and evidence-based resource allocation and decision-making. However, certain adjustments need to be made to the SPM framework to be compatible with Eindhoven, and leverage its strengths, rather than highlight its points of inefficiency. This section delves into the dilemmas and highlights what elements of the municipality's current structure need to be carefully considered when designing an adapted SPM for its context.

7.3.1 Strategic Dilemmas in Decision Making in Eindhoven

The earlier analysis revealed both structural and cultural challenges that shape how decisions are made. These challenges create three strategic dilemmas that show why a rigid, one-size-fits-all SPM approach will not work in Eindhoven. Instead, the city needs a flexible model that fits its unique context.

Dilemma 1: Stability VS Adaptability in Strategic Planning
Eindhoven needs clear long-term goals to prepare for a growing population and to help departments plan effectively. At the same time, the political environment is dynamic, and the organization often works informally, which calls for flexibility. A possible solution is to set high-level strategic goals that remain stable, while allowing departments to adjust implementation based on changing political and economic conditions.

Dilemma 2: Centralized Oversight vs Decentralized Decision-Making
Eindhoven could benefit from stronger central coordination to improve alignment and reduce fragmented decisions. But at the same time, its informal governance style already helps departments work around silos. A more decentralized model allows teams to stay flexible and take ownership of their work. The challenge is finding the right balance. One way forward is a coordinated model, where joined-up governance structures support collaboration and information sharing, without needing to fully centralize control.

Dilemma 3: Political Influence vs Evidence-Based Decision-Making
Political input in a democracy is necessary and cannot be removed from a municipality's decision-making process. However, an over-reliance on political preferences undermines consistency, continuity, and long-term planning. The enabling conditions of Emergent strategies can offer potential solutions that can be implemented into the SPM framework by enabling adaptability and autonomy to change processes. This can help absorb political shifts while preserving strategic integrity.

7.3.2 Connecting Challenges to the Need for an Adapted SPM Model

The findings from the interviews align with the critiques of SPM discussed in the literature. Traditional SPM assumes a decision-making environment that is characterized by clear strategic goals, stable governance, and formalized procedures, all of which are currently not established in the municipality of Eindhoven. As a result, SPM in its current form is not implementable within this municipal context.

Nevertheless, SPM still remains a powerful tool to bring structure to project evaluation, enabling evidence-based decision-making and prioritization. However, changes need to be made to be implemented in the municipality of Eindhoven. SPM cannot deal with the informal and political governance in Eindhoven, the fragmentation of departmental structures, and the absence of formalized strategic direction. To address these issues, concepts from two complementary governance frameworks can be integrated: Joined-up governance and Emergent strategies.

SPM provides structure and a prioritization tool. But the municipality needs a more flexible decision-making model to account for changes in citizens' needs and political agendas due to Eindhoven's highly dynamic and political environment. SPM alone cannot allow for adapting the prioritization procedures to changing environments, but the enabling conditions of emergent strategies do. By facilitating emergent strategies, Eindhoven could create an SPM model that remains adaptable to changing political priorities and citizens' needs, without sacrificing long-term strategic visions.

Additionally, the lack of cross-sector collaboration in the municipality is a key bottleneck preventing effective resource allocation. Applying practices from joined-up governance can help align departments and establish clear accountability mechanisms, and promote knowledge sharing across the sectors. This would reduce inefficiencies and allow SPM principles to be applied in a way that fits Eindhovens' decentralized governance structure.

In the following section of this research project a conceptual framework on how to combine these concepts is proposed. Following this, the principles and concepts from emergent strategies and joined-up governance that Eindhoven can benefit from will be explored.

8 Conceptual Framework

This chapter presents a conceptual framework that integrates SPM, Joined-Up Governance, and the enabling conditions for Emergent Strategies. It is developed based on the findings from the case analysis of Eindhoven and the theoretical insights from the literature review. The framework is used to explore how SPM can be adapted to better fit the municipality's governance context and improve its resource allocation process. It outlines how these three approaches interact and why their integration is necessary, given Eindhoven's current challenges and the structure of SPM.

The core idea behind this conceptual framework is the following:

- SPM provides the structured backbone for prioritization and resource allocation

- Emergent Strategies transform SPM's behavioral element, embedding adaptability, learning, and responsiveness into decision-making processes.

- Joined-Up Governance provides the collaborative practices that enables both structure and adaptation to function across silos.

Given the analysis of Eindhoven's current situation, as well as the literature review of these three theories, together these three theories form the foundation of what an adapted SPM for the municipality of Eindhoven should entail and incorporate.

8.1 Rationale for Integrating SPM, Joined-Up Governance, and Emergent Strategies

As discussed in the literature review, SPM provides a structured, top-down approach to prioritizing projects and allocating resources (Killen et al., 2012;). It provides a way to balance trade-offs and make informed and strategic decisions regarding resource allocation. However, as highlighted in chapter 7, SPM has a number of assumptions, which can be characterized as limitations, particularly for the context of a municipality. It assumes stable goals, a centralized top-down structure, it ignores or underestimates fragmentation and silos, as well as assumes stable and efficient capacity tracking. Given Eindhoven's political nature, its frequent goal changes, and its siloed organizational structure, these assumptions limit the applicability of traditional SPM.

The literature on Joined-Up Governance and Emergent Strategies offers practices and concepts that together may address these limitations. Joined-up governance counters siloed structures and fosters horizontal collaboration (Pollitt, 2003; Carey and Harris, 2015). While facilitating emergent strategies leads to the possibility of accommodating uncertain or changing priorities by implementing a culture of learning and bottom-up initiatives (Mintzberg and Waters, 1985). On their own, SPM, emergent strategies, and Joined-up governance cannot effectively resolve the inefficiencies observed in the municipality of Eindhoven. But together, they offer a more realistic and operational governance model for municipalities.

8.2 Core Roles of Each Theory

8.2.1 SPM: The Structural Backbone

SPM provides a structured approach to managing portfolios and projects based on long-term objectives. SPM offers a clear set of tools and processes for evaluating, prioritizing, and allocating resources to projects. However, some of the assumptions of SPM are not compatible with the realities of municipal governance. The difference between the assumptions and the current situation in Eindhoven, highlight barriers to the straightforward application of SPM in municipal settings, resulting in the need for adaptations that address volatility, silos, and complexity of municipalities.

8.2.2 Emergent strategies: Behavioral Adaptation and Learning

Emergent Strategies propose that strategies can evolve from the ground up in response to real-time conditions and situations, rather than being pre-planned and pre-defined. They occur due to a pattern in behavior that emerges. Therefore, for Emergent strategies to emerge, there needs to be adaptability and iterative learning. In politically dynamic environments, this way of thinking allows organizations to adapt without losing coherence. This aligns well with the current situation in the municipality

of Eindhoven. Common elements that enable emergent strategies are feedback loops, reflection, and autonomy to act. Integrating these elements with a structured decision-making process of SPM, can improve the municipality's ability to navigate shifting goals and unpredictable developments.

8.2.3 Joined-up Governance: Collaborative Enablement

Joined-Up Governance complements SPM by addressing structural fragmentation and cultural silos. It emphasizes the importance of cross-departmental coordination and aims to reduce fragmentation by fostering horizontal collaboration, transparency, and mutual accountability through mechanisms like cross-departmental committees, shared information systems, and a culture of trust. These practices allow both SPM and emergent strategies to operate across structural boundaries. One of the key issues of the municipality of Eindhoven is that practices are isolated in sectors or departments, rather than standardized and shared across the municipality. This has lead to further fragmentation and inefficiencies. Therefore, without additional collaborative practices, the structured prioritization from SPM and adaptive behavior from emergent strategies would remain confined within individual departments, rather than improving the municipality as a whole operation. In this framework, joined-up governance acts as the connective tissue that allows structure and adaptability to scale across the municipality.

8.2.4 How Emergent Strategies and Joined-up Governance Help Address SPM's Limitations

Although SPM provides a structured approach for selecting and prioritizing projects, it contains assumptions that may not hold municipalities. Table 6 below summarizes these SPM critiques, highlights the key assumption behind each, and shows how Joined-Up Governance and Emergent Strategy can address them. This integrated perspective underpins the adapted SPM model explored in this thesis.

Table 6: Comparison of SPM's Limitations with Elements from Emergent Strategy and Joined-Up Governance

SPM Limitations in Eindhoven	Underlying Assumption	How Emergent Strategy Addresses It	How Joined-Up Governance Addresses It
Requires Clear, Stable Strategic Goals	Assumes long-term strategic objectives remain consistent, enabling top-down planning	Introduces iterative feedback loops for re-evaluating objectives if political or social demands shift	Encourages ongoing conversations across departments to make sure new or updated goals are understood and supported
Focuses on Centralized, Top-Down Decision-Making	Assumes a stable governance structure where senior leadership defines portfolios and ranks projects	Gives more room for bottom-up input, so people closer to the work can influence strategic direction	Sets up shared boards or committees so that departments make decisions together, rather than waiting on a central authority
Ignores or Underestimates Fragmentation and Silos	Assumes teams share data and coordinate easily across departments	–	Actively addresses siloed ways of working by formalizing collaboration and improving how information flows between departments
Assumes Stable Resource Availability and Central Control	Expects stable funding, capacity tracking, and minimal political disruption over time	Acknowledges that resource allocation may need rapid reconfiguration; emergent practices let teams adapt swiftly	Makes it easier for teams to adjust together by setting up shared budgets or planning spaces that allow reallocation when priorities or conditions change
Lacks Built-In Ways to Adjust Strategy Continuously	Assumes occasional portfolio reviews are enough to stay aligned, rather than continual, real-time learning	Uses ongoing feedback from stakeholders to make small adjustments during implementation	Builds in regular cross-sector check-ins and short planning cycles to create a culture of learning and re-evaluating decisions

8.3 Proposed Conceptual Framework

Therefore, the conceptual framework explores in this thesis combines elements from SPM, Joined-up governance, and emergent strategies in attempts to develop a SPM suitable and beneficial for the municipality of Eindhoven. How these theories fit together is visualized in the figure below.
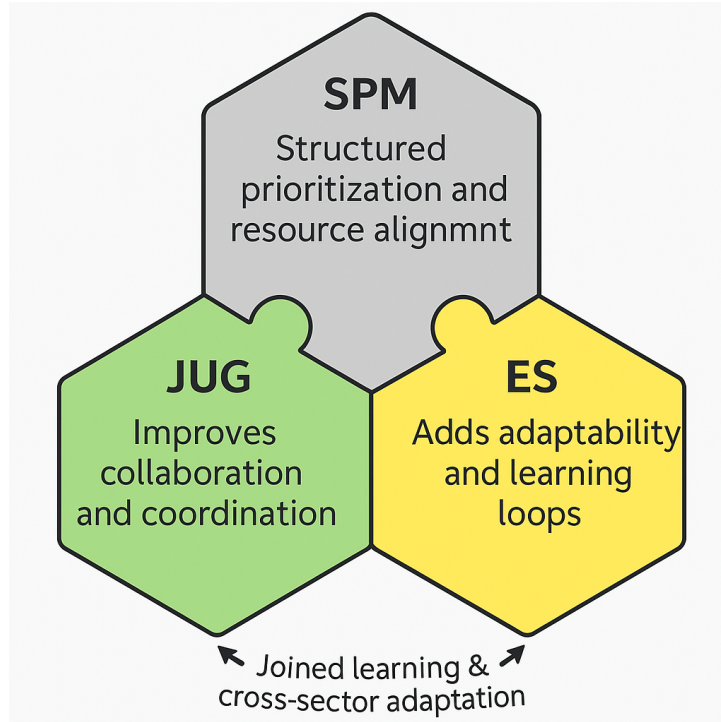
Figure 2: Conceptual Framework Visualization

8.3.1 Mechanisms and Interactions Between the Theories

Cross-Department Prioritization (SPM × Joined-up governance)
Through joint planning committees or a central portfolio office, SPM can be operationalized using practices from Joined-up governance, ensuring each department's projects are evaluated against the whole municipality for overlaps, synergies, or conflicts.

Adaptive Re-Prioritization (SPM × Emergent Strategies)
Conditions for Emergent Strategies to form, such as adapting to your environment allow the portfolio to pivot and for resources to be allocated quicker, rather than remaining locked in a static, top-down, mandated process.

Collaborative Learning and Real-Time Coordination (Joined-up governance × Emergent Strategies)
Routine cross-department teams or communities of practice let employees exchange new findings, thus letting emergent knowledge feed organizational adaptation facilitating strategies to emerge.

8.4 Conclusion

This conceptual framework presented in this paper synthesizes SPM, Joined-Up Governance, and Emergent Strategy into an "adapted SPM" model tailored to the context of municipal governance. By integrating structure (SPM), collaboration (Joined-up Governance), and flexibility (Emergent Strategies), this framework addresses key challenges in Eindhoven's resource allocation as well as other challenges such as silos, political shifts, and diverse stakeholder needs. This framework provides the foundation for recommendations that will allow Eindhoven to remain strategically focused, organizationally coordinated, and politically responsive.

The next chapters operationalize this framework by identifying specific practices and governance mechanisms that Eindhoven can adopt to translate this integrated model into practice.

9 Joined-up Governance Practices That Can Improve SPM for the Municipality of Eindhoven

The current governance structure of the Municipality of Eindhoven is based on vertical silos. This makes collaboration difficult, impacting the resource allocation process in the municipality, and, in turn, its ability to implement SPM. Joined-up Governance is a theory that emphasizes the importance of collaboration across government. The concept of Joined-up Governance has developed over time to include principles that enhance policy coherence, improve the delivery of services, and increase cross-sector collaboration. Given these goals and principles of Joined-up Governance, adopting some of its practices may improve the functioning and decision-making process in the municipality, facilitating the implementation of SPM.

In the following sections, the practices of Joined-up Governance will be discussed. These practices will then be linked back to Eindhoven's current situation to identify which are most promising, answering the third sub-question of this research paper.

