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Policy brief

Governing inclusive innovation in the Cambridge ecosystem

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She founded Cambridge Grand Challenges, an interdisciplinary platform connecting Cambridge's research base with industry, government and the third sector, and subsequently developed this partnership infrastructure through her work in doctoral training, research in practice and regional innovation. From 2019 to 2023, she was Innovation Strategy Lead for the Oxford-Cambridge Arc, leading Cambridge's engagement across a nine-university ecosystem and contributing to the Arc Life Sciences Strategy, subsequently cited in the March 2024 Budget.

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The full acknowledgements are set out in the Appendix.

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Executive summary

World-leading innovation ecosystems generate significant economic value, yet participation in innovation pathways and the distribution of benefits remain persistently uneven.

Throughout this policy brief, inclusive innovation refers to who takes part in innovation, who benefits from it, and how the governance of the ecosystem shapes both participation and the distribution of value (Heeks, 2013; Coyle and Selvi, 2024).

Cambridge is internationally recognised as one of the world's leading innovation ecosystems, combining frontier research, dense entrepreneurial activity, and strong access to global capital.

Throughout this policy brief, innovation performance refers to the ecosystem's ability to generate research excellence, create and scale innovative firms, attract investment, and translate knowledge into economic and societal value.

Recent initiatives, including the Cambridge Innovation Charter and Innovate Cambridge, demonstrate a growing commitment to inclusive innovation. Yet those commitments have not translated into durable ecosystem change. This policy brief examines why.

No organisation is responsible for coordinating the ecosystem as a whole. Coordination depends instead on informal mechanisms, such as networks, reputation, and market signals, that enable flexibility but also produce systemic blind spots. Inclusion is widely endorsed but weakly operationalised.

Drawing on empirical evidence from the Cambridge innovation ecosystem, the paper identifies five interacting domains through which exclusion is produced:

- access and participation
- skills and pathways
- capital allocation
- governance and accountability
- value capture and distribution

It is across these domains that exclusion emerges through informal mechanisms (such as network dependence, opaque gatekeeping, relationship-driven investment, and fragmented progression pathways) rather than explicit barriers.

Across the ecosystem, inclusion is consistently described as "everyone's responsibility but no one's ownership." This diffusion of accountability means that:

- **Access to opportunities** is mediated through informal networks rather than transparent pathways
- **Skills systems** operate in parallel rather than as coordinated pipelines
- **Capital allocation** relies on relational screening, reinforcing unequal starting positions
- **Value** in the ecosystem is not systematically tracked or redistributed.

Critically, these are not neutral dynamics. Existing coordination patterns confer advantages on actors already embedded within dense networks of capital, reputation, and institutional affiliation. Informal gatekeeping, relationship-based investment, and opaque decision-making

reduce uncertainty for incumbents while raising barriers for new entrants. This helps explain why inclusion does not emerge endogenously: the current system actively rewards opacity, and transparency alone is insufficient without governance mechanisms that enable meaningful participation.

Why existing approaches are insufficient

Three pathways to inclusion are commonly assumed, but each falls short:

- **Programme-led approaches:** generate localised impact but remain fragmented and fail to influence core decision-making arenas.
- **Market-led correction:** assumes competition will widen participation, but in practice reinforces network-based advantage and cumulative inequality.
- **Cultural or normative change:** increases awareness but does not translate into operational change without mechanisms linking values to decisions.

Inclusion cannot be achieved through isolated interventions; it must be governed as a system property (Adner, 2017; OECD, 2020). The question is what that governance looks like in practice.

Why neither market nor state solutions fit

The empirical record indicates that neither market correction nor centralised direction alone are credible responses to enhance inclusive innovation. .

On the one hand, applying a Silicon Valley-style reliance on decentralised capital and elite networks would intensify the very mechanisms identified as exclusionary (Saxenian, 1994; Lerner and Nanda, 2020).

Conversely, implementing a Singapore-style state-led model would conflict directly with the strong institutional preference for autonomy that characterises Cambridge, and would risk suppressing the bottom-up experimentation that drives its performance (OECD, 2017).

Coordination without centralisation therefore emerges as a structural necessity.

Core governance instruments

This policy brief proposes a strategy of coordination without centralisation: a minimal governance layer that aligns autonomous actors through shared metrics, transparency at decision points, and reputational accountability.

The paper proposes a set of light touch, mutually reinforcing instruments, each mapped to one of five domains: access and participation, skills and pathways, capital allocation, governance and accountability, and value capture and distribution.

- Shared minimal indicators covering entry transparency, progression pathways, capital decision points, skills demand signalling, and local value capture, to make participation and progression visible across the ecosystem
- Conditional transparency requiring publication of entry criteria and decision processes for key programmes and infrastructures
- Decision-logic explainers for investors and accelerators to clarify how selection decisions are made

- Demand-led skills signalling to align training provision with labour market needs
- Simple value-capture proxies (e.g. local hiring, supplier engagement) to link innovation performance with local impact

These instruments do not constrain autonomy or impose quotas. Instead, they reduce ambiguity, improve navigability, and create shared reference points for coordination. Over time, this enables inclusion efforts to compound across actors rather than remain isolated.

