



RESEARCH PROPOSAL



Improving municipal strategic urban development processes for politically sensitive urban renewal projects by implementation of scenario thinking.

(Mlefter, 2012)

Colophon |

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Abstract |

This research proposal delves into the integration of scenario thinking within urban development strategies, focusing on politically sensitive projects such as Feyenoord City in Rotterdam, Netherlands. Drawing from interdisciplinary literature and empirical insights, the proposal aims to explore advanced scenario thinking approaches and effective municipal strategies. Through a case study methodology focussed on Rotterdam's resilience strategy, with a particular focus on the Feyenoord City project, the research seeks to investigate the role of scenario thinking in decision-making for urban renewal projects. Utilizing action research, including workshops and in-depth interviews, the proposal intends to promote understanding among practitioners and stakeholders. The main research question will be addressed through a strategy improvement assessment, which synthesizes data gathered from in-depth interviews, offering insights into refining urban development strategies. Ultimately, the research proposal aims to offer practical recommendations for enhancing strategic urban development processes and advancing resilience-oriented urban governance.

Personal motivation and personal study targets |

As someone with a migration background, my fascination with cities and the built environment runs deep. I've always been intrigued by how cities function, how they're governed, and how they evolve over time. This curiosity led me to pursue a master's degree in Management in the Built Environment at the Technical University Delft. Through this program, I aim to deepen my understanding of urban management and planning.

My professional journey has taken me to various municipalities, where I've worked in the spatial planning department. These experiences have reinforced my passion for understanding how cities shape their landscapes and engage with their residents.

Moreover, I'm drawn to the narratives that cities tell—the stories of their past, present, and future aspirations. It's inspiring to witness the strategies cities employ to address challenges and seize opportunities, and I'm eager to contribute to this ongoing dialogue.

Ultimately, my motivation stems from a desire to play a meaningful role in the sustainable development and management of urban spaces, ensuring that they are inclusive, resilient, and vibrant for generations to come.

Study targets

My journey is fuelled by a curiosity about the intricate workings of municipalities, particularly in navigating *uncertainties inherent in urban governance*. I am driven to unravel the complexities of *municipal decision-making*, especially in the face of rapid urbanization and evolving societal needs. Through this research thesis, I aim to grasp the nuances of municipal uncertainties and develop insights into *crafting resilient solutions to multifaceted urban challenges*.

Moreover, I am drawn to *explore strategic master plans* that serve as roadmaps for sustainable urban development. I am eager to delve into the intricacies of urban planning, analysing how strategic visions are translated into actionable policies and projects that enhance the quality of life for residents while safeguarding the environment.

Table of content |

Colophon 	2
Personal information.....	2
Educational information.....	2
Graduation Supervision	2
Abstract 	2
Personal motivation and personal study targets 	3
Study targets.....	3
Introduction 	6
Problem statement 	7
Problems the municipality wants to address strategically	7
Positioning of the master thesis within literature	7
Relevance 	8
Societal	8
Scientific.....	8
Key concepts & definitions 	9
Research questions and conceptual framework 	10
Research questions.....	10
Conceptual framework	10
Problem	10
What?	11
How?.....	11
What if?	11
Research methods 	11
Research method.....	11
What?	12
How?.....	12
What if?	12
Research limitations.....	12
Research timeline & research output 	13
Goals	13
Deliverables	13
Literature review 	14
Literature review Scenario Thinking Approach	14
Possible, probable and desirable futures method.....	14
Previous research that incorporated the possible, probable and desirable futures method and main findings	16

Crucial components*	17
Literature review Politically sensitive urban renewal projects	18
Political sensitivity in urban renewal projects	18
Crucial components	19
Conclusion	20
Case study analysis	21
Case studies	21
Case study analysis	21
Strategy improvement analysis	24
Existing research on the positioning of scenario thinking within urban strategies	24
Cross-reference analysation	24
Strategy improvement assessment	24
References	26
Appendix I: Case study municipality of Rotterdam	29
Strategic urban development plan	29
Organisational structure department of city development	30
Appendix II: Interview protocol	31
Part 1: interview strategy	31
Part 2: interview questions	32

Introduction |

In the Netherlands, practitioners and decision-makers are faced with an immense challenge. Their responsibility not only involves expanding the current housing stock but also keeping pace with the ever-evolving trends in real estate. Recent shifts in urban development paradigms have prompted local decision-makers to reevaluate their strategic approaches. Trends like compact and smart cities have compelled municipalities to adjust their plans accordingly (Ooms et al., 2020; Bibri et al., 2020). Additionally, the COVID-19 pandemic has highlighted the importance of resilient urban design, requiring the integration of new technologies to better manage present and future crises (Afrin et al., 2021). Amidst these changes, practitioners and decision-makers in the Netherlands must compose strategic urban development initiatives that not only accommodate these shifts but also ensure a brighter future for their citizens.

The significance of strategic urban planning in shaping societal progress and the urban landscape is underscored by Kornberger (2013), a professor of organizational management. According to him, urban strategy serves as a catalyst for change, enabling the transformation of the present into a desired future state. This concept revolves around envisioning what tomorrow could look like and the broader implications it carries. Consequently, strategic urban development offers local governments an opportunity to foster intelligent growth within their municipalities (Manganelli et al., 2020).

Research into the decision-making processes underlying local strategic urban development has yielded various criteria, frameworks, and models. Among these, scenario thinking stands out for its ability to incorporate flexibility and uncertainty. Its application varies across contexts; for instance, Manganelli et al. (2020) utilize scenario thinking to inform urban regeneration in Southern European countries with medium to high seismic risks. Conversely, Della Spina (2019) uses scenarios to explore alternative outcomes for the conservation of cultural heritage.

Globally, the adoption of scenario thinking as an essential part of urban strategy has gained momentum. Major cities have embraced this methodology as a pivotal tool in their arsenal for envisioning and preparing for various future scenarios (Kornberger, 2013). By crafting sophisticated urban strategies grounded in scenario planning, these cities have fortified themselves against uncertainty and volatility. For instance, cities like Sydney have utilized scenario thinking to reconcile conflicting priorities, such as balancing population density with environmental sustainability (Kornberger, 2013). This strategic approach has empowered decision-makers to engage citizens in shaping the future trajectory of their cities, thereby fostering a sense of ownership and collaboration.

While many global cities have embraced scenario thinking as a cornerstone of their urban strategies, the Netherlands has primarily focused on examining the process rather than improving it. Notable exceptions include den Hartog's (2023) study on local referendums for urban area development, which sheds light on how public value conflicts influence decision-making. However, there remains a prevailing tendency, as observed by Van Oistaeijen et al. (2023), to view scenario thinking as a data presentation tool rather than integrating it into the municipal decision-making framework.

Problem statement |

Practitioners need an alternative (more flexible) way to achieve their strategic goals. On a global scale the use of scenario thinking has seen to be effective. On the European level, the relevance of scenario thinking within strategic urban development has acknowledged, but not yet fully integrated (European Environment Agency's Home Page, n.d.). On the national level of the Netherlands, there has not been any significant research that supports this relevance. As seen in Dutch literature, strategic urban development processes do not include the strategic use of scenario thinking. However, the integration and use of scenario thinking within the strategic urban development has been an ambition for practitioners (The Municipality of Rotterdam, 2022, p. 24).

The municipality of Rotterdam has stated a need for new forms of collaboration that require (temporary) flexibility in dealing with existing frameworks, procedures and programme lines (The Municipality of Rotterdam, 2022, p. 24). To achieve this the city wants to give more attention to integrated work processes, including scenario thinking.

Problems the municipality wants to address strategically

The city of Rotterdam faces several challenges that they wish to overcome. They frame six challenges, or as the city states it; crisis, that lead to problems in the city. These challenges are: the climate crisis, natural resources and pollution crisis, the health crisis, biodiversity crisis, cyber crisis, in equality crisis and other disruptions (The Municipality of Rotterdam, 2022, p. 15). By tackling these problems the city want to become a resilient city. More on the municipalities strategic urban development plan and their organisational structure is seen on appendix I.

Positioning of the master thesis within literature

The research done for the MBE master thesis will not only be an addition for the desired research on the strategic use of scenario thinking, but will also be a starting point of exploration for practitioners on how scenario thinking can be used within strategic urban development. To highlight this use of scenario thinking even further, the focus of the research is on one of the sore points within strategic urban development; politically sensitive urban renewal projects.

Relevance |

After the pandemic struck, many cities have realized that their city structure is in need of improvement. The pandemic has served as a catalyst to take the challenges of our world today more seriously and take systematic changes. Cities are responding to various challenges including environmental, social and digital challenges. Strategic urban development processes are the plans to tackle those challenges. Over the years, there has been a trend within literature about strategic spatial planning and their influence on policy (Kalliomäki et al., 2024). The success of those strategic urban development processes depends on whether the spatial planning systems have the capacity to promote integration between policy sectors, to adaptively respond to changing societal and political conditions, and to involve and engage citizens in decision-making processes (Nadin et al., 2021).

