

Beyond Innovation Tourism



How to Visit an Innovation Ecosystem

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How to Visit an Innovation Ecosystem

With travel picking up post-Covid, innovation tourism is on the rise again. Groups of policymakers, academic administrators, and even investors are keen to visit the most vibrant innovation ecosystems on the planet, explore their secrets, and return home with the recipe for success.

They have traditionally frequented Silicon Valley – perhaps the most iconic ecosystem on the planet – but today’s innovation tourists are seeking lessons from innovation ecosystems as diverse as Cambridge, Cairo and Copenhagen. Today, in my own ecosystem – with its epicenter in and around MIT and Kendall Square and out into Greater Boston – we receive many such groups. Certainly not for the weather, our visitors come to learn from the committed community of stakeholders that support life science startups i.e., our biotech innovation ecosystem, or to understand the growing role of universities, risk capital, corporate and government in fostering deep tech ventures i.e., our deep tech innovation ecosystem.

Making these visits effective for the visitors and hosts alike can be a challenge.

I have personally hosted countless delegations, each hoping to learn the secret of our startup-generating strategies. Each time, I place Greater Boston’s tremendous success in historical context, outlining the state of our system while reflecting on the seeds of our success and the long journey to get here. In reality, ecosystem stories are complex, nuanced and steeped in a complex combination of serendipity and strategy. Indeed, in *Where Futures Converge*, Bob Buderer devotes his entire book to the rise of Kendall Square, Cambridge, MA and Brad Feld’s *Startup Community* is similarly detailed in its insights into the emergence of the startup ecosystem in Boulder, Colorado. Such complexity is hard to illustrate and absorb during a one-hour or one-day visit. And, as important, some of the strategies that worked for Boston may not be entirely relevant to the group in the room: What served Boston’s ecosystem may not translate into ecosystem change in Bangkok or Budapest.

So what is useful to share with your visitors? And if you are visiting, **how can you be sure to get the most from your visit?** With innovation visits on the rise again, I have been reflecting upon the secrets of a successful visit that moves beyond innovation tourism. How can we ensure that visits provide lasting impact as well as immediate inspiration?

First off, set the stage for your visit: Where are you (or where is your region) on your own innovation ecosystem journey? Are you at the very start, visiting for inspiration and ideas? Are you looking to develop your own strategic plan, having already committed to action? Or are you well on your way, instead wanting to gather new perspectives for next steps or find like-minded partners? Each of these stages is critical, and at each stage, well-crafted ecosystem visits can provide a much-needed boost for you and your team. But setting that context is important – for you and your host. Likewise, what is the stage of the ecosystem you are visiting? Is it old and well-established with a storied history (and one you might read up on ahead of your trip)? Or is it newly “on the map” with a range of newly launched experiments in ecosystem building? You can learn as much from Cairo as Cambridge, MA, especially if you understand the context.

Beyond the wider context, much of the work that MIT has done with regions building successful innovation ecosystems has focused on understanding three elements of an ecosystem: building the system, engaging stakeholders and developing strategic interactions. In our MIT Regional Entrepreneurship Acceleration Program (MIT REAP), we lead regional teams through these activities over the course of two years. The same logic applies to a well-considered visit – even if it’s only two hours, not two years!

Our framework can serve as the basis for three guiding questions that can inform your visit and will help ensure that your time is well spent.

- First, ‘What is your (eco)system today, what was it before and what do you hope it to become?’
- Second, ‘Who are your ecosystem-building stakeholders and who do you need to engage?’ And
- Third, ‘How will you design and implement strategic action to make a difference?’

These questions can also be used when framing your visit so that your hosts know the ‘what’, the ‘who’ and the ‘how’ of your region (today and in the future). In return, they can explain the what, who and how of their region. **Together, you can then discuss which insights from the visit can be translated into action when you get home.**

Taking each question in turn and using a visit to Cambridge, MA as an illustrative example:

What are you trying to accomplish in your region and with your visit, and with what resources?