9.1 Joined-up Governance Practices

Given that the Municipality of Eindhoven is facing silos that limit its ability to collaborate, implementing some of the principles and practices of Joined-up Governance may result in improved process efficiency. Joined-up Governance is not a singular practice, but rather a portfolio of practices. Structurally, it involves cross-departmental collaboration and implementing people or groups to be "linking pins" (Karré et al., 2013; Hyde, 2008). Strategically, it involves creating shared performance targets, pooled budgets, and formalized accountability mechanisms (Pollitt, 2003). Lastly, at an operational level, Joined-up Governance involves using tools such as digital portals and integrated information systems to improve collaboration through better communication (Klievink and Janssen, 2009).

Joined-up Governance also involves fostering a change in culture and behavior in an organization. It includes building trust, developing collaborative skills, aligning professional norms, and supporting adaptive learning systems (Bryson et al., 2006; Carey and Harris, 2015).

In the following section, the different practices that Joined-up Governance involves to achieve a more coordinated and collaborative governance style in municipalities and government entities are further elaborated on.

9.1.1 Strategic and Structural Practices

Joined-up Governance often begins with political or executive mandates to coordinate policy across siloed institutions. These mandates are typically operationalized through new or reformed governance structures or frameworks.

At the strategic level, Joined-up Governance encourages reforms that align the goals and actions of different departments. One of the key mechanisms is the development of shared strategic frameworks. This entails a set of municipality-wide goals, with outcome indicators or KPIs that provide a common reference for all departments (Pollitt, 2003). These frameworks help ensure that project proposals and departmental actions are aligned with long-term objectives and can be compared or prioritized consistently.

Another practice in Joined-up Governance that fosters structural and strategic collaboration is the implementation of formal structures such as joint planning committees. These are formal interdepartmental governance bodies that often involve program managers, strategists, policymakers, and financial officers who meet to align planning processes, resolve cross-cutting tensions, and co-own decisions (Carey et al., 2015; Hyde, 2008). These committees can be given the responsibility to align departmental goals, prioritize investment, or make certain decisions. Eindhoven could build on its existing governance structures by introducing or strengthening such cross-departmental planning forums.

Cross-departmental teams are another common mechanism. These teams are composed of staff from different departments working jointly on integrated initiatives. They are often formed around thematic portfolios, such as neighborhood-based projects. These teams encourage shared ownership, faster learning, and more responsive planning (Bryson et al., 2006).

Joined-up Governance also recommends assigning the role of linking pins or liaison officers to foster collaboration and coordinated responses to issues. These are individuals embedded in multiple teams who ensure that emerging projects are coordinated across departments from the beginning (Karré et al., 2013). These actors play a bridging role and are particularly important in siloed environments where dependencies or overlaps are otherwise discovered too late.

While these practices stimulate collaboration structurally, they often rely on shared performance targets or pooled budgets to be effective (Ling, 2002). Without shared performance targets, it is difficult to motivate collaboration with other sectors. Structural collaboration risks becoming symbolic rather than real. Nevertheless, these structures enable joint policy planning and monitoring and help reduce duplication of efforts across the municipality (Pollitt, 2003).

9.1.2 Operational Integration and Shared Tools

While implementing structural procedures is important, Joined-up Governance recognizes the importance of operational-level integration as well. Collaboration must occur through daily routines and operational tools, not only through high-level structures.

One key practice is the use of integrated information systems, such as dashboards that visualize project interdependencies, progress, and capacity across departments. These systems help surface collaboration opportunities and reduce duplication of effort. For instance, a shared digital portfolio dashboard in Eindhoven could support SPM by giving sector heads and strategists a real-time overview of strategic alignment and capacity.

Operational integration is further supported by implementing standardized procedures. For example, implementing standardized planning templates, shared project evaluation methods, and shared project intake processes ensures that when departments collaborate, their processes and systems are compatible, making cross-department collaboration more predictable and systematic.

However, to make this effort successful, there must be an understanding of shared outcomes and targets across domains to help align incentives and create accountability for collaboration (Bianchi, 2015; Pollitt, 2003). Therefore, these practices alone may not be sufficient, cultural and behavioral initiatives are also needed.

9.1.3 Cultural and Relational Practices

Structural changes alone are not enough. Long-term collaboration also requires cultural and behavioral change. Studies on Joined-up Governance emphasize the need for trust, shared learning, and open communication (Bryson et al., 2006; Carey and Harris, 2015).

Literature on Joined-up Governance describes multiple mechanisms to achieve this. Firstly, inter-agency training and co-creation workshops help bring departments closer together (Hyde, 2008). For example, organizing a workshop between spatial planning and mobility teams to scope a project together not only improves the project itself but also builds long-term relationships and mutual understanding.

Another practice is fostering communities of practice. These are voluntary cross-sectoral groups that meet regularly to exchange experiences, share lessons, and develop solutions for recurring challenges (Emerson and Gerlak, 2014). In Eindhoven, communities of practice could be organized around themes like climate resilience, digitalization, or inclusive mobility, enabling informal knowledge-sharing and improving reflexivity across departments.

Consensus-based decision-making is also a valuable tool in collaborative settings. It focuses on making decisions through open conversations where everyone involved can support or at least accept the outcome (Sørensen and Torfing, 2021). This helps avoid situations where more powerful actors dominate, and it improves trust in the process. In Eindhoven, where informal influence sometimes overrides formal steps, this could help create more shared and stable decisions.

Lastly, effective leadership is essential in Joined-up Governance. It is about stepping outside the structure or boundaries of the organization and collaborating in new ways. To do this, leaders are needed. Therefore, training programs that focus on skills like negotiation, emotional intelligence, and cross-departmental collaboration can help(Carey and Harris, 2015). These programs also help overcome siloed thinking or past tensions that can block collaboration.

9.1.4 Adaptive Management and Learning Infrastructure

While the core aspect of Joined-up Governance is to encourage cross-sector collaboration through creating more cross-sector formal structures, there is also an emphasis on an adaptive approach to governance. It acknowledges the complexity of modern public problems. To achieve this, Joined-up Governance includes designing feedback loops between planning, implementation, and policy refinement (Emerson and Gerlak, 2014).

A prominent practice is the use of quarterly portfolio reviews, where decision-makers pause to assess progress across strategic portfolios, reflect on what is or isn't working, and recalibrate plans as needed. Data-sharing infrastructure and real-time monitoring enable these loops to function effectively. Functional performance targets, such as equity, accessibility, or system responsiveness, shift the focus from outputs to outcomes, encouraging teams to think systemically (Carey and Harris, 2015). These practices support collective learning, which in turn, strengthens collaborative capacity by surfacing hidden interdependencies and generating new solutions (Emerson and Gerlak, 2014).

9.1.5 Facilitating Collaboration: How It Works

Together, these practices enable Joined-up Governance by embedding collaboration into both structure and culture. They create formal and informal infrastructures, such as liaison roles, shared dashboards, and governance boards, that support interdependence, trust, and joint action. Specifically, they contribute in the following ways:

- Breaking down silos by requiring shared tasks, budgets, and goals.

- Creating relational infrastructure (liaison roles, shared IT systems, governance boards) that formalize inter-organizational ties.

- Aligning incentives through performance management and financial arrangements.

- Building mutual understanding and trust via social learning and face-to-face interaction.

- Legitimizing joint action through inclusive participation and co-produced policy goals.

By combining these practices, municipalities can build lasting collaborative capacity. In Eindhoven's case, such capacity is needed to overcome its current governance inefficiencies and unlock the full potential of SPM.

9.2 Joined-up Governance Principles Applicable to Eindhoven

Based on the reviewed literature on Joined-up Governance and the practices it entails to achieve collaboration across sectors in government, links can be made between the benefits of these practices and the inefficiencies in the Municipality of Eindhoven.

In the following table, the observed points of inefficiencies in the Municipality of Eindhoven are linked to the practices and benefits of practices from Joined-up Governance.

Table 7: Joined-up Governance Practices Matched to Eindhoven Inefficiencies (Grouped Thematically)

Eindhoven Inefficiency	Recommended Joined-up Governance Practice	Practice Description
Strategic Alignment and Prioritization		
Different methods for project prioritization across departments	Shared Strategic Frameworks	Aligns departments with common outcome targets and priorities
Long-term planning is undermined by shifting political priorities	Quarterly Portfolio Reviews	While this does not directly improve the reaction and process of adapting to political changes, it introduces iterative feedback loops for adjustment
Collaboration and Governance Structures		
Departments create sector plans without formal coordination	Joint Planning Committees	Formal governance bodies to harmonize plans and co-own decisions
No governance structures for shared project ownership across departments and cross-department collaboration is based on informal arrangements	Cross-Department Teams or Joint Planning Committees	Formal governance bodies of mixed practices to harmonize plans and co-own decisions
Portfolio management is fragmented and lacks cross-organizational governance	Joint Planning Committees	Formal governance bodies to harmonize plans and co-own decisions
Sector head meetings do not promote cross-departmental collaboration	Co-Creation Workshops	Joint working sessions to align goals and build trust
Operational Visibility and Data Infrastructure		
Cross-sector project dependencies are not identified early	Integrated Information Systems	Dashboards or IT platforms to consolidate project/resource data
Strategic leaders lack insight into operational project status	Integrated Information Systems	Dashboards or IT platforms to consolidate project/resource data
Coordination Across Departments		
Support departments are not involved early in planning	Linking Pins / Liaison Officers	Boundary-spanning roles to facilitate coordination across departments
Preference for informal coordination limits uptake of structured processes	Leadership Development for Collaboration	Training to build systems thinking and relational skills
Knowledge Sharing and Standardization		
Portfolio management practices are not standardized	Communities of Practice	Cross-sectoral peer networks for knowledge exchange

As shown in the table above, Joined-up Governance offers specific, actionable practices that directly target the interdepartmental fragmentation and siloed decision-making processes currently undermining SPM in Eindhoven. By adopting these practices, Eindhoven can create the structural, cultural, and operational conditions necessary to implement SPM successfully. This enables both strategic coherence and cross-sector collaboration.

9.3 Linking Joined-up Governance Practices to Strategic Portfolio Management

To explicitly show how Joined-up Governance can improve the implementation of SPM, it is useful to examine how specific practices enable key features of SPM.

SPM depends on the municipality's ability to assess, prioritize, and balance investments across multiple domains according to strategic objectives. This requires integrated information, coherent decision-making, shared ownership, and iterative learning. The table below illustrates how core Joined-up Governance practices directly support these SPM enablers.

Table 8: How Joined-up Governance Practices Support SPM

SPM Requirement	Supporting Joined-up Governance Practice	Contribution to SPM Implementation
Strategic alignment across departments	Shared strategic frameworks	Provide a unified set of criteria to evaluate and prioritize projects across domains
Integrated project selection and prioritization	Joint planning committees	Allow departments to collectively assess interdependencies and jointly decide on portfolio composition
Cross-departmental coordination	Liaison officers and cross-departmental teams	Ensure early communication, shared ownership, and synchronized planning across portfolios
Reliable and comparable data	Integrated information systems	Create visibility across departments on capacity, status, and dependencies for informed portfolio steering
Institutional trust and collaboration	Co-creation workshops and consensus-based decision-making	Build mutual understanding and reduce informal or unilateral decision-making

As shown above, Joined-up Governance offers both structural and cultural mechanisms that directly enable the design and implementation of core SPM processes. It not only addresses the root causes of interdepartmental fragmentation but also strengthens the municipality's capacity for strategic decision-making, adaptation, and collaborative delivery, all of which are essential for effective portfolio management.

9.4 Synergies Between Joined-up Governance and Emergent Strategies

While Joined-up Governance focuses on improving coordination between departments, it also helps create a more collaborative environment where bottom-up ideas and adaptive ways of working can develop. By improving communication and creating shared goals, it becomes easier for teams to respond to change. This connection is explored further in Chapter 10, which looks at how Emergent Strategies support responsiveness in a political and fast-changing environment.

10 How Enabling Emergent Strategies can Improve SPM for the Municipality of Eindhoven

The Municipality of Eindhoven traditionally relies on top-down planning methods to guide strategic decision-making and resource allocation. However, as the challenges that the municipality addresses become increasingly complex and interconnected, rigid long-term plans often fail to remain relevant. Additionally, SPM, or portfolio management in Eindhoven, is frequently constrained by changing political priorities, fragmented information, and siloed governance structures. This dynamic environment calls for a more adaptive and learning-oriented approach to strategy-making.

Emergent strategy offers a different way of approaching this complexity. Rather than being developed through a centralized plan, emergent strategies form over time in response to new insights, contextual changes, and patterns in behavior. Strategies emerge through repeated actions, small decisions, and reflection, often outside of formal planning cycles (Mintzberg and Waters, 1985). In this way, emergent strategies do not aim to replace planning but complement it with greater responsiveness. In Eindhoven, where political priorities shift and implementation realities are often different from the initial plan, emergent strategies can provide a valuable addition to SPM.

In the previous chapter, Joined-up Governance was explored as a set of practices that promote structural and cultural collaboration across departments. This chapter takes a different perspective. In light of the potential benefits of both the enabling conditions of emergent strategies, and the nature of emergent strategies being adaptive and responsive, this chapter explores how municipalities can enable emergent strategies. It focuses on how they can create the right conditions for strategies to form organically in response to ongoing learning and adaptation. It first outlines the conditions that enable emergent strategies, followed by an explanation of how these can support the functioning of SPM in Eindhoven, answering the fourth research sub-question of this paper.

10.1 Conditions That Enable Emergent Strategy in Municipalities

While emergent strategies cannot be planned or implemented in a traditional sense, municipalities can enable their development by shaping the environment in which they form. This involves creating the right conditions for learning, flexibility, and participation. The following five areas reflect the most relevant enabling conditions for municipalities.

Real-time Reflection and Short-Cycle Reviews

Emergent strategies often begin when teams notice that something is not going as expected. Regular opportunities to reflect on progress help identify issues early and make timely adjustments. Practices such as quarterly reviews, learning sessions, or informal feedback loops help teams understand what is happening and adjust accordingly. Research shows that these reflective practices support learning and increase responsiveness (Govender and Reddy, 2020). In Eindhoven, these short-cycle learning routines are not consistently present. Introducing more structured but lightweight reflection moments across projects would help identify misalignments and support a more adaptive way of working.