Societal

The societal relevance can be explained by understanding the changes of urban spatial planning within Europe. Within the European context, there have been many substantial changes to processes and practices. One of the first comprehensive comparison and assessments in Europe was published in 1997 by the European Commission: *The EU compendium of spatial planning systems and Policies* (Commission of the European Communities, 1997; Nadin et al., 2021). Since then, the European Commission has had several comparisons and assessments. A review of these reports, made by Reimer et al. (2014), has identified several common and interconnected directions within the spatial planning practices of European countries (Nadin et al., 2021). The first one is that the meaning of spatial planning has generally widened to become more strategic. Governments have encouraged to include more coordinated action to shape spatial development. This is done by the use of visioning tools and multi-actor collaboration, alongside with regulation. Secondly, governments have revised these planning instruments in many ways, with a tendency towards more 'flexible' or discretionary tools that enable more tailored responses (Munoz Gielen & Tasan-Kok, 2010). Thirdly, urban planning has become more practiced across different administrative boundaries. Fourthly, planning systems in Europe have in various degrees increasingly engaged more actors in the planning process, including other sectoral policy interest and partnerships with private sector interests. Lastly, many national reforms represent a shift in planning style from 'command and control' to a 'consensus oriented' (Dühr et al., 2010; Reimer et al., 2014; Nadin et al., 2021). These changes represent a collective change in practicing urban planning within Europe.

Scientific

As stated in the previous paragraph, there has been a clear European trend within urban spatial planning to become more strategic and integrated in different policy fields. Comparative scientific studies have been conducted to differentiate trends in Europe. Barisha et al. (2021) conducted a study that compared 39 countries (28 EU and 11 non-EU) in relation to the mechanisms and allocate land use and spatial development rights as well as to the prevalence of the state vs. the market in guiding the development decisions. This study includes the Dutch system, that to a certain extend has a market-led development policy. This study signifies the urban planning policy trends within Europe and forms the context in which the Dutch planning system operates. However, only a few studies focus on how these systems use (policy) tools in their spatial planning process, and even fewer studies focus on how strategic urban development planning can benefit from these tools. This research proposal will add to this scientific discussion and bring crucial insights from practitioners.

Key concepts & definitions |

- EXPLORATIVE SCENARIO THINKING: A method used to anticipate possible futures and their impacts on strategic planning, particularly useful in managing uncertainty in politically sensitive urban renewal projects.
- POLITICALLY SENSITIVE URBAN RENEWAL PROJECTS: Urban development projects that are particularly subject to political influences and controversies, requiring careful strategic planning and stakeholder management.
- STRATEGIC URBAN DEVELOPMENT PROCESS: The planning and implementation of high-level goal setting in urban development projects, particularly how municipalities like Rotterdam can manage and improve these processes.
- CASE STUDY METHODOLOGY: An in-depth examination of a specific instance (e.g., Feyenoord City in Rotterdam South) to understand and illustrate broader principles or processes.
- RESEARCH PHASES:
 - WHAT?: Identifying the relevant characteristics of the problem through literature review and analysis.
 - How?: Exploring the connections between different parts of the problem using methods like action research.
 - WHAT IF?: Assessing how the insights gained can improve the current situation, leading to strategy proposals.
- ACTION RESEARCH: A methodology involving iterative cycles of action and reflection, aimed at solving practical problems while simultaneously generating theoretical knowledge.
- WORKSHOPS AND IN-DEPTH INTERVIEWS:
 - WORKSHOPS: Structured sessions where stakeholders explore various scenarios to anticipate challenges and opportunities.
 - IN-DEPTH INTERVIEWS: Detailed conversations with participants to gather rich qualitative data and insights.
- STRATEGY IMPROVEMENT ANALYSIS: Assessing current strategies and proposing improvements based on the data gathered from literature reviews, workshops, and interviews.
- KEY REFERENCES:
 - BLAIKIE AND PRIEST's (2019) METHOD: A guide for designing social research.
 - COGHILAN AND BRANNICK's (2019) ACTION RESEARCH: A methodology for facilitating organizational interventions.
 - BÖRJESON ET AL. (2006): Framework for possible, probable, and desirable futures.
 - CHAKRABORTY & McMILLAN (2015): Key components for incorporating scenarios in strategic processes.

Research questions and conceptual framework |

This chapter explains the conceptual framework and how the research questions are derived from it.

Research questions

The following research questions are set up based on Blaikie and Priest's (2019) method of designing social research. Answer to the main research question will describe how the municipality of Rotterdam can improve their strategic urban development processes for politically sensitive urban renewal projects by implementation of scenario thinking.

MAIN RESEARCH QUESTION: *How can the implementation of strategic scenario thinking improve Rotterdam's municipal strategic urban development process for politically sensitive urban renewal projects by analysing case study project Feyenoord City in Rotterdam South?*

RESEARCH SUB-QUESTIONS:

1. How can practitioners use strategic scenario thinking for politically sensitive urban renewal projects, by analysing case study project Feyenoord City in Rotterdam South?
2. How can practitioners implement the use of explorative scenario thinking for sensitive urban renewal projects within the municipal urban development process, by analysing case study project Feyenoord City in Rotterdam South?

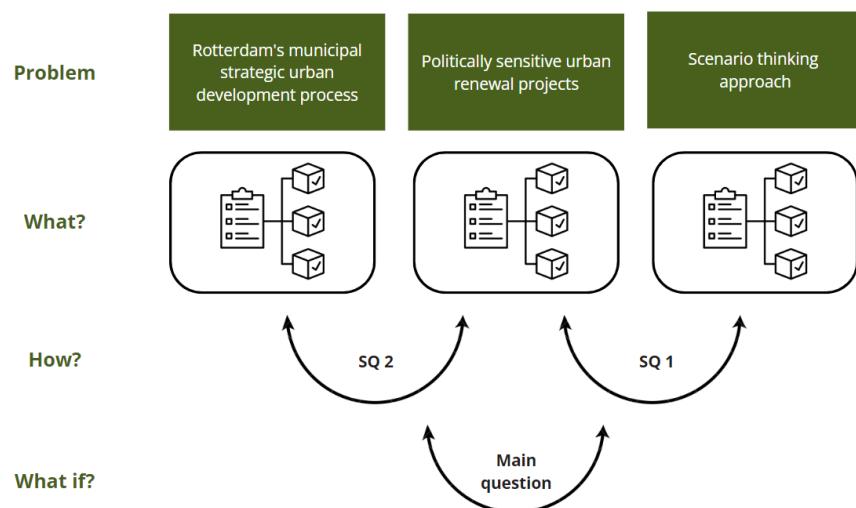


Figure 1: Conceptual framework thesis questions (own work)

Conceptual framework

The conceptual framework, displayed on figure 1, is set-up based on the problem division (horizontal) and the different phases of the research (vertical). The basis of the conceptual method is used and built upon in the next research method chapter.

Problem

The main question is made out of three parts; Rotterdam's strategic urban development process, politically sensitive urban renewal projects and scenario thinking approaches. Each of these three parts form the basis for the sub-questions and together form the base to answer the main question.

What?

This research phase will answer the question; what are the relevant characteristics of the problem? Each of the problem parts will generate a set of characteristics that are relevant to answer the sub-questions. This phase forms the foundation for the research questions and is part of the literature review process.

How?

This research phase will answer the question; how are the parts of the problem connected to each other? In this phase the connections between the different parts of the problem are explored. The research sub-questions are a variation of this research phase question.

What if?

In this last research phase the following question is posed; What if the answers of the connections between the research problem can improve the current situation? In this phase the answers of the sub-questions are reflected upon the current strategic urban development process. This will answer the main question.

Research methods |

In this chapter, the research method to answer the research questions is explained. The following proposal will use the case study method and will explain how each sub-question will be answered.

Research method

There are several steps within each research phase that are taken to answer the sub-questions and eventually the main research question. The research method, as displayed on figure 2, is an expansion on the conceptual framework that is mentioned in the previous chapter. This expansion includes what product will be delivered and which subjects will be analysed.