This governance approach reframes inclusion as a core design parameter of ecosystem performance (Heeks, 2013; OECD, 2020). It strengthens talent utilisation by widening access and progression pathways, improves innovation diffusion by broadening participation, and links growth to local legitimacy. Crucially, it aligns inclusion with the existing strengths of the Cambridge ecosystem rather than working against them.

Scope and approach

This policy brief focuses specifically on inclusivity within the Cambridge innovation ecosystem, rather than inclusivity more broadly in Cambridge's economy or society. Cambridge's broader social and spatial inequalities, including housing affordability, transport constraints, and cost of living pressures, are treated as contextual conditions rather than the primary object of analysis.

The analytical focus of this policy brief is on how inclusion is produced, mediated, and governed within the innovation ecosystem itself. This includes the actors, institutions, and processes that shape research, entrepreneurship, investment, and high-growth firm development: universities and research institutes, venture capital and investment networks, start-ups and scale-ups, intermediaries, and public and policy-facing institutions. Exclusion persists not because actors lack awareness or intent, but because the ecosystem lacks the governance mechanisms to convert distributed goodwill into coordinated action.

The empirical findings in this paper draw on a qualitative, interpretive case-based study of the Cambridge innovation ecosystem (Flyvbjerg, 2006; Eisenhardt, 1989). Primary data were collected through twelve semi-structured interviews with actors occupying strategically relevant positions across the ecosystem, including university and research leadership, venture capital and investment organisations, founders and scale-up executives, intermediary organisations, and public-sector actors.

Interviewees were selected using purposive sampling (Patton, 2015) to ensure positional diversity rather than demographic representativeness. Analysis followed an iterative coding process guided by sensitising concepts (participation, coordination, accountability, diffusion, and value capture) while remaining open to contradiction and divergence across actor groups. Findings are triangulated against documentary analysis and comparative ecosystem literature (Denzin, 1978).

The study does not claim causal generalisation; its contribution is analytical and mechanism-level (Yin, 2018). Limitations include a sample that reflects elite ecosystem perspectives more strongly than community-level experiences, and comparative analysis based on secondary rather than primary sources.

1. The Cambridge tension

Cambridge is internationally recognised as a world-leading innovation ecosystem, anchored by globally competitive universities, high rates of science-based entrepreneurship, dense venture capital networks, and strong international connectivity (Brown and Mason, 2017; Katz and Wagner, 2014). It consistently generates frontier research, high-growth firms, and substantial economic value.

Yet this success coexists with persistent and, in some cases, widening inequalities in participation and access to the ecosystem, as well as inequality in the distribution of the benefits produced by the system.

Drawing on both the interview evidence and the wider literature, the diagnosis is consistent: despite a proliferation of inclusion-focused initiatives, strong rhetorical commitment from stakeholders, and increasing policy attention, participation in innovation in Cambridge remains uneven across social, spatial, and economic dimensions:

- Entry into innovation pathways is often mediated through informal networks and reputational signals rather than transparent processes
- Progression from education into sustained innovation roles is fragmented and uncertain
- Access to capital is shaped by relationship-based screening and "invisible filters" (Gompers et al., 2014; Lerner and Nanda, 2020)
- Responsibility for inclusive outcomes is diffuse and weakly institutionalised
- The local distribution of value generated by innovation-led growth is insufficiently tracked or governed

These patterns are not incidental. The same mechanisms that enable high performance, such as network-based access, relational capital, and reputational signalling, also create barriers to entry and progression (Saxenian, 1994; Brown and Mason, 2017).

This dynamic reflects a coordination problem within a distributed ecosystem (Adner, 2006; Rumelt, 2011). Interdependent actors operate under misaligned incentives, fragmented information flows, and diffuse accountability. Inclusion initiatives deliver impact within bounded domains, but they do not aggregate into durable, ecosystem-wide change (OECD, 2020). These dynamics arise not from a lack of interdependence, but from the absence of mechanisms to align it across actors.

Cambridge occupies an intermediate position among global innovation ecosystems. At one extreme are market-led systems such as Silicon Valley, characterised by decentralised capital, elite networks, and persistent inequalities in access and value capture (Saxenian, 1994; Lerner and Nanda, 2020); at the other, state-led systems such as Singapore, where inclusion is operationalised through formal coordination and planning (OECD, 2017). Between these lie hybrid systems such as MIT–Harvard–Boston, which combine market dynamism with intentional coordination (Etzkowitz and Leydesdorff, 2000; Katz and Wagner, 2014)

Cambridge shares features with market-led systems but lacks the lightweight coordination mechanisms of hybrid models. Comparative evidence shows that uneven participation is not an inevitable by-product of innovation intensity but reflects governance choices embedded within ecosystem architectures (Audretsch and Belitski, 2017; OECD, 2020).

