

Participatory Scenario Planning in Complex Multi-Stakeholder Contexts: The Feijenoord Case

Abstract

This study examines how Participatory Scenario Planning (PSP) can enable co-creation of long-term visions in contested multi-stakeholder contexts. Using Feijenoord, a diverse Rotterdam neighborhood, as a case, we prototyped a three-step PSP approach, (I) Vision Building, (II) Stress Test, and (III) Placemaking Mapping, across six facilitated sessions with residents, entrepreneurs, municipal actors, educators, and housing corporations. Results highlight the importance of structured facilitation, iterative reflection, and tool sequencing for reconciling divergent perspectives, surfacing assumptions, and translating visions into concrete actions. The study demonstrates PSP's potential to foster inclusive, actionable strategies in urban, organizational, and other complex multi-stakeholder contexts, emphasizing that meaningful facilitation, temporal investment, and sustained incentives are essential to ensure equitable participation and durable outcomes.

Keywords: *participatory foresight, visitor economy, inclusive innovation, urban governance, strategic visioning*

Track: *ethically driven innovation*

Focus of Paper: *theoretical/academic*

Introduction

The visitor economy, encompassing activities to attract, receive, and serve visitors, plays a key role in urban development (CELTH, 2024). Cities such as Rotterdam have embraced it as an opportunity for income generation, job creation and neighborhood revitalization (Rotterdam Partners, n.d.). Yet, this strategy also creates challenges including social tension, higher housing costs, and environmental degradation (CELTH, 2024). Rapidly transforming districts often face this paradox: redevelopment attracts investment but can deepen exclusion and spatial inequality.

Feijenoord, a historically working-class and culturally diverse neighborhood in Rotterdam, illustrates this tension. Despite assets such as its waterfront, architectural heritage, and strong community networks, the area experiences socioeconomic marginalization and limited access to urban development benefits. To address this, the Municipality of Rotterdam promotes sustainable visitor economies in underserved neighborhoods. The premise is that visitor economies built around local culture, creativity and entrepreneurship can stimulate economic activity while strengthening cohesion and identity (Koens &

Postma, 2018). However, in contexts like Feijenoord where trust between residents and institutions is fragile and stakeholder interests diverge, traditional top-down planning approaches are insufficient.

This paper presents a Participatory Scenario Planning (PSP) approach that convenes diverse stakeholder groups, residents, entrepreneurs, policy makers, to co-design shared futures for the neighborhood. PSP is used not just as a planning tool but as an inclusive innovation framework for navigating complex, multi-stakeholder contexts (Oteros-Rozas et al., 2015; Poskitt et al., 2018, 2021; Andersen et al., 2021). The research question is: Which PSP approach supports the co-creation of shared, long-term visions among diverse stakeholder groups in multi-stakeholder contexts, such as a potentially sustainable visitor economy development? The aim is to prototype and test a PSP-based method that supports vision-building in multi-stakeholder contexts, using Feijenoord as a case study.

The paper begins with a literature review, followed by context, methodological design, and implementation of the PSP prototype. We then present empirical findings from six participatory sessions, analyze outcomes and tensions, and conclude with design principles for future application of PSP in multi-stakeholder contexts.

Literature Review

PSP is a foresight methodology that enables stakeholders with conflicting perspectives to explore multiple futures and align strategic actions (Oteros-Rozas et al., 2015). In urban governance, PSP has gained attention for supporting collaborative visioning and policy co-creation in complex social-ecological systems (Poskitt et al., 2021). Yet, persistent challenges remain: Superficial inclusion, where marginalized groups are invited but lack real influence (Krupa et al., 2017); assumptions of group homogeneity despite internal diversity (Cornelisse, 2020); and suppression of dissent due to premature consensus-seeking (Wack, 1985; Poskitt, 2018). Moreover, PSP processes often lack long-term embedding and follow-up, limiting strategic impact (Andersen et al., 2021). These critiques underscore the need for careful PSP design, especially in contexts of entrenched power asymmetries and low trust. PSP offers a modular toolkit of foresight methods to support inclusive dialogue and strategic alignment.

Visioning elicits normative aspirations and shared values across stakeholder groups (Ackermann & Eden, 2011). Scenario workshops guide participants in co-creating narratives of the future, fostering mutual understanding and surfacing divergent perspectives (Van Notten et al., 2003). Other tools unpack assumptions: Causal Layered Analysis exposes dominant views and belief systems, valuable in culturally diverse urban settings (Inayatullah, 2004), while Backcasting works backwards from a preferred future to identify steps toward its realization (Robinson, 2003). Methods such as Trend Impact Analysis and Futures Wheels help anticipate ripple effects of interventions and emerging trends. Strategic Roadmapping aligns actors around actionable, time-based pathways (Popper, 2008). In urban contexts,

Placemaking Mapping anchors abstract futures in concrete local geographies (Courage et al., 2020). This diversity illustrates PSP's flexibility and the importance of context-driven selection. In response to these critiques, scholars advocate for modular, adaptive PSP designs that are place-sensitive and ethically grounded (Poskitt et al., 2021; Andersen et al., 2021). Particularly in fragmented urban areas with institutional distrust, approaches must (I) respect multiple knowledge systems (lived and institutional), (II) foster inclusive, trust-based engagement, and (III) generate insights that are both visionary and actionable.

