

Webinar Series on the Viable System Model (VSM)

Session 1: Introduction to the Viable System Model



Session 2: Applications of VSM in Public Health

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Complex Systems Group, Cranfield University

25th February 2026, 10:30-12:30



Session Aim

To explore how the Viable System Model can be applied in practice to make sense of complex pressures and identify meaningful ways forward.

Who is it for?

- Researchers, students and practitioners working in complex environments who are interested in applying systems thinking to public health contexts.
- Public health professionals working in complex, multi-stakeholder environments.
- Community partners and practitioners engaged in health-systems improvement.
- Anyone curious about using systems approaches to support critical reflective inquiry.

Recap of VSM.

Discovery Questions

CCG

Urban Regeneration Program
(UK City)

Summary

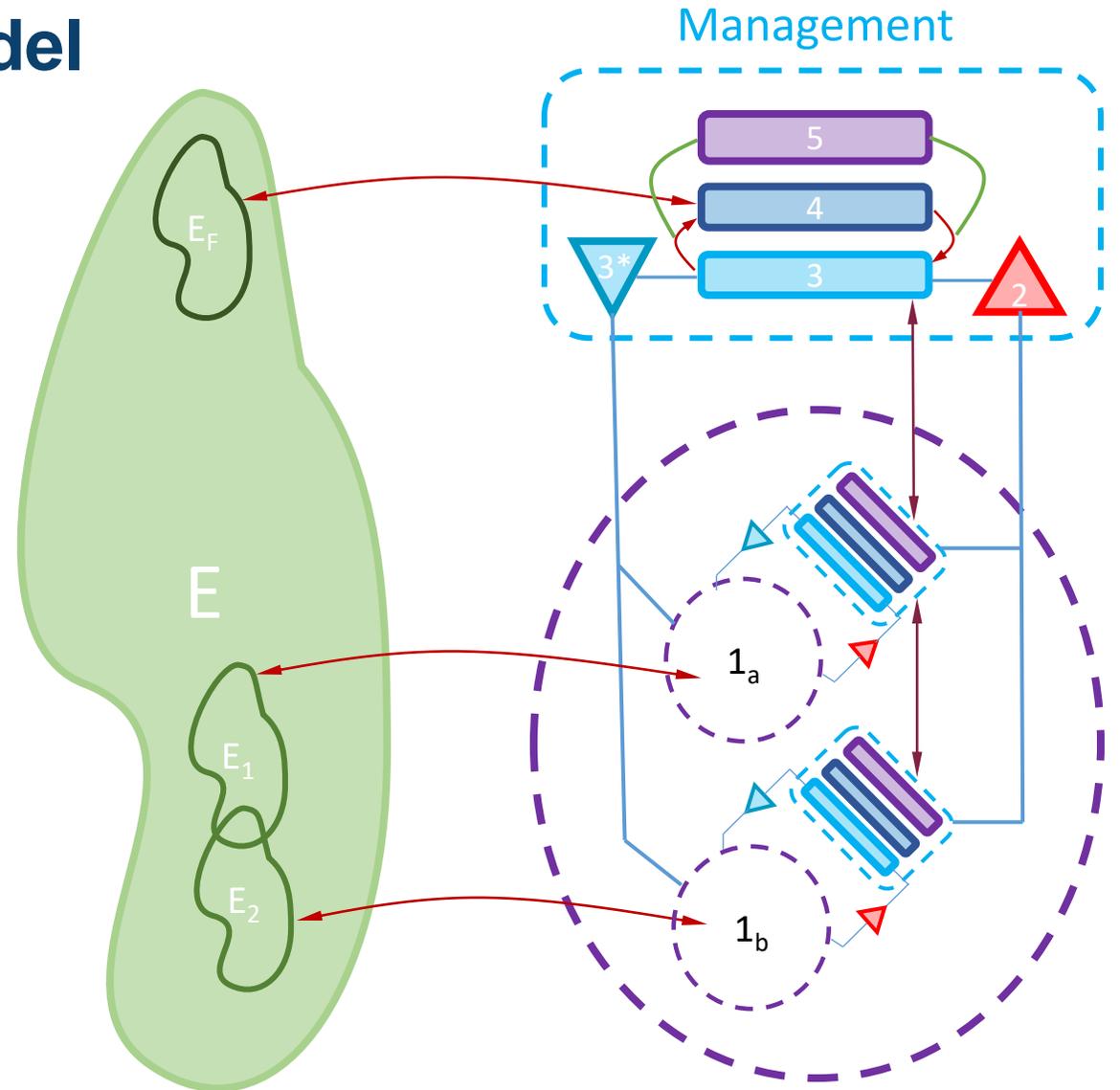


Recap: Complexity and Pressure

- Complex environments generate unavoidable pressures.
- Pressure is structural, not an organisational failure.
- Boundaries and relationships shape how pressure is experienced.

Recap: The Viable Systems Model

- What is the organisation trying to achieve?
 - Identity and Policy (5)
- How are activities coordinated?
 - Coordination (2)
- How are we adapting to our environment?
 - Adaptation (4)
- How is identity and purpose maintained?
 - Identity and Policy (5)



Recap of VSM.

Discovery Questions

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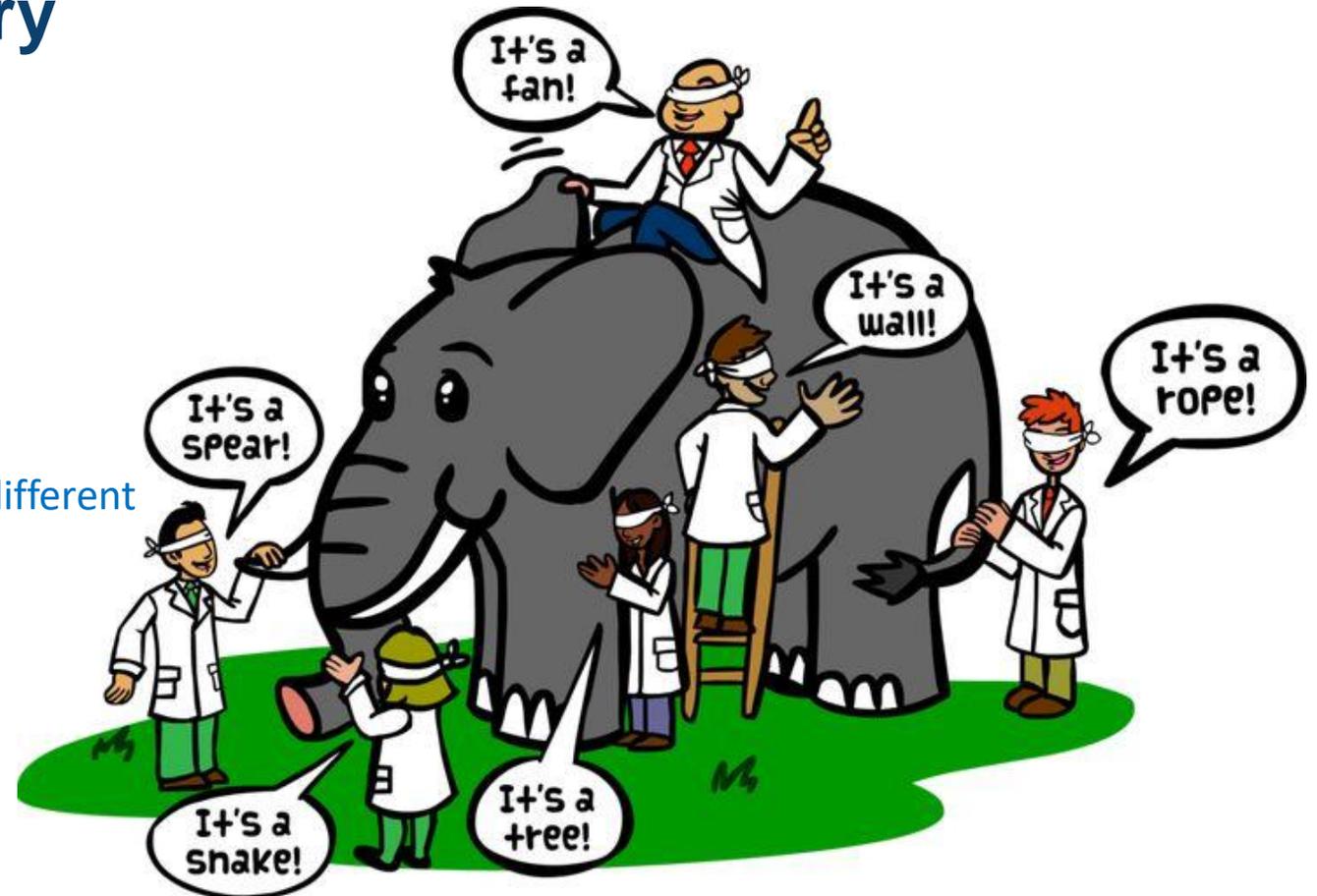
Urban Regeneration Program
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Summary