Cross-Sector Experimentation and Pilot Projects

Testing new ideas on a small scale allows for learning without the risk of large-scale failure. Pilot projects are often used to try out new approaches in a limited setting. In Eindhoven, various pilots have been carried out, especially in the domains of mobility and energy. However, these are rarely evaluated systematically, and learning are not shared across departments. When different clusters work together to test new ideas, they create space for innovation. These pilots can be used to generate insights, challenge assumptions, and inform future decision-making.

Decentralized Decision-Making in Early Phases

Allowing teams to take initiative in the early stages of a project increases the chance that strategies reflect what is happening in practice. This does not mean a loss of strategic control, but rather giving operational staff more space to be adaptive.

Stakeholder Co-Creation in Goal Setting

Another enabling condition for emergent strategies is the involvement of stakeholders. Emergent strategies are more likely to remain relevant when external stakeholders are involved early in the planning process (Jekabsone et al., 2019). When municipalities include residents, community groups, or partners in defining goals, they make space for new insights to shape direction.

Learning Infrastructure and Peer Networks

Emergent strategies become more powerful when lessons from one part of the organization are shared more broadly. Creating spaces for departments to share experiences, discuss outcomes, and reflect together helps identify patterns and avoid repeating mistakes. In Eindhoven, informal peer learning happens, but it is not systematically supported. Strengthening communities of practice or setting up regular knowledge-sharing sessions would improve the organization's learning capacity and support adaptation across teams.

These five areas do not create strategies on their own. However, they create the right conditions for emergent strategies to develop over time in response to changing needs and experience.

10.2   How Emergent Strategy Supports SPM in Eindhoven

The previous section described how municipalities can enable the development of emergent strategies by creating the right conditions. Encouraging reflection, allowing for experimentation, and involving stakeholders early all support a more flexible way of working. These practices are especially relevant in a context like Eindhoven, where priorities shift, information is fragmented, and formal planning often struggles to keep pace with reality.

Several of the inefficiencies described earlier in this thesis, including unclear prioritization criteria, reactive portfolio adjustments, and limited coordination between policy and execution, make it difficult to implement SPM consistently. Emergent strategies do not directly solve these issues, but they offer a way of working that can strengthen SPM by making it more adaptive, responsive, and grounded.

Portfolio management in Eindhoven currently relies heavily on formal plans, political decisions, and structured proposals. While these are important, they often leave little space to adapt based on experience. By supporting the conditions outlined above, the municipality can better identify what is working, surface new opportunities, and recalibrate priorities based on what is actually happening. This leads to a more resilient and realistic version of portfolio management.

The following table shows how each enabling condition contributes to both the development of emergent strategy and the improvement of SPM in Eindhoven.

Table 9: Conditions That Enable Emergent Strategy and Strengthen SPM in Eindhoven

Enabling Condition	How It Supports Emergent Strategy	How It Improves SPM in Eindhoven
Real-time reflection and feedback loops	Allows teams to adjust actions based on what is working or not	Makes the portfolio more responsive to political shifts and implementation realities
Cross-sector collaboration	Encourages shared learning and coordinated adaptation	Reduces fragmentation and supports integrated prioritization across clusters
Decentralised decision-making space	Gives room for operational insights to shape direction	Helps SPM align better with practical constraints and new developments
Stakeholder participation in early planning	Brings in diverse and evolving perspectives	Improves project selection and strengthens legitimacy of strategic choices
Learning infrastructure such as short cycles and peer sharing	Helps insights spread and become part of shared knowledge	Avoids repeating mistakes and enables more adaptive steering over time

These improvements are particularly relevant when viewed in light of the inefficiencies described in Chapter 5. For example, early stakeholder involvement can help align fragmented priorities across clusters. Short-cycle feedback loops allow the municipality to adjust when political shifts or capacity issues arise. In this way, enabling emergent strategy improves the municipality's ability to steer adaptively, without relying solely on rigid procedures or long-term forecasts.

10.3   Limitations and Considerations

While emergent strategies offer valuable flexibility, they also come with limitations. Because they arise through practice, they can be difficult to observe, evaluate, or justify. Without structures for visibility and learning, useful adaptations may go unnoticed. Additionally, there is a risk that emergent actions will drift away from strategic priorities, especially if there are no feedback loops to guide alignment.

In Eindhoven, where political visibility and accountability matter, strategies that form through informal adaptation may be harder to communicate or justify. Therefore, the municipality must pair its enabling practices with structured review mechanisms. This will help connect emergent behaviors to broader goals, so that the benefits of flexibility do not come at the cost of coherence.

10.4   Conclusion

Enabling emergent strategies allows municipalities to better adapt to change, uncertainty, and complexity. These strategies do not develop through formal planning, but through repeated actions, reflection, and shared learning. When the right conditions are in place, they can complement structured approaches to decision-making and improve the overall functioning of SPM.

In Eindhoven, creating these conditions means embedding practices such as reflection, experimentation, and participation into the daily reality of governance. The next chapter builds on this by translating the insights from both Joined-up Governance and Emergent Strategies into a set of design principles and recommendations for an adapted SPM model tailored to Eindhoven's needs.

11 Developing Final Recommendations

This chapter explains how the final recommendations were developed and how an adapted version of SPM could be introduced in a way that actually fits Eindhoven's needs. Therefore, this chapter sets up the criteria on how to answer the fifth sub-question of this research paper. First, the critical points of improvement that were identified are summarized, and the strengths of Eindhoven's current governance style that the solution should build on are reintroduced. Using these factors, a design criterion is created that is used to develop a cohesive recommendation for Eindhoven.

11.1 Recap of Core Governance Challenges

The analysis of Eindhoven's municipal governance revealed three root causes:

- **Strategic Ambiguity:** While the Bestuursakkoord outlines general ambitions, these are not consistently translated into measurable objectives for portfolio decision-making. This disconnect limits the ability to guide, prioritize, or evaluate projects based on strategic fit.

- **Fragmentation:** Strategic initiatives are often developed and executed in silos. This makes it difficult to collaborate as there are no shared practices or clear procedures for establishing collaboration.

- **Inconsistent Portfolio Practices:** Project intake, prioritization, and capacity tracking differ across departments, making trade-offs between initiatives difficult and reactive.

This research project determined that the underlying problem in the municipality is that the formal governance structure has not evolved in complexity in line with the increased complexity of problems the municipality faces as it grows. This results in several inefficiencies being seen and felt throughout the organization. As it is impossible to change the governance structure easily, it is important to adapt SPM in a way that targets some of these inefficiencies across the organization for its implementation to be effective. Therefore, the recommendations in this paper should address the root causes of the inefficiencies identified.

11.2 Strengths and Enablers

Despite these challenges and inefficiencies, the municipality of Eindhoven exhibits several internal strengths that can support adaptive change:

- **Strong Informal Networks:** As Eindhoven grew, teams found ways to work around the slow or unclear formal procedures by relying on informal agreements and personal networks. This informal network is established and seen as more efficient than the current formal guidelines and processes in the municipality. Instead of replacing them, the recommendations aim to formalize and scale up what is already working well, while making sure key compliance and coordination needs are still met.

- **A Proactive, Improvement-Oriented Mindset:** Many employees take initiative and are open to trying something new in order to improve processes. There is a strong "just fix it" attitude. Previous examples like the creation of the Strategic Investment Team show a willingness to experiment with new tools and methods. This shows that change is possible when people believe in the value it brings.

- **Openness to Pilot-Based Learning:** Eindhoven has a culture willing to experiment and try new things. It may take some time to approve a new way of working, team, or idea. However, employees would like Eindhoven to be seen as effective and innovative, just like the region, and therefore are willing to change processes if the benefit is clear.

These factors suggest that a collaborative, iterative, and data-informed approach to governance redesign is possible and desirable. Moreover, these strengths of the municipality of Eindhoven should be considered in the recommendations. The recommendations on how to implement an adapted version of SPM should work with these strengths and capitalize on them.

11.3 Design Criteria for the Recommendations

To translate the analytical findings of this research into actionable solutions, a set of eight design criteria was developed to guide the design of an adapted SPM model for the Municipality of Eindhoven. These criteria do not aim to solve every inefficiency observed, but instead focus on the systemic dysfunctions that are both urgent and realistically addressable within the existing organizational constraints.

Each criterion responds to one or more of the following: the root causes identified in Chapter 5 (strategic ambiguity, fragmentation, and inconsistent portfolio practices), the governance symptoms and inefficiencies identified in Chapter 5, the strengths and enablers described in Chapter 5, and relevant concepts from SPM, Joined-up Governance, and Emergent Strategies.

This criterion serves as a way to filter and guide the development of an effective and feasible recommendation for the context of Eindhoven.

1. Translate Political Goals into Operational Portfolio Themes

One of the main issues in Eindhoven is that long-term political goals are not broken down into clear priorities that departments can use in practice. This makes it hard to link projects to strategy or evaluate them consistently. This criterion is about making those goals more concrete and measurable, so they can guide decisions across portfolios and over time. The political goals and visions need to be expressed in a way that are more meaningful to departments and measurable over time.

2. Enable Prioritization that Reflects Both Strategic Value and Urgency

Currently, projects are often prioritized in an inconsistent way, depending on who is involved or what is urgent at the time. This leads to reactive decisions and makes it hard to compare trade-offs across the municipality. This criterion focuses on creating a process that helps teams weigh both the strategic value and the urgency of a project. It should be flexible enough to work across departments but structured enough to support clear and fair prioritization.

3. Preserve Political Decision-Making Power, but Improve Its Evidentiary Basis

This criterion targets ad-hoc political decision-making and a lack of structured feedback to political actors. Political discretion is an essential and legitimate part of municipal governance. Therefore, while introducing a prioritization criteria, it is important that Aldermen can still deviate from these prioritizations and remain able to make autonomous decisions. This criterion allows political power to remain, but strives to ensure that the recommendations given to the municipality lead to politicians getting more data and evidence to guide their decision-making. This criterion ensures political choices are better informed, better explained, and better embedded in strategic logic, which in turn can improve legitimacy without limiting autonomy.

4. Encourage Cross-Sector Collaboration Without Collapsing Silos

This criterion is aimed at solving issues such as fragmentation between departments, lack of joint ownership, and coordination bottlenecks. Rather than trying to restructure the organization (as this is not realistically feasible), this criterion ensures the recommendations include mechanisms that support collaboration. This criterion links Joined-up Governance practices into the solution. Additionally, as the underlying cause of the inefficiencies in the municipality is a governance structure that has too many vertical silos that do not match the complexity of the projects and problems they face, this criterion tries to somewhat improve that governance structure and address this underlying problem.

5. Improve Information Transparency and Availability

This criterion addresses problems such as resistance to change, and low adoption of formal tools. Eindhoven's informal trust networks, staff proactivity, and pilot culture are clear strengths. This criterion makes sure that new ways of working build on those existing strengths while also making it easier to share information across teams in a more consistent and open way.

6. Institutionalize Learning and Adjustment

This criterion responds to the need for flexibility within the municipality to adapt to political changes and evolving demands from citizens. Eindhoven operates in a dynamic political environment and is expected to continue growing, which brings constant shifts in priorities and societal needs. That means it cannot rely on one fixed system or a solution that only works under stable or the current conditions. Instead, there needs to be space to pause, reflect, and make small changes along the way. This criterion is about making sure that there are regular points to reflect, learn, and make small changes as needed. The goal is not to set a fixed system but to build something that can grow and evolve over time. That includes practices like checking in during implementation, making time for reflection, and making sure teams have the freedom to adjust their approach when things change. It allows the municipality to learn from what works, fix what does not, and keep improving without having to start over every time.

7. Be Scalable Across Departments

One of the main challenges in Eindhoven is that each department does things its own way. This makes it hard to compare, collaborate, or scale what works. This criterion targets fragmented implementation, siloed learning, and inconsistent adoption across different parts of the organization. The goal of this thesis is not to improve practices in a single department, but rather provide recommendations for the municipality as a whole, due to the underlying understanding that there are silos in the municipality and we should aim to reduce them. Therefore, it is important that the recommendations are not tailored specifically to a sector or department, but that they are practices that can be implemented throughout the organization, even if they require slight adjustments.

8. Be Legally and Financially Feasible

A lot of ideas fail not because they are bad, but because they are too ambitious or not realistic for the current legal or financial situation. This criterion makes sure that the recommendations can actually be implemented. They should work within the systems and resources Eindhoven already has. No major restructuring or new budgets should be needed just to get started.

11.4 Selectivity and Scope: What Is Not Addressed and Why

The design criteria presented above does not aim to address every inefficiency identified in this research. Instead, they are focused on the governance challenges that are both important and realistically addressable within Eindhoven's current context. It focuses on improving the root causes of these inefficiencies. Therefore, not every issue that came up in the research is tackled directly. Some were left out on purpose, either because they are out of scope, not practical to solve right now, or too specific to one part of the municipality.The reasoning for excluding certain issues is explained below.

- **Operational Bottlenecks in Support Departments** : Some delays and inefficiencies came from coordination with departments like Legal, IT, or Finance. These are important, but they mostly reflect wider problems like unclear roles or a lack of shared planning. Instead of directly trying to solve these bottlenecks, this thesis includes criteria to improve collaboration and transparency across departments. That may help reduce the pressure on support teams and improve their integration in the portfolio process.

- **IT and Data Infrastructure Limitations**: Eindhoven clearly lacks consistent data sharing platforms and portfolio visibility tools. Nevertheless, this thesis deliberately avoids prescribing specific technical solutions in the design criteria. Instead, the design criteria focus on improving visibility, prioritization logic, and communication across silos. These improvements are expected to indirectly support better data infrastructure by making future digital tools more aligned with actual governance needs. As a result, the design criteria do not assume or prescribe the use of new data infrastructure, but rather aim to create the conditions that would make such tools more useful and effective over time.

- **Highly Department-Specific Issues**: Some inefficiencies identified were very specific to certain sectors or teams. While those are important, this research aims to propose recommendations that apply to the municipality as a whole. Therefore, the design criteria were selected based on their ability to scale across departments and address cross-cutting governance challenges.

Overall, the design criteria chosen in this thesis focus on improving strategic alignment, prioritization, collaboration, learning, and feasibility. These are the areas where there is the most room for improvement and where practical, system-level changes can realistically be made within Eindhoven's current governance context.