Many delegations simply arrive and note that they are “here to learn.” A laudable goal, it puts the burden on the host to determine which of the many details of Greater Boston’s history, present and future might be of interest. Instead, **it helps to start by stating the goals you have for your region (or organization) and the assets and advantages that you are building upon.** And, as background preparation, you might read up on the history and progress of the ecosystem you are visiting so you are well prepared to ask questions and probe details.

For example, given Greater Boston and especially Cambridge, MA’s storied history in the life sciences, for many visitors their goal might be stated as “we want to build a successful innovation ecosystem in the biomedical sciences.” When a group from King’s College London came to visit, they had a similar goal and detailed some of their existing assets: a vibrant medical school, a strong hospital system with multiple world-class facilities, special expertise in mental health. They had a particular advantage with their south London location being embedded within a vibrant multi-cultural, multi-ethnic community, whose health needs were not only relevant to a global audience, but also provided a unique context in which to develop new forms of community healthcare. This set the stage for a conversation about how Greater Boston stakeholders have combined medical expertise with engineering and design skills, or how scientific expertise was drawn into the risk capital world. Personally, I often put the scale of the biomedical research base in Greater Boston into context, noting that it has among the highest biomedical research spend per capita of any state (let alone city) and the role of large-scale university efforts in supporting translational research. We also talk about the role of regulation – as far back as key decisions made in the 1970s by the City of Cambridge to allow rDNA research. Similarly, a visit to Copenhagen would not be complete without a stop at the Novo Nordisk Foundation as a visionary funder at the frontier of research in the city and across the country, experimenting with new models for translation.

Other recent visits from groups as diverse as ministers from Turkey and inventors from North Africa have outlined their “what” as a desire to build deep tech ventures. Their request goes something like this: “we want to expand our entrepreneurial activity from digital software into deep tech that takes advantage of our investments in science and technology in universities or national labs.” For Turkey, this aspiration

might be built upon the excellent technical education available in the country; for North Africa, it may be built upon long-standing but more specific mission-critical challenges in food, energy and water.

A visit to any new ecosystem always reminds me that there are different, unique assets around the world that can serve as drivers of ecosystem development. In Nova Scotia a few years ago, my ecosystem visit highlighted the fascinating intersection of excellence in fisheries, shipbuilding and undersea engineering as the emerging basis of an “ocean ecosystem.” In Copenhagen, the long history of world-class physics that we recall when visiting the Niels Bohr Institute is another foundational element of their nascent deep-tech activities, especially in quantum.

When serving as host, I find that when visitors frame the “what” –their goals, and also their assets and advantages, it serves two useful purposes. First, it situates the visit in the right context so that I can make sure my examples are relevant. Second, it helps me imagine the likely frictions they will encounter and makes it easier to highlight how we overcame our own limitations in Greater Boston, or how other regions approach the challenges differently with the benefit of hindsight. Sometimes, this gets quite specific. For example, when we talk “deep tech ventures,” I will often start by outlining the close relationship MIT faculty have with industry, their drive to solve real-world problems and the recognition that building startup ventures is now regarded as the most effective path to impact. We talk about the tenure process and translational research grants, as well as the key role of graduate students. Discussions of the key “human agents” in entrepreneurship often shift the conversation to question two: the Who.

Who are the key stakeholders engaged in building your regional innovation ecosystem, and who are you bringing with you on your visit?

Our experience in Greater Boston, as well as in regions from Leeds to Lagos, is that effective ecosystem building requires extensive multi-stakeholder engagement. As my colleague Dr. Phil Budden and I have written, effective ecosystems engage five key stakeholders: entrepreneurs, risk capital providers (of different types), universities, government agencies (local, regional and national) and finally corporations. In different regions, ecosystem leaders are drawn from different stakeholder groups – there is no one group who *must* be in charge. And yet, success ultimately comes from collective action and committed stakeholder communities. This insight frames how to prepare for an innovation ecosystem visit.

