



Institute for  
Innovation and  
Public Purpose

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# Past, present and future of European innovation agencies

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*'Pathbreaking.'*  
Mariano Mozzucato, author of *The Entrepreneurial State*

# How to Make an Entrepreneurial State

Why  
Innovation  
Needs  
Bureaucracy

Rainer Kattel,  
Wolfgang Drechsler  
and Erkki Karo

Innovation is political.

“Civil servants, I discovered, lack interest in finding innovative solutions to complex challenges. Instead, they’re rewarded for adhering to the correct procedures.”

Kate Bingham, Head of UK’s vaccine task force



# How many public policies work?

In the case of UK government's major programmes, "**80% of the government's biggest tasks** are in a position where **nobody knows** for sure whether the programme will be a success or not."



We cannot judge the effectiveness of individual innovation policies without strong contextualisation



# Why are innovation agencies not innovating?

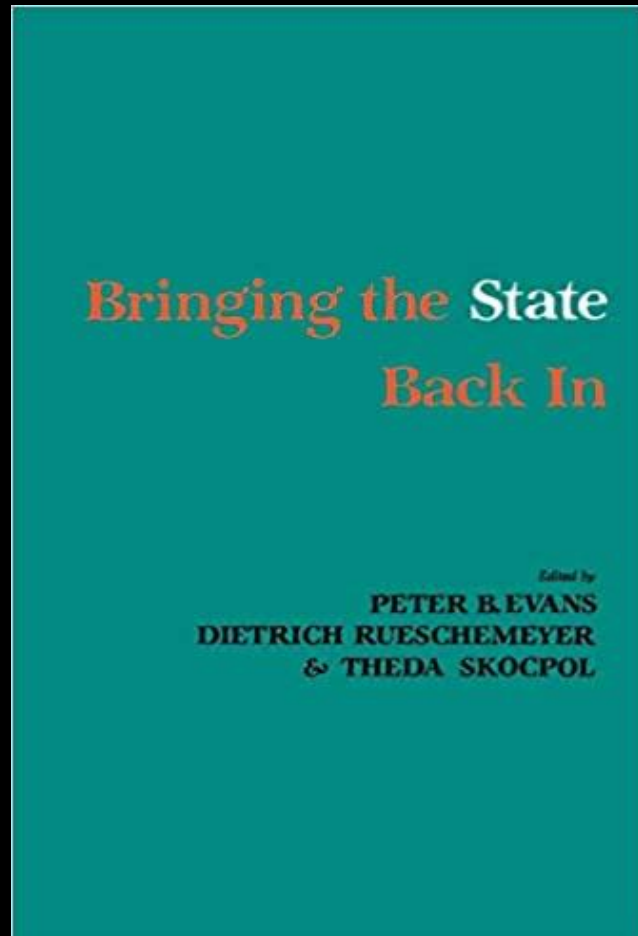
# Policy as waterfall





Agile stability.

# Weber vs Schumpeter



“Organization structure is not an incidental aspect of government, but the root of what becomes feasible or infeasible.” (Mintzberg)

|                                                 | Entrepreneurial                                                    | Machine                                                                   | Diversified                                                                      | Professional                                                                                      | Innovative                                                                             |
|-------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Organisational routines                         | Simple, informal, flexible, little staff or middle-level hierarchy | Centralised bureaucracy, formalised, specialised work, division of labour | Divisions' loosely coupled together under headquarters                           | Bureaucratic, decentralised, pigeonholes for professional autonomy                                | Fluid, organic, selectively decentralised 'adhocracy' (multi-disciplinary task forces) |
| Strategic management routines                   | Visionary, flexible, leadership-based                              | Planning that is strategic programming                                    | Corporate' portfolio strategy and divisions with individual strategies           | Stable and also many fragmented strategies by professional judgement and collective choice        | Largely emergent, evolving through a variety of bottom-up processes                    |
| Location in the broader system of organisations | Peripheral or within machine and/or diversified organisations      | Central policy implementation units with public accountability            | Central/core policy units (whole policy fields)                                  | Specialised service providers (between core and periphery)                                        | Peripheral or in new domains, or as parts of machine/diversified organisations         |
| Organisational trade-offs                       | Responsive, with mission vs vulnerable, restrictive, unstable      | Efficient, reliable vs obsession with control, no initiative, autonomy    | Autonomy, diversity vs costly, reluctance to innovate, requires measurable goals | Democracy, autonomy vs professional discretion, reluctance to innovate (unless collective action) | Innovative, effective vs inefficient (communication, coordination)                     |