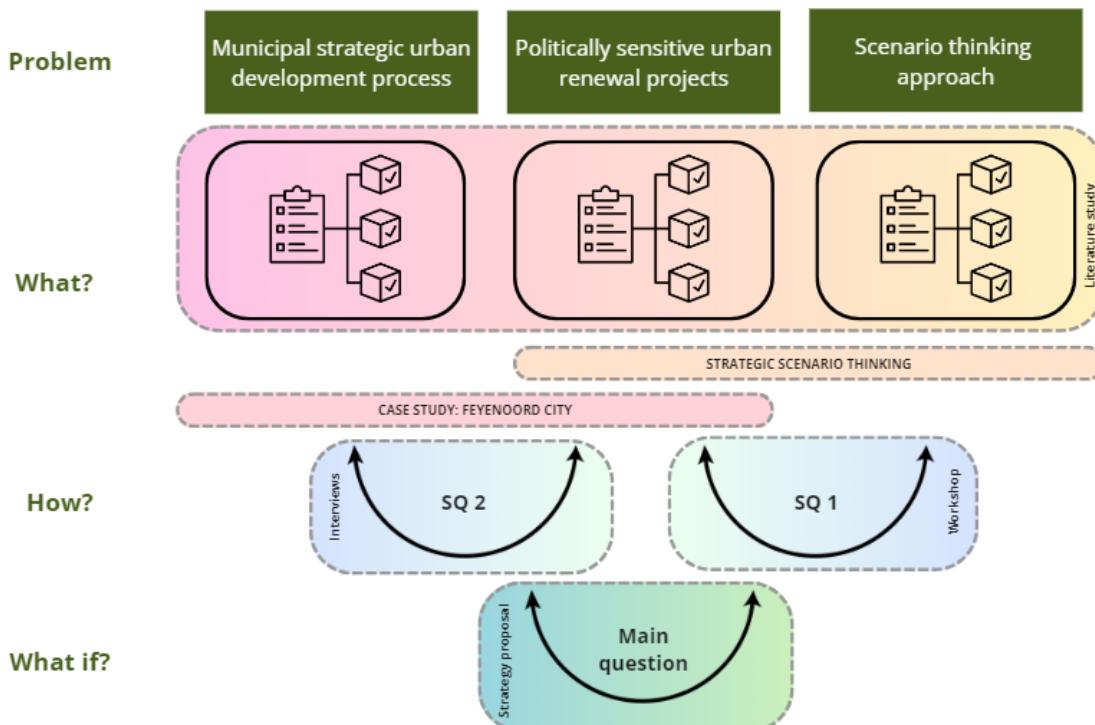


Figure 2: Research method thesis questions (own work)

What?

As part of the “what” phase, a literature study is done. This literature study entails the following reviews and analyses: Literature review scenario thinking approach, literature review politically sensitive urban renewal projects, case study analysis, and strategy improvement analysis. This literature study is part of this thesis proposal and forms the basis for the selection of the scenario approach as well as the case study. Furthermore, the strategy improvement analysis is done to provide guidance for the strategy proposal, which will be drawn up in the What-if phase. The complete literature review, including the findings, can be found in the literature review chapter later in this document.

How?

In the “how” phase the implementation of action research is used. Action research, as outlined in Coghlan and Brannick's (2019) "Doing Action Research In Your Own Organization" (4th Edition), is a methodology designed to facilitate organizational interventions. This approach emphasizes the integration of practical action and reflective practice within an organization, allowing researchers to simultaneously address issues and examine their own processes. Chapter 2 of the book underscores the significance of self-reflective practice, highlighting how it enables researchers to critically assess their interventions and adapt strategies as necessary. This dual focus on action and reflection ensures that the research not only contributes to immediate problem-solving but also enhances the overall understanding and development of the organization. This way, the potential of strategic scenario thinking can by means of action research both promote understanding amongst practitioners and be part of the research.

Combining a workshop on strategic scenario thinking with in-depth interviews aligns with the action research technique, which is consistent with the strategic scenario types described in Table 1 of the literature review. Firstly, the workshop on strategic scenario thinking provides a structured environment for stakeholders to explore various potential future scenarios and their implications for the organization. This exercise encourages participants to think creatively, anticipate challenges, and identify opportunities for proactive intervention. Following the workshop, in-depth interviews with the target participants can be conducted to delve deeper into their perspectives, concerns, and priorities regarding the identified scenarios. These interviews not only provide rich qualitative data but also foster a sense of ownership and engagement among participants.

The outline of the workshop will be formalized in P3. The interview protocol can be found in Appendix II.

What if?

The strategy improvement analysis, done as part of the literature review, concludes with a strategy improvement assessment. This assessment is used to process the data gathered from the in-depth interviews. After doing the assessment, a strategy proposal can be drawn up.

Research limitations

The research methodology chosen in this research proposal strives to encompass a broad spectrum of components within the strategic urban development process. This, however, does not go without making decisions and assumptions. The literature and frameworks chosen in the literature review can be seen as one of the limitations. These are based on the available research and are determined through one research search. This aspect of the research proposal can be further investigated or even be made into its own research. This is applicable to Börjeson et al. (2006, p. 59) possible, probable and desirable futures method, the division of the research about politically sensitive urban renewal projects, and to Chakraborty & McMillan (2015) nine key components for incorporating scenarios within strategic urban processes.

Research timeline & research output |

The following research timeline will be followed. The research will follow the MBE Graduation structure which comprises of five periods (the 5 P's). Each period will have an end product and presentation.

Goals

The goal of this research is to improve the current strategic urban development processes by providing the practical work sphere with a strategy to implement scenario thinking within their strategic urban development process. To achieve this goal, multiple objectives are set up. The first is to create deeper understanding of the three problem objectives that identify the research question. These are: Rotterdam's municipal strategic urban development process, politically sensitive urban renewal projects and the scenario thinking approach, as seen on figure 1. To create this deeper understanding theoretical and empirical data will be used. Then, the third goal is to discuss how this background information can be implemented in the case study. And, finally, the last goal is to assess how these outcomes can provide a comprehensive strategy that can be used to improve the current strategic urban development process.

Deliverables

The research timeline started with P1 in February, see figure 3. In this phase the problem definition, research questions & concept and the research relevance and goals are set up. This research proposal is part of the end product of the P1. The P2 phase starts with a literature review which, to translate the above stated methodology, will answer sub-question 1. Also, the case study selection and case study set up are done which will form the basis for sub-question 2 and is the blue "what" section of the research method.

This will form the basis for conducting the interviews as part of the data collection in P3. This phase will mainly focus on the data collection and the analysis of the collected data. In P4, conclusions are drawn and a strategy proposal for the case study, based on the data outcomes, is set up. When this is concluded, we enter the final phase of P5. In this phase the end product is finalized and the results are presented.

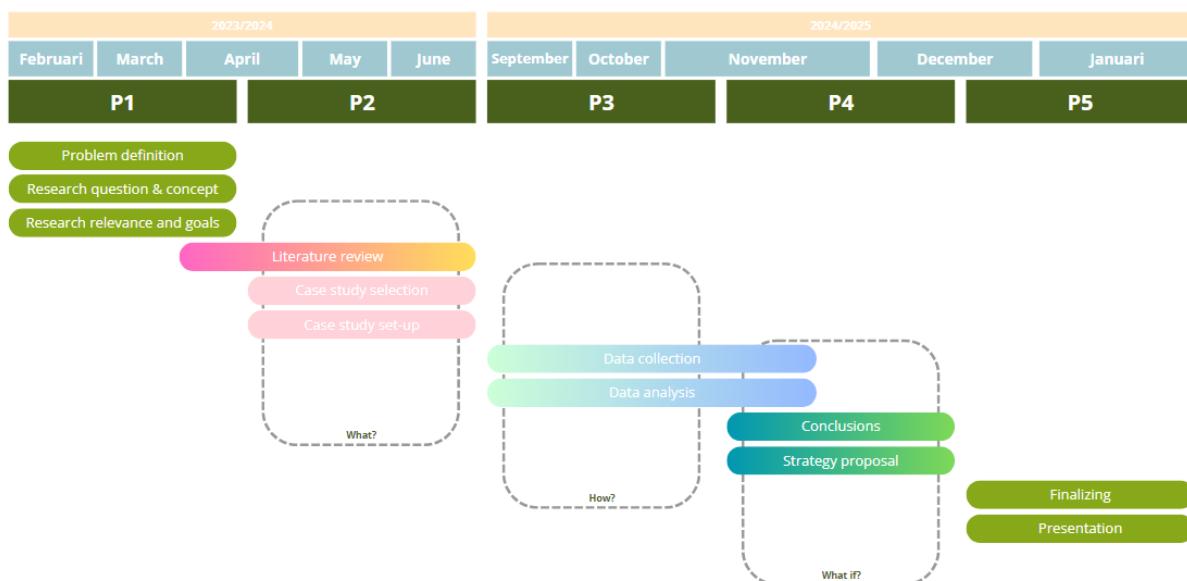


Figure 3: Research timeline (own work)

Literature review |

Literature review Scenario Thinking Approach

Many companies already have included probable futures and scenarios in their strategic planning (Neuvonen, 2022; Son, 2015). This advanced in different approaches and definitions of scenario's. Grišakov (2023) even describes scenario thinking as an entire ecosystem of schools and methods. This results, within urban planning, in situations where urban planners are often faced with a vast numbers of futures documents and futures thinking techniques. This literature review gives an overview of a conceptualised version of the scenario thinking approach and the techniques used within the approach.

The conceptualize method this literature review will focus on is a concept commonly used within urban planning and redevelopment strategies (Grišakov, 2023; Chakraborty & McMillan, 2015; Berbés-Blazquez et al., 2023; Munnucci et al., 2023; Nogués et al., 2023; Certomà, 2022; Sivagurunathan et al., 2022). This is Börjeson et al. (2006, p. 59) possible, probable and desirable futures method (from here on PPD method). This method has three typologies for setting up scenarios; predictive scenarios, explorative scenarios and normative scenarios.

Possible, probable and desirable futures method

The PPD method is the summation of nine typologies that Börjeson et al. (2006) mention in their research paper. The three categories of the method; probable, possible and preferable, represent three different modes of thinking about the future (Dreborg, 2004; Börjeson et al., 2006). The method builds upon this principle to emphasise the use of the scenarios within the method.