This study builds on this literature by developing a PSP prototype that combines three tools: Vision Building, Stress Test, and Placemaking Mapping. The rationale for this selection is elaborated in the Methodology.

Methodology

Case Feijenoord

Feijenoord, a culturally diverse but socioeconomically disadvantaged district, experiences rising exclusion as new residents arrive through redevelopment. The city aims to redistribute tourism benefits by promoting visitor economies in underserved areas. A sustainable visitor economy generates income while fostering social and cultural development (Koens & Postma, 2018). Feijenoord's culture, history, architecture, and riverside location provide unique potential, supported by multicultural entrepreneurial energy. However, top-down strategies risk reinforcing power asymmetries if communities are not actively involved.

Research Design

This study piloted a PSP approach designed to explore the potential for developing a sustainable visitor economy that is socially equitable, locally supported, and future-oriented. It focused on designing and testing a PSP prototype for Feijenoord. The prototype emerged through iterative conceptual work and field engagement, combining insights from PSP literature, toolkits from international organizations (SmartCulTour, n.d.; UN Global Pulse, n.d.), and practitioner experience in community-based tourism (Cornelisse, 2020) and foresight (Cornelisse & Van Klink, 2024). Over 30 foresight tools were reviewed and adapted into a context-specific prototype. Researchers assessed the ethical suitability of each tool, considering participatory depth and cultural sensitivity.

Six facilitated sessions (April–September 2025) involved five stakeholder groups: residents (n=5), entrepreneurs (n=9), municipal actors (n=6), education (n=5), and housing corporations (n=2), totaling 27 participants. Sessions aimed to elicit visions, identify tensions, and co-develop leverage points for a potentially sustainable visitor economy.

Tool Selection

The approach integrates three foresight tools, chosen for their complementarity in normative, exploratory, and spatial dimensions:

- I. **Vision Building** (Ackermann & Eden, 2011): to articulate aspirations, challenges, and shared values within and across groups. Stakeholders express long-term hopes and concerns through posters, mapping, and plenary discussion. This surfaced overlapping ambitions and frustrations regarding tourism and development.
- II. **Stress Test** (Mendonça et al., 2004): to stimulate creative thinking through “what if” scenarios that challenge present assumptions and highlight emerging uncertainties. Stakeholders engage with speculative futures, such as radical tourism growth, expanding the perceived possibility space.
- III. **Placemaking Mapping** (Courage et al., 2020): to spatially ground visions by linking them to local geographies and material realities. Participants mark meaningful places and imagined tourism infrastructure embedded in local values.

This combination balances normative, exploratory, and spatial dimensions in a way that resonated with both institutional and community stakeholders. The prototype was finalized before the first workshop and

refined based on lessons learned. After each session, participants reflected on the approach per session, their feedback informed subsequent adjustments.

Data Collection and Analysis

Data were collected via audio recordings, facilitator notes, and visual outputs (maps, post-its, flipcharts). Seven structured sessions were held, including one methodological pre-test. Five sessions for Vision Building in total, and one for Stress Test and Placemaking Mapping. Outputs were thematically coded in Atlas.ti, focusing on tool performance on how each method facilitated (or failed to facilitate) inclusive engagement, reflection, and co-creation.

Findings

Step 1: Vision Building

The Vision Building tool highlighted differences in how stakeholder groups engaged with the process. All groups contributed constructively, but the level of facilitation required varied.

- **Clarity and accessibility:** Residents initially struggled to understand the purpose of the exercises. Once clarified, participation improved, demonstrating the tool's accessibility. Entrepreneurs quickly understood the task and articulated ambitions independently, though they needed facilitation to prioritize and align ideas. Municipal actors engaged readily, but their inputs reflected internal divergence, with some focusing on policy implementation and others on systemic change or resident-led development. This indicates the plurality of perspectives even within institutional actors.
- **Facilitation and inclusive engagement:** Structured facilitation was crucial in fostering dialogue and reflection. Residents engaged openly, but diverged from the stepwise format, which complicated the co-creation of a unified vision. Entrepreneurs drew on operational experience to frame priorities efficiently. Municipal actors required task division and occasional prompts to contribute strategically. The iterative presentation of thematic overlaps and divergences helped all groups reflect on others' perspectives, supporting mutual understanding and convergence around shared priorities, such as youth engagement, cultural identity, and participatory infrastructure.
- **Tool performance:** Vision Building effectively elicited aspirations, surfaced latent tensions, and encouraged reflection across groups. Its success depended heavily on clear framing, facilitator guidance, and iterative synthesis of inputs.