# Historical ideal-types of innovation agencies

**Creators:** organisations directly involved in creating new knowledge and technologies, often in codified form (such as scientific publications), for instance public research institutes;

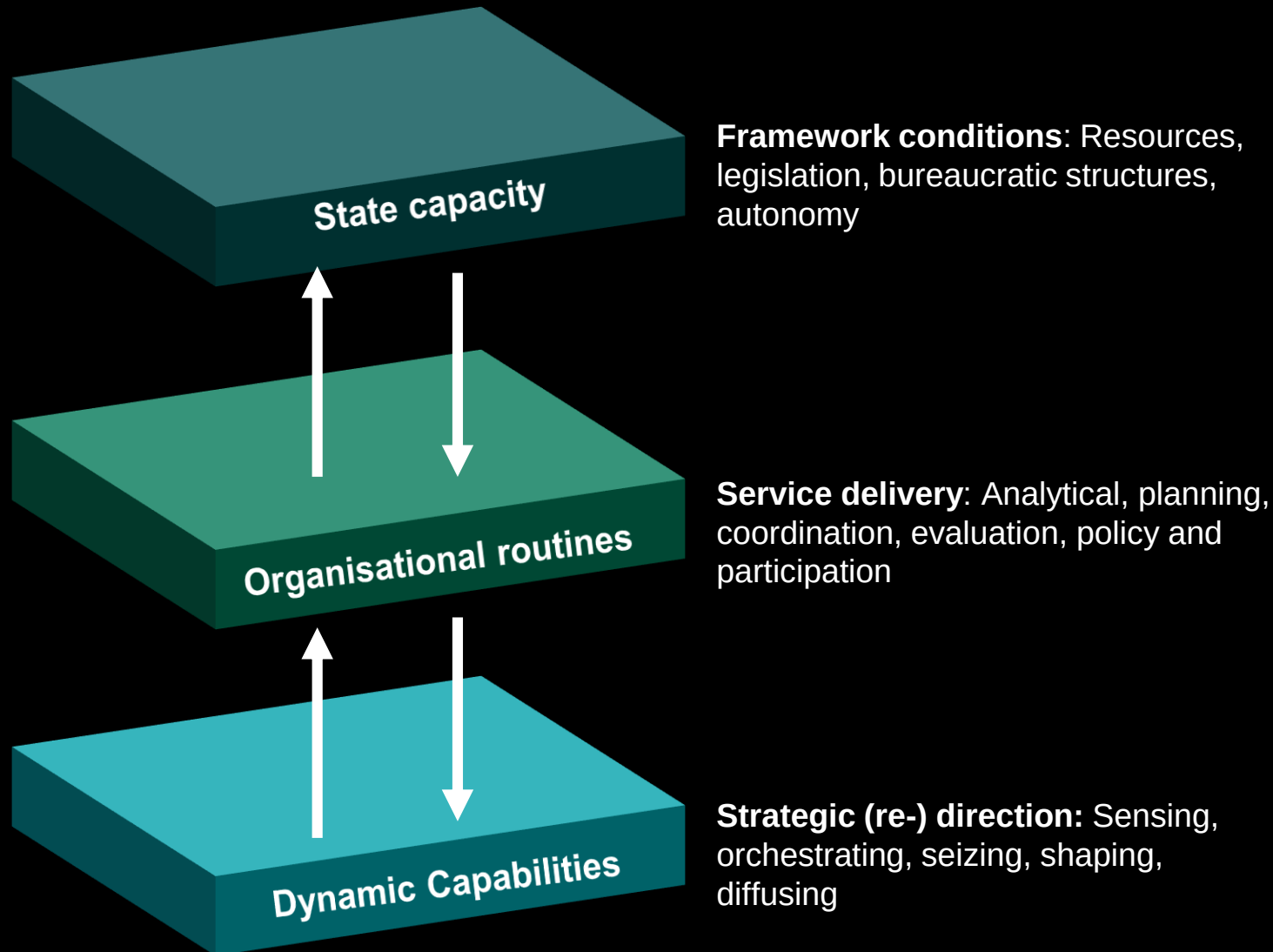
**Doers:** organisations involved in creating and delivering actual new products or services, for instance state-owned companies or specialised agencies (e.g. for space exploration or agriculture);