Silicon Valley vs. Silicon Fen — a governance choice

Cambridge – sometimes known as Silicon Fen – is often compared with Silicon Valley, as a market-led innovation ecosystem. As noted above, both generate high innovation output through decentralised capital and elite networks, while exhibiting persistent inequalities in access and value capture. The comparison is instructive because it illustrates what becomes structurally entrenched when governance intervention is delayed. Cambridge shares market-led characteristics (networks, venture capital, decentralised coordination) but with less formalised pathways and limited system-level accountability for inclusive outcomes. The strategic implication of this is that Cambridge has a window to intervene in governance before inequalities become structurally entrenched. Unlike Silicon Valley, it can embed transparency and coordination early, avoiding extreme social fragmentation while preserving dynamism. The coordination instruments set out in Section 5, shared indicators, conditional transparency, and decision-logic explainers represent exactly such early-stage interventions.

Of the three comparators, the MIT–Harvard–Boston system is closest to what Cambridge could plausibly become. It demonstrates that a market-oriented, university-anchored ecosystem can achieve broader participation and clearer pathways without sacrificing innovation dynamism, provided that coordination infrastructure is put in place and maintained.

This comparison is analytically important: it shows that Cambridge's inclusion challenges are not an inevitable feature of high-performing, market-led ecosystems but the result of specific governance choices that remain open to change and that the window for making those choices is still open in a way it no longer is in Silicon Valley.

Cambridge can therefore be understood as a critical case (Flyvbjerg, 2006): a high-performing, institutionally dense, but weakly coordinated ecosystem that has not yet locked into the structural entrenchment observed in more mature market-led clusters. This creates a window of opportunity to embed governance mechanisms that support inclusion without undermining dynamism. The coordination failures that are now visible and the governance choices that are made are therefore significant not only for Cambridge but for other innovation ecosystems facing similar challenges.

2. Diagnosis: exclusion across five domains of the innovation ecosystem

These competing interpretations are analytically important. Some actors frame observed patterns as efficient selection under uncertainty, a reading that the analysis takes seriously. However, the findings show that, at the system level, individually rational screening decisions generate cumulative exclusion effects that are not visible from within individual decision contexts (Adner, 2006). What appears as efficiency at the firm or fund level operates as a coordination failure at the ecosystem level. The analysis does not adjudicate between these interpretations by dismissing one; it explains why both can be simultaneously valid at different levels of analysis, and why system-level governance rather than firm-level behaviour change is therefore the appropriate response.

The analysis is structured across five domains of the Cambridge innovation ecosystem derived from the empirical findings of the research: access, skills, capital, governance, and value capture. Together they represent core functional components through which the ecosystem operates. They are presented as overlapping and interdependent, rather than discrete or sequential. Importantly, the domains themselves are not inherently exclusionary; rather, exclusion arises through the interaction of mechanisms operating within and across them.

Barriers are rarely formal or explicit; they arise through informal practices, weak coordination, and diffuse accountability. Exclusion accumulates across domains, shaping who enters the ecosystem, who progresses, and who ultimately benefits.

Access and participation

> *"Unless someone introduces you, it's hard to know where to start."* (Intermediary)

The Cambridge ecosystem is widely perceived as open in principle but selective in practice. Entry is not governed by formal exclusion but by the ability to navigate informal norms, networks, and signals of legitimacy (Brown and Mason, 2017). This is consistent with prior work by the Bennett School, particularly Limb (2025), which characterises the ecosystem as "impenetrable" to those without prior connections.

Key dynamics include:

- **network-mediated entry**: access depends on introductions and endorsements
- **reputational signalling**: institutional pedigree strongly influences perceived credibility, and
- **informal gatekeeping**: decisions are made through relational judgement rather than transparent criteria.

These mechanisms are efficient for incumbent actors but create high navigational barriers for outsiders (Saxenian, 1994). As one intermediary described, the ecosystem contains "many doors, but few visible handles."

Skills and pathways

"There are entry points, but progression is much less clear." (Employer)

While the Cambridge innovation ecosystem includes strong educational institutions and training initiatives, pathways into sustained participation remain fragmented. Many programmes are front-loaded, focused on entry while providing limited support for progression. Education providers, employers, and intermediaries operate in parallel rather than as an integrated pipeline (OECD, 2019).

Progression depends heavily on sponsorship and network access, which are unevenly distributed, resulting in "leaky pathways" where individuals enter but fail to sustain participation. Housing affordability and transport constraints shape who can sustain participation in early-career innovation roles (Katz and Wagner, 2014). These structural factors are rarely integrated into skills system design, reinforcing fragmentation and attrition.

Capital allocation

"Warm introductions matter — it's about managing risk." (Investor)

Investment decision-making is shaped by risk management, speed, and relational trust. Investors rely heavily on trusted networks; founders outside core networks experience repeated validation requests without clear progression (Gompers et al., 2014).

Although inclusion-focused funds exist, they remain peripheral to mainstream capital flows (Lerner and Nanda, 2020). These practices are often justified as rational responses to uncertainty, but they create "invisible filters" that disproportionately disadvantage founders without established networks (Sorenson and Stuart, 2001).

