



BEYOND SILICON VALLEY: RE-THINKING HIGH-TECH INNOVATION DISTRICTS

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Everywhere wants to be the next Silicon Valley, a rich concentration of advanced technology enterprises, entrepreneurs, world-class universities, and researchers, attracting global talent and investment, quality jobs, and high-growth industries.

Promotion of high-tech innovation districts, precincts and hubs is a favoured strategy of economic development professionals and organisations. They are vital innovation ecosystems, fostering creative and entrepreneurial endeavours, enhancing economic prosperity, and achieving urban and civic renewal.

However, while innovation districts represent economic vitality and progress, they also have significant and often unrecognised shortcomings that undermine social wellbeing and cohesion.

This paper marshals the research to look more closely at the downsides of high-tech innovation districts and similar clusters, and ways of redressing these deficiencies.

It outlines an alternative approach for re-thinking place-based innovation policies, the key feature of which is connecting

economic development with community development.

QUALIFIED ECONOMIC IMPACT

Innovation places and spaces are painted as modern economic engines, leveraging human and financial capital to drive research, development and entrepreneurship, thus fostering job creation and supporting industries like law, accounting, logistics, and local retail (Feldman & Zoller, 2012; Turok, 2012).

The rhetoric praises their positive impact on regional economies, citing 'ripple', 'spillover', and 'trickle-down' effects as evidence of broader economic advantages (Moretti, 2012; Audretsch & Feldman, 1996).

Policymakers and industry leaders amplify these proclaimed economic benefits (Feldman, 1994; Florida, 2002). Silicon Valley, for instance, is cited as having produced tech giants like Apple, Google, and Facebook, contributing significantly to the US economy (Kenney & Zysman, 2016). However, closer examination reveals significant inequities: wealth concentration among a small elite, high housing costs, and wage stagnation for non-tech workers.

The 'trickle-down effect' has limitations, with marginalised populations rarely seeing tangible improvements in living standards. The negative environmental impact of innovation districts, including intensive construction, energy consumption, and waste generation, is frequently downplayed (Bulkeley et al., 2011).

In other words, the economic benefits are not universally shared, and employment opportunities are skewed towards those with high educational attainments, widening the gap between skilled and unskilled workers (Florida, 2017; Glaeser, 2011; Markusen, 1996; Autor, 2015; Moretti, 2012).

GENTRIFICATION EFFECTS

The rise of innovation districts triggers gentrification. Infrastructure investments and an influx of high-paying tech jobs and high-income knowledge workers elevate housing costs and property values (Lees, Slater, & Wylie, 2018). Long-standing residents, often lower-income families, are displaced as rents and essential service costs increase. Severe housing affordability issues are evident in places like Silicon Valley and Boston's Kendall Square (Smith, 1996).

Local governments and policymakers, in efforts to rebrand places as ‘innovation hubs’, favour corporate interests. Tax incentives and relaxed zoning laws facilitate large-scale developments that clash with the existing built environment, inadvertently marginalising current residents. This scenario is unfolding in central Sydney.

Historically, planning for innovation zones has not provided for affordable housing or investments in cultural landmark preservation, allowing change to the social and cultural landscape (Brenner, Marcuse, & Mayer, 2009; Fainstein, 2014).

Speculative investments also contribute. Announcing an innovation district can trigger speculative buying, with investors anticipating property value increases, further driving up prices (Fields, 2015).

SOCIAL INEQUALITY AND EXCLUSION

In addition to the consequences of gentrification, innovation districts can perpetuate further social inequality by being sites of significant economic restructuring.

By definition, striving to create new industries and jobs of the future and to transform local economies is disruptive. New skills and capabilities are essential to adapt and take advantage of opportunities. This attracts the “creative class” seeking high-paying jobs and cosmopolitan lifestyles, at odds with the existing population and social amenities (Florida, 2002).

Inevitably, a two-tier labour market emerges, where high-income professionals and low-income service workers co-exist but with disparate economic and social prospects.

This situation is reinforced by the focus of innovation districts being on advanced technologies, and high-value, high-growth industries. Innovation becomes equated with selected high-end or new to the world breakthroughs, excluding recognition of non-technological innovation and the ingenuity of mainstream businesses and their workforces.

Inequalities are exacerbated by the disproportionate influence on the shape and operation of innovation districts by ‘power elites’- property developers,

policymakers, venture capitalists, academic leaders, the media and the like. With access to resources and networks heavily tilted to favour those already well-connected or privileged, other interests and voices are excluded (Brown & Greenbaum, 2017).

Typically, success for innovation districts is defined by economic and commercial returns. This is another indicator of a culture of exclusivity, limiting interaction across social sectors and neglecting social innovation that could benefit a broader population (Bourdieu, 1986; Granovetter, 1973).