11.5 Small Shifts in Eindhoven Outside of SPM Recommendations That Can Strengthen Strategic Change

This thesis focuses on adapting SPM to Eindhoven's reality by introducing practices from Joined-up Governance and creating the conditions for Emergent Strategies to take shape. The emphasis of this thesis has been on identifying pragmatic practices to be recommendations, rather than on redesigning structures or proposing large-scale reforms for the municipality due to the difficulty in implementing them. The goal has been to work with what exists, and to offer realistic improvements that make Eindhoven's resource allocation more strategic and evidence-informed.

Nevertheless, there are some cultural and behavioral patterns within the organization that contribute to inefficiencies and could be addressed with relatively small changes. One of the clearest examples is how collaboration currently functions. While there is a strong informal culture and a high degree of trust within clusters, collaboration across clusters is often limited. Information tends to stay within silos, coordination relies heavily on personal relationships, and alignment across portfolios is fragile. As the municipality continues to grow, these issues are likely to become more noticeable. The current way of working, that has been extremely successful until now, may not be enough to keep up with the increasing complexity and scale of growth the municipality is facing.

This is where small cultural shifts can make a real difference. Some of the recommendations elaborated on later in this thesis already contribute to this, such as the Portfolio Steering Committee and the linking pin roles, which help build more structure around cross-cluster collaboration. But looking ahead, Eindhoven would benefit from making horizontal collaboration more visible, repeatable, and normal. This could include regular joint portfolio reviews, shared sessions across clusters to discuss strategy, or short reflection moments tied to OKRs. The goal is not to create more meetings, but to build a rhythm where coordination is expected and becomes a natural part of how the organization works. These moments can help normalize the habit of considering other portfolios when making decisions, and over time can help reduce duplication and misalignment.

There is also another important cultural dynamic that should be acknowledged. In Eindhoven, formal procedures are often seen as slower or less effective than informal coordination. As a result, people tend to rely on personal networks rather than formal channels. While this flexibility has helped the municipality move quickly in the past, it presents a challenge as the organization grows. With many new employees expected to join in the coming years, relying on informal relationships is not sustainable. It risks excluding people, creating inconsistent practices, and making collaboration dependent on who knows whom. Therefore, encouraging a cultural shift that makes formal coordination more trusted and more widely used is beneficial. The aim is not to eliminate informal cooperation, but to make formal channels more widely used. This also involved updating formal channels to be more aligned with how people actually work, encouraging them to use the channels and see them as efficient. This will help build consistency, especially for new staff, and reduce dependence on implicit knowledge and invisible networks.

Leadership plays an important role in this. Many inefficiencies are not the result of a lack of effort, but of teams being focused inward on their own responsibilities. There is a lot of unity within individual clusters, but much less between them. Creating a shared sense of direction across the organization can help shift this. When people understand they are all working toward the same goals, and that collaboration is not optional but necessary, behavior starts to shift. Having shared values such as value co-creation, learning, and working with the city in mind can help support this change.

It is also worth noting that Eindhoven is already aware of many of these challenges. Internal efforts to improve culture are ongoing, with a focus on collaboration, ownership, and trust. This shows that there is momentum in the right direction. But many of these initiatives are still happening in isolation. There are multiple teams working on improving collaboration, but these efforts are often stuck within silos. They are not yet integrated across the municipality as a whole. This is why leadership matters.

The practice of collaboration and a sense of shared direction should be made visible from the top, to help unite the organization and build more consistent ways of working together. By improving how people work across boundaries, Eindhoven can get more out of the tools and practices introduced in this thesis and increase the chances that they will stick over time.

This view on culture does not change the recommendations that follow. But strengthening collaborative behavior is something Eindhoven can work on alongside the structural improvements. It does not come directly from SPM, Joined-up Governance, or Emergent Strategies, but it supports all of them. If people across the organization start working together more intentionally, using consistent processes, and aligning their efforts, then the road map that follows becomes easier to implement and more likely to succeed. Improving how people collaborate is not a separate project. It is something that makes the broader change more practical and more sustainable.

12 Final Recommendations: An Adapted SPM for Eindhoven

This chapter discussed the various elements of SPM, Joined-up governance, and emergent strategies that have been selected and combined to produce a final recommendation for an adapted version of SPM, and therefore answers the fifth and final sub-question of this research paper. To select the design, various practices of SPM, Joined-up governance, and Emergent strategies were considered for each criteria item until a cohesive solution was developed that also met the needs of Eindhoven. The proposed solution addresses the three root causes- strategic ambiguity, organizational fragmentation, and inconsistent prioritization, while also building on the existing strengths of the municipality, such as informal teamwork and a motivated and forward-thinking workforce.

The proposed solution is designed as a cohesive yet flexible approach to improving Eindhoven's strategic resource allocation. Rather than attempting to overhaul the system all at once, it offers four interlocking parts, each addressing a different layer of governance: goal setting, coordination, prioritization, and information flow. These elements are simple enough to implement gradually, but powerful when working together.

12.1 Introduction to the Recommendation

The underlying cause of many of the inefficiencies in Eindhoven, but also in other municipalities, is that the problems municipalities are currently facing are much larger and more complex than before. Therefore, the vertical, siloed governance structure is making it difficult to tackle these problems. However, restructuring an entire municipality, especially one that has a growing list of projects, and is expected to rapidly continue growing in the coming years, is not an easy job, nor realistic.

Therefore, solutions need to be developed to try and decrease some of the symptoms, or inefficiencies seen. This thesis explores ways to tackle these challenges and inefficiencies that the municipality of Eindhoven is experiencing through the implementation of an adapted SPM framework. The ultimate goal is to create a process of resource allocation and decision-making that is more informed and evidence-based while still remaining flexible for political intervention and decisions. The proposed solution has four main elements.

12.1.1 Translating Political Vision into Operational Direction: OKRs for Strategic Alignment

One of the most frequently voiced concerns from municipal employees in Eindhoven is the lack of clear, specific, and actionable strategic goals. Although the ambitions outlined in political documents such as the Bestuursakkoord provide high-level direction, they are often too abstract or vague to effectively guide daily decision-making or project prioritization. This has led to difficulties in aligning departmental efforts, in measuring progress, and in justifying resource allocation decisions.

To address this issue, this thesis recommends that the new political coalition, to be formed in 2026, formulate a set of Objectives and Key Results (OKRs) directly linked to its ambitions in the Bestuursakkoord. These OKRs should then serve as the foundation for translating political vision into specific and measurable goals that the entire municipal organization can act upon. The S&O sector should take responsibility for coordinating this process, helping to cascade the OKRs from the political level to each portefeuille, then further down to sectors, departments, and individual teams. In this way, OKRs can become the common thread that aligns the whole municipality behind a shared direction.

OKRs provide a structured and transparent mechanism for translating political goals into specific, quantifiable targets that departments can act upon. OKRs have become a prevalent strategic management tool in large organizations, aiming to enhance operational alignment and performance (Barbala et al., 2025). It is a lightweight management framework for aligning teams and tracking outcomes. Zasa and Buganza, 2022 highlights that OKRs contribute to creating a shared vision which keeps the different, empowered teams aligned. Additionally literature also states that OKRs encouraged employee collaboration and innovation (Rompho and Truktrong, 2024). While there is no literature on OKRs being implemented in municipalities, there is no reason that this goal-setting method would not work in municipalities, as they are often used in large, siloed organizations facing similar alignment challenges.

Each OKR consists of two components. The Objective is a clear, qualitative statement of a strategic goal. It should be ambitious, inspiring, and direction-setting. The Key Results are three to five measurable outcomes that indicate whether the objective has been achieved. These should be specific, time-bound, and evidence-based.

For example, one of Eindhoven's strategic goals from the current bestuursakkord is: *Become a climate-neutral and climate-resilient city.* The following can be an example of an OKR for this strategic goal:

- Objective: Achieve measurable progress toward climate neutrality and resilience by 2030.

- Key Results:

  - Reduce citywide CO_2 emissions by 40% from 2020 levels by the end of 2026.
  - Ensure 100% of new municipal buildings are built to energy-neutral standards by 2026.
  - Retrofit 2,000 low-energy label homes annually (D–F) starting in 2023.
  - Support 25 neighborhood energy coalitions by 2026 to co-develop local energy solutions.

Another example based on the current Bestuursakkoord may be the following OKR for the strategic goal: *A city where everyone benefits from the Brainport economy:*

- Objective: Promote inclusive growth through the Brainport for Everyone agenda.

- Key Results:

  - Launch 3 joint employment programs in disadvantaged neighborhoods by 2024.
  - Reach 100 youth annually through "Brainport Traineeships" by 2025.
  - Provide job coaching to 1,000 low-income families annually by 2025.
  - Establish a €5M Social Brainport Fund by 2025.

By expressing each political ambition as a set of OKRs, the municipality can make its goals more tangible, measurable, and actionable across all domains. OKRs also create a clearer connection between political priorities and the work of departments. This makes it easier to track progress, coordinate collaboration, and allocate resources based on shared goals.

In order to embed the OKRs into the Bestuursakkoord process and ensure accountability, the following division of roles is proposed:

- The S&O sector should coordinate the OKR drafting process shortly after the formation of the new coalition in 2026. This can start with a workshop or presentation that uses examples from the previous Bestuursakkoord to illustrate how OKRs might have been formulated.

- For each major ambition of the Bestuursakkoord, the S&O sector should check that the coalition has formulated an OKR. The S&O sector should then, in consultation with relevant departments and policy advisors, advise the coalition on the OKRs if adjustments are needed.

- The complete set of top-level OKRs should be approved by the Gemeenteraad alongside the Bestuursakkoord. These OKRs are then assigned to the Aldermen as part of their political portfolio. This helps clarify their responsibilities and enables better preparation within the organisation to meet those goals.

- Once validated, the OKRs should be distributed to the relevant clusters or portefeuilles. The OKR's will then be embedded into their portfolio plans and be used as a foundation for their evaluation criteria during project evaluations. The S&O sector should work with each portefeuille, sector, and department to ensure they each have clear OKRs. This process continues down to individual teams. In this way, OKRs will be embedded at all levels of the organization, providing clarity about responsibilities and the role each team plays in achieving the vision set out in the Bestuursakkoord.

Each portefeuille should then develop its own project prioritization framework based on the OKRs it contributes to. This research also identified the difficulty of applying a single, shared set of evaluation criteria across the entire municipality, given the varied nature of work in different portefeuilles. Therefore, this method allows different portefeuilles to have their own criteria, but ensures they are all grounded in the overarching OKRs. At the same time, for projects that cross multiple clusters or require substantial investment, a Portfolio Steering Committee should use the OKRs to create a shared evaluation framework. This makes it easier to align on which cross-cutting initiatives are most important and deserve priority.

Embedding OKRs at every level of the organization makes SPM more grounded and coherent. It avoids ad hoc decision-making and encourages a more structured, transparent approach to assessing projects and allocating resources. Over time, this creates a stronger portfolio logic across Eindhoven.

OKRs also strengthen the strategic role of the Aldermen. With OKRs assigned to their political portfolios, each Alderman can report annually on progress toward their OKRs, reinforcing political accountability and transparency. They can also use their OKRs to guide and coordinate collaboration across departments, especially when objectives involve multiple portefeuilles. Lastly, OKRs provide a reference point for making informed decisions when political ambitions exceed available resources.

To ensure that OKRs remain relevant and adaptive, they should not be treated as static targets for four years. An annual OKR review cycle should be integrated into the municipal planning calendar and coordinated by the S&O sector. In this review, S&O should examine which OKRs are on track, which need to be updated, and which may no longer be relevant due to political shifts, societal changes, or practical implementation insights. Based on these findings, S&O provides advice to the Aldermen and Directieraad on whether the OKRs need to be adjusted, expanded, or refined.

Embedding OKRs across all levels of the municipality transforms them into a shared language that links political ambition to operational execution. This creates stronger alignment, makes prioritization more transparent, and connects long-term goals to day-to-day work. OKRs provide the foundation Eindhoven needs to move toward an approach to Strategic Portfolio Management that is not only more data-driven and coherent, but also more adaptive and in tune with changing political and societal needs.

12.1.2 Strengthening Strategic Coordination: A Portfolio Steering Committee

To build on the strategic direction created by OKRs, the next step in the recommendations from this research is the creation of a Portfolio Steering Committee (PSC). While each portefeuille develops its own evaluation framework based on its specific work, the PSC is tasked with reviewing and coordinating the most significant and cross-cutting initiatives. This is especially important in a siloed governance context like Eindhoven's, where large-scale challenges often require collaboration across multiple departments and where project dependencies may not be identified early on.

While the S&O sector is responsible for coordinating the OKR drafting process and conducting annual reviews to keep them up-to-date, the PSC plays a complementary role during implementation. Where S&O advises on the content and continuity of OKRs, the PSC focuses on ensuring that the portfolios being developed by different portefeuilles are strategically aligned and that OKRs that span across clusters are supported through coordinated implementation. In practice, a member of the S&O sector can act as the chair or secretary of the PSC, ensuring that both political direction and operational execution remain connected throughout the political term.

The PSC should function as a cross-sectoral advisory group that meets quarterly to review project proposals and provide strategic recommendations to the Aldermen. Its role is to ensure that prioritisation across portefeuilles is done in a coordinated and coherent way. Rather than reviewing all project proposals, the PSC focuses on a selected number of strategic objectives that require input or resources from multiple departments, or where interdependencies and alignment are especially important.

Based on information shared by linking pins and project teams, the PSC flags risks, coordination issues, or resource gaps and provides targeted advice to the Directieraad and Aldermen. In doing so, the PSC helps ensure that strategic objectives remain visible during implementation, and that project

interdependencies are taken into account in the decision-making process. It also provides a structure for having strategic conversations at the Aldermen level, something that is currently lacking due to the absence of consistent and strategic information reaching them.

It is suggested that the PSC consists of a small group of senior managers from different clusters, as well as members from the S&O department. Ideally, someone from S&O leads the committee, given their wider view of the municipality and close connection to both the Aldermen and the Directieraad. At the start of each year, the PSC selects around five to ten strategic objectives, based on the OKRs, that are considered high-impact and cross-sectoral. These are usually goals that require ongoing coordination, depend on shared resources, or involve large investments.