**Funders:** organisations that fund private or public entities involved in innovations, for instance, STI funding agencies;

**Intermediaries:** organisations that act as knowledge and interest intermediaries, such as engineering or business associations or technology parks and clusters; and

**Rulers:** organisations that create and constrain the legitimacy and space (through politics, policy and regulations) for others and give direction to their missions and tasks, such as ministries, cabinet offices or specialized offices for innovation.

# Types of capacities and capabilities



# European paradox: too much stability and agility

- Relatively strong and experimentalist state capacity in setting goals and frameworks on the EU level (e.g., framework programmes, smart specialization, missions)
- Implementation through rigid and managerialist (NPM and waterfall-type) organizational routines both on the EU and member state level, leading low ability to learn and iterate through and in implementation
- On regional and city level, experimental approaches die thousand deaths by pilots that do not lead to scale and diffusion of learning

# Wide-ranging practices and organizational frameworks

| Type                                                            | Features                                                                     | Institutional form                                                                                           |
|-----------------------------------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Foresight and futures thinking                                  | Raise awareness and readiness for future challenges and scenarios            | Both as established organisations and ad hoc processes                                                       |
| Digital teams / agencies                                        | Rapid transformation of key public services, agile way of working            | Both centralized and decentralized teams, mostly outside existing organizations                              |
| (Policy) labs                                                   | Encourage user-centric approaches, testing, experimentation, quick iteration | Typically new organisations outside existing systems/organisations, compete for project (inhouse consulting) |
| Sandboxes                                                       | Encourage risk taking and experimentation                                    | Time-bound, separate legislation, within existing organisations                                              |
| Hackathons                                                      | Mobilise stakeholders and trial multiple solutions, induce experiments       | Ad hoc unique events                                                                                         |
| Technology prizes                                               | Solve specific technological challenges, create market awareness             | Ad hoc unique events                                                                                         |
| Challenge prizes                                                | Mobilise stakeholders around issues, increase awareness                      | Ad hoc unique events                                                                                         |
| Purpose-oriented procurement (innovative, sustainable solution) | Create markets and increase capabilities for new solutions                   | Part of routine procurement processes and organisations                                                      |
| Missions                                                        | Tackle socio-economic challenges                                             | High-level political leadership, lead                                                                        |



# Some common elements

- Strong political and/or managerial leadership
- Focus on shaping markets for desired outcomes
- Mixed analytical approaches to understand critical user needs and bottlenecks
- Extensive networking and engagement
- Encouraging risk-taking and experimentation
- No silver bullets, rather a portfolio of solutions
- Conscious building of new managerial and operational capabilities (i.e. organisational and dynamic capabilities) to implement new approaches
- Active engagement with innovation!

# Transition tasks: why challenge-driven government is ... challenging

Box 1.