EROSION OF COMMUNITY IDENTITY AND THE SOCIAL FABRIC

While innovation districts drive technological advances and civic renewal projects in hard-pressed neighbourhoods, cities and towns, it is rare that they are initiated and controlled by local people.

Rather, innovation districts rely on attracting specialised talent and businesses, often new inhabitants with different socioeconomic profiles (Fainstein, 2001, Harvey, 2008). This creates an external ecosystem alien to the local community (Florida, 2002).

Innovation districts also draw on global businesses and a mobile, cosmopolitan population, which can also lead to the loss of local identity (Zukin, 1995). Global retail chains and brands replace local traditions, landmarks and businesses, diluting local and indigenous cultures and distinctiveness (Shaw & Hagemans, 2015).

The locality gains economic value but loses its distinct identity, becoming another extension of a gentrified city (Zukin, 2010).

There is a loss of a sense of belonging. As social bonds weaken, the neighbourhood loses its social capital, which is crucial for residents’ mental wellbeing and resilience (Putnam, 2000).

Invisible assets like community relationships, values, and local vernacular are diminished. The collective cultural memory and sense of place fade, replaced by a narrative of tech-driven progress and competitiveness (Harvey, 2008). Existing residents, lacking the financial or educational capital to adapt, become cultural ‘outsiders’ in their neighbourhoods (Butler, 2007; Slater, 2006).

SAVING INNOVATION DISTRICTS

Innovation does not have to be antithetical to social inclusion. Innovation districts can still drive economic growth and prosperity but should not do so at the expense of social equity and community cohesion.

The much-lauded attributes of innovation districts as epicentres of collaboration, creativity and technology leadership are weakened by blindspots about their contributions to gentrification, displacement and other social inequities; damage to the social fabric and identity of local communities; and unfair constraints on who benefits from innovation’s higher living standards and opportunities.

Rather than abandoning innovation districts, they require a re-think. Building on their foundation aims of boosting place-based economic development, innovation districts should expand their remit to advance community and social wellbeing also.

Practical programs suggested in the literature to counter deficiencies in high-tech innovation districts include:

- Introducing performance measures that go beyond GDP and other economic outputs like patents, spin-off companies, and jobs created. These should cover affordable housing, income distribution, gender diversity, carbon footprint, and community engagement, among other parameters of equity and sustainability. (Benneworth & Dassen, 2011).
- As proposed by Prahalad (2004), innovation programs that serve the most disadvantaged should receive priority. Such programs would focus on using innovation to provide affordable, accessible services and products to people experiencing poverty and create job opportunities beyond highly specialised tech roles.
- Other approaches include cooperative governance models, which involve local communities and give them a say in the businesses and services operating in innovation districts (Chatterton, 2016).
- Community participation in planning and development processes is crucial. Such engagement ensures community needs are addressed, fostering inclusion and value (Fainstein, 2014).

- Policy settings that ensure that the benefits of innovation are more widely shared and that local identity is respected and retained, e.g. protection of cultural landmarks and venues and dedicated spaces for local artisans.
- For innovation districts to achieve their potential, they must become sustainable models of both social and economic progress rather than elitist areas benefiting a few at the expense of many (Sassen, 2001).

THE WAY FORWARD: COMMUNITY-LED CHANGE MEETS INNOVATION MANAGEMENT

The way forward for innovation districts, precincts and hubs is to connect economic development with community development.

The crossover between lessons on managing business innovation and those on empowering local communities is fertile ground to both broaden and strengthen the capabilities of high-tech innovation districts.

INNOVATION IS MORE THAN TECHNOLOGY

Innovation management has been defined as “the strategies and practices that can be used to improve organisational (and community) benefits from innovation” (Dodgson et al., 2013).

Innovation management covers a wide research field, drawing from an array of perspectives, including science, economics, engineering and psychology. Similarly, innovation covers a broad sphere from the traditional topics of R&D, intellectual property, technology and creativity to the emerging initiatives in design, social networks, open and social innovation, and innovation in business models. (Dodgson, 2018).

Innovation management studies seek to explain how value from innovation is created, captured and deployed.

The key insight for innovation districts is not to become fixated on powerful new technologies, as they are only one of many ways to innovate. Don't undervalue innovation in how enterprises learn and absorb knowledge, how they manage their people, organise relationships with customers and other key parties, and the business model used for earning money and sustaining the enterprise.

The imperative is not more advanced technologies or discoveries, but to ensure a critical mass of adept, agile enterprises, competing globally and able to solve problems that matter to customers or communities.