Step 2: Stress Test

The Stress Test aimed to stimulate creative thinking by introducing speculative “what if” scenarios, via wild cards such as “Feyenoord suddenly turns into an international hotspot” and “waterfront hospitality faces licensing crisis”, challenging assumptions and broadening the perceived possibility space.

- **Clarity and accessibility:** Participants initially approached scenarios through their established frames. They frequently referred to the waterfront as a key area for visitor engagement and discussed underutilized industrial spaces as potential sites for creative initiatives. What stood out was that all the groups ended up feeling disappointed. They had come up with a solid idea about the waterfront for instance, but then something happened that threw it into doubt. It turned out to be quite difficult to turn that disappointment into constructive or mitigating action. Particularly municipal actors, struggled to engage in future-oriented thinking, often commenting that scenarios were unrealistic or unlikely to occur. Not all participants were able to stretch their imagination beyond immediate concerns, highlighting the importance of careful facilitation.
- **Facilitation and inclusive engagement:** The tool was most effective when facilitators guided discussions and encouraged iterative exploration. Residents' contributions increased when supported by examples from more experienced stakeholders, such as entrepreneurs imagining youth-driven events or pop-up gastronomy.
- **Tool performance:** The Stress Test successfully expanded the imagined solution space, encouraged divergence in thinking, and surfaced unexamined assumptions. Its effectiveness depended on facilitator prompts, scenario plausibility, and integration with other tools to translate insights into actionable reflections.

Step 3: Placemaking Mapping

Placemaking Mapping aimed to anchor abstract visions in concrete geographies and local realities.

- **Clarity and accessibility:** Entrepreneurs gravitated toward commercially attractive sites, such as the waterfront and underutilized industrial spaces, while municipal actors emphasized public spaces and broader urban connections. Residents initially focused on familiar neighborhood areas and potential visitor disturbances. The tool facilitated visualization of these differing perspectives and enabled participants to negotiate meaning collectively.
- **Facilitation and inclusive engagement:** The mapping exercise resulted in concrete action ideas, with entrepreneurs leading initiatives. The municipality remained more hesitant and did not move toward concrete implementation, highlighting a difference in inclusiveness and engagement.
- **Tool performance:** Placemaking Mapping successfully linked visions to place, grounded discussions in local contexts, and supported negotiation across diverging perspectives. Its effectiveness relied on clear instructions, facilitation, and iterative discussion linking abstract and spatial insights.

Overall Reflections on the PSP Prototype

Across the three tools, participants emphasized that a clear explanation of purpose, combined with structured and facilitated sessions, was essential for meaningful engagement. The prototype balanced normative, exploratory, and spatial dimensions, enabling stakeholders to express values, challenge assumptions, and anchor ideas in tangible realities. Its success depended on careful facilitation to ensure clarity, equal participation, and iterative synthesis, particularly for residents with limited prior experience in participatory foresight. By providing multiple entry points for engagement, the PSP prototype fostered inclusive participation, while the sequencing of Vision Building, Stress Test, and Placemaking Mapping effectively guided stakeholders from articulating values to exploring possibilities and grounding visions in concrete actions. Overall, these findings highlight five key takeaways: (1) Meaningful facilitation is

critical to manage power asymmetries and ensure equitable input; (2) carefully sequenced, complementary tools enhance reflection, negotiation, and actionable outcomes; and (3) place-sensitive PSP enables abstract visions to translate into contextually grounded strategies that can inform sustainable, inclusive development in complex multi-stakeholder settings; (4) such processes require considerable temporal investment; and consequently, (5) benefit from explicit incentive structures to sustain engagement, for example, through the allocation of an upfront investment budget to support the implementation of emergent ideas.

Outcome of the Feijenoord Case

The Feijenoord case demonstrates how PSP can contribute to shaping a sustainable visitor economy that strengthens, rather than displaces, local life. During the Vision Building phase, stakeholders collaboratively articulated a shared vision for the neighborhood's future. In this envisioned future, "Feijenoord is an attractive and authentic district where living, working, and visiting coexist in balance." The visitor economy directly supports the socio-economic ecosystem. Visitors contribute to local entrepreneurship, stimulate economic vitality, and enhance the neighborhood's vibrancy. Public spaces are designed as places of encounter, with greenery providing safety, comfort, and a sense of belonging. Along the waterfront, attractive and accessible areas invite both residents and visitors to stay, while car-reduced walking routes connect key locations and ensure that everyday amenities and flexible workspaces remain within easy reach.