For the visiting delegation, please do share your list of participants! Not just their names and illustrious bios, but some insight into which stakeholder group they come from: entrepreneur, risk capital, government, corporate or university. Help us understand who is leading the visit and who is leading ecosystem engagement back home. If you are visiting as an entrepreneur to learn more about support, that is relevant, too. When I visit an ecosystem, I am there both as a builder of the Cambridge ecosystem, but also as a scholar of science, technology and innovation.

As important, **how far are you on your journey to stakeholder engagement?** Are you visiting to gain some inspiration on where to start and who to engage? Or are you more like our visitors from Kings College Hospital and their colleagues from different London boroughs, moving down a path towards ecosystem building and needing to convince a key stakeholder that meaningful engagement is worthwhile? We often host ministers whose staff want them to be persuaded of the power of ecosystem building for prosperity and growth (but we often don't know the purpose of the visit until it emerges in

conversation!). Yet, other visitors use a visit to actually galvanize their own stakeholders and take the time and inspiration to drive a more collective vision. A recent visit from a very senior Danish university leader explored the potential role his university could play in galvanizing ecosystem building for deep tech using newly funded research activities. A delegation from South Africa focused on engaging ministers in an innovation agenda that was already quite active but needed more high-level attention to bring in corporate partners. Our ongoing conversation with visitors from Morocco have highlighted the powerful role that a national champion such as OCP can play in bringing the ecosystem stakeholders together. A visit from a Northern Ireland cybersecurity delegation was multi-stakeholder in nature and emphasized the nature of effective collective action.

On my visit to Nova Scotia, I was intrigued by the leading role Dalhousie University was playing and explored the ways in which the national and regional governments were working together – an area that has often been a source of tension in a place like Greater Boston with its mayors, governor, senators, etc. In Leeds, UK, I saw an example of the university bringing a multi-stakeholder group together around some shared mission challenges, with a particularly close university and local government nexus that was useful food for thought.

The question of who (is at the table in the ecosystem and in the room) may feel like something of a formality, but it is more than that. It is much easier to make a success of a single visit when it's clear who is at the table. When I have visits from one entity (a government department, university, etc.), I focus on their role, and whom they might usefully add to the conversation. We talk about how to engage others – what their incentives might be to participate. I emphasize, for example, the role of philanthropic local families in inspiring some of MIT's most recent initiatives, such as the new "tough tech" fund – The Engine, and what brought them to the table. Or the role of the Massachusetts governor in sparking a state-level commitment to robotics, defense and security, working closely with our National Laboratories (such as Lincoln Labs, which is a federally funded research and development center). For a multi-stakeholder delegation, the conversation is more likely focused on the complex innovation diplomacy of ensuring that each organization feels its voice is heard and its commitment recognized. We might emphasize the power of programs such as MassChallenge in bringing stakeholders together – for example, in Fintech, or Greentown Labs in cleantech. Programs such as these serve as the third element in ecosystem building – the How.

How are you pursuing your regional innovation ecosystem strategy, and what types of programs or policies are you most interested in understanding on your visit?

At the end of the day, ecosystem resources and groups of stakeholders must come together around strategic action – a plan for **how** to drive change. This is more than an end goal, it's the implementation of programs and policies that drive change on a day-by-day, year-by-year basis. As a group of visitors, you might have tried a variety of different strategic interventions: programs whose core intent is to support entrepreneurs and their ventures – from accelerators to funds and co-working communities. You might wish to reflect on your own as you come and visit.

Indeed, most innovation ecosystem visits will be to such programs: some will be programs within a university, such as to one of MIT's entrepreneurship centers or our Protoventures program. Others might be to a key local accelerator, such as MassChallenge or TechStars. Some may be keen to visit inspiration investment funds such as The Engine or Flagship Pioneering whose novel structures have accumulated capital in new ways and supported venture building and scaling in challenging sectors including, especially, deep tech.