These three categories are each principled in a main question that it answers. Predictive scenarios, intend to answer the queion of 'What will happen?' (probable); Explorative scenarios, intend to answer the question of 'What can happen?' (possible); Normative scenarios answer the question of 'How can a specific target be reached?' (preferable). As seen on figure 4, each of these categories contain two different types of scenarios implementations.

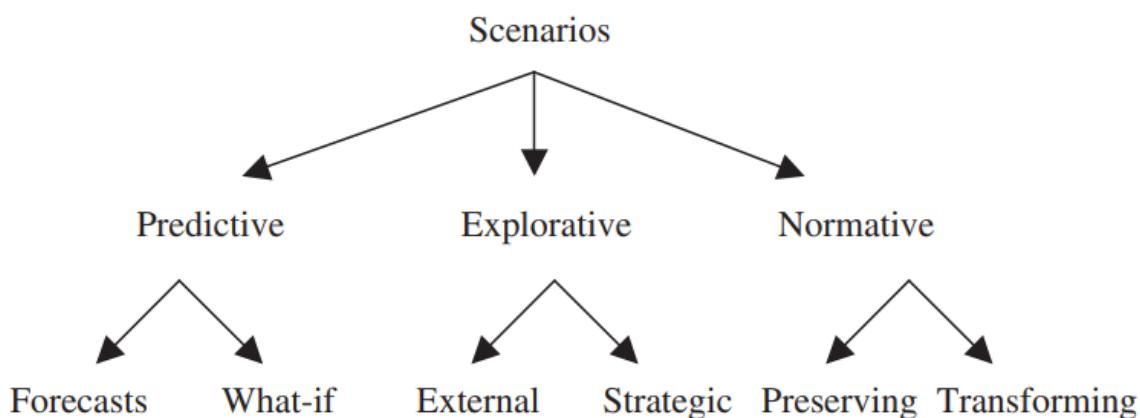


Figure 4: Nine scenario method typologies (Börjeson et al., 2006)

Predictive

The aim of predictive scenarios is to make an attempt to predict what is going to happen in the future. They are primarily draw-up to make it possible to plan and adapt to situations that are expected to occur. Decision-makers can therefore become aware of problems that are likely to occur if some conditions on the development is fulfilled.

Forecasts scenarios respond to the question: What will happen, on the condition that the likely development unfolds? They are conditioned by what will happen if the most likely development unfold and give one reference result which may be accompanied by result of the type 'high' and 'low'.

What-if scenarios respond to the question: What will happen, on the condition of some specified events? They investigate what will happen on the condition of some specified near-future events of great importance for future development. What distinguishes these scenarios from simple forecasts is that they involve more than just slight variations in a single external factor. Instead, the differences between these scenarios are significant, similar to a bifurcation. In other words, they represent diverging paths or critical points where events or conditions significantly change. The difference is fundamental and obvious, 'yes' or 'no' in an important referendum.

Explorative

Explorative scenarios aim to examine plausible future situations from various angles, often covering a broad range of possibilities. Unlike what-if scenarios, they focus on long-term perspectives, allowing for significant structural changes. They are valuable for anticipating unknown or rapidly evolving situations and exploring the consequences of alternative developments, particularly in strategic issues.

External scenarios respond to the user's question: What can happen to the development of external factors? They focus only on factors beyond the control of the relevant actors. They are typically used to inform strategy development of a planning entity. Policies are not part of the scenarios but the scenarios provide a framework for the development and assessment of policies and strategies. The external scenarios can then help the user to develop robust strategies, i.e. strategies that will survive several kinds of external development.

Strategic scenarios respond to the question: What can happen if we act in a certain way? They incorporate policy measures at the hand of the intended scenario user to cope with the issue at stake. The aim of strategic scenarios is to describe a range of possible consequences of strategic decisions. By taking only internal factors into account, they describe how the consequences of a decision can vary depending on which future development unfolds.

Normative

The focus of interest for normative scenarios is on certain future situations or objectives and how these could be realised. The two scenario approaches that are distinguished by if their system structure works within the current system or departures from its existing structure.

Persevering scenarios respond to the question: How can the target be reached, by adjustments to current situation? They find out how a certain target can be efficiently met, with efficiently usually meaning cost-efficiently. In qualitative regional planning, the starting point for a new plan is often a group of targets concerning environmental, social, economic and cultural factors. Planners or experts can then make judgements on which path is most efficient to reach a specific target or several targets.

Transforming scenarios respond to the question: How can the target be reached, when the prevailing structure blocks necessary changes? This scenario approach comprises two types: optimizing, which seeks efficient solutions, and backcasting, which aims to meet long-term goals. Backcasting can lead to costly short-term decisions, and long-term targets or available options might shift before reaching the goal year. Optimizing may suffer from the discrepancy between the investment's lifecycle and the predictability of key decision aspects. Near-term investments might conflict with long-term targets, complicating fulfilment.

Scenario development techniques

Börjeson et al. (2006) mention a number of techniques to develop scenarios and to implement in the development process. These techniques consists of elements that generate ideas and gather data, that

integrate parts into wholes, or that check the consistency of scenarios. Table 1, illustrates which techniques can be used for which scenario type.

Table 1: Contribution of techniques in the phases of scenario development

Scenario types	Techniques		
	Generating	Integrating	Consistency
<i>Predictive</i> Forecasts	<ul style="list-style-type: none"> • Surveys • Workshops • Original Delphi method 	<ul style="list-style-type: none"> • Time series analysis • Explanatory modelling • Optimising modeling 	
What-if	<ul style="list-style-type: none"> • Surveys • Workshops • Delphi methods 	<ul style="list-style-type: none"> • Explanatory modelling • Optimising modeling 	
<i>Explorative</i> External	<ul style="list-style-type: none"> • Surveys • Workshops • Delphi modified 	<ul style="list-style-type: none"> • Explanatory modelling • Optimising modeling 	<ul style="list-style-type: none"> • Morphological field analysis • Cross impact
Strategic	<ul style="list-style-type: none"> • Surveys • Workshops • Delphi methods 	<ul style="list-style-type: none"> • Explanatory modelling • Optimising modeling 	<ul style="list-style-type: none"> • Morphological field analysis
<i>Normative</i> Preserving	<ul style="list-style-type: none"> • Surveys • Workshops 	<ul style="list-style-type: none"> • Optimising modeling 	<ul style="list-style-type: none"> • Morphological field analysis
Transforming	<ul style="list-style-type: none"> • Surveys • Workshops • Backcasting Delphi 		<ul style="list-style-type: none"> • Morphological field analysis

All techniques can be used in several phases but only their main contribution is mentioned in this table.

Previous research that incorporated the possible, probable and desirable futures method and main findings

Through a search on researchrabbitapp.com, research papers were found that cited Börjeson et al. (2006) method. From the 991 research papers cited the literature, 79 papers were connected with urban planning. Many of these studies use the Börjeson et al. (2006) method to explore potential futures (Mannucci et al., 2023; Enault et al., 2021) and as a tool for backcasting future scenarios to explore policy, market and governance implications (Letcher & Britton, 2023; González-González et al., 2023; Bibri, 2020). However, this part of the literature review will focus on research papers that either assess (a part of) an urban planning and policy processes or compares different urban planning processes. From this perspective, important characteristics of the method, in relation to the urban planning process, can be identified for further implementation in this research proposal.

Berbés-Blazquez et al. (2023) use qualitative tools for the assessment of *transformative* visions. This normative scenario type fits into the urban planning process by allowing for the exploration of alternative policy pathways, identifying potential barriers to proposed policies, and building robustness for future uncertainty (p. 2). The research uses transformative scenarios by allowing participants to build

their imagined visions through conversation, resulting in narratives reflecting issues and opportunities perceived by actors at different government scales (p. 15). This further emphasizes the already methodological approach of understanding how scenarios work at different government scales. This is done by the method of assessing 11 visions from the scales of village (or borough) and regional (or metropolitan) in the context of urban planning and future visioning (p. 1).

There are differences in priorities and emphases between the two scales, highlighting the political nature of visioning and the need to explore interactions across different scales (p. 9, 14). In the case study of the city Phoenix, Arizona, the main findings show in both levels of visions the prioritization of building resilience. However, the village-visions focus more on social dimensions, equity mechanisms and participation, while regional visions align with a green sustainability agenda (p.9, 14).

Furthermore, Munnucci et al. (2023) uses the predictive “what if” scenario approach to generate five-thousand computational experiments that describe the possible shape of a flood risk urban area (p. 13). This way the utility of the approach is to explore potential futures under uncertain conditions in the urban planning through scenario planning. The aim of the study is to simulate urban growth patterns considering uncertainties like the implementation of new poles of attraction (p.8). By conducting the computational “what if” experiments, the study generates an ensemble of scenarios to explore different outcomes and responses within the complex system, leading to the identification of decision-relevant clusters (p.8).

