

Executive Summary

The speed of technological change coupled with increased global integration and competition have dramatically spurred innovation across the world economy.

The ‘innovation economy’ describes what happens when new generations of technologies and business models emerge at unprecedented speeds and scales to disrupt existing sectors, create new products and processes, and foster advanced and high-growth industries.

In the innovation economy, improved access to venture capital and expanded investment pools, along with the recent rise of global crowdfunding, is making it easier to market ideas and obtain finance. Another feature of the innovation economy is the agglomeration of businesses in specific geographic areas, attracted by knowledge intensive institutions, talent and skills, and opportunities to collaborate and share insights. These trends are supported by improvements to the business climate for entrepreneurship and small dynamic firms, and better legal protections for intellectual property.

Many high-income countries are finding that innovation and global competition have disrupted the job intensity of the established commodities and manufacturing economies. Many jobs have either become unnecessary or have moved off shore. They now seek to grow the innovation economy as one of the means to diversify their activities, provide a new base of jobs, boost wages, profits, and tax revenues, to be more competitive, and provide greater resilience to global economic shifts and shocks.

The world’s leading innovation regions highlight different pathways to innovation economy success. Some have emerged more organically as a result of strong fundamentals, such as publicly funded research, inherited pro-enterprise culture, and high quality of place that attracts talent. Others have been supported by successive cycles of evolving and intentional government intervention in Science, Technology, and Enterprise.

California is known for its unique appetite for risk supported by collaborative networks, while Israel’s high-tech specialisations are underpinned by its military R&D programs. Singapore has focussed on a small number of innovative industries, providing substantial tax, training and infrastructure support, while Finland has made long-term investments to build comprehensive end-to-end innovation systems. The innovation ecosystem in Bangalore, India emerged from incentives and policies to encourage the relocation of global IT and biotech firms to technology parks on the edges of the city.

The leading innovation economies of states and regions such as Bavaria, Ontario and Massachusetts have made consistent long-term public-sector investment in technologies, infrastructure, public education and a commitment to build on their regional strengths. They have made sustained attempts to respond to the gaps and needs of the innovation economy and intervene in targeted ways to best support it.

In these regions, government's role is to 'nudge' the market to intervene effectively in five main ways:



1

Adjust business climate and institutions

Pro-enterprise and pro-productivity reforms can protect IP and reduce the regulatory time and cost burden on innovative businesses. Public consultations are used to help identify areas for reform and pro-commercialisation approaches can incentivise universities to shift from R&D to commercialisation. Government land use adaptions and support for anchor institutions, such as hospitals, universities and military installations, can provide the catalyst to help foster the innovation ecosystem.



2

Address infrastructure gaps

Governments can provide the general and specialised infrastructure for new technologies to be tested and taken to market. This includes improved transport connections, better energy and data systems, high-speed broadband networks and university partnerships that grow the number of graduates in emerging fields.



3

Tackle investment deficits

Governments have a role in encouraging capital allocation and investment flows towards growth companies and intangible assets. The scale of investment varies, but public 'voucher' programs that support specific innovation sectors are a commonly used mechanism. The top innovation regions support this with a clear evidence-based proposition about their region's competitive strengths and investment readiness that includes how their science and technology assets can be optimised for the new economy. They identify the scale of investable opportunities and the support systems that attract investors.



4

Gear up for global competitiveness

Global leaders have talent attraction and retention strategies that address the global competition between markets for high value firms and skilled workers. They attract high-skilled migration, and support them to set up businesses and access resources in the region by increasing the visibility of the innovation within the region, tackling the migration and investment barriers, and championing reforms.



5

Correct information and coordination failures

Building the innovation identity and reputation of the region is a task that can be led by Government in alliance with industry players. Brokering networks enables actors to come together, build trust and improve information about innovation opportunities. Leading innovation regions adopt strategies that make the innovation process more visible and accessible to outsiders to improve the success rate of start-ups. Branding of strategies and emerging locations is a method that signals to the market that innovation is occurring. They also coordinate state and federal level innovation efforts.

Typically, leading innovation regions target a smaller number of strategic sectors and locations – sometimes as few as three sectors and three locations. This is matched by a shared recognition from all levels of government that key innovation locations require bespoke and complementary interventions.

Most fundamentally, the world's leading regions demonstrate a long term and deep commitment to driving innovation as the key source of future prosperity, fostering a more resilient and diversified economy, with the ability to adapt to shocks and future advancements. For many of the leading regions this is already a commitment spanning more than 50 years.

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