**The five transitions tasks for government. Based on: [Braams et al. \(2021\)](#)**

1. *Give direction*—The government should guide the search by articulating demands, vision, and ambitions and take the lead in establishing policy objectives and plans through policy strategies that should steer the generation and diffusion of innovation towards societal needs.
2. *Support governance*—The government should play an essential role in opening up the transition process for multiple stakeholders and collective action, encouraging others to participate.
3. *Support the new*—The government should collaborate and engage with, support, and fund new developments that could lead to new configuration breaking the dominant socio-technical regime.
4. *Destabilize the unsustainable*—The government should proactively weaken and phase out specific regimes' processes to replace niche innovation for systemic change.
5. *Develop internal capabilities and structures*—The government should develop internal capabilities and structures to enhance its capabilities to play its role and direct societal change.

# Emergence of dynamic capabilities

“dynamic capabilities ... are higher-order bundles of organizational routines and managerial decisions that drive the **strategic activities** of the business enterprise competing in regimes of **deep uncertainty**.”

# Dynamic capabilities of public sector organisations: how can we drive strategic change?

**Sense-making** (system awareness)

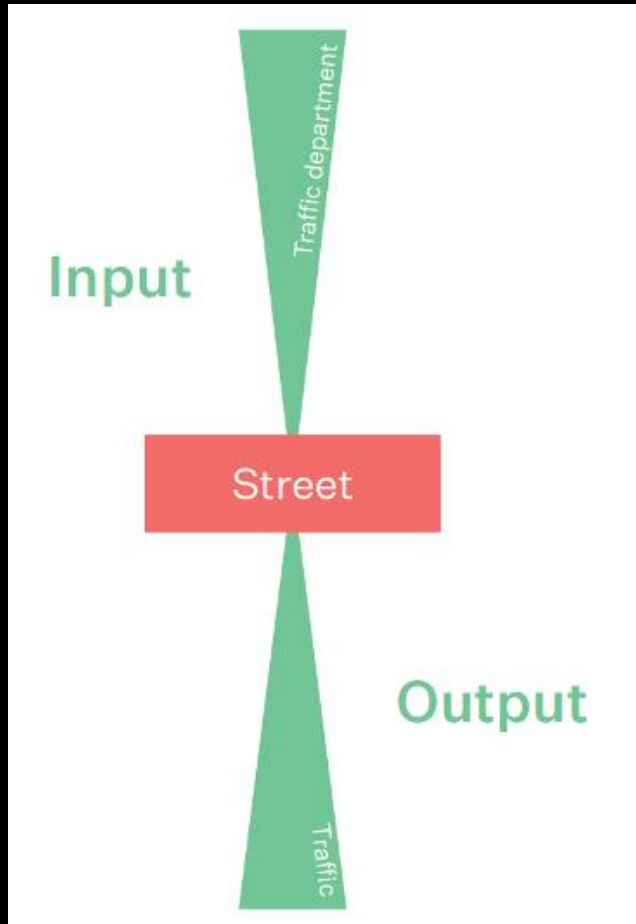
**Connecting** (policy coordination)