The research claims that planners need a nuanced understanding of the complex system’s behaviour is an imperative component for urban planners. The tool used in this research is scenario narratives, where different behaviours under different futures are associated with uncertainties. It depicts, through a Scenario Discovery selection process, how variables interact and offer insight into plausible evolutions of the system (p. 11). By translating complex analytical results into accessible narratives, planners can make informed decisions, develop adaptive strategies, and devise contingency plans aligned with the system’s dynamics (p. 11)

*Crucial components**

The following components are found crucial from the literature review:

- Companies need a clear definition of scenarios within urban planning to align internal understanding
- Scenarios are part of the strategic urban planning process and several tools can be used to set up scenarios.
- Use of scenario narratives help depict how variables interact and offer insight into potential system evolutions.
- The scenarios implemented can differ depending on the government scale (village/borough and regional/metropolitan) they are implemented
- Practical implications for urban planning, includes the translation of complex analytical results into accessible narratives for informed decision-making
- Frequent assessments of the evolving dynamics of the urban environment, including demographic, economic, environmental, and social changes, help urban planners to recognize emerging challenges and opportunities

*These components are used in the case study analysis and the strategy improvement analysis of this literature study.

Literature review Politically sensitive urban renewal projects

Within the domain of urban development, projects labelled as politically sensitive occupy a space where governmental authority, societal dynamics, and community well-being converge. Despite lacking a singular definition, "political sensitivity" encapsulates the intricate interplay of power dynamics and socio-cultural intricacies that shape regional governance (Cambridge University Press, n.d.). This nebulous concept mirrors the essence of politics itself, consequently the acquisition and application of power intertwine with societal values and interests (Reverso Dictionary, n.d.). As urban renewal endeavours navigate this intricate terrain, the polarity of political correctness and incorrectness introduces further complexity, inspiring the discourse with layers of social obligation and controversy. Amid these multifaceted dynamics, sensitivity emerges as a vital consideration, influencing stakeholders to proceed with caution to avoid inciting discord or distress within a community.

Academic discussions on politically sensitive urban renewal projects encompasses three primary categories: politically sensitive societies, policies, and issues. This categorization will serve, in this chapter, as a framework for analysing the complex dynamics involved in these projects.

Political sensitivity in urban renewal projects

In urban development, politically sensitive environments present unique challenges that require careful navigation and strategic decision-making. This selection of studies explores various facets of politically sensitive urban policies, governance practices, and development projects, shedding light on the intricate interplay between political dynamics, financial complexities, and urban planning initiatives. From examining the application of performance metrics in smart city governance to analysing the political and financial influences on urban development in major metropolitan areas, these studies offer valuable insights into the complexities of managing politically sensitive issues in the context of urban renewal and spatial planning. Through empirical research and ethnographic studies, the authors delve into the roles of stakeholders, governance devices, and visionary plans in shaping urban development outcomes, highlighting the importance of transparent governance, collaborative decision-making, and strategic planning practices in addressing the multifaceted challenges of politically sensitive urban projects.

Politically sensitive societies

Alsaïd (2021) examined the application of performance metrics in the governance of smart cities, particularly in politically sensitive environments like Egypt, focusing on the New Cairo city council. The research delved into how these metrics influence political decision-making, stressing the importance of standardized performance indicators at the local level of city councils and their role in ensuring accountability in smart urban development (p. 12). The study revealed that political pressures and military influences significantly affect the adoption of performance measurement systems in smart city governance. It highlights how institutionalized performance metrics shape political choices at the city council level (p. 3), aiding in managing internal tensions and supporting smart urban development, with implications extending beyond purely economic considerations (p. 3). Moreover, the study's findings indicate the pivotal role of performance measurement systems in addressing internal conflicts within city councils, fostering smart urban development, and influencing political decisions beyond economic factors (p. 35). Lastly, the research underscores the significance of performance measurement systems in smart city governance, advocating for their integration of economic, social, and political dimensions to enrich urban development and ensure accountability.

Politically sensitive policies

Brorström & Styhre (2021) focus on an ethnographic study of a Swedish city's harbour area renewal project, emphasizing the importance of being present to understand the planning process fully. It started in 2011 with the drafting of a vision for the harbour area, leading to the initiation of work in 2012. The project involved multiple stakeholders managed by a collaborative organization. A total of 81 interviews and extensive observations were conducted over nine years, with a particular focus on the steering

group and events related to the New Harbour District project between August 2017 and December 2018. The study sheds light on the challenges faced in translating visionary plans into actionable strategies in urban renewal projects (p. 6).

The study's findings indicate a significance of governance devices and accurate information in realizing projects, especially when faced with politically sensitive decisions and financial complexities (p. 1). Governance devices, such as business plans and calculative practices, are crucial tools in urban renewal projects to ensure alignment with political and economic objectives, preventing unfavourable outcomes and project risks (p. 3). Accurate information is essential for bridging the gap between visionary plans and actual implementation, highlighting the importance of introducing calculative practices to effectively transform illiquid assets into investment objects like housing (p. 5). These governance practices are vital in managing politically sensitive decisions and financial complexities, ensuring transparency, realistic goal-setting, and successful project realization (p. 1, 9).

The link between visionary plans and governance devices lies in their role in translating ambitious visions into actionable strategies, especially when faced with politically sensitive decisions and financial complexities (p. 5, 3). However, implementing visionary plans in urban renewal projects without detailed financial calculations, advocating for the introduction of calculative practices to bridge this gap effectively (p. 13). This discrepancy between visionary narratives and practical concerns can lead to difficulties in decision-making, collaboration, and project progress, hindering the realization of ambitious goals in complex urban renewal projects (p. 12).

Politically sensitive issues

Savini et al. (2015) examine the political and financial influences on urban development in Amsterdam, Milan, and Paris, analysing the roles of national governments, core cities, and market investors in shaping spatial planning and large-scale projects in metropolitan areas' inner peripheries (p. 5). The study reveals how electoral strategies, political conflicts, and business interests affect peripheral development outcomes, highlighting evolving relationships among these stakeholders (p. 4). In Amsterdam, the northwest waterfront redevelopment emphasizes incremental housing production and mixed land-use mixes (p. 12), while Paris focuses on reconnecting the city with its banlieue through social housing and improved transport (p. 7). Milan's Territorial Government Plan prioritizes major projects along corridors, emphasizing new spatial qualities and sustainability (p. 6).

The types of peripheral developments include cross-border collaborations in Paris, where local politics, market actors, and national governments work together for inner periphery redevelopment (p. 14). In Amsterdam, an organic approach focuses on incremental housing production and mixed land-use mixes in the northwest waterfront area (p. 12). Milan showcases isolated scenarios with left-wing groups and a left-wing government, facing challenges due to political fragmentation and lack of planning synergies (p. 14).

Crucial components

The following components are found crucial from the literature review and can be implemented in the strategy proposal in this research.

Politically sensitive societies

- Examination of how performance metrics influence political decision-making in smart cities.
- Importance of standardized performance indicators at the local level.
- Impact of political pressures and military influences on the adoption of performance measurement systems.
- Role of institutionalized performance metrics in shaping political choices and managing internal tensions within city councils.

Politically sensitive policies

- Importance of governance devices and accurate information in realizing projects.
- Challenges in translating visionary plans into actionable strategies.
- Role of governance devices such as business plans and calculative practices.
- Significance of accurate information in bridging the gap between visionary plans and actual implementation.
- Link between visionary plans, governance devices, and successful project realization.
- Advocacy for the introduction of calculative practices to bridge the gap between visionary narratives and practical concerns.

Politically sensitive issues

- Analysis of political and financial influences on urban development in Amsterdam, Milan, and Paris.
- Roles of national governments, core cities, and market investors in shaping spatial planning.
- Impact of electoral strategies, political conflicts, and business interests on peripheral development outcomes.
- Different approaches to peripheral development in Amsterdam, Paris, and Milan.
- Types of peripheral developments and collaborations in each city, including cross-border collaborations, incremental housing production, mixed land-use mixes, and major projects prioritization.

Conclusion

Since municipalities are legally prohibited from developing real estate themselves (Bruggeman et al., 2010), their authority lies with the establishment of policies. This means that within the context of urban renewal projects, the political sensitivity lies within municipal policies. In this chapter, the crucial components for politically sensitive policies are cross referenced against the different scenario approaches studied in the previously stated literature review. This is shown on table 2. Resulting in that **strategic scenario strategies** are most suitable for dealing with politically sensitive urban renewal project.

Table 2: Cross-reference table crucial components for dealing with politically sensitive urban renewal projects against scenario thinking approaches

		Predictive		Explorative		Normative	
Crucial components for dealing with politically sensitive urban renewal projects		Forecasts	What-if	External	Strategic	Preserving	Transforming
1	Importance of governance devices and accurate information in realizing projects.	-	-	X	X	X	X
2	Challenges in translating visionary plans into actionable strategies.	-	-	-	X	-	X
3	Role of governance devices such as business plans and calculative practices.	-	-	X	X	X	X
4	Significance of accurate information in bridging the gap between visionary plans and actual implementation.	-	-	X	X	X	X
5	Link between visionary plans, governance devices, and successful project realization.	-	-	X	X	X	-
6	Advocacy for the introduction of calculative practices to bridge the gap between visionary narratives and practical concerns.	-	-	X	X	X	X

Case study analysis

In this case study analysis, multiple politically sensitive urban renewal projects that have been/are part of the municipalities urban strategy are analysed. The analysis is based on the crucial components found in the literature review on scenario approaches.