From Understanding to Inquiry

- Understanding begins with the questions we ask...
- Different positions in a system (organisation) reveal different perspectives.



Structured questions (relating to the VSM) help us move from general principles to specific contexts.

Discovery Questions

What am I taking for granted?

- From where I sit, where does pressure appear strongest?
- What might others see that I cannot see?
- What is this part of the organisation trying to achieve?
- How are activities coordinated?
- How does it adapt to change?
- How do we know what is really happening on the ground?



Recap of VSM.

Discovery Questions

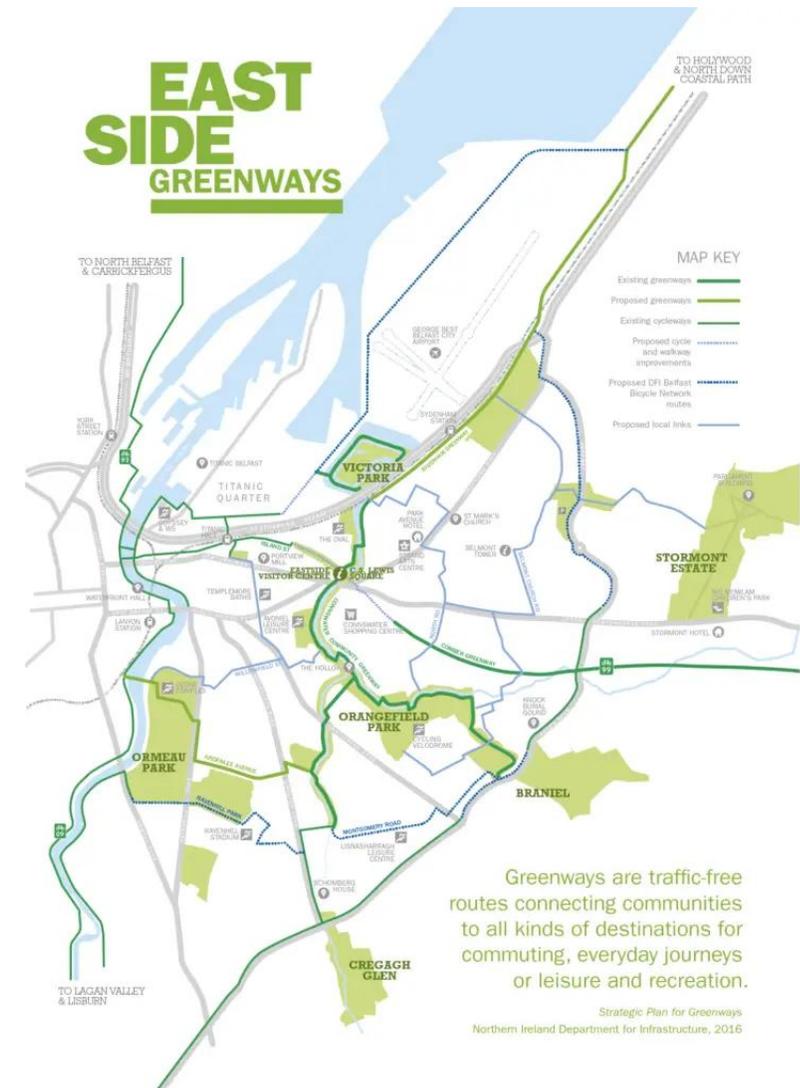
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Urban Regeneration Program
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Summary