Using these selected objectives, the PSC can develop a simple shared evaluation framework that clusters can use when assessing projects. This is not intended to replace their own evaluation criteria, but to provide a shared lens for understanding how certain projects contribute to municipal-wide objectives. The PSC does not need to review every single project but focuses on the ones that are cross-cutting or where coordination is necessary. This shared approach supports alignment without slowing things down unnecessarily.

To implement this recommendation, the Directieraad should give the PSC a formal mandate. S&O can help organise the first meetings and support the committee in selecting initial objectives. The PSC can keep a short quarterly report that is shared with the Directieraad and Aldermen.

This recommendation builds directly on Eindhoven's existing strengths. The PSC formalizes what is already somewhat happening through the municipality's strong informal networks, making coordination more consistent and visible without introducing unnecessary bureaucracy. By giving structure to existing collaboration, the PSC supports more deliberate and strategic conversations across clusters. The implementation approach also aligns with the municipality's proactive and improvement-oriented culture. In this way, the recommendation leverages what is already working well, while addressing the current gap in cross-sectoral coordination.

The PSC reflects key principles of Joined-up Governance and contributes to the behavioral dimension of the adapted SPM model. By creating a regular space for strategic dialogue across portefeuilles, it fosters a culture of collaboration, shared ownership, and alignment. It helps ensure that long-term strategic objectives remain visible and actionable throughout implementation, and that major initiatives receive the cross-sector attention they require. In doing so, the PSC strengthens the governance model by making it more coherent, connected, and capable of navigating the complex challenges facing Eindhoven.

12.1.3 Improving Operational Coordination: Linking Pins

The next recommendation from this research is to implement linking pins across the municipality where coordination between departments or sectors is needed. The PSC or the S&O sector can identify where this is necessary. For example, if the PSC observes that multiple departments are working on separate projects that contribute to the same OKR but are not aligned, they can initiate the appointment of a linking pin to improve coordination. Similarly, S&O may recommend assigning a linking pin when the annual OKR review reveals that a strategic objective is not progressing due to fragmentation or a lack of shared ownership.

Linking pins can come from any department involved in the strategic objective. In most cases, they should be selected from within the cluster or program that has the most relevant expertise or ownership of the project. However, to ensure neutrality and oversight, S&O can also take on the linking pin role, especially when multiple departments are equally involved or when no clear lead exists. The person chosen must have a good understanding of the objective, be able to work across teams, and have enough seniority or informal influence to bring people together.

The linking pin is not responsible for delivering results, but for enabling coordination. Their role is to regularly check in with the different project teams, identify overlaps, risks, or gaps, and ensure that relevant information is shared. They can organize short alignment meetings between departments, raise red flags to the PSC when needed, and provide a brief status update before each PSC meeting using a

shared format. If needed, they can also facilitate workshops or coordination sessions to support progress on the objective.

Linking pins can also be appointed temporarily. In these cases, their role is clearly defined in scope and time, such as connecting teams during the early phase of a cross-departmental program or helping align project portfolios around a single OKR for one year. This flexible approach ensures that linking pins are used only where they add value and avoids creating unnecessary overhead or permanent roles. The PSC is responsible for initiating, defining, and ending the linking pin roles and can evaluate their impact as part of the quarterly review process.

This recommendation also builds directly on Eindhoven's existing strengths. Linking pins formalize the informal collaboration and personal networks that already exist, giving them more structure and visibility. They help bridge silos in a lightweight and targeted way, without creating unnecessary layers of management. The flexible nature of the role fits Eindhoven's culture of experimentation and learning. By supporting day-to-day collaboration and surfacing information that may otherwise remain siloed, linking pins help create the conditions for more adaptive and responsive governance.

Linking pins reflect key principles of Joined-up Governance and contribute to the behavioral dimension of the adapted SPM model. By enabling coordination across teams and flagging emerging risks or misalignments early, they foster a culture of openness, shared responsibility, and cross-sector learning. They ensure that implementation remains connected to strategic goals, even in complex or fragmented contexts. In doing so, they strengthen the municipality's ability to act collaboratively and adjust to change without losing focus.

12.1.4 Enabling Evidence-Based Prioritization with Adaptability: Applying an Adapted WSJF Method

In municipal organizations like Eindhoven, the challenge is not a lack of projects, but rather how to decide which projects to prioritize when time, budget, and capacity are limited. There is always more work to do than resources. Since it is not possible to do everything at once, the municipality needs a way to assess which projects create the most value if done now, and which would cause the biggest loss if delayed. For this reason, this thesis recommends using an adapted version of the Weighted Shortest Job First (WSJF) method.

WSJF comes from agile working and is used to help teams decide what to prioritize when things are constantly changing. It ranks projects based on how much value they deliver compared to the effort they take. This makes it a good fit for a municipality like Eindhoven, which needs to constantly balance long-term ambitions with short-term realities.

WSJF is usually calculated using the following formula:

$$\text{WSJF Score} = \frac{\text{Public Value} + \text{Urgency} + \text{Risk Reduction or Opportunity Enablement}}{\text{Effort}}$$

Each element is scored on a relative scale (for example, 1, 2, 3, 5, 8, 13, 20), with higher scores meaning more value or urgency. In Eindhoven's context, these terms can be interpreted as follows:

- **Public Value:** The benefit for residents or the city, such as improved services, social equity, or climate action. This also includes how well the project aligns with OKRs.

- **Urgency:** How urgent the project is based on political momentum, legal deadlines, seasonal timing, or rising public concern.

- **Risk Reduction / Opportunity Enablement:** Whether the project prevents future problems or enables future innovation, capacity, or collaboration.

- **Effort:** This refers to the job size. The time, money, or effort required to complete the project.

Each sector can apply this formula quarterly as part of their planning cycle. Portfolio managers score projects based on input from project leads, internal experts, and, when relevant, linking pins. A linking pin from the S&O sector should also support this process to help check the scores for time sensitivity and risk reduction, based on their overview of other projects and departments. Projects are not scored in isolation. They are compared alongside other proposals being considered that quarter, which helps teams make better trade-offs.

While this prioritization method can also be used by the PSC or the S&O sector when advising what project to do in general, this recommendation advises to first use it within portefeuilles as a way to prioritize projects when new projects are assigned to sectors, or political pressures increase on a project and hence it becomes more urgent. Once the method is established it may eventually be helpful at a higher level in the organization.

OKRs should be used as the main reference when scoring public value and strategic alignment. A project that directly contributes to a top-level OKR should receive a higher score than one with limited relevance. Time criticality can reflect not only formal deadlines, but also political or public urgency. This keeps the process focused on real priorities, while allowing flexibility when conditions change.

Table 10: Example of WSJF Scoring for Municipal Projects

Project	Public Value	Urgency	RR / OE	Effort	WSJF
Energy-Neutral School Renovation	13	8	5	5	5.2
Affordable Housing Expansion	20	5	8	8	4.1
Mobility Hub	8	13	5	3	8.7

This adapted WSJF method provides several benefits to the municipality. It creates more transparency in how decisions are made, allows for better trade-offs, and helps balance long-term goals with urgent needs. By scoring project proposals instead of ranking them subjectively, departments can have clearer and more focused discussions about priorities. WSJF also keeps the planning process flexible. When new political agendas or urgent needs arise, the scores can be updated, and decisions adjusted quickly.

In terms of governance, WSJF strengthens the adapted SPM model by making prioritization more consistent and evidence-based. It replaces informal decision-making with a method that is simple to apply and repeat. Since the method comes from agile working, it also supports reflection and learning. It allows the organization to respond to change without losing sight of longer-term strategy. As a result, WSJF helps create the space for emergent strategies to develop. New insights, local ideas, or societal needs can be evaluated and added into the planning process in a structured way. This supports a more adaptive and forward-looking way of working in Eindhoven.

12.1.5 Improving Visibility and Organizational Learning: A Strategic Dashboard for All Levels

One of the recurring issues identified in this research is that decision-makers across the municipality often lack a shared overview of ongoing projects, their interrelations, and their alignment with strategic goals. This lack of visibility contributes to duplicated efforts, delayed coordination, and missed opportunities for collaboration across portefeuilles. To support more transparent decision-making and foster institutional learning, this thesis recommends the implementation of a multi-level strategic dashboard that connects portfolio planning, project execution, and OKR progress.

The dashboard should be designed with multiple users in mind. For Aldermen, it should provide a high-level overview of active and upcoming projects, showing how each one contributes to the strategic OKRs and which portefeuilles are involved. This enables better political steering, especially when making trade-offs during budget discussions or coalition negotiations. Sector heads can use the dashboard to

monitor the balance of workload across their teams, identify potential synergies with other departments, and keep track of risks or bottlenecks in project delivery. For portfolio managers and project leads, the dashboard should offer a consistent and structured way to enter, update, and review project information, allowing them to better plan, report, and align with strategic ambitions.

To ensure that the dashboard becomes an enabler of SPM and not just another reporting tool, its development should follow a few guiding principles. First, it should build on and integrate with existing tools already in use, such as the Project Toolbox, rather than creating parallel systems. Second, a clear and simple protocol must be developed for data entry and maintenance. This includes defining who is responsible for updating project information, how often updates are required, and what minimum information must be included. The S&O sector should oversee this process to ensure consistency and data quality, but each department should retain responsibility for their own inputs.

To keep the dashboard useful, it should be embedded in regular governance routines. For example, it can be used as input during quarterly planning meetings, PSC discussions, and annual OKR reviews. It can also serve as a tool for sector-level reflection, helping teams identify where progress is lagging, where projects are drifting from their intended purpose, or where collaboration could increase impact. This makes the dashboard not just a technical tool, but a mechanism for organizational learning and adaptation.

By improving visibility and creating a shared language around project performance and strategic relevance, the dashboard helps Eindhoven move toward a more aligned and evidence-based approach to governance. It strengthens both the analytical and adaptive components of SPM. It also supports the emergence of new strategies from the ground up, as project teams, policy advisors, and portfolio managers gain insight into what others are working on, where priorities are shifting, and what synergies are possible. In this way, the dashboard builds on Eindhoven's existing strength in informal collaboration by giving it structure, visibility, and strategic value - without adding unnecessary complexity.

12.2   Summary and Integration: A Cohesive but Flexible Model

Together, the five recommendations presented in this chapter form an integrated and adaptive approach to SPM that addresses the real-world challenges faced by the municipality of Eindhoven. Rather than presenting stand-alone tools inspired by SPM, joined-up governance and the conditions needed for emergent strategies, these recommendations work as a connected set of practices that reinforce each other across different layers of governance.

Each recommendation has a distinct role: OKRs provide strategic clarity and alignment for every layer in the organization, the PSC and linking pins ensure coordination across clusters, WSJF supports consistent and evidence-based prioritization, and the strategic dashboard improves visibility and learning. When combined, they help Eindhoven work more strategically without requiring a full structural overhaul.

These elements are intentionally designed to be easy to implement and pilot, realistic, and compatible with Eindhoven's informal, and collaborative culture. They build on what is already working and strengthen the areas that are currently lacking, especially around cross-sector alignment, prioritization, and long-term focus.

It is important to note that the five recommendations do not depend on each other to function. Each one can be implemented on its own, depending on the municipality's priorities and capacity at a given moment. For example, OKRs can be introduced to strengthen strategic direction without immediately changing how project prioritization is handled. WSJF can be piloted within a single portefeuille. The PSC and linking pins can start small, focusing on just a few shared objectives. The dashboard can be developed gradually using existing project data.

However, the added value of each element increases when they are implemented together. OKRs give meaning to prioritization decisions and reporting. The PSC helps translate these strategic goals into coordinated action. Linking pins improve day-to-day collaboration. WSJF makes trade-offs more transparent, and the dashboard ties it all together by improving visibility across the entire system. In

short, while each element contributes on its own, their full potential is realised when used in combination. The table below summarizes the distinct purpose and value of each recommendation, and how they fit together as part of a coherent model.

Table 11: How the Five Recommendations Work Together

Recommendation	Main Function	What It Solves / Enables
OKRs for Strategic Alignment	Translate political ambitions into measurable goals	Aligns all levels of the organisation behind shared objectives and improves clarity
Portfolio Steering Committee (PSC)	Coordinate cross-sector implementation and review strategic alignment	Helps align portfolios, manage shared goals, and improve strategic decision-making across clusters
Linking Pins	Enable operational coordination between departments and programmes	Improve collaboration, reduce fragmentation, and increase visibility across teams working on shared objectives
Adapted WSJF Prioritisation	Make informed trade-offs when capacity is limited	Adds structure and flexibility to prioritisation, enabling more transparent and adaptive decisions
Strategic Dashboard	Improve shared visibility and track progress over time	Supports learning, accountability, and strategic conversations through accessible data

12.3   Fit with Design Criteria

This model fulfills all eight of the design criteria established earlier in the research. It translates political vision into actionable goals through the OKR methodology. It enables prioritization that reflects both strategic value and urgency via the WSJF method. Political decision-making is preserved but strengthened through evidence-based input from the PSC and the dashboard. Collaboration across sectors is encouraged through Linking Pins and shared evaluation forums, without requiring structural consolidation. The model builds on the strengths of Eindhoven's informal culture, trust-based relationships, and motivated workforce. It institutionalizes learning and adaptation through regular dashboard reviews and annual OKR adjustments. It is scalable across departments due to the use of shared tools and rhythms. Finally, it is legally and financially feasible and aligns with Eindhoven's current governance structure.

By aligning structure, collaboration, and adaptability, this model positions Eindhoven to navigate the complexity of modern urban governance. It offers not a rigid framework, but an evolving system that allows the municipality to improve resource allocation incrementally, consistently, and strategically. The following table summarizes how these recommendations meet the design criteria.