**Seizing** (action as experimentation)

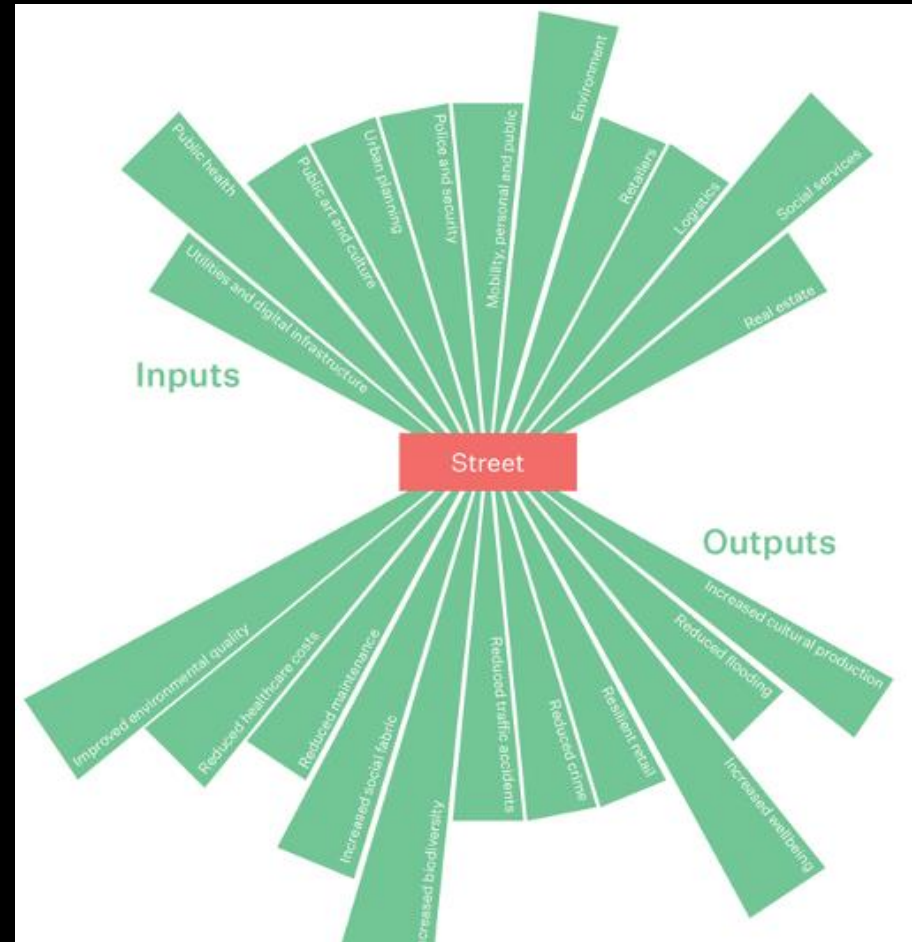
**Shaping** (transforming contexts)

**Diffusing** (organizational learning)

Example: “Ensure that every street in Sweden is healthy, sustainable and vibrant.” (Vinnova, Sweden)