Why was the Connswater Community Greenway such a successful project?



Identity and Policy (5)

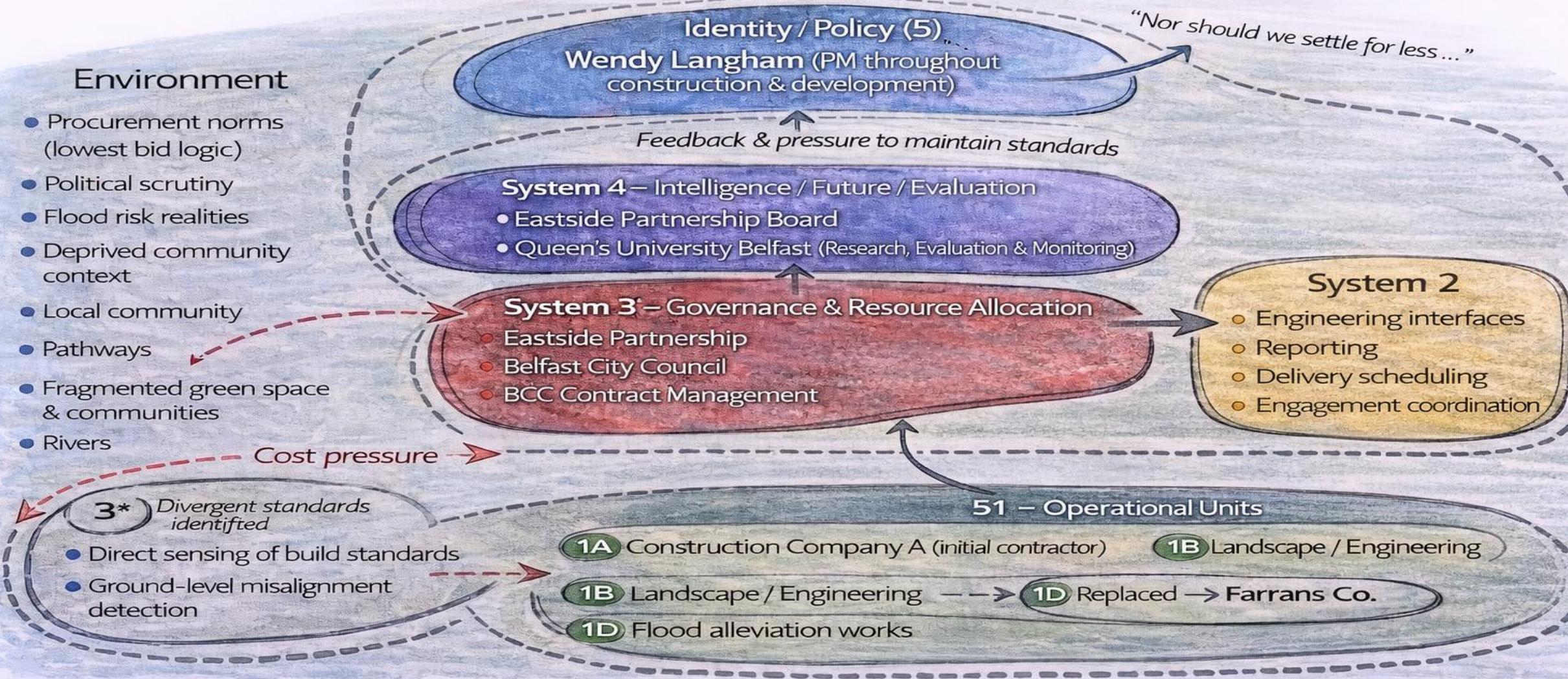
“She wanted something that the local community could
be proud of.”