INNOVATION FOR ALL

Next, avoid the stereotype of innovation being the province only of scientists, technologists and knowledge workers.

Innovation should not be a rarefied concept, either ignored or feared by the public at large, because it is irrelevant or else, brings job losses and service closures. Innovation must be managed to benefit the wider population, including those who are most likely to become the casualties of economic disruptions.

A good starting point is with essential work and workers of the everyday economy, those providing the goods and services that sustain our daily lives. They include nurses, teachers, aged care and child care workers, those in retail, transport and the like.

The everyday economy impacts on innovation because everyone, irrespective of income, is involved and a significant element of the everyday economy is learning, caring and social support work. This work reinforces the social ties and human interactions crucial for social cohesion, resilience and a sense of belonging and community identity.

Strengthening the performance of the everyday economy is an innovation strategy—because it unlocks the untapped potential of communities. This includes those left behind by technological and economic change. It has been referred to as ‘the economics of belonging’. (Sandbu, 2020).

Work on the economics of belonging has been taken further in Australia by projects on place-based capital and community wealth building, which aim to foster wealth creation, ownership and investment by local people in local enterprises.

Action on the everyday economy delivers both economic and social outcomes and is a useful crossover strategy for innovation districts.

Case Example: Corangamite Shire Council

A case example is the broad-based wellbeing economy plan in the Corangamite Shire in southwestern Victoria, Grow and Prosper Corangamite.

The distinguishing features of Corangamite Shire Council's approach include comprehensive interrogation of data sources to:

- explore trends and policy approaches,
- define unique needs,
- diagnose the Shire's strengths and weaknesses, and
- identify the most effective actions for change.

It made deliberate decisions to span boundaries. For example, melding three previously separate strategy plans, recognising the links between community and economy, and deriving the crossover benefits between economic development and cultural industries.

A further distinctive feature was abandoning standard consultants' reports in favour of producing an integrated economic prosperity framework from a close, rigorous and highly interactive and interdependent working relationship with community members. Community members included residents, businesses, artists and creatives, service providers and more.

The method used was based on a human or user-centred design process, where priority is given to the ideas and solutions of those for whom the program is targeted. The motto was “with you, not for you”.

Council asked and aimed to understand what their people and communities actually wanted and worked through potent solutions and imaginative actions with them. They shared knowledge and collaborated on knotty problems around a myriad of ‘kitchen tables’ to come up with a common approach that incidentally, addressed both economic and social issues, from Agriculture to Art.

COMMUNITY-LED ACTION FOR ECONOMIC DEVELOPMENT AND SOCIAL WELLBEING

Finally, social and community wellbeing measures should be included in the design of the priority economic development projects implemented by those responsible for high-tech innovation districts. A vital feature is ensuring community members and residents are co-designers of these projects and measures, not just consulted along the way.

A useful tool is the Cities and Regions Wellbeing Index for 2024 by SGS

Economics and Planning. This is a rigorous and data-driven set of spatial wellbeing rankings for over 500 Local Government Areas across Australia, with seven wellbeing dimensions measured by 24 indicators. Going beyond GDP, it shows how place impacts community wellbeing.

Innovation districts can use the Cities and Regions Wellbeing Index to explore the measures and indicators most relevant for their circumstances, to start conversations and to begin the assessment process to measure their progress on social and community wellbeing outcomes.

Equally important as what to measure, is how to measure. Participation by community members as equal partners is a priority. Rather than sporadic consultation or asking people what they think of a plan already developed by Government authorities or other officials, communities should be empowered to take a leading role.

CONCLUSION

Australia's current major industry policy debates centre on how we can become a powerhouse of cutting-edge technologies to underpin self-sufficiency in industries of the future and to aid solutions to big intractable societal challenges. The focus is on renewable energy, critical minerals processing, advanced manufacturing and the like.

But, focus does not mean loss of vision.

Australia's future prosperity will equally depend on the human dimensions of innovation as the technological; knowledge and problem-solving from the arts and humanities as well as from science, technology, engineering and maths disciplines; and progress on measures of social wellbeing as well as on economic performance.

High-tech innovation districts keen to mimic Silicon Valley must be more ambitious.

REFERENCES

Audretsch, D. B., & Feldman, M. P. (1996). R&D spillovers and the geography of innovation and production. *American Economic Review*, 86(3), 630-640.

Autor, D. H. (2015). Why are there still so many jobs? The history and future of workplace automation. *Journal of Economic Perspectives*, 29(3), 3-30.

Benneworth, P., & Dassen, A. (2011). *Strengthening Global-Local Connectivity in Regional Innovation Strategies*. OECD Publishing.

Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241-258). Greenwood Press.