Governance and accountability

"Everyone agrees inclusion matters, but no one owns it." (Public-sector actor)

There is no single point of accountability for inclusive outcomes. Inclusion is widely recognised as important but not formally assigned to any actor or institution. Coordination depends on goodwill and voluntary alignment (Ostrom, 1990).

Public actors face constraints on intervention; private actors prioritise autonomy. Intermediaries attempt to bridge these positions but lack formal authority (Howells, 2006). As a result, successful initiatives often struggle to scale or persist.

Value capture and distribution

"The ecosystem grows fast, but local benefits aren't tracked." (Institutional actor)

Cambridge generates significant economic value, but the distribution of benefits within the local ecosystem is uneven and weakly governed (Florida, 2017; Mazzucato, 2018). Few mechanisms exist to track or govern how value is distributed locally.

Firms and investors emphasise aggregate growth and employment with less focus on distributional outcomes. Responsibility for value distribution is often treated as outside the remit of individual actors, creating a growing disconnect between global success and local experience.

Cross-pillar synthesis: how exclusion compounds

Across all five pillars, three cross-cutting patterns emerge:

- inclusion is widely supported but weakly specified
- exclusion is produced through informal, interacting mechanisms that compound over time
- ownership of inclusion is diffuse, preventing initiatives from scaling (Adner, 2017; OECD, 2020)

These dynamics are not neutral. Existing coordination patterns confer advantages on actors already embedded in dense networks of capital, reputation, and institutional affiliation. Informal gatekeeping, relationship-based investment, and opaque decision-making reduce uncertainty for incumbents while raising barriers for new entrants (Saxenian, 1994; Gompers et al., 2014).

As a result, exclusion is not only a by-product of weak coordination but is also partially stabilised by incentive structures that do not reward transparency or system-level alignment. This helps explain why inclusion does not emerge endogenously even in the presence of broad normative commitment.

These dynamics suggest that the current configuration of the Cambridge innovation ecosystem operates as a self-reinforcing equilibrium rather than a transient failure (North, 1990). Existing practices, such as network-based access, reputational filtering, and decentralised decision-making, are mutually reinforcing and continue to function effectively for incumbent actors, even as they constrain broader participation and limit the diffusion of opportunities.

The implication is significant: without external governance mechanisms that reshape incentives and align coordination across actors, the ecosystem is likely to reproduce existing patterns of access and benefit while maintaining strong aggregate innovation performance. The following section sets out what a different governance logic would look like.

3. A new governance logic

This section sets out the conceptual shift required to address Cambridge's inclusion challenge. It moves from treating inclusion as a normative or moral add-on to understanding it as a functional system condition of innovation ecosystems and reframes it as an emergent outcome of how interdependent actors are coordinated (Adner, 2017; Heeks, 2013).

3.1 From normative ideal to system function

As defined in the Executive Summary, inclusive innovation refers to who takes part in innovation, who benefits from it, and how ecosystem governance shapes both. Building on the upstream/downstream distinction developed by Coyle and Selvi (2024) — itself grounded in Heeks (2013) — the analysis focuses on why upstream processes (research, development, entrepreneurship, and decision-making) remain less accessible than downstream ones (employment, supply chains, financial returns), and what governance mechanisms could change that.

Across policy and practice, inclusion is often framed as a desirable social objective, something to be pursued alongside, or after, economic growth (Sen, 1999; Fraser, 1995). It is typically operationalised through discrete programmes (skills initiatives, outreach, diversity efforts) that sit at the margins of core innovation processes. The empirical findings demonstrate the limits of this approach: while such initiatives can deliver localised benefits, they do not alter the mechanisms that govern access, decision-making, and value distribution across the ecosystem (Brookings Institution, 2019).

Singapore and "procedural inclusion"
A useful contrast is provided by systems such as Singapore, where inclusion is designed ex ante through formal rules, clear onboarding pathways, defined criteria, and performance management. Access and progression are baked into procedures, not left to informal networks (OECD, 2017). While full centralisation is neither feasible nor desirable for the Cambridge innovation ecosystem, the lesson is methodological: inclusion must be embedded in the how (rules, criteria, decision points), not only the what (programmes). The implication for decentralised systems is the need for 'procedural inclusion' to achieve visibility, transparency and shared metrics rather than central control.

Singapore is not proposed as a model for Cambridge — its degree of centralisation would be neither feasible nor desirable here. Rather, it demonstrates a general principle: that inclusion can be deliberately designed into the processes through which access and progression are governed, rather than left as an afterthought.

3.2 Inclusion as an emergent property of governance

The challenge, in short, is not simply one of coordination failure, but of existing arrangements simultaneously enabling high aggregate performance and reproducing unequal access (North,

1990; Ostrom, 1990). Understanding this distinction is what makes the governance response proposed here different from standard coordination solutions.

Innovation ecosystems are characterised by distributed authority, voluntary participation, and asymmetric power (Kooiman, 2003). Outcomes emerge from coordinated interactions among interdependent actors rather than from hierarchical control (Adner, 2006; Autio et al., 2018). Coordination is achieved through formal institutions, informal norms, intermediary organisations, and shared infrastructures (Ostrom, 1990).