“That shouldn't define us and nor should we settle for less because we're coming
from that background.”

“It was actually the lowest bid... this divergent view was never
going to work.”

Phase 2 – Construction & Development (2011–2016/7)

Governance under delivery pressure



What did the VSM Reveal

- Pressure entered through procurement logic.
- Misalignment emerged at the operational boundary.
- Assurance (3*) enabled direct sensing of standards.
- System 3 intervened.
- Identity / Policy (5) defined the boundary.

Recap of VSM.

Discovery Questions

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Summary



Urban Regeneration Program: (UK City)

- Multi-site regeneration in an area of long-term deprivation
- Multiple overlapping projects operating in the same geography
- High number of actors (council, developers, heritage bodies, community groups)
- Systems are dispersed and poorly connected
- Programme governance weakened under pressure

Where I Started (Boots on the Ground)

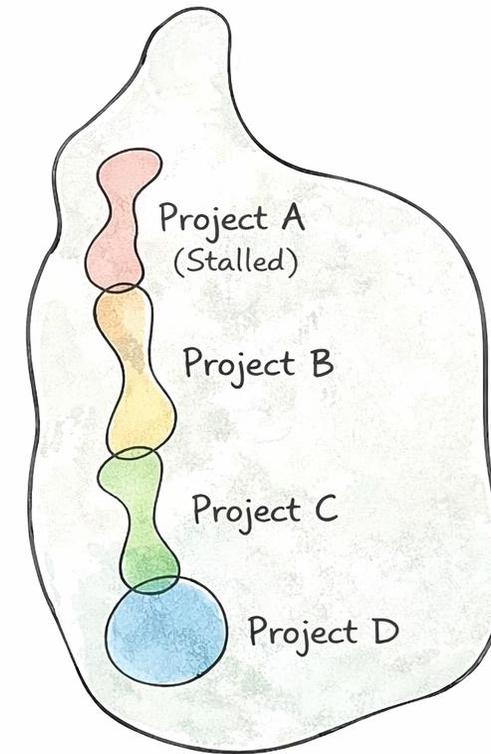


So I,

- Project entirely new to me
- No prior knowledge of the area
- One major component had been stopped
- Public health evaluation originally planned
- Task: use VSM to develop clarity
- Visited the site physically
- Walked the geography
- Spoke with local community group
- Discovered multiple overlapping projects
- Realised the system was larger than had been acknowledged