Remaining true to Feijenoord's character emerged as a guiding principle. The case emphasizes that future developments should reinforce the district's authentic identity. The visitor economy is conceived as additive, it contributes to quality of life and local enterprise, never at their expense. "Local first" serves as a central commitment, encouraging visitors to engage with neighborhood entrepreneurs, makers, and cultural actors, thereby circulating economic and social value within the community. Design principles such as "space for encounter and greening," "accessibility and connectivity," and "pride and ownership" further articulate this vision.

Building on this shared vision, the district could now exploring concrete pathways to operationalize their vision on a sustainable visitor economy. The municipality, together with residents, aims to develop a "museum of the future" that connects heritage, innovation, and community engagement. Local festivals may be integrated into the broader cultural offer of Rotterdam, strengthening both neighborhood identity and city-wide appeal. Simultaneously, entrepreneurs and developers are collaborating to identify investment opportunities that ultimately benefit residents through improved infrastructure, enhanced amenities, and increased local employment.

Discussion and Conclusion

This study set out to examine the question: Which PSP approach supports the co-creation of shared, long-term visions among diverse stakeholder groups in multi-stakeholder contexts, such as the development of sustainable visitor economies? By prototyping and testing a PSP-based method in Feijenoord, we explored both the potential and limitations of PSP in contexts characterized by institutional complexity, fragile trust, and contested urban futures.

The three-step PSP prototype (I) Vision Building, (II) Stress Test, and (III) Placemaking Mapping, proved effective in supporting a structured yet flexible process of collective sense-making.

- I. Vision Building elicited initial aspirations and values while highlighting divergences in framing and capacity across stakeholder groups. Entrepreneurs articulated ambitions clearly and independently, whereas municipal actors emphasized systemic, procedural, and citywide

considerations. Residents initially contributed limited creative input, reflecting a narrower focus on familiar neighborhood routines. Structured facilitation, clear explanation of purpose, and iterative synthesis were crucial in translating individual contributions into shared reflections.

- II. Stress Test effectively disrupted conventional thinking by introducing speculative “what if” scenarios. While some participants, particularly municipal actors, struggled to engage in future-oriented thinking and questioned the realism of scenarios, the exercise broadened the perceived possibility space and encouraged critical reflection. Residents’ engagement increased when supported by facilitators and examples from entrepreneurs, demonstrating the importance of guided interaction. The tool surfaced latent assumptions, fostered creative divergence, and encouraged exploration of alternative pathways, although its success was contingent on facilitation and scenario plausibility.
- III. Placemaking Mapping translated abstract visions into tangible geographies. Entrepreneurs actively developed concrete action ideas, while municipal actors remained more hesitant, highlighting differences in engagement and implementation capacity. Residents gradually engaged with broader urban opportunities, linking everyday experiences to collective visions. The exercise resulted in actionable proposals grounded in the local context, with entrepreneurs leading initiatives and municipal actors mainly observing. Sustained support for entrepreneurial initiatives was identified as essential to translate ideas into practice.

Contributions

This study demonstrates that, when carefully adapted, PSP provides a promising framework for inclusive innovation in contested multi-stakeholder contexts, where participants hold conflicting perspectives or interests, as illustrated in the Feijenoord case. The prototype shows that PSP can be both reflective and actionable, offering a pathway to co-created solutions in complex settings, whether urban neighborhoods, industrial sites, natural areas, or interdepartmental organizational contexts. This study highlights five key contributions: First, it underscores the importance of meaningful facilitation to address asymmetries in knowledge, capacity, and institutional power, thereby fostering equitable participation; second, it demonstrates that carefully sequenced and complementary PSP tools can structure a balanced process of reflection, negotiation, and convergence towards actionable outcomes; third, it shows that place-sensitive PSP approaches enable the translation of abstract foresight and collective visions into contextually grounded strategies that inform sustainable and inclusive development within complex multi-stakeholder settings; fourth, it highlights that such processes entail substantial temporal investment and commitment from participants; and fifth, it emphasizes that sustained engagement can be strengthened through explicit incentive mechanisms, for instance, by allocating an upfront investment budget to facilitate the implementation of emergent ideas.

Limitations and Future Research

Despite these insights, challenges remain in consistently engaging all stakeholders, particularly residents facing social, economic, or historical marginalization. This underscores the need for sustained investment in facilitation, trust-building, and iterative engagement. Moreover, the process revealed that municipal actors tended to be hesitant in proposing or taking responsibility for concrete actions, in contrast to entrepreneurs who actively advanced initiatives. Future research should explore how PSP outputs can be translated into tangible implementation, how to maintain active participation across the lifecycle of initiatives, and how to address institutional barriers that limit municipal actors from assuming ownership and executing interventions.

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