Within this context, inclusion is best understood as an emergent system property, produced through the interaction of governance mechanisms rather than being directly controlled by any single actor (Adner, 2017). The empirical findings in Cambridge illustrate this clearly: informal networks shape access, fragmented pathways shape progression, relationship-based capital allocation shapes opportunity, and diffuse accountability weakens coordination.

Inclusion fails not because actors are unwilling, but because interdependence is not aligned. Each actor's decisions (who to admit, who to fund, which skills to develop) shape the opportunity landscape for others, yet these decisions are made without shared visibility or mutual accountability. A university trains graduates without knowing which roles are accessible; an investor funds founders without transparent criteria others can navigate; an intermediary connects talent to opportunity without data on where progression breaks down. The result is a set of individually coherent decisions that collectively reproduce exclusion. As a result, locally rational decisions do not aggregate into inclusive outcomes, and exclusion is reproduced through the interaction of uncoordinated mechanisms.

Power asymmetries reinforce these dynamics. Universities, established firms, and well-networked investors hold structurally different capacities to shape access, influence decision-making, and capture value (Bourdieu, 1986; Sorenson and Stuart, 2001). These asymmetries are not incidental; they are actively reproduced by the informal mechanisms that currently substitute for formal governance. Opaque gatekeeping, relationship-driven capital allocation, and network-dependent progression are arrangements that serve specific actors well and which those actors have limited structural incentive to change (North, 1990). This is why reputational and conditional governance instruments, rather than appeals to goodwill, are the appropriate policy response.

3.3 The shift to a functional system condition

Taken together, the evidence supports a conceptual shift from inclusion as a moral or compensatory objective (Sen, 1999; Fraser, 1995) to inclusion as a functional condition of system performance (Heeks, 2013; OECD, 2020).

In this framing, inclusion is not simply about fairness or representation. It is about how effectively the ecosystem mobilises and utilises talent, enables participation across domains, diffuses innovation and knowledge, and sustains legitimacy and social licence to operate (Mazzucato, 2018; Florida, 2017). Exclusion, in turn, represents a system inefficiency, reflected in underutilised talent, constrained diffusion, and growing legitimacy risks.

The relationship is contingent on how inclusion is governed (Heeks et al., 2014). Increasing transparency at decision points may slow processes that rely on speed and discretion; expanding participation can create tensions with selectivity; and strengthening coordination may be perceived as constraining autonomy (Gunningham et al., 2003). The governance

approach proposed here does not eliminate these trade-offs but makes them explicit and manageable within a shared framework. In decentralised, high-performing ecosystems such as Cambridge, inclusion is most compatible with sustained performance when it is embedded in governance structures, aligned with incentives, and integrated into core decision-making processes.

4. The strategic framework: coordination without centralisation

4.1 Strategic principle: coordination without centralisation

Limb's report on Inclusive Innovation in Cambridge (2025) calls for a mission-led framework. While it identifies the need for a unifying strategic direction, it does not specify how such a mission could be operationalised in a decentralised ecosystem.

This framework provides that missing layer. It translates mission-led aspirations into governance mechanisms that align actors around common objectives without requiring centralised authority (Ostrom, 1990; Ansell and Gash, 2008).

The strategic challenge is to introduce sufficient structure to align behaviour without constraining autonomy. A purely market-led approach would reinforce existing dynamics of network dependence and cumulative advantage (Saxenian, 1994; Lerner and Nanda, 2020) while a centralised model would conflict with the institutional realities and risk suppressing the bottom-up experimentation that underlies the ecosystem's performance (OECD, 2017).

Comparative evidence from hybrid ecosystems such as MIT–Harvard–Boston and Israel demonstrates that lightweight coordination, transparency at gatekeeping points, and selective conditionality can broaden participation while preserving dynamism (Etzkowitz and Leydesdorff, 2000; Mazzucato, 2018). The proposed framework builds on this logic.

MIT–Harvard–Boston —Coordination infrastructure in practice

The MIT–Harvard–Boston area takes a hybrid approach combining market dynamism with mission-oriented coordination. The ecosystem uses translational institutes, structured talent pathways, and intermediary orchestration to align actors and broaden participation (Etzkowitz and Leydesdorff, 2000; Katz and Wagner, 2014).

Compared to the Cambridge innovation ecosystem, there are clearer end-to-end pathways (education → venture → scale-up); stronger intermediary orchestration (translational labs, venture bridges); and more explicit shared responsibility for outcomes across institutions. The gap is less about capability and more about coordination infrastructure and collective accountability

Cambridge often benchmarks itself against Boston because both ecosystems combine world-class universities, science-based entrepreneurship, and global investment. Boston demonstrates stronger coordination across talent pipelines, university–industry interfaces, translational infrastructure, and investment pathways — making it the most relevant model for what Cambridge could realistically adopt.

The implication of the proposed governance instruments – shared metrics, conditional transparency, and convening forums – represents a competitive evolution, rather than a radical departure. In effect, they align Cambridge with peer ecosystems.