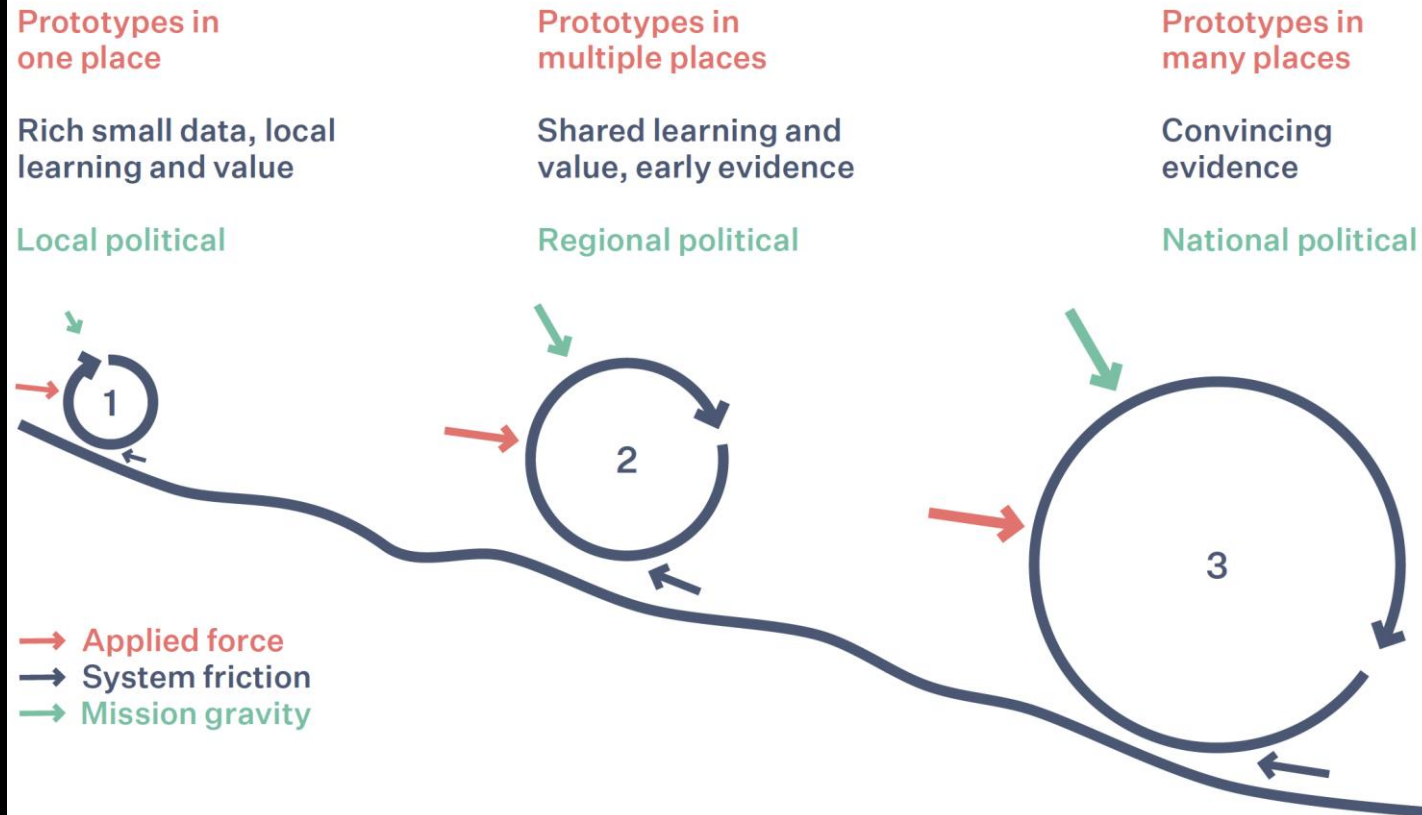


How?



# Organisational landscape to deliver transformative innovations

## Snowball dynamics



Vinnova

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“And I literally walked into the [GDS] office having worked with a lot of government departments during my time at private consultancies, and it was just like, you know, totally different. I just felt like I so want to work here, this is what I want to do. I want to deliver change to government, not just write documents or have strategy meetings about how we might do that. So even just walking in felt so different to anything I’ve experienced before. ” (Former GDS employee, January 2020)