Brenner, N., Marcuse, P., & Mayer, M. (2009). Cities for people, not for profit: An introduction. *City: Analysis of Urban Trends, Culture, Theory, Policy, Action*, 13(2-3), 176-184.

Brown, J., & Greenbaum, R. T. (2017). The role of industrial diversity in economic resilience: An empirical examination across 35 years. *Urban Studies*, 54(6), 1347-1366.

Bulkeley, H., Broto, V. C., Hodson, M., & Marvin, S. (Eds.). (2011). *Cities and Low Carbon Transitions*. Routledge.

Butler, T. (2007). *Re-Urbanizing London Docklands: Gentrification, Suburbanization or New Urbanism?*. SAGE Publications.

Chatterton, P. (2016). Building Transitions to Post-Capitalist Urban Commons. *Transactions of the Institute of British Geographers*, 41(4), 403-415.

Corangamite Shire. (2023). *Grow and Prosper Corangamite: Framework 2023-2033*. Corangamite Shire Council.

Dodgson, M. (2018). *Innovation Management. A Research Overview*. Routledge.

Dodgson, M., Gann, D. M., Phillips, N. (2013). *Oxford Handbook of Innovation Management*. Oxford University Press.

Fainstein, S. S. (2001). *The City Builders: Property, Politics, and Planning in London and New York*, Second Edition. University Press of Kansas.

Fainstein, S. S. (2014). *The Just City*. Cornell University Press.

Feldman, M. P. (1994). *The Geography of Innovation*. Kluwer Academic Publishers.

Feldman, M. P., & Audretsch, D. B. (1999). Innovation in cities: Science-based diversity, specialization and localized competition. *European Economic Review*, 43(2), 409-429.

Feldman, M., & Zoller, T. D. (2012). Dealmakers in place: Social capital connections in regional entrepreneurial economies. *Regional Studies*, 46(1), 23-37.

Fields, D. (2015). Contesting the financialization of urban space: Community organizations and the struggle to preserve affordable rental housing in New York City. *Journal of Urban Affairs*, 37(2), 144-165.

Florida, R. (2002). *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life*. Basic Books.

Florida, R. (2014). *The Creative Class and Economic Development*. Routledge.

Florida, R. (2017). *The New Urban Crisis: How Our Cities Are Increasing Inequality, Deepening Segregation, and Failing the Middle Class—and What We Can Do About It*. Basic Books.

Glaeser, E. L. (2011). *Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier, and Happier*. Penguin Press.

Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360-1380.

Harvey, D. (1989). From managerialism to entrepreneurialism: The transformation in urban governance in late capitalism. *Geografiska Annaler: Series B, Human Geography*, 71(1), 3-17.

Harvey, D. (2008). The right to the city. *New Left Review*, 53, 23-40.

Kenney, M., & Zysman, J. (2016). The rise of the platform economy. *Issues in Science and Technology*, 32(3), 61-69.

Lees, L., Slater, T., & Wyly, E. (2018). *Gentrification*. Routledge.

Markusen, A. (1996). Sticky places in slippery space: A typology of industrial districts. *Economic Geography*, 72(3), 293-313.

Moretti, E. (2012). *The New Geography of Jobs*. Houghton Mifflin Harcourt.

Pralhad, C. K. (2004). *The Fortune at the Bottom*

of the Pyramid: Eradicating Poverty Through Profits. Wharton School Publishing.

Putnam, R. D. (2000). *Bowling Alone: The Collapse and Revival of American Community*. Simon & Schuster.

Sandhu, M., (2020). *The Economics of Belonging*. Princeton University Press.

Sassen, S. (2001). *The Global City: New York, London, Tokyo* (2nd ed.). Princeton University Press.

Shaw, K. S., & Hagemans, I. W. (2015). Gentrification without displacement and the consequent loss of place: The effects of class transition on low-income residents of secure housing in gentrifying areas. *International Journal of Urban and Regional Research*, 39(2), 323-341.

Slater, T. (2006). The eviction of critical perspectives from gentrification research. *International Journal of Urban and Regional Research*, 30(4), 737-757.

Szafrańiec, J. and Tjondro, M., (2024), *SGS Cities and Regions Wellbeing Index*, *SGS Economics and Planning*, May 2024, <https://sgsep.com.au/projects/sgs-wellbeing-index>

Turok, I. (2012). *Urbanisation and development in South Africa: Economic imperatives, spatial distortions and strategic responses*. Urbanisation and Emerging Population Issues Working Paper 8. International Institute for Environment and Development, United Nations Population Fund.

Zukin, S. (1995). *The Cultures of Cities*. Blackwell.

Zukin, S. (2010). *Naked City: The Death and Life of Authentic Urban Places*. Oxford University Press.

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