Table 12: Design Criteria Used to Develop the Adapted SPM Solution

Design Criterion	Explanation
Translate political goals into operational portfolio themes	Ensures that ambitions from the Bestuursakkoord are concretely translated into actionable objectives that guide project design and selection.
Enable prioritisation that reflects both strategic value and urgency	Allows for meaningful comparisons between initiatives by considering long-term impact alongside time-sensitivity and capacity constraints.
Preserve political decision-making power, but improve its evidentiary basis	Keeps elected officials in charge, while supporting their choices with transparent scoring, trade-off documentation, and objective performance data.
Encourage cross-sector collaboration without collapsing silos	Promotes coordinated action across departments through mechanisms like Linking Pins and shared evaluation forums, while preserving sectoral ownership.
Build on current strengths of the municipality	Leverages Eindhoven's proactive staff, high trust networks, and openness to experimentation to implement improvements that feel credible and grounded.
Institutionalise learning and adjustment	Includes built-in feedback loops (e.g. OKR updates, dashboard reviews, quarterly PSC sessions) to help the system evolve as needs shift.
Be scalable across departments	OKRs help make strategic objectives more concrete and relevant across different departments, sectors, and portfolios. They create a shared foundation for scoring and evaluation, while still giving each team the flexibility to adapt the objectives to fit their own context.
Be legally and financially feasible	Aligns with Eindhoven's governance structure, legal capabilities and budget cycles, and can be gradually implemented.

12.4 How These Recommendations Reflect SPM, Joined-Up Governance, and Emergent Strategies

The recommendations previously discussed all link to SPM, Joined-Up Governance, and Emergent Strategies. While some of the recommendations are more clearly linked than others, such as linking pins, which were directly identified as a practice from Joined-Up Governance, the other recommendations are also connected to these three concepts.

While the practices proposed are adapted to fit Eindhoven's specific context, they are not random or stand-alone tools. Instead, they reflect core ideas from the three governance frameworks that guided this research. This section explains how each recommendation connects to one or more of these frameworks.

Recommendation 1: Using OKRs to Translate Political Goals into Operational Direction

This recommendation is primarily grounded in SPM. One of the key assumptions in SPM is that there are clear, measurable strategic objectives that guide portfolio decisions. By introducing OKRs, the municipality can create a direct link between high-level political goals and the operational projects being carried out across portefeuilles. This allows for better alignment, transparency, and long-term focus.

At the same time, the way in which it is recommended to implement OKRs also supports the emergence of strategies over time. It is suggested that the OKRs are regularly reviewed and adapted if necessary. It is important that they are used as a way to guide the organization and are allowed to change when there are shifts in citizens' needs or other environmental factors. Therefore, the way in which OKRs are used creates space for reflection and learning, which are key aspects that can lead to emergent strategies. This can include new ways of determining OKRs, monitoring their progress, or identifying patterns in their implementation.

Recommendation 2: Establishing a Portfolio Steering Committee

This recommendation reflects practices from both SPM and Joined-Up Governance. From the SPM perspective, a Portfolio Steering Committee provides a formal structure to evaluate, prioritise, and manage the project portfolio at a higher level. It ensures that trade-offs are discussed in a cross-sectoral setting and that decisions are made in line with strategic goals. While in traditional SPM the Portfolio Steering Committee or board may have the final say in which projects enter the portfolio, this recommendation is still grounded in SPM, but adapted to the realities of a municipality in which political decision-makers such as Aldermen must remain in charge.

This recommendation also incorporates elements from Joined-Up Governance. It introduces a formal horizontal structure and increases collaboration and coordination between sectors. The goal of the Portfolio Steering Committee is to align the projects of the municipality, and doing so requires discussions on what is going on in each sector. Since the PSC is structured with people from multiple sectors and portefeuilles, it incorporates a practice directly from Joined-Up Governance.

In addition, the PSC is not only responsible for monitoring OKRs and creating evaluation criteria and frameworks. It is also responsible for reflecting on the organization's progress. This includes sharing information and practices, and creating a culture of reflection. By giving the PSC the task of providing advice based on this reflection and sharing, the conditions are created for emergent strategies to be identified, recognized, and possibly even developed.

Recommendation 3: Implementing Linking Pins

Linking pins are explicitly a practice drawn from Joined-Up Governance. They introduce horizontal coordination mechanisms that bridge siloed departments and programs. By creating direct connections between teams working on the same strategic objective, linking pins enable better information sharing, increase visibility, and build mutual awareness across clusters.

In addition to their alignment with Joined-Up Governance, linking pins also support the emergence of strategies. Their ability to identify overlaps, surface coordination issues, and reflect back insights from multiple department positions them well to notice informal patterns or adaptive practices that might evolve into broader strategic approaches. This visibility and feedback contribute to an organizational culture that is more responsive, reflective, and capable of learning from experience, which are key conditions for emergent strategies to develop.

Recommendation 3: Applying an Adapted WSJF Method for Prioritization

This recommendation combines the structured decision-making principles of SPM with the flexibility of Emergent Strategies. The WSJF method offers a systematic way to compare and prioritize projects based on strategic value, urgency, and effort. This structure for evaluating projects is clearly grounded in SPM.

However, the adapted version of WSJF that is recommended also includes room for context-specific judgment. It allows sectors to reflect on shifting needs, political requests, and urgent developments. This flexibility supports the development of emergent strategies by allowing the prioritization process to adjust when new needs arise, while still using a consistent framework. Over time, the way in which projects are assessed in the WSJF framework, how urgency is measured, and how priorities are recalculated may lead to certain patterns or behaviors that eventually become an emergent strategy. WSJF is a tool that helps portefeuilles re-prioritize, but it still requires a lot of human input and contextual understanding. It is not a strict formula, which is what gives it the ability to support adaptive behavior and learning.

Recommendation 4: Introducing a Shared Strategic Dashboard

While this recommendation is not directly derived from a single framework, it supports all three in different ways. From an SPM perspective, the dashboard improves visibility into project progress and strategic alignment. It supports performance tracking and allows decision-makers to monitor the overall portfolio more effectively.

From a Joined-Up Governance perspective, a shared dashboard fosters transparency and coordination across portefeuilles. It helps different sectors stay informed about what others are working on, which

can reduce duplication and encourage collaboration. The integration of shared IT systems and capacity tracking is also a practice commonly used in Joined-Up Governance.

Lastly, the dashboard supports Emergent Strategies by making patterns visible. When data on performance, bottlenecks, or cross-sector initiatives is shared in real time, it becomes easier for teams to spot recurring trends or successful practices that can evolve into new strategies. It also creates a feedback loop that supports continuous learning and improvement. The way in which the dashboard is eventually used may itself become an emergent strategy. The dashboard will contain a lot of data that can be interpreted and applied in different ways across different contexts. Therefore, it could lead to emergent strategies regarding how the dashboard is used to inform decisions and support coordination.

Conclusion

Together, these five recommendations form an integrated approach to improving strategic resource allocation in Eindhoven. Each practice reflects a different combination of structure, collaboration, and adaptability, just like the three frameworks they are inspired by. It is important to note that while some of these practices are directly taken from the frameworks discussed, such as linking pins, others are tools used in agile working or private organizations to support structured strategic decision-making. These tools have been adapted in this thesis to fit the context of a municipality.

Therefore, these recommendations apply concepts inspired by SPM, Joined-Up Governance, and Emergent Strategies, and their combined effect is a collaborative, adaptive, and structured SPM model that fits the needs identified in this research and is described in the conceptual framework. Rather than applying SPM, Joined-up Governance, or Emergent strategies in isolation, the recommendations combine their strengths in a way that fits Eindhoven's political and organizational reality. They bring structure where needed, introduce collaboration mechanisms across silos, and leave space for strategies to emerge from practice.

12.5   Why This Solution Is a Pragmatic Fit for Eindhoven

This set of recommendations is not meant to be a traditional, textbook SPM model. Instead, it draws from the strengths of SPM while integrating collaborative elements from Joined-Up Governance and the adaptability of Emergent Strategies. The aim is to offer a realistic and implementable approach that fits Eindhoven's institutional reality: one that improves prioritization and alignment, without requiring full centralization or major structural change. Rather than enforcing rigid control, the proposed tools and governance mechanisms provide clarity and coherence while respecting departmental autonomy and political dynamics. In doing so, this adapted model helps Eindhoven become more strategic in how it allocates resources, without losing the flexibility that supports learning and progress.

13 Conclusion

The goal of this research study was to explore how SPM can be adapted to better fit the governance realities of the municipality of Eindhoven. Due to the rapid growth of the city of Eindhoven, it is important that the municipality makes decisions that lead to the long-term success of the city, so that it is ready to accommodate its expected population growth.

Throughout this research project, it was identified that the structured evaluation process of SPM is extremely valuable to the municipality. However, the traditional form of SPM was not compatible with the political nature of the municipality, and its siloed governance structure. Therefore, an adapted set of practices is needed as a recommendation for the municipality on how to improve their resource allocation process to be more anchored in their strategic goals. This research focused on exploring what this adapted set of practices could be, and therefore, what recommendations can be given to Eindhoven to achieve a more structured and strategic allocation of resources. The conclusions of this research are summarized and discussed in this chapter.

13.1 Discussion of the Analysis and Research Outcomes

To understand how elements of SPM should be adapted to improve the resource allocation process in Eindhoven, first an understanding of the current decision-making process and its inefficiencies was established. The analysis of Eindhoven's current governance structure led to one of the most important findings of this thesis. It revealed that there is a fundamental mismatch between Eindhoven's current governance structure and the complexity of the challenges it is facing. Like many growing municipalities, the governance structure hasn't evolved at the same pace as the issues the municipality is trying to address. This mismatch creates a number of recurring symptoms.

When looking deeper into these symptoms, three main root causes behind these symptoms were identified: a lack of clear, measurable strategic goals; organizational fragmentation and siloed decision-making; and inconsistent prioritization and capacity management. These issues do not occur in isolation, but they reinforce one another in a negatively reinforcing loop, and all stem from the underlying mismatch that Eindhoven's governance structure isn't built to deal with the complexity it now has to manage.

Overhauling the entire governance structure of the municipality is not feasible for many reasons such as, changing the structure is politically risky, time-consuming, and hard to determine what the best structure is. Furthermore, given the speed with which the city is growing, by the time a new structure is designed and implemented, it will not fit the new realities in the city. Therefore, this research focuses on how to tackle these symptoms of misalignment by working within the current structure and introducing practices and tools that may also partially address the root causes of the symptoms of misalignment.

Another conclusion of this research is that traditional SPM is not suitable for municipal contexts, especially that of Eindhoven. The political nature of municipalities, their vertical silos, and the vague strategic visions used as goals in municipalities are not compatible with the rigid approach of SPM. Therefore, instead of determining how to apply SPM as a full framework, this thesis explores how elements of SPM, combined with practices from Joined-Up Governance and Emergent Strategies, can be used to strengthen Eindhoven's governance processes in a more practical way. In doing so, the goal was not to implement SPM as a complete framework, but rather to draw on its benefits to develop recommendations that address the symptoms of strategic misalignment.

To do this, the research developed a conceptual framework integrating practices SPM (for structured prioritization), enabling conditions of Emergent Strategies (to introduce adaptive learning and responsiveness), and practices Joined-Up Governance (to enhance cross-sector collaboration). This framework provided a way to link concepts to target inefficiencies, such as having clear strategic goals, a consistent way to compare projects, and better coordination across departments. This framework was used to guide the creation of a design criteria and the selection of final practices to form the final recommendations for Eindhoven.

The final recommendations include five key interventions: the introduction of OKRs to operationalize political goals; the formation of a cross-sectoral Portfolio Steering Committee: the introduction of

linking pins; the use of an adapted Weighted Shortest Job First (WSJF) method for prioritization; and the development of a digital dashboard for visibility and learning. These recommendations are designed to create structure where needed, without undermining what already works. Additionally, it aims to formalize and leverage the strengths of Eindhoven's informal network and culture of getting things done.

Ultimately, this research concludes that SPM, as a formal model, is not the answer for Eindhoven. Eindhoven needs shared strategic goals, a consistent way to evaluate initiatives, and better visibility across the organization. While these practices are part of SPM, but due to the assumptions in SPM, SPM itself is not what Eindhoven needs. Additionally, the final recommendations in this thesis do not aim to target the underlying issue in the municipality, but rather its symptoms. These final recommendations are not designed to solve the root governance mismatch entirely, but they do offer practical ways to reduce the impact of that mismatch. In other words, they address the key symptoms and introduce adaptive mechanisms that can slowly begin to improve the structural fit over time. They help Eindhoven make more strategic, aligned, and transparent decisions in the short and medium term, without needing to wait for a new structure to be designed. In the context of a rapidly growing and changing municipality, that is both more achievable and more useful.

13.2   Revisiting the Research Questions

Whilst the previous section discussed the general results and process taken in this research project, the following section circles back to the research questions that guided this research process. Each research sub-question and the main results of each sub-question are summarized below.

1. **What are the symptoms and causes of inefficient strategic resource allocation and prioritization in the Municipality of Eindhoven?**
   Based on the interviews, document analysis, and observations, five key symptoms of inefficient resource allocation were identified: a lack of clear strategic goals and alignment, ad hoc and politically driven decision-making, fragmented governance and siloed structures, lack of capacity management and insight into resource availability, and the need for stronger portfolio management.

   After further investigating these symptoms, three main root causes were identified: a lack of strategic clarity and leadership alignment, fragmentation and silos that make collaboration difficult, and the absence of consistent portfolio and capacity management. These issues are all symptoms of a deeper misalignment between Eindhoven's governance structure and the complexity of the challenges it needs to manage. Like many municipalities that have grown fast, the governance structure hasn't evolved in line with the scale of the issues the municipality is facing.

2. **What are the limitations of SPM in Eindhoven's governance structure?**
   Regarding the second sub-question, it was concluded that traditional SPM is too rigid for Eindhoven's political and organisational context. It assumes stability, centralised decision-making, and a clear strategic direction. However, Eindhoven's current way of making decisions does not reflect those conditions, which makes it difficult to apply SPM in its traditional form. Changes to the SPM practices, or in the processes and culture of the municpality of Eindhoven are needed for the succesfull implementaiton of an SPM like process.

3. **How can Joined-Up Governance improve the implementation of SPM by addressing Eindhoven's interdepartmental fragmentation and coordination challenges?**
   This research concluded that practices from Joined-Up Governance offer practical ways to improve coordination between departments. It supports shared decision-making, more transparency, and a stronger connection between strategic goals and actual project execution. Practices from Joined-Up Governance, like establishing linking pins or multidisciplinary teams, help break down silos by setting up more formal communication and horizontal structures in the organization. This helps the implementation of SPM by improving information transfer between silos and creating more standardization across them, while also slightly reducing siloed behavior.