2009



2018

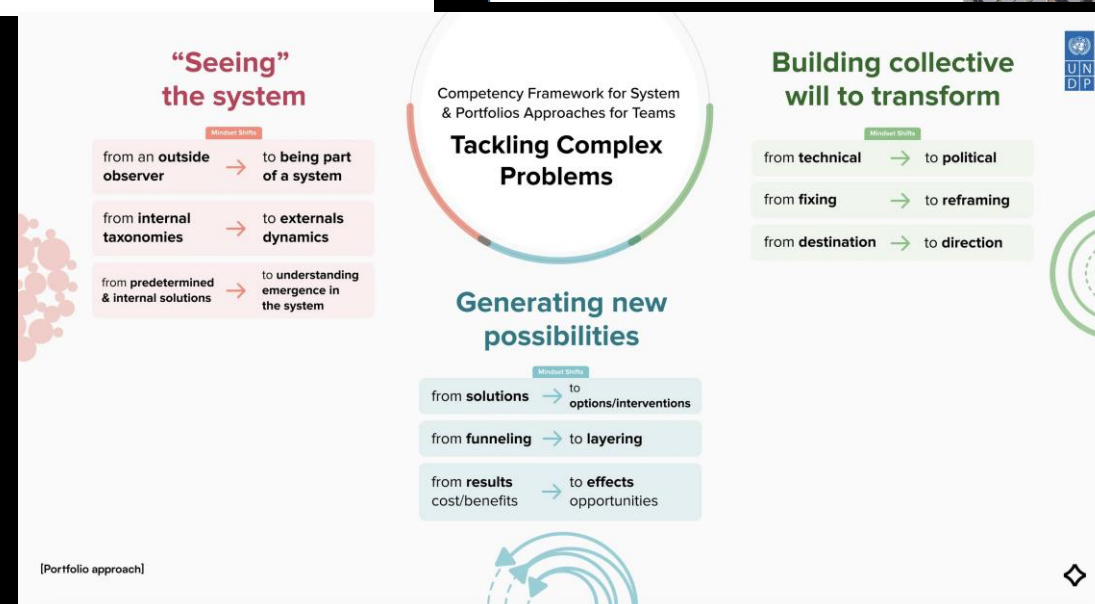
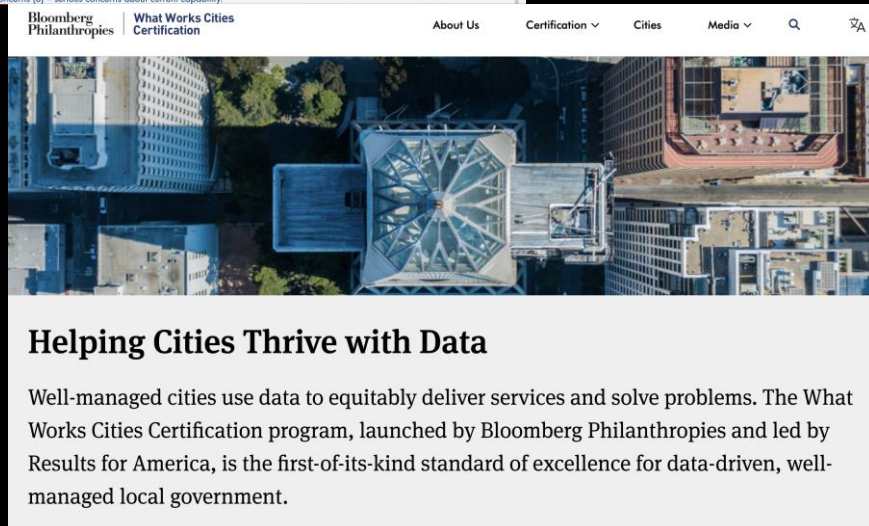
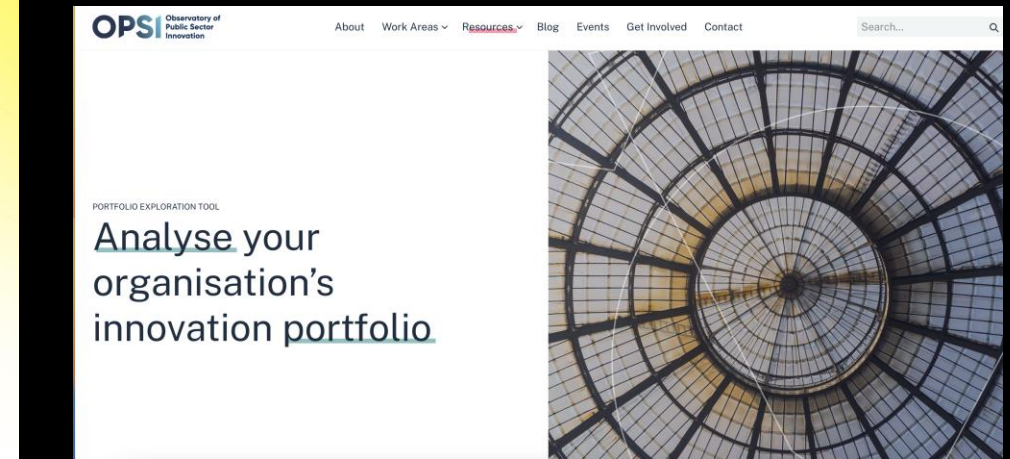
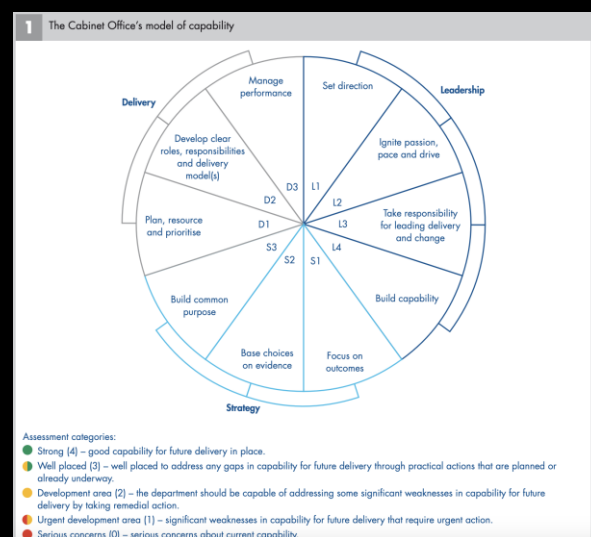