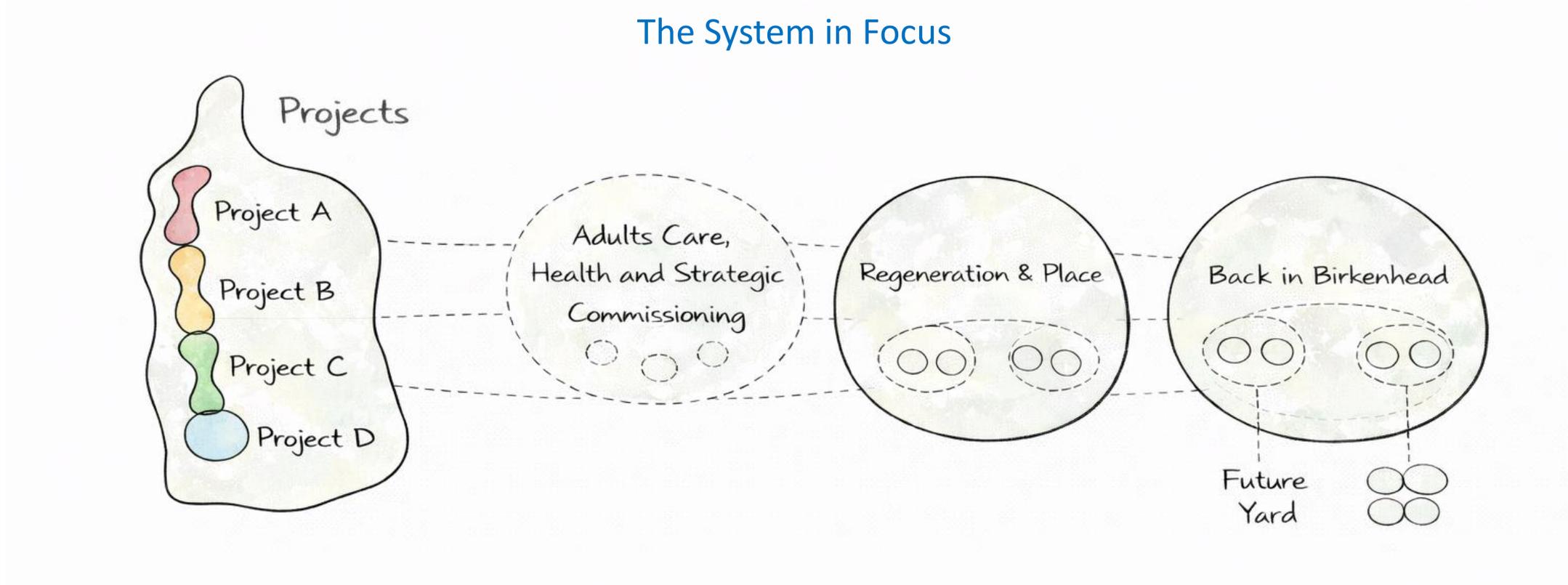
The Environment: what was actually there...

- Project A (stalled infrastructure scheme)
- Project B (parallel transport corridor works)
- Project C (major housing-led urban development)
- Project D (heritage-sensitive city-centre renewal)
- Project E (public realm & connectivity upgrades)