Case studies

Rotterdam is an exemplary case for analysing politically sensitive urban renewal projects due to its diverse range of high-profile redevelopment initiatives that have sparked controversy and debate. The city has undertaken significant urban regeneration efforts, such as the Feyenoord City project and the transformation of former port areas into green spaces, which highlight the challenges and sensitivities involved in balancing urban development with social equity, inclusiveness, and the prevention of gentrification (Nieuwland & Lavanga, 2020; Custers & Willems, 2024). In the international Journal of urban Policy and Planning Custers & Willems (2024) mention in their article "Rotterdam in the 21st century: From 'sick man' to 'capital of cool'", the following politically sensitive projects:

- FYEENOORD CITY PROJECT: A large-scale redevelopment initiative in Rotterdam South, which faced controversy and the eventual withdrawal of the football club Feyenoord.
- SEVEN NEW CITY PARKS: An initiative to transform former port areas and major transport axes into green spaces, aimed at improving liveability.
- WILHELMINAPIER REVITALIZATION: A project to transform a former harbour area into a mixed-use development with residential and commercial uses, a new bridge, a metro station, and a tram line.
- 'CITY LOUNGE' STRATEGY: Launched in 2008 to revitalize the outdated modernist city centre with new iconic buildings, such as the indoor market De Markthal and the mixed-use office building De Rotterdam.

Case study analysis

The case study analysis is seen on table 3. While each of these projects contributes to Rotterdam's urban renewal, they do not encounter the same level of political complexity, broad impact, and public scrutiny as the **Feyenoord City project**. The Feyenoord City project is the most politically sensitive urban renewal initiative in Rotterdam due to its massive scale, substantial investment, and significant community impact. The project, which involves a new stadium and large-scale housing and commercial spaces with a total investment of over €1.5 billion, raises concerns about gentrification, resident displacement, and environmental issues (Feyenoord City, 2017; Schrama, 2021). The withdrawal of the football club Feyenoord due to project disagreements underscores its contentious nature and the complexities of stakeholder engagement (Feyenoord City Waterside, n.d.). Additionally, the cultural significance of the club and its strong local support further amplify the project's political sensitivity.

In comparison, the other urban renewal projects in Rotterdam face fewer issues and controversies. The initiative to create seven new city parks is primarily a local-scale effort focused on transforming former port areas into green spaces, aiming to enhance liveability without significant socio-political conflicts (Lynch, 2022). The Wilhelminapier revitalization is a metropolitan-scale project transforming a former harbour area into a mixed-use development with residential, commercial, and transportation elements. While significant, it lacks the high-profile controversies and intense stakeholder disagreements seen in the Feyenoord City project (Lynch, 2022).

Similarly, the 'City Lounge' strategy, which aims to modernize Rotterdam's city centre with iconic buildings like De Markthal and De Rotterdam, primarily affects the urban core at a borough level. This project focuses on upgrading outdated infrastructure and enhancing urban appeal, involving fewer political and social conflicts compared to the Feyenoord City project (Lynch, 2022).

Table 3: Cross-reference table crucial components against politically sensitive urban renewal projects

Crucial components		Politically sensitive urban renewal projects			
		<i>Feyenoord City Project</i>	<i>Seven new city parks</i>	<i>Wilhelminapier revitalization</i>	<i>'City Lounge' strategy</i>
1	Companies need a clear definition of scenarios within urban planning to align internal understanding	The Feyenoord City project underscores the necessity for clear scenario definitions to ensure cohesive understanding among stakeholders. This involves delineating the project's scope, objectives, and potential outcomes to harmonize the diverse perspectives and expectations of the involved companies (Feyenoord City, 2017; Lynch, 2022)	For the initiative to create seven new city parks, clear scenario definitions are crucial to ensure all stakeholders understand the project's objectives, potential benefits, and logistical requirements (Lynch, 2022)	The revitalization of Wilhelminapier required precise scenario definitions to align stakeholders, including developers, investors, and the municipality, ensuring a unified approach to transforming the area (Lynch, 2022)	The 'City Lounge' strategy necessitated clear scenario definitions to align the efforts of municipal planners, architects, and developers towards the goal of modernizing Rotterdam's city center (Lynch, 2022)
2	Scenarios are part of the strategic urban planning process and several tools can be used to set up scenarios.	The strategic urban planning process for Feyenoord City has employed various tools such as master planning, stakeholder consultations, and feasibility studies. These tools facilitate the creation of comprehensive scenarios that guide the project's development and address potential challenges (Lynch, 2022)	Various tools, including environmental impact assessments, community consultations, and land use planning, are used to develop scenarios for the park transformations. These tools help anticipate and plan for potential challenges and benefits (Lynch, 2022)	Strategic planning tools such as economic feasibility studies, architectural designs, and transportation planning were used to create viable scenarios for Wilhelminapier's redevelopment (Lynch 2022)	Tools such as urban design frameworks, economic impact analyses, and stakeholder engagement workshops were employed to create robust scenarios for the 'City Lounge' initiative (Lynch, 2022)
3	Use of scenario narratives help depict how variables interact and offer insight into potential system evolutions.	Scenario narratives have been pivotal in the Feyenoord City project, illustrating interactions between infrastructure developments, economic activities, and social programs. These narratives provide a clearer picture of how different variables such as housing, commercial spaces, and public amenities might evolve and influence each other (Feyenoord City, 2017; Schrama, 2021)	Scenario narratives in this initiative illustrate the interplay between urban green spaces, community health, and environmental sustainability. These narratives help stakeholders understand the long-term benefits and interactions of the parks within the urban ecosystem (Lynch, 2022)	Scenario narratives helped stakeholders visualize how the new mixed-use area, transportation links, and public spaces would interact, providing insights into the potential evolution of the area over time (Lynch, 2022)	Scenario narratives illustrated the interactions between new buildings, public spaces, and economic activities, providing a comprehensive view of potential developments and their impacts (Lynch, 2022)

4	The scenarios implemented can differ depending on the government scale (village/borough and regional/metropolitan) they are implemented	The implementation of scenarios for Feyenoord City varies significantly between local (Rotterdam-Zuid) and regional (greater Rotterdam) scales. Local scenarios focus on immediate community benefits and infrastructure improvements, while regional scenarios emphasize broader economic impacts and connectivity enhancements (Feyenoord City, 2017)	The implementation of scenarios varies with the scale of governance, with local plans focusing on immediate community impacts and regional plans addressing broader environmental and recreational benefits (Lynch, 2022)	Implementation scenarios varied from local impacts on the immediate harbor area to regional considerations of improved connectivity and economic growth (Lynch, 2022)	Scenarios for the 'City Lounge' varied from local enhancements within the city center to broader implications for Rotterdam's regional attractiveness and economic vitality (Lynch, 2022)
5	Practical implications for urban planning, includes the translation of complex analytical results into accessible narratives for informed decision-making	Translating complex analyses into accessible narratives is crucial in Feyenoord City's planning. This involves simplifying technical data and projecting future developments into understandable formats that aid decision-makers in crafting effective policies and strategies (Lynch, 2022)	Translating analytical results into accessible narratives helps policymakers and the public grasp the significance of the park initiative, fostering informed decision-making and community support (Lynch, 2022)	The project's success hinged on translating complex planning data into compelling narratives that informed decision-makers and secured support from various stakeholders (Lynch, 2022)	The strategy's success depended on making complex urban planning results accessible and understandable to decision-makers, ensuring informed and effective policy decisions (Lynch, 2022)
6	Frequent assessments of the evolving dynamics of the urban environment, including demographic, economic, environmental, and social changes, help urban planners to recognize emerging challenges and opportunities	Regular assessments of changing demographics, economic conditions, environmental factors, and social dynamics are integral to the Feyenoord City project. These assessments help planners identify emerging trends, address potential issues proactively, and seize new opportunities to enhance the project's success (Feyenoord City, 2017; Schrama, 2021)	Regular evaluations of demographic shifts, economic trends, environmental conditions, and social changes are essential to adapt the park initiative to meet evolving needs and maximize its positive impact (Lynch, 2022)	Ongoing assessments of urban dynamics ensured that the revitalization efforts could adapt to changing conditions and emerging opportunities, enhancing the project's sustainability and success (Lynch, 2022)	Regular evaluations of the city's evolving dynamics were crucial to adjust the 'City Lounge' strategy to new challenges and opportunities, ensuring its continued relevance and effectiveness (Lynch, 2022)

Strategy improvement analysis

This strategy improvement analysis is done to understand when improvement of the urban development strategy has taken place. For this analysis, the crucial components that are found from the scenario thinking literature review are cross analysed with existing research on the positioning of scenario thinking within urban strategies. This cross analysis serves as a “peer-review”; amplifying the components that are highlighted in the cross analysis. From this, a strategy improvement assessment is set up.