The framework introduces a minimum coordination layer that operates across the five domains of the innovation ecosystem identified in section two. It does not centralise authority, but creates shared reference points that guide behaviour across autonomous actors. (Ansell and Gash, 2008).

At its core, the model connects three elements:

1. **Shared metrics** to create visibility and comparability
2. **Aligned incentives** to embed inclusion into decision-making
3. **Coordinating forums** to enable collective learning

Pillar 1 — Shared metrics

A central component of the framework is the introduction of a shared, minimal indicator set (Kaplan and Norton, 1996; OECD, 2020). These metrics do not impose targets, but make inclusion-relevant processes visible and comparable

Illustrative indicators include:

- publication of entry and selection criteria
- visibility of progression pathways
- reporting of pipeline stages
- skills demand signalling
- local value-capture proxies

Pillar 2 — aligned incentives

Metrics alone are insufficient without incentives (North, 1990). The framework operates through:

- **conditional transparency:** access to selected shared infrastructures is contingent on publishing clear entry criteria and decision processes
- **reputational signalling:** participation in the framework signals quality
- **peer comparison:** visibility of practices enables benchmarking and norm-setting (Ostrom, 1990).

The model is not frictionless. Actors benefiting from informational asymmetries may resist transparency, and organisations under strong performance pressure may prioritise speed over coordination. Adoption will therefore vary across actors, and resistance is likely where existing arrangements confer advantage or where the perceived costs of participation outweigh immediate benefits. In particular, actors operating within established networks or benefiting from existing decision-making opacity may have limited incentives to engage without clear strategic or reputational returns.

The effectiveness of the framework depends on aligning participation with reputational and strategic advantage rather than assuming universal voluntary uptake.

Crucially, sufficient engagement by anchor institutions is required to prevent the framework from remaining peripheral.

Pillar 3 — coordinating forums

Intermediary-led convening structures provide the connective infrastructure of the framework. These forums enable:

- information exchange
- alignment of expectations
- iterative adjustment of practices

They support coordination without formal authority, allowing system-level alignment to emerge through interaction rather than control.

Institutional anchoring and ecosystem stewardship

While coordinating forums provide the operational mechanism for alignment, they require a distinct layer of institutional anchoring to function sustainably. This is not a feature of the forums themselves but a prerequisite for them: without a recognised host to maintain shared indicators, convene actors, and hold the framework together, coordination remains episodic rather than embedded. While the model avoids centralisation, it requires clear institutional anchoring. Responsibility is distributed across actors: Intermediaries: convene actors and maintain shared indicators (Howells, 2006).

- Anchor institutions: reinforce norms through conditional transparency
- Investors and programme operators: adopt decision-logic explainers and reporting
- Public actors: provide legitimacy and policy.

What matters is not the identity of the host, but that it possesses sufficient legitimacy, convening capacity, operational capability, and perceived neutrality to coordinate action across otherwise autonomous actors.4.2 How the framework operates as a system

The components set out above (shared metrics, aligned incentives, coordinating forums, and institutional anchoring) are mutually reinforcing: each is necessary but insufficient on its own. Taken together, they operate as a coordinated but non-centralised system in which shared indicators increase visibility over decision points, convening structures enable alignment, and reputational and conditional mechanisms create incentives for participation.

The system operates across four interacting layers:

- Data layer: shared indicators provide visibility
- Transparency layer: decision criteria are made explicit
- Coordination layer: intermediaries align actors without control
- Accountability layer: benchmarking and comparison shape behaviour

Taken together, these layers create a feedback system in which information becomes visible, behaviour becomes comparable, and coordination improves over time without requiring centralised authority. Inclusion therefore emerges through repeated interaction rather than top-down control.

Actors retain autonomy but operate within a more structured environment where decisions are visible, expectations are clearer, and behaviour is shaped by system-level feedback. The governance layer applies across entry, progression, capital allocation, and value capture. It does not mandate outcomes or impose quotas. Its function is to structure how decisions are made, not to determine what decisions are made. Section 5 translates this framework into a set of practical coordination instruments and an implementation roadmap.

5. Operationalising the governance framework

This section translates the strategic framework into practical coordination instruments and implementation actions, defining a minimum viable governance layer that enables inclusion to be embedded, coordinated, and scaled across the ecosystem.

5.1 Design principles

All recommendations are guided by four principles:

- Minimalism: interventions should be lightweight and low burden
- Embeddedness: Instruments should integrate into existing processes
- Voluntariness with selective conditionality: adoption is encouraged but reinforced where access is already mediated
- Reputational accountability: change is driven through visibility and norms rather than enforcement (Ostrom, 1990)

As one interviewee noted, *"We don't need more programmes — we need clearer rules of the game."*

The framework is operationalised through a small number of coordinated instruments that reshape how decisions are made at key points of access, progression, and value allocation. Conditionality is most effective where access is already mediated, particularly within publicly supported infrastructure, shared platforms, and high-visibility programmes. Linking transparency to participation in these domains, the framework introduces coordination leverage without formal regulatory intervention (Ansell and Gash, 2008).