4. **How can facilitating Emergent Strategies make SPM more adaptable to Eindhoven's political and operational constraints?**
   Emergent Strategies help organizations stay flexible. They encourage learning-by-doing, which makes it easier to adjust when political goals or operational needs change. Unlike SPM and Joined-Up Governance, emergent strategies cannot be directly implemented. However, through building

a culture of learning, sharing practices, decentralized decision-making, and reflection, they can emerge over time.

This thesis concludes that if such a culture is fostered within the municipality through the use of reflection cycles, shared practices, and a modest degree of decentralized decision-making, it can make SPM more adaptable and support better decision-making. It enables a structured process through SPM while preserving the flexibility needed to respond to change.

5. **What practices can Eindhoven implement, inspired by SPM, Joined-Up Governance, and Emergent Strategies, to improve its resource allocation process?**
   The final recommendations of this thesis include five concrete practices: using OKRs to translate political goals into operational direction, forming a cross-sector Portfolio Steering Committee, implementing linking pins, applying an adapted WSJF method for prioritization, and introducing a shared dashboard for monitoring and learning. Together, these practices are realistic to implement and directly target the challenges identified in this research.

   These recommendations are the first steps in the development of an adapted SPM model. Using OKRs allows for clear strategic goals, which are essential in SPM as they form the basis for portfolio selection and monitoring. They also create a way to track progress towards goals. Implementing a Portfolio Steering Committee is a practice that comes from both SPM and Joined-Up Governance, but also supports emergent strategies. While SPM assumes there is a board that evaluates projects across the organization, involving multiple sectors in that process is a practice from Joined-Up Governance. The periodic reviews done by this board also create moments for reflection, which is a key condition for emergent strategies to form.

   Linking pins are another practice from Joined-Up Governance, but they also support the emergence of new strategies. By connecting different sectors, they allow for the identification and sharing of new patterns and ways of working, which can later become strategies. The WSJF method combines the structured project evaluation of SPM with the flexibility to respond to changing needs or urgent proposals. This allows sectors and portefeuilles to re-prioritize when needed, but still within a structured method. Lastly, the shared dashboard does not directly come from SPM, Joined-Up Governance, or Emergent Strategies, but it supports all three. It improves information sharing, makes progress more visible, and helps reduce the effects of siloed working.

The answer to each of these sub-questions combined leads to the final recommendation of practices for the Municipality of Eindhoven, but also answers the central research question of this paper: **How can Strategic Portfolio Management (SPM) be adapted to integrate practices from Joined-Up Governance and enable the formation of Emergent Strategies to improve resource allocation and project prioritization in the Municipality of Eindhoven?**

This thesis concluded that rather than applying SPM in its traditional form, Eindhoven requires a tailored model that integrates key principles from SPM, but adapts them to fit the political, operational, and cultural realities of the municipality. This means combining the structured decision-making and prioritization tools from SPM with collaborative practices from Joined-Up Governance and the flexibility and learning mindset that is key to enabling Emergent Strategies to form.

Therefore, the recommendations given in answer to sub-question five form an adapted process of SPM that retains SPM's benefits, such as goal alignment, prioritization, and monitoring, but avoids rigid implementation. By introducing OKRs for strategic clarity, a cross-sectoral steering committee for shared governance, an adaptable prioritization method (WSJF), and a digital dashboard for learning and visibility, these practices improve strategic alignment and coordination while working within existing structures.

In conclusion, this research found that the structured evaluation process and clear goals of SPM are very beneficial to Eindhoven. However, to implement an SPM-like process in Eindhoven, the SPM process and practices need to be flexible to political changes and new societal needs. Therefore, the SPM process that is implemented needs to be changed to give employees in the municipality the autonomy to deviate from the traditional process.

13.3 Limitations of the Research

While this thesis offers a grounded and practice-oriented contribution to improving strategic resource allocation in municipal governance, it is subject to several limitations that should be acknowledged. First, the research is based on a single case study of the Municipality of Eindhoven. Although many of the governance challenges identified, such as strategic ambiguity, siloed decision-making, and inconsistent prioritization are common in other municipalities, the findings and recommendations may not be directly applicable to other municipalities without adaptations.

Second, the study follows an exploratory and primarily qualitative methodology. The use of 14 semi-structured interviews, internal documents, and participatory observations enabled a rich contextual understanding, but also introduces the potential for subjective interpretation and bias. While triangulation methods were used to enhance reliability, the findings remain interpretative in nature and their validity can be questioned.

Third, the conceptual framework and final recommendations developed in this thesis have not been formally tested or implemented. They were developed to be both theoretically grounded and practically relevant, but their effectiveness has not been demonstrated through implementation. Further research would be needed to evaluate how these recommendations perform when applied in real municipal settings.

Finally, this thesis focused primarily on strategic alignment, prioritization, and collaboration. It does not directly address operational constraints, such as IT system limitations, legal frameworks, or financial procedures, even though these may play a significant role in the feasibility of implementation. These areas remain important for future investigation.

13.4 Validation of Findings

This thesis is based on a single case study of the Municipality of Eindhoven. It combines insights from 14 semi-structured interviews, internal documents, and direct observations. To enhance the robustness and credibility of the findings, data triangulation was applied. For example, interview insights were validated with internal documents as well as other interviews. Moreover, interviews were purposefully sampled across strategic, tactical, and operational levels as well as different silos, ensuring that multiple perspectives within the organization were represented.

While this approach allowed for a deep contextual understanding and the development of tailored recommendations, it also introduces limitations to generalizability. The adapted SPM model or the conceptual framework developed are not tested. Therefore, while the recommendations are strongly grounded in both theory and practice, they remain, to some extent, theoretical propositions.

To partially address this lack of validation, preliminary validation occurred through feedback loops with municipal actors during the research process. Their reflections confirmed both the relevance and feasibility of the proposed recommendations. Additionally, partial validation occurred through the cross-checking of internal audit reports in the municipality that took place concurrently to this research. Many of the findings of the audit report and this research are aligned, indicating that, though this research is exploratory and based on only 14 interviews, the conclusions it has made are valid.

13.5 Societal and Managerial Implications

This research has several societal and managerial implications, both for the Municipality of Eindhoven and for other municipalities facing similar challenges. While this research was focused on a singular case study on Eindhoven, the findings reflect broader issues in municipal governance that are becoming more common as cities grow, problems become more complex, and expectations for public services increase.

For municipal managers in Eindhoven, the main takeaway is that implementing more structured decision-making tools and processes is possible, but only if these tools are adapted to the realities of how the municipality actually operates. SPM, in its traditional form, does not fit the fragmented, political, and often informal governance environment of a municipality. However, when adapted by adding collaborative mechanisms, allowing flexibility, and anchoring it in existing governance practices, it becomes a

useful approach to improve transparency, prioritization, and alignment across the organization.

Another key implication is that structure and flexibility do not need to be opposites. By combining the structured principles of SPM with the coordination practices of Joined-Up Governance and the flexibility and responsiveness that leads to emergent strategies, municipalities can design decision-making systems that are both robust and adaptive. This research shows that collaboration, reflection, and learning are not just cultural values, but they are governance tools that can be concretely built into processes and structures.

Another important takeaway from this research is that while it is difficult to make perfect or operationalized goals for municipalities, perfect ones are not what is needed or wanted. Introducing more operationalized goals is something that municipal employees are looking for and wanting, and can benefit the monitoring and alignment of progress and projects in the municipality. Therefore, setting operationalized and clear goals that map out the visions of politicians is important. Additionally, these operationalized goals do not need to be seen as concrete goals that need to be achieved. They should be seen as goals to guide decision-making, and goals that the municipality should strive to achieve and work towards. They just need to serve as guiding goals to give more direction to different people and sections of the municipality. Therefore, there should not be a lot of emphasis on creating the perfect goals that correspond to the vision of the municipality exactly, but rather goals that are close enough to the vision that can help guide decision-making and create clarity in the organization.

Beyond Eindhoven, the results of this research can be relevant to many other municipalities. Cities across the Netherlands, and internationally, are also growing fast and facing larger and more complex problems. These issues require cooperation between departments, long-term planning, and the ability to prioritize under political and resource constraints. The traditional siloed ways of working are no longer a perfect fit. This research offers an example of how a municipality can move towards a more integrated and strategic way of working, without needing to redesign the entire organization.

Ultimately, the recommendations proposed in this thesis, which combines SPM, Joined-Up Governance, and practices that stimulate Emergent Strategies to form, offer more than a set of practices. It provides a flexible and realistic way forward for municipalities that want to improve their strategic capacity while still working within their current organizational constraints.

13.6   Academic Reflection

This thesis contributes to a growing academic discussion on how governance tools from the private sector, such as SPM, can be adapted for use in public sector organizations. While SPM has been widely studied in corporate and infrastructure settings, its application to municipalities remains limited. Most of the existing literature assumes a certain level of strategic clarity, centralized decision-making, and stable priorities are needed in order to implement tools such as SPM in the public sector. However, this research challenges that assumption by showing that structure does not have to come at the expense of adaptability. In fact, flexible and adaptive approaches can be integrated into structured portfolio management practices, making them more resilient and suitable for dynamic public sector environments.

Building on this, this thesis agrees with existing literature that the governance environment of municipalities is too dynamic, too political, and too fragmented to support rigid frameworks. It explores ways to make the rigid and structured approaches of tools such as SPM, to incorporate flexibility and accommodate dynamic environments through the use of collaborative tools, and practices to promote learning, reflection, and adaptability.

Therefore, this thesis makes two main contributions to academic literature. First, it offers a context-sensitive re-framing of SPM. Rather than seeing SPM as a fixed model that needs to be applied in full, this research shows how practices from SPM, such as prioritization methods, portfolio overviews, and goal-setting structures, can be combined with other governance practices and behaviors to create an adapted form of SPM. It adds to the literature that critiques the direct application of private-sector tools in public organizations and instead promotes a more reflective, modular approach.

Second, this thesis connects academic discussions that are usually treated separately. The literature

on emergent strategies often focuses on behavior and learning within organizations, while Joined-Up Governance is typically discussed as an institutional or policy coordination concept. These two perspectives are not linked to the discussion on SPM. By combining them in one conceptual framework and applying it to a real-world municipal case, this thesis shows that collaboration, adaptability, and structured prioritization can work together. They are not necessarily competing practices, but can be used as complementary elements that can be integrated and implemented together.

Therefore, this thesis contributes to the literature on adaptive public governance. It provides a practical example of how municipalities can work with strategic tools without needing to replicate private-sector logic.

13.7 Future Research Possibilities

This thesis is exploratory in nature, and as such, the recommendations it presents have not yet been fully tested. A key avenue for further research is to study how each of the five recommendations can be designed and implemented in practice. This includes questions about how OKRs should be introduced in the municipality, how the Portfolio Steering Committee should be positioned within the organization, and how the linking pin roles can be made effective without creating new layers of complexity. Similar questions apply to the WSJF method and the dashboard. For each of these practices, more research is needed on who should be responsible for their implementation, how accountability should be arranged, and how they can be adapted over time. The recommendations provided in this thesis are meant to serve as a starting point. They are not intended to be final, complete, or rolled out immediately.

A second area for further research is the development of practical tools and frameworks that help municipalities apply these ideas. In particular, the dashboard recommendation could benefit from a more detailed investigation into what different levels of the organization actually need from such a tool. Research could explore what types of information should be visible to Aldermen, sector heads, portfolio managers, and project teams, and how these needs can be translated into a shared structure. This could help guide the design of a dashboard that is not only technically feasible but also aligned with the way the municipality works. Developing this kind of framework would help the IT department make more targeted design decisions and avoid building something that fails to meet user needs.

Third, if these practices are implemented, future research could focus on developing indicators to measure whether the adapted SPM model leads to better outcomes. This includes evaluating whether there is improved alignment with strategic goals, stronger coordination across portefeuilles, or more consistent and transparent prioritization decisions. A more quantitative assessment could help clarify which elements of the model are working, where adjustments are needed, and how the overall approach compares to current ways of working.

Finally, it would be valuable to test the conceptual framework developed in this thesis in other municipalities. Research could explore whether the same inefficiencies and root causes are present, and whether the same or different recommendations emerge from those contexts. This would help validate and refine the ideas presented here and offer insight into how broadly applicable they are. If similar patterns are found across multiple municipalities, there may be an opportunity to consolidate the findings into a more uniform and widely applicable set of recommendations for local governments. This would strengthen the relevance of the adapted SPM model and improve its potential to serve as a common starting point for municipalities seeking to improve strategic resource allocation.

13.8 Concluding Reflection

Ultimately, this thesis demonstrates that improving resource allocation in municipalities is not only a technical or methodological challenge, but also a governance challenge. Structural tools such as SPM can only be effective if supported by cultural adaptation, collaborative infrastructure, and political awareness. While Eindhoven's governance system may not change overnight, small and targeted interventions, grounded in the realities of how decisions are actually made, can lead to more strategic, equitable, and future-ready public administration.

References

Alotaibi, N. S., & Abdelmegeed, N. A. (2023). Strategic behaviours in municipal decision-making: A strategic approach. *Journal of Law and Sustainable Development*, *11*, e2321–e2321. https://doi.org/10.55908/sdgs.v11i12.2321

Baptestone, R., & Rabechini, R. (2018). Influence of portofolio management in decision-making. *Journal of Industrial Engineering and Management*, *11*, 406. https://doi.org/10.3926/jiem.2464

Barasa, E. W., Cloete, K., & Gilson, L. (2017). From bouncing back, to nurturing emergence: Reframing the concept of resilience in health systems strengthening. *Health Policy and Planning*, *32*, iii91–iii94. https://doi.org/10.1093/heapol/czx118

Barbala, A., Moe, N. B., Stray, V., Aamo, H., Uthus, M., Tkalich, A., & Nygaard, T. A. (2025). Objectives and key results in large-scale agile organizations: Challenges and enablers. *Proceedings of the … Annual Hawaii International Conference on System Sciences/Proceedings of the Annual Hawaii International Conference on System Sciences*. https://doi.org/10.24251/hicss.2025.890

Basanya, R., Ojo, A., Janowski, T., & Turini, F. (2011). Mining collaboration opportunities to support joined-up government. *IFIP advances in information and communication technology*, 359–366. https://doi.org/10.1007/978-3-642-23330-2_40

Baškarada, S., & Hanlon, B. (2018a). Corporate portfolio management in the public sector. *Journal of Management Development*, *37*, 333–340. https://doi.org/10.1108/jmd-04-2017-0107

Baškarada, S., & Hanlon, B. (2018b). Corporate portfolio management in the public sector. *Journal of Management Development*, *37*, 333–340. https://doi.org/10.1108/jmd-04-2017-0107

Bektas, A., Wäspi, F., Müller, J., & Haller, S. (2023). An empirical analysis of the perceived usefulness of digital governance tools among heterogeneous swiss municipalities. *Hawaii International Conference on System Sciences*, 1880–1895.