Existing research on the positioning of scenario thinking within urban strategies

For the positioning of scenario thinking within urban strategies Chakraborty & McMillan (2015) nine key components are analysed. The researchers note the importance of understanding the position of scenarios and the tools they use within the strategic urban process. According to the literature, scenario planning is a component within this strategic planning process, that allows for creative thinking about the future by combining technical and participatory planning approaches (p.2). Urban planners benefit from understanding the following nine key components (p. 11):

1. Organizational structure: Unitary, strong leader, or loose coalition
2. Scope: single issue, comprehensive, or problem-oriented
3. Scenario type: Normative, predictive, or explorative
4. Outcome: awareness, vision, or policy recommendation
5. Stakeholder Engagement: General public, government agencies, or interest groups
6. Participation extent: Inform only, seeking feedback, or joint fact finding
7. Engagement medium: Web-Based, Face-to-Face, or hybrid
8. Scenario Construction analysis tools: Qualitative, Planning Support Systems, or Computer Modelling
9. Resources: statutory or recurring, opportunity-based, fundraised

This systematic approach helps planners address complex planning situations, improve traditional urban planning techniques, and integrate scenario planning into broader planning processes successfully (p. 11). By using the typology, planners can create transparent, participatory, and effective scenario-planning processes, integrating technical and participatory planning approaches systematically for future-oriented urban planning (p. 11).

By using the developed typology with nine major components and subcomponents, planners can create transparent, participatory, and effective scenario-planning processes for future-oriented urban planning (p. 11). Planners should carefully analyse the trade-offs between these components to make informed decisions, highlighting the connection between project scope and involved parties (p. 11).

Cross-reference analysis

The cross-reference analysis is seen on table 4. From this analysis a weighted assessment framework can be set up.

Strategy improvement assessment

The strategy improvement assessment is based on the above stated cross-reference. This weighted assessment framework is used in the P4/P5 phase when the main question is answered and a strategy proposal is drawn up. This is done based on the data collected in phases P3 and P4. The minimum score the strategy improvement should have is 80%. This score is acquired from the interviews that will be taken.

Table 4: Cross-reference table crucial components against Chakraborty & McMillan (2015) nine key components

Crucial components		Chakraborty & McMillan (2015) nine key components (p. 11)								
		Organizational structure: Unitary, strong leader, or loose coalition	Scope: single issue, comprehensive, or problem-oriented	Scenario type: Normative, predictive, or explorative	Outcome: awareness, vision, or policy recommendation	Stakeholder Engagement: General public, government agencies, or interest groups	Participation extent: Inform only, seeking feedback, or joint fact finding	Engagement medium: Web-Based, Face-to-Face, or hybrid	Scenario Construction analysis tools: Qualitative, Planning Support Systems, or Computer Modelling	Resources: statutory or recurring, opportunity-based, fundraised
1	Companies need a clear definition of scenarios within urban planning to align internal understanding	x	x	x	-	x	-	-	-	-
2	Scenarios are part of the strategic urban planning process and several tools can be used to set up scenarios.	x	x	x	x	-	-	x	x	x
3	Use of scenario narratives help depict how variables interact and offer insight into potential system evolutions.	x	x	x	x	x	-	x	x	x
4	The scenarios implemented can differ depending on the government scale (village/borough and regional/metropolitan) they are implemented	x	x	x	x	x	-	-	x	x
5	Practical implications for urban planning, includes the translation of complex analytical results into accessible narratives for informed decision-making	x	x	x	x	x	x	x	x	-
6	Frequent assessments of the evolving dynamics of the urban environment, including demographic, economic, environmental, and social changes, help urban planners to recognize emerging challenges and opportunities	x	x	x	x	x	x	x	x	x

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Appendix I: Case study municipality of Rotterdam |

Strategic urban development plan

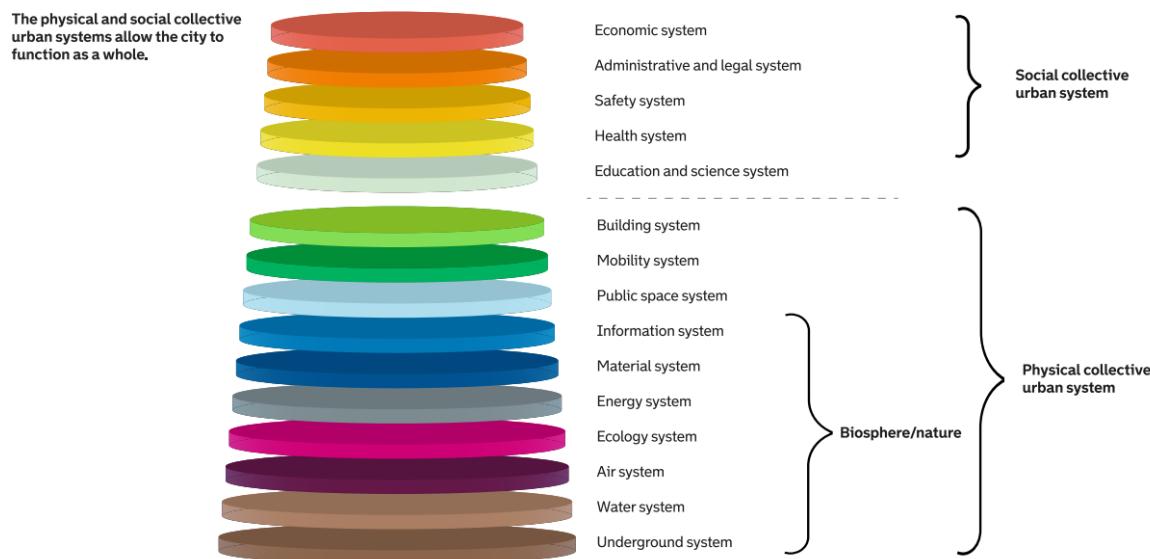
This case study method uses the municipality of Rotterdam as its objective. This case study will form the basis for answering the sub-questions and eventually the main question. This chapter forms the context in which the basis of the research.

The city of Rotterdam has set its course, becoming a resilient city. In their strategy analysis for the period 2022 – 2027 the municipality has identified six challenges they want to overcome. As also stated in the problem statement of this research proposal, the six challenges are: the climate crisis, natural resources and pollution crisis, the health crisis, biodiversity crisis, cyber crisis, in equality crisis and other disruptions (The Municipality of Rotterdam, 2022, p. 15). To become a city that is resilient in these challenges, the city has identified four characteristics for resilience, which are:

1. Resistibility: preventing the impact of a crisis (preventive);
2. Recoverability: the ability to recover if a 'shock' does occur;
3. Learning ability: the ability to learn for a crisis
4. Adaptability: the ability to adapt and come out stronger

(The Municipality of Rotterdam, 2022, p. 22).

To become a more resilient, the city has integrated these characteristics into each challenge. This forms the outline of the strategy. Also, each resilient challenge touches upon different layers of the city. These layers are part of the social collective urban system or the physical collective urban system, and include the following layers:



- The physical systems will only function when the social systems function properly
- The social systems can only function if the physical systems function properly
- All systems must function within the boundaries within which humanity must navigate in order to continue to make sustainable use of our planet's resources (the planetary boundaries).
- Some systems have to go through a fundamental change process (transition) to ensure that the whole of all systems remains within the planetary boundaries and is resilient.

Figure 5: The physical and social collective urban systems regarding the city of Rotterdam (The Municipality of Rotterdam, 2022, p. 27)

This research proposal will deal with a politically sensitive urban renewal project that will fall into one (or more) of the above stated layers, specifically the physical collective urban system layers. A specific project still needs to be chosen, but it will likely be within the pilot projects the municipality is planning to set-up as part of the resilient Rotterdam strategy.

Organisational structure department of city development

The municipal department that is in charge of the developments within the urban environment is the department of city development (or in Dutch: "Stadsontwikkeling"). The organizational chart, as seen on figure 6, displays the division of the department. The strategy division is the supporting division for the department director. This research proposal will mainly focus on the strategy division and the role of the department director.