Table 5.1: Core coordination instruments

Instrument	Objective	Example
Conditional transparency for access points	Reduce opaque gatekeeping for those outside established networks — including early-career talent, first-time founders, and underrepresented groups — by making entry criteria visible and navigable	Accelerator publishes selection criteria
Decision-Logic explainers and pipeline reporting	Increase visibility in decisions.	A VC publishes pipeline drop-off data
Shared indicator framework	Create an accountability surface	Ecosystem dashboard
Skills signalling	Align training with demand.	Innovation Skills Map
Value-capture metrics	Link innovation-led growth to local economic impact by tracking distributional outcomes alongside aggregate performance	Local hiring share, proportion of procurement spend with local suppliers, and wage distribution within innovation firms (see also Table 5.2: value capture indicators)

The shared indicator framework provides the operational backbone of the model, translating transparency into measurable signals.

Table 5.2 translates the five diagnostic domains identified in Section 2 into a minimal set of indicators. Each indicator is designed to be process-focused rather than outcome-prescriptive, capturing how decisions are made rather than mandating what decisions should be reached. The indicators are intentionally lightweight, drawing on information that organisations already hold or can disclose at low cost, and are intended as shared reference points rather than performance targets. Together they constitute a common accountability surface that enables comparison and collective learning across actors without requiring uniform behaviour or centralised reporting.

Table 5.2: Shared indicator framework

Domain	Indicator Type	Example Measure	Purpose
Access and participation	Entry transparency	Publication of entry criteria	Reduce reliance on informal networks
Progression pathways	Pathway visibility	Clear articulation of progression routes	Improve navigability and retention
Capital allocation	Decision transparency	Pipeline reporting	Increase visibility in funding decisions
Skills alignment	Demand signalling	Publication of priority roles	Align training with ecosystem needs
Value capture	Local impact proxies	Hiring share, procurement spend	Link innovation to local legitimacy

These instruments are mutually reinforcing. Indicators enable comparison; transparency reduces reliance on informal access; coordination structures support alignment; and reputational mechanisms create incentives for adoption. Together, they reshape the informational and incentive environment within which decisions are made, allowing inclusion to emerge as a system-level property rather than through isolated interventions.

5.2 Governance and ownership

Implementation requires distributed but clearly defined ownership. An ecosystem-level host provides coordination infrastructure, maintains shared indicators, and supports collective learning (Ansell and Gash, 2008). This function enables alignment but does not imply enforcement.

Table 5.3: Governance responsibilities

Domain	Lead Actors
Access and participation	Universities, accelerators, ecosystem builders
Skills and pathways	Education providers, training organisations, and employers
Capital allocation	Venture capital firms, angel networks, and investment platforms
Governance and accountability	Intermediaries and ecosystem convenors
Value capture and distribution	Public sector actors, anchor firms

While lightweight, implementation requires sustained investment in data, convening, and analytical capacity.

5.3 Implementation roadmap

Implementation should follow a phased approach, beginning with low-friction interventions that demonstrate value and build participation, and progressing toward system-level alignment over time.

Table 5.4: Implementation

Phase	Actions	Outputs
Phase one – foundation (0 – 12 months)	• Define and agree on a minimal shared indicator set • Pilot transparency measures with selected organisations • Map existing data sources • Establish an initial convening forum	• Baseline ecosystem visibility • Initial cohort of participating organisations • Early evidence on feasibility.
Phase two – expansion (12 – 24 months)	• Scale transparency requirements across a broader set of actors • Publish the first ecosystem-wide dashboard • Introduce decision-logic explainers across investment and programme selection • Develop demand-led skills signalling	• Increased comparability • Improved navigability of pathways • Stronger alignment between skills supply and demand
Phase three – consolidation (24+ months)	• Integrate indicators into routine decision-making • Strengthen alignment with the ecosystem-level governance host • Introduce and standardise value capture proxies • Iterate governance mechanisms through feedback	• Inclusion embedded as a system-level capability • Durable coordination across domains

While designed to be lightweight, the approach is not costless. Effective implementation requires modest but sustained investment in data infrastructure, convening capacity, and analytical support at the system-host level. These requirements are limited relative to large-scale programme interventions, but are essential for maintaining credibility and continuity (Ansell and Gash, 2008).

6. Implementation and risk

6.1 Institutional constraints and adoption dynamics

The framework operates within a system characterised by asymmetric incentives, varying organisational capacities, and existing power structures. Actors who benefit from informational asymmetries may resist transparency measures, while organisations under strong performance pressure may prioritise speed over coordination.

Adoption will therefore vary. The framework's effectiveness depends on aligning participation with reputational advantage and strategic positioning, creating incentives that are endogenous to the ecosystem rather than externally imposed. In practice, adoption is likely to be uneven in early stages, with system-level effects emerging only as participation reaches critical mass among anchor actors.

6.2 Risks and mitigation

Implementing the framework introduces a set of systemic risks shaped by incentive structures, institutional asymmetries, and distributed decision-making across the ecosystem.