----- Projects physically overlapping but -----
not structurally integrated

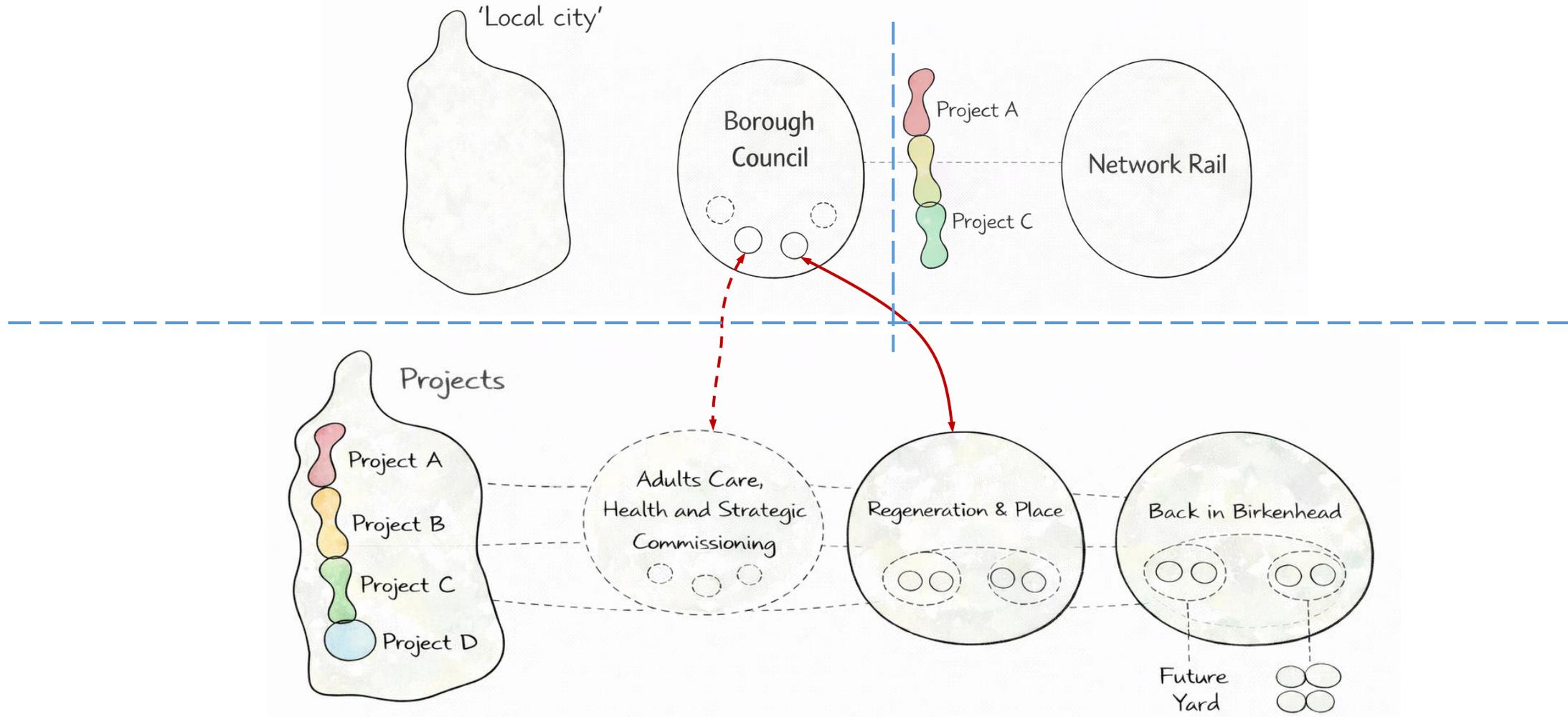
Operationally: what was actually there...



The dotted lines indicate what should have been there but were not...

One Level Up: Regional Context

- Each operating semi-independently
- Sharing physical space but not coordination



When Did the VSM become Necessary?

- Multiple overlapping projects
- Layered governance
- Boundary ambiguity
- No single coherent system in focus

My Questions:

- What is the system we are actually trying to understand?
- Who holds operational control — and where?
- Where does coordination sit?
- Where is strategic direction coming from?
- Who is not currently involved but should be?

Recap of VSM.

Discovery Questions

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Urban Regeneration Program
(UK City)

Summary



Summary

1. Complex environments generate unavoidable pressure
2. Structural capacity determines how pressure manifests internally
3. Identity and purpose shape how people respond under strain
4. Modelling begins with discovery and boundary clarification
5. Operational units, coordination, governance, and adaptation must be surfaced explicitly
6. The VSM provides a disciplined structure for meaningful intervention

Questions?



Evaluation Survey



We would really appreciate a couple of minutes of your time to let us know how you found this session.

Please follow the QR code to access our evaluation survey.

References

- Beer, S. (1985). *Diagnosing the system for organizations*. John Wiley & Sons.
- Csikszentmihalyi, M. (2003). *Good business: Leadership, flow, and the making of meaning*. Viking.
- Espinosa, A., & Walker, J. (2011). *A complexity approach to sustainability: Theory and application*. Imperial College Press.
- Espinosa, A., & Walker, J. (2013). A complexity approach to sustainability—Stafford Beer revisited. *European Journal of Operational Research*, 227(3), 569–580.
- Hoverstadt, P. (2008). *The fractal organisation: Creating sustainable organisations with the viable system model*. John Wiley & Sons.
- Pérez Ríos, J. (2012). *Design and diagnosis for sustainable organizations: The viable system method*. Springer.

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