Organogram Stadsontwikkeling

September 2023

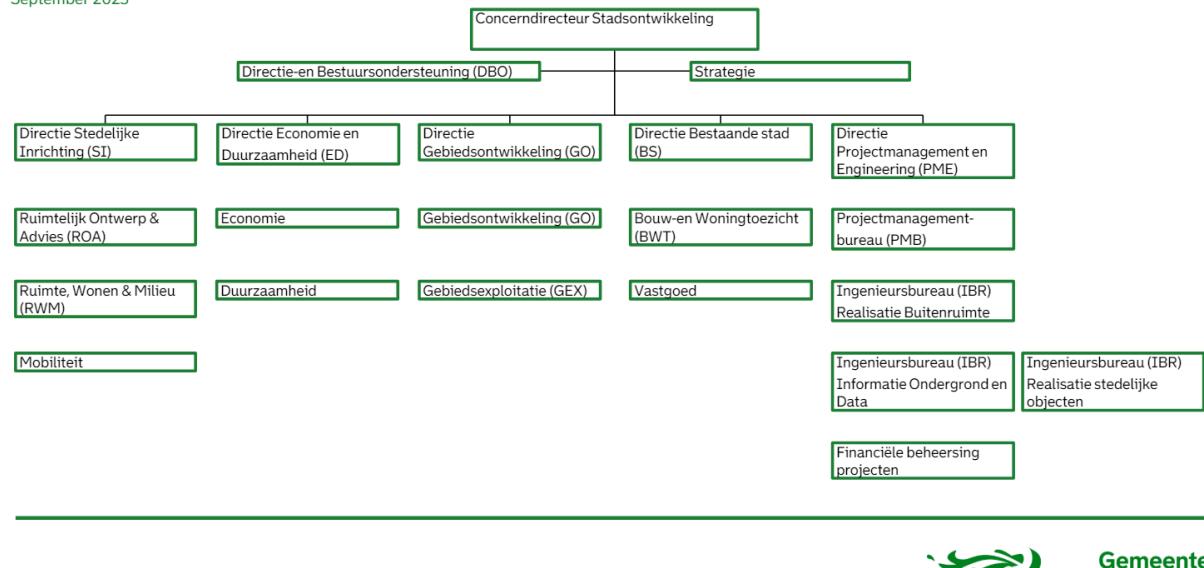


Figure 6: Municipal department organisational chart (Municipality of Rotterdam, n.d.)

Appendix II: Interview protocol |

The first part of the interview protocol is the interview strategy, followed by the second part of the interview questions. The interview questions are set up based on Chakraborty & McMillan's (2015) above stated framework.

Part 1: interview strategy

The interview strategy is set up to have an effective interview and to ensure that valuable information is retrieved. Specifically, to get insight on how scenarios fit in the current strategic urban development process. This interview strategy is set up in 3 steps: 1. Interview objective, 2. Target participants, and 3. Interview protocol & format.

Step 1: interview objective

The interview objective is to gain in-depth insights into the utilization of scenario planning within the strategic urban process. Specifically, the objective is to understand how urban planners incorporate scenario planning into broader planning processes effectively, as outlined by the typology developed by Chakraborty & McMillan (2015).

Topics: organizational structures, scope, scenario types, outcomes, stakeholder engagement, participation extent, engagement mediums, scenario construction analysis tools, and resources involved in scenario planning initiatives.

Step 2: target participants

The target participants for the interviews would ideally be urban (strategic) planners or professionals directly involved in the municipal urban planning process in Rotterdam. Also, individuals who have experience or expertise in utilizing scenario planning within the strategic urban process. This could be:

1. Urban planners working in government agencies or consulting firms
2. Professionals involved in urban development projects with a focus on long-term planning
3. Researchers or academics specialising in urban planning or related fields
4. Stakeholders engaged in urban planning processes, such as representatives from community organizations, advocacy groups, or government bodies.

The size of the city or the size of the strategic program falls outside the scope of limitations.

Step 3: Interview protocol & format

The following interview protocol structures the topics, questions, prompts and format that will be used during the interview.

1. Introduction
 - Welcome and introduction to the purpose of the interview.
 - Brief overview of the interview process and confidentiality assurance.
 - Confirmation of consent for recording.
2. Organizational structures
 - Discussion on the organizational structure of urban planning processes.
 - Key decision-making processes within the organization or team.
 - Influence of organizational structure on scenario planning initiatives.
3. Scope
 - Understanding the typical scope of urban planning efforts.
 - Focus areas: single issues, comprehensive planning, or problem-oriented approaches.
 - Impact of scope on scenario planning strategies

4. Scenario Types
 - Overview of the types of scenarios used in planning processes.
 - Classification: normative, predictive, explorative, or hybrid.
 - Factors influencing scenario type selection.
5. Outcomes
 - Intended outcomes of scenario planning efforts.
 - Goals: raising awareness, vision development, policy recommendations.
 - Alignment of outcomes with planning process and decision-making.
6. Stakeholder Engagement
 - Identification of primary stakeholders involved in planning activities.
 - Strategies for stakeholder engagement throughout the planning process.
 - Methods to ensure effective stakeholder involvement.
7. Participation Extend
 - Level of stakeholder participation in planning processes.
 - Modes of participation: informed only, feedback provision, joint fact-finding.
 - Influence of participation extent on scenario planning outcomes.
8. Engagement mediums
 - Mediums utilized for stakeholder engagement.
 - Preference: web-based, face-to-face, hybrid.
 - Advantages and challenges associated with each engagement medium.
9. Scenario Construction Analysis tools
 - Tools and methodologies used for scenario construction and analysis.
 - Utilization of qualitative methods, planning support systems, or computer modelling.
 - Contribution of tools to scenario planning effectiveness.
10. Resources
 - Available resources for scenario planning initiatives.
 - Resource types: statutory or recurring, opportunity-based, fundraised.
 - Impact of resource allocation on scenario planning success.
11. Conclusion
 - Allow interviewees to share any additional insights or thoughts.
 - Thank them for their participation and conclude the interview.

Format:

- Semi-structured interview format to allow for flexibility within each section.
- Open-ended questions to encourage detailed responses and exploration.
- Probing for deeper insights or clarification on specific areas of discussion.
- Conducted in person or via video conferencing with audio recording for reference.
- Estimated duration: 60-90 minutes.

Part 2: interview questions

Introduction

Welcome to our interview exploring the integration of scenario planning in urban development. We aim to gain insights into how urban planners navigate strategic processes. Your valuable perspectives will inform our understanding of scenario planning's role in shaping future-oriented urban environments. Before we begin, I want to ensure that you understand the purpose of this interview and your role in our study. Your participation is entirely voluntary, and you have the right to withdraw at any time.

We will be recording this interview to ensure accuracy, and the recordings will be transcribed verbatim. Once completed, the data will be systematically analysed to extract valuable insights. Thank you for your participation and cooperation!

Organizational structures

1. Can you describe the organizational structure of your strategic urban development process, particularly in terms of how decisions are made and entities involved?
2. How is scenario planning involved in this process?
3. How would you characterize the relationships among the involved agencies or organizations in terms of hierarchy and how does this effect the decision-making dynamics?

Scope

4. Could you describe the scope of your project within the scenario planning process? Specifically, does it focus on a single issue, such as transportation or land use, or does it encompass a broader range of planning domains?
5. Within your scenario planning initiatives, how do you determine whether the scope is classified as single-issue, comprehensive, or problem-oriented? Can you provide examples of projects that align with each scope classification?

Scenario Types

6. Could you describe the scope of your project within the scenario planning process? Specifically, does it focus on a single issue, such as transportation or land use, or does it encompass a broader range of planning domains?
7. Within your scenario planning initiatives, how do you determine whether the scope is classified as single-issue, comprehensive, or problem-oriented? Can you provide examples of projects that align with each scope classification?

Outcomes

8. Within your scenario planning endeavors, how do you define and categorize the outcomes based on the classifications of awareness, vision, and policy recommendation?
9. Can you provide examples of scenario planning initiatives where the outcomes align with each classification—awareness, vision, and policy recommendation? How do these outcomes manifest in the planning process?

Stakeholder Engagement

10. How do you categorize stakeholder engagement within your scenario planning initiatives, distinguishing between engagement with the general public, government agencies, and interest groups?
11. Can you provide examples of stakeholder engagement activities that fall into each classification—general public, government agencies, and interest groups? How do these engagements contribute to the scenario planning process?

Participation Extend

12. How do you categorize stakeholder engagement within your scenario planning initiatives, distinguishing between engagement with the general public, government agencies, and interest groups?
13. Can you provide examples of stakeholder engagement activities that fall into each classification—general public, government agencies, and interest groups? How do these engagements contribute to the scenario planning process?
14. How does the classification of stakeholder engagement—general public, government agencies, and interest groups—affect the dynamics and outcomes of the scenario planning process,

particularly in terms of data collection, policy coordination, and representation of diverse interests?

Engagement mediums

15. How do you categorize stakeholder engagement within your scenario planning initiatives, distinguishing between engagement with the general public, government agencies, and interest groups?

Scenario Construction Analysis tools

16. How do you categorize stakeholder engagement within your scenario planning initiatives, distinguishing between engagement with the general public, government agencies, and interest groups?
17. Can you provide examples of stakeholder engagement activities that fall into each classification—general public, government agencies, and interest groups? How do these engagements contribute to the scenario planning process?

Resources

18. How do you categorize the resources involved in your scenario planning initiatives, distinguishing between statutory or recurring, opportunity-based, and fundraised resources?
19. Can you provide examples of scenario planning projects that rely on each type of resource—statutory or recurring, opportunity-based, and fundraised? How do these resources impact the sustainability and scope of the planning activities?

Conclusion

I want to express my appreciation to (each of) you for your insightful contributions to our discussion on scenario planning in urban development. Before we wrap up, I encourage you to share any additional thoughts or insights you may have.

Thank you for your time and valuable input. Your participation has been invaluable to our research efforts. Should you have any further questions or wish to continue the conversation, please don't hesitate to reach out. Thank you again, and have a fantastic day.