Table 6.1: Implementation risks and mitigation mechanisms

Risk	Mitigation
Uneven adoption	Use anchor institutions and conditionality
Performative compliance	Emphasise interpretation, peer learning over reporting alone (Meyer and Rowan, 1977)
Resistance from high-status actors	Frame as a strategic advantage
Data burden	Keep metrics minimal

6.3 Window of opportunity

The timing of implementation is significant. Current policy attention to innovation-led growth, combined with ongoing institutional and governance developments within Cambridgeshire, creates a favourable environment for introducing a coordination layer of this kind. This represents a rare and time-limited window in which governance mechanisms can be embedded before patterns of exclusion become further entrenched.

Early action is therefore critical. Even a minimal version of the framework can shape expectations and behaviours before they become more rigid, increasing the likelihood that inclusion is incorporated into the evolving structure of the ecosystem rather than addressed retrospectively.

7. Conclusion

This policy brief has examined how inclusive innovation can be operationalised within a high-performing, decentralised ecosystem. Cambridge is used here as a critical case through which to examine how inclusive innovation can be governed in decentralised, high-performing ecosystems, with implications extending beyond the specific context. The analysis demonstrates that persistent exclusion is not primarily a consequence of insufficient intent, activity, or capability, but of weak coordination across interdependent actors (Adner, 2017; OECD, 2020).

The analysis identified a consistent pattern: inclusion is widely endorsed but not systematically governed. Across access, skills, capital, governance, and value capture, exclusion emerges through interacting informal mechanisms, network dependence, opaque gatekeeping, fragmented pathways, relationship-led decision-making, and diffuse accountability (Brown and Mason, 2017; Saxenian, 1994). These mechanisms compound over time and are sustained in part by incentive structures that reward incumbents for maintaining opacity (North, 1990).

7.1 From coordination failure to system capability

The policy brief reframes inclusion from a normative objective to a functional condition of ecosystem performance (Heeks, 2013; OECD, 2020). Exclusion represents not only a social concern but a system inefficiency, underutilised talent, constrained diffusion, and increasing legitimacy costs (Mazzucato, 2018). Without intervention, these dynamics are likely to become self-reinforcing (North, 1990). Conversely, ecosystems that treat inclusion as a system-level capability are better positioned to broaden participation without diluting excellence, improve alignment between actors and processes, and sustain innovation-led growth over time.

7.2 Legitimacy: the social contract of innovation

In Cambridge, there are growing signs of tension between global success and local experience, rising housing costs, uneven access to high-value opportunities, and limited visibility over how benefits are distributed (Katz and Wagner, 2014; Florida, 2017). If left unaddressed, these dynamics risk weakening the implicit social contract that underpins the ecosystem: reduced public support for innovation-led growth, increased policy intervention or regulatory constraint, and difficulty attracting and retaining diverse talent.

Inclusion is therefore not simply a moral imperative. It is a precondition for maintaining legitimacy and long-term system stability (Mazzucato, 2018). Increasing transparency and comparability can improve not only access but also the perceived fairness of outcomes, which is critical for sustaining institutional trust.

The most immediate risk is not collapse but gradual reputational divergence: a widening gap in which Cambridge retains its global innovation standing while progressively losing the local social licence that enables it to recruit diverse talent, maintain political support, and sustain civic relationships. As these tensions move from background to foreground, governance options become more constrained and costly than the lightweight coordination layer proposed here.

7.3 Sustainability: from growth to resilience

Long-term sustainability depends on the system's ability to adapt, renew, and maintain resilience (OECD, 2020). Broader participation expands the effective talent pool (Florida, 2017), while diverse participation improves the spread and application of ideas. Conversely, exclusion creates fragility. Concentration of opportunity and value increases dependence on narrow networks and limits the system's capacity to evolve (Adner, 2017). The proposed framework supports a shift from growth-led performance to resilience-oriented performance.

7.4 Final reflection

The Cambridge innovation ecosystem stands at a critical juncture. It combines exceptional strengths (world-class research, entrepreneurial dynamism, and global connectivity) with structural challenges that, if left unaddressed, risk undermining its long-term performance and legitimacy. These challenges are not inevitable; they are the result of governable coordination dynamics (Adner, 2006; Ostrom, 1990).

Limb (2025) notes that national government interest and local government reform in Cambridgeshire create a rare and time-limited window for embedding this governance layer before exclusion becomes structurally entrenched. The framework proposed here is designed to be deployable within that window, lightweight enough to implement quickly, and durable enough to compound over time.

By reframing inclusion as a system-level governance issue and implementing a minimal, coordination-based framework, Cambridge has the opportunity to sustain its global leadership in innovation, broaden participation in meaningful and durable ways, strengthen its legitimacy within its local and national context, and build a more resilient and adaptive ecosystem.

This governance approach reframes inclusion as a core design parameter of ecosystem performance. Inclusive innovation is therefore not a peripheral objective but a defining feature of resilient, high-performing innovation ecosystems. The governance infrastructure to achieve it is within reach.

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Appendix

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