The difficulty that visitors often have is recognizing that any one of these programs sits in a wide system. It is often successful not only because it's run by terrific people but also because of the other programs and resources that sit just next door. And so, I always recommend a few key questions for any program you are visiting (or try to provide some critical information):

- How is the program defined, i.e., what problem is it trying to solve?
- How is the program structured in the ecosystem, e.g., does it sit within a single organization and whom does it serve?
- How would the program leaders define their goals, i.e., what is a good set of outcomes?
- How would the program define its key stakeholders?

As important, **is it replicable in other places** – at least according to those leading it? A case in point is The Engine – a venture fund with committed space and infrastructure that also builds a community among its deep tech founders. It is an independent fund that was “built by MIT” to invest in tough tech ventures at their earliest stages with a wider mission to build and support the ecosystem of deep tech stakeholders. At the time of its inception in ~2015, MIT and other stakeholders hypothesized that deep tech coming out of MIT's labs (and other universities) could not find adequate early-stage funding that matched the high technical risks and long timelines associated with commercialization. By creating a new type of fund and a new type of space (with key infrastructure), the thought was that the frictions along the idea to impact path could be reduced, spurring more such companies to be started and attracting more later-stage capital – all within the region.

For interested visitors, the origin stories of The Engine or MassChallenge, or the founding of the Cambridge Innovation Center or Greentown are inspiring ones. As important is to explore the conditions that drove success – such as universities with a depth of technical ideas and culture of entrepreneurship, a licensing model that is founder-friendly, a group of committed investors with an interest in the region, or students whose career goals are increasingly turning to startup venture building. We should also consider what the frictions were to be overcome – it's hard to air dirty laundry in public, but being frank about the challenges helps others on their own journey.

If you are visiting startup ventures (as well as programs), be sure to ask them about the ecosystem. What programs did they participate in? How did those programs structure their support? Was it helpful? Could it have been done better? And do they have any views on or experience with your region – it's surprising how many entrepreneurs have global experience and know your region better than you might think! Likewise, talk to risk capital providers in the region. But rather than simply asking them about their portfolio, ask them about their investment funnel – where in the ecosystem do they source opportunities? Who are the best sources? What are the weaknesses and how do they get support? All this will give you some insight into the ecosystem.

Armed with these insights, and backed up by the analysis you have done before you come, ask hard questions. I don't hear visitors ask us challenging questions often enough: What were the conditions for our success? How did we get started? Or what problem does this solve, and what alternative solutions did we consider? Or 'What would have to be true for us to replicate this in our region?' Lastly, ask – as I often do – whether and how serendipity has played a part. It's sometimes a rare confluence of events that is hard to replicate that pushed an ecosystem down a particular path. It's good to know that and how those moments fell on fertile, prepared ground. Questions like these make the visit more informative for you but also more interesting for us as your hosts. It helps us reflect more clearly on our own journey as we try and walk in your shoes and consider what you might do differently.

The answer to my three questions: what, who and how, can form the basis of your pre-travel preparations and your after-action report and debrief.

The debrief is an essential element of the trip: what did you learn about the region, its resources and advantages, who is at the table driving or supporting action and change, and how are the individual programs configured? Each participant may take away something different, so be sure to ask everyone on the trip to answer these questions separately before you synthesize your collective point of view. What lessons can you garner for your own what, who and how? And what seems less relevant? And most salient, what will be different after the trip? Are your goals and focus shifted? Will you invite new people to the table or engage stakeholders in new ways? Will you design your programs and policies in new ways? Having a clear after-action report and clear follow-up will ensure that the preparation for the trip lasts well after the jet lag has dissipated.

If you can address my what, who and how questions ahead of time – for your region and for the region you are visiting – and explore these questions with your hosts, the chances of quick innovation tourism turning into enduring innovation action is much higher.

Enjoy your visit! See you in Cambridge soon!