The UK Digital Marketplace was launched in 2014 not only to help make it simpler, clearer, faster and more cost efficient for government to buy technology, but also in response to the UK Government's relationship with the technology market.

Government technology was described as an "oligopoly" by Parliament; according to the National Audit Office report 'Information and Communications Technology in Government: Landscape Review', in 2009 fewer than twenty companies retained 80% of the UK's £16 billion of annual IT spending.

GDS has helped the UK digital, data and technology (DDaT) sector to evolve from a highly concentrated, uncompetitive market in 2009 to a highly diversified, competitive market; as of 1 October 2018 almost 5,100 suppliers are available to the UK public sector through the Digital Marketplace, over 92% of which are small and medium-sized enterprises (SMEs).

# Assessment of dynamic capabilities: emerging practice



# Towards Neo-Weberian organisations in post-NPM, poly crisis world?

- Re-focusing on professional skills (e.g., digital skills as relevant in all public organisations) and long-term planning (e.g., financing green transition)
- Openness in recruitment, communities of practices, and methods (e.g., open source), and need to engage (e.g., citizen juries)
- Focus on larger meaningful challenges
- Diversity across the organisational dimensions
- Ethics of conviction meets ethics of responsibility

“I have come to believe we should stop building labs in isolation. Instead, we should tear their existing parent organizations apart, and assemble them from scratch based on a new set of design principles: Human, meaningful, creative, caring, collaborative, trusting, thriving. We need to make the entire organization the lab.” Christian Bason, Danish Design Centre

# Ways out of the European paradox of too much stability and agility

- Refocus on building dynamic capabilities internally in order to speed up learning on what works and what does not.
- Emerging design, experimentation, and agile working skills must be codified and standardised into professions and career tracks
- Develop multi-agency training programmes in order to upskill core staff in innovation agencies.
- There needs to be a conscious effort to design and govern the ecosystem of multiple innovation agencies as a pool of distributed and collaborative ecosystems of capabilities.

# ... continued

- The European Commission should continue its experimentalist approach to policy. However, it needs to pay much more attention to organisational ecosystems and capabilities within these ecosystems. Today, too many good policy ideas either fail to scale after pilots or are implemented by agencies without significant capabilities in iterative policy design and quick learning.
- Member states should focus on the 'meta-governance' of innovation agency landscapes and consciously design and build organisations with diverse yet complementary capabilities. This requires ownership of the innovation agency ecosystem and the building of governance structures.
- Regions and cities are often the focus of experimental policies, yet their organizational capabilities are not enough to scale successful policy and implementation innovations.



“The role of the public servant is no longer that of controlling the mechanical levers, it is that of the head gardener: setting out the design, planting, tending, nurturing and where necessary, weeding.”

Hilary Cottam







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