Benaija, K., & Kjiri, L. (2014). Trade off between risk management, value creation and strategic alignment in project portfolio management. *Proceedings of the 16th International Conference on Enterprise Information Systems*. https://doi.org/10.5220/0004952904470452

Bianchi, C. (2015). Enhancing joined-up government and outcome-based performance management through system dynamics modelling to deal with wicked problems: The case of societal ageing. *Systems Research and Behavioral Science*, *32*, 502–505. https://doi.org/10.1002/sres.2341

Bodwell, W., & Chermack, T. J. (2010). Organizational ambidexterity: Integrating deliberate and emergent strategy with scenario planning. *Technological Forecasting and Social Change*, *77*, 193–202. https://doi.org/10.1016/j.techfore.2009.07.004

Bozeman, B., & Rogers, J. (2001). Strategic management of government-sponsored rd portfolios. *Environment and Planning C: Government and Policy*, *19*, 413–442. https://doi.org/10.1068/c1v

Bryson, J. M., Crosby, B. C., & Stone, M. M. (2006). The design and implementation of cross-sector collaborations: Propositions from the literature. *Public Administration Review*, *66*, 44–55. https://doi.org/10.1111/j.1540-6210.2006.00665.x

Carey, G., & Crammond, B. (2015). What works in joined-up government? an evidence synthesis. *International Journal of Public Administration*, *38*, 1020–1029. https://doi.org/10.1080/01900692.2014.982292

Carey, G., Crammond, B., & Riley, T. (2014). Top-down approaches to joined-up government: Examining the unintended consequences of weak implementation. *International Journal of Public Administration*, *38*, 167–178. https://doi.org/10.1080/01900692.2014.903276

Carey, G., & Harris, P. (2015). Developing management practices to support joined-up governance. *Australian Journal of Public Administration*, *75*, 112–118. https://doi.org/10.1111/1467-8500.12169

Carey, G., McLoughlin, P., & Crammond, B. (2015). Implementing joined-up government: Lessons from the australian social inclusion agenda. *Australian Journal of Public Administration*, *74*, 176–186. https://doi.org/10.1111/1467-8500.12096

Dunn, D., & Salazar, A. (2004). Knowledge-based competitive advantage in the internet age: Discovering emerging business strategies. *International Journal of Information Technology and Management*, *3*, 246. https://doi.org/10.1504/ijitm.2004.005035

Elbanna, S., Andrews, R., & Pollanen, R. (2016). Strategic planning and implementation success in public service organizations: Evidence from canada. *Public Management Review*, *18*, 1017–1042. https://doi.org/10.1080/14719037.2015.1051576

Emerson, K., & Gerlak, A. K. (2014). Adaptation in collaborative governance regimes. *Environmental Management*, *54*, 768–781. https://doi.org/10.1007/s00267-014-0334-7

Fan, L., Wang, W., Liu, Q., & Li, T.-h. (2022). Design and achieve of management system for optimal allocation of municipal resources. *Journal of Physics Conference Series*, *2278*, 012013–012013. https://doi.org/10.1088/1742-6596/2278/1/012013

Ferreira, A., Carvalho, J., & Pinho, F. (2020). Political competition as a motivation for earnings management close to zero: The case of portuguese municipalities. *Journal of Public Budgeting, Accounting Financial Management*, *32*, 461–485. https://doi.org/10.1108/jpbafm-10-2018-0109

Gemeentelijke organisatie | gemeente eindhoven. (2022). *Eindhoven.nl.* Retrieved May 31, 2025, from https://www.eindhoven.nl/bestuur-en-beleid/organisatie/gemeentelijke-organisatie

Govender, N., & Reddy, P. S. (2020). An evaluation of ethekwini municipality's regeneration programmes on littering and dumping. *African Evaluation Journal*, *8*. https://doi.org/10.4102/aej.v8i1.415

Guérard, S., Langley, A., & Seidl, D. (2013). Rethinking the concept of performance in strategy research: Towards a performativity perspective. *Management*, *16*, 566. https://doi.org/10.3917/mana.165.0566

Huijbregts, R., George, B., & Bekkers, V. (2021). Public values assessment as a practice: Integration of evidence and research agenda. *Public Management Review*, 1–20. https://doi.org/10.1080/14719037.2020.1867227

Hyde, J. (2008). How to make the rhetoric of joined-up government really work. *Australia and New Zealand Health Policy*, *5*, 22. https://doi.org/10.1186/1743-8462-5-22

Jekabsone, A., Kamenders, A., Rosa, M., Kaselofsky, J., & Schule, R. (2019). Assessment of the implementation of sustainable energy action plans at local level. case study of latvia. *Environmental and Climate Technologies*, *23*, 36–46. https://doi.org/10.2478/rtuect-2019-0053

Johnsen, Å. (2017). Impacts of strategic planning and management in municipal government: An analysis of subjective survey and objective production and efficiency measures in norway. *Public Management Review*, *20*, 397–420. https://doi.org/10.1080/14719037.2017.1285115

Karré, P. M., Van der Steen, M., & Van Twist, M. (2013). Joined-up government in the netherlands: Experiences with program ministries. *International Journal of Public Administration*, *36*, 63–73. https://doi.org/10.1080/01900692.2012.713295

Kester, L., Griffin, A., Hultink, E. J., & Lauche, K. (2011). Exploring portfolio decision-making processes*. *Journal of Product Innovation Management*, *28*, no–no. https://doi.org/10.1111/j.1540-5885.2011.00832.x

Khan, N. A., & Musarrat, K. M. (2016). Joined-up governance. *Springer eBooks*, 1–7. https://doi.org/10.1007/978-3-319-31816-5_1802-1

Killen, C. P., Jugdev, K., Drouin, N., & Petit, Y. (2012). Advancing project and portfolio management research: Applying strategic management theories. *International Journal of Project Management*, *30*, 525–538. https://doi.org/10.1016/j.ijproman.2011.12.004

Klievink, B., & Janssen, M. (2009). Realizing joined-up government — dynamic capabilities and stage models for transformation. *Government Information Quarterly*, *26*, 275–284. https://doi.org/10.1016/j.giq.2008.12.007

Knies, E., Boselie, P., Gould-Williams, J., & Vandenabeele, W. (2014). Special issue ofinternational journal of human resource management: Strategic human resource management and public sector performance. *The International Journal of Human Resource Management*, *26*, 421–424. https://doi.org/10.1080/09585192.2014.980127

Kopmann, J., Kock, A., Killen, C. P., & Gemünden, H. G. (2017). The role of project portfolio management in fostering both deliberate and emergent strategy. *International Journal of Project Management*, *35*, 557–570.

Leitner, K.-H. (2019). Strategy formation in the innovation and market domain: Emergent or deliberate? *Journal of Strategy and Management*, *7*, 354–375.

Ling, T. (2002). Delivering joined-up government in the uk: Dimensions, issues and problems. *Public Administration*, *80*, 615–642. https://doi.org/10.1111/1467-9299.00321

Maceta, P. R. M., & Berssaneti, F. T. (2019). Comparison of project portfolio management practices in the public and private sectors in brazil. *International Journal of Managing Projects in Business*, *13*. https://doi.org/10.1108/ijmpb-09-2018-0176

MacKay, B., Chia, R., & Nair, A. K. (2020). Strategy-in-practices: A process philosophical approach to understanding strategy emergence and organizational outcomes. *Human Relations*, *74*, 001872672092939. https://doi.org/10.1177/0018726720929397

Martinsuo, M., & Killen, C. P. (2014). Value management in project portfolios: Identifying and assessing strategic value. *Project Management Journal*, *45*, 56–70. https://doi.org/10.1002/pmj.21452

Mintzberg, H., & Waters, J. A. (1985). Of strategies, deliberate and emergent. *Strategic Management Journal*, *6*, 257–272. https://doi.org/10.1002/smj.4250060306

Molen, J. V. D., Kadefors, A., & Troje, D. (2023). Integrating facilities management knowledge in municipal school building: Swedish case studies. *IOP Conference Series: Earth and Environmental Science*, *1176*, 012033. https://doi.org/10.1088/1755-1315/1176/1/012033

Nagorsky, B., Sabag, K., Emerson, D., & Hewitt, S. (2016). Moving beyond evaluation to transit project prioritization: Lessons from the toronto, ontario, canada, context. *Transportation Research Record*, *2568*, 64–71. https://doi.org/10.3141/2568-10

O'Flynn, J. (2007). From new public management to public value: Paradigmatic change and managerial implications. *Australian Journal of Public Administration*, *66*, 353–366. https://doi.org/10.1111/j.1467-8500.2007.00545.x

Ortega, S., Hanley, N., & Simal, P. (2014). A proposed methodology for prioritizing project effects to include in cost-benefit analysis using resilience, vulnerability and risk perception. *Sustainability*, *6*, 7945–7966. https://doi.org/10.3390/su6117945

Patel, B., Peko, G., & Sundaram, D. (2019). Adaptive sustainable organizations: System dynamic models of a university balancing the virtuous and the vicious. *consensus.app*, 1–10. https://doi.org/10.24251/HICSS.2019.830

Plant, T. (2009). Strategic planning for municipalities: Ensuring progress and relevance. *Performance Improvement*, *48*, 26–35. https://doi.org/10.1002/pfi.20076

Pollitt, C. (2003). Joined-up government: A survey. *Political Studies Review*, *1*, 34–49. https://doi.org/10.1111/1478-9299.00004

Ring, P. S., & Perry, J. L. (1985). Strategic management in public and private organizations: Implications of distinctive contexts and constraints. *Academy of Management Review*, *10*, 276–286. https://doi.org/10.5465/amr.1985.4278197

Roberts, P., & Edwards, L. H. (2023). Portfolio management: A new direction in public sector strategic management research and practice. *Public Administration Review*, *83*. https://doi.org/10.1111/puar.13633

Rompho, N., & Truktrong, S. (2024). Do okrs help employees collaborate and innovate? *Measuring Business Excellence*. https://doi.org/10.1108/mbe-02-2023-0018

Seetha. (2023, November). Eindhoven fastest growing brabant municipality - eindhoven news. *Eindhoven News*. Retrieved September 11, 2024, from https://eindhovennews.com/news/2023/11/eindhoven-fastest-growing-municipality/

Sørensen, E., & Torfing, J. (2021). Accountable government through collaborative governance? *Administrative Sciences*, *11*, 127. https://doi.org/10.3390/admsci11040127

Stentoft Arlbjørn, J., Freytag, P. V., & Thoms, L. (2015). Portfolio management of development projects in danish municipalities. *International Journal of Public Sector Management*, *28*, 11–28. https://doi.org/10.1108/ijpsm-03-2014-0047

Tavares, A., Santos, P., Lopes, J., & Brito, J. (2017). Intermunicipal risk management: Addressing territorial and local expectations. *Portuguese National Funding Agency for Science, Research and Technology (RCAAP Project by FCT)*, 248–248. https://doi.org/10.1201/9781315210469-217

Teeratansirikool, L., Siengthai, S., Badir, Y., & Charoenngam, C. (2013). Competitive strategies and firm performance: The mediating role of performance measurement. *International Journal of Productivity and Performance Management*, *62*, 168–184. https://doi.org/10.1108/17410401311295722

Termeer, C. J. A. M., Dewulf, A., Breeman, G., & Stiller, S. J. (2013). Governance capabilities for dealing wisely with wicked problems. *Administration Society*, *47*, 680–710. https://doi.org/10.1177/0095399712469195

Thesari, S. S., Lizot, M., & Trojan, F. (2021). Municipal public budget planning with sustainable and human development goals integrated in a multi-criteria approach. *Sustainability*, *13*(19), 10921. https://doi.org/10.3390/su131910921

Thomas, L., & Ambrosini, V. (2015). Materializing strategy: The role of comprehensiveness and management controls in strategy formation in volatile environments. *British Journal of Management*, *26*, S105–S124. https://doi.org/10.1111/1467-8551.12075

Tjeerdsma, A. v. d. B., & Veuger, J. (2016). Towards a more professionalised municipal real estate management. *Journal of Corporate Real Estate*, *18*(2), 132–144. https://doi.org/10.1108/JCRE-11-2015-0041

Tria, G., & Valotti, G. (2012, June). *Reforming the public sector*. Brookings Institution Press. Retrieved September 23, 2024, from https://www.scopus.com/record/display.uri?eid=2-

s2.0-84905312535&origin=resultslist&sort=r-f&src=s&mltEid=2-s2.0-85158114706&
mltType=ref&mltAll=t&imp=t&sid=51c795f381a2ef98c3ae46799faa5b53&sot=mlt&sdt=mlt&
sessionSearchId=51c795f381a2ef98c3ae46799faa5b53&relpos=34&citeCnt=3

Vaara, E., & Whittington, R. (2012). Strategy-as-practice: Taking social practices seriously. *Academy of Management Annals*, *6*, 285–336. https://doi.org/10.5465/19416520.2012.672039

Zasa, F. P., & Buganza, T. (2022). Developing a shared vision: Strong teams have the power. *Journal of Business Strategy*, *44*, 415–425. https://doi.org/10.1108/jbs-04-2022-0065

s2.0-84905312535&origin=resultslist&sort=r-f&src=s&mltEid=2-s2.0-85158114706&
mltType=ref&mltAll=t&imp=t&sid=51c795f381a2ef98c3ae46799faa5b53&sot=mlt&sdt=mlt&
sessionSearchId=51c795f381a2ef98c3ae46799faa5b53&relpos=34&citeCnt=3