Exploring the Role of Smart City Strategies in Fostering Entrepreneurship in Small and Medium Sized Cities of India: A Case Study of Indore and Satna



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Cities across the globe have adopted smart city policies, with India rolling out the Smart Cities Mission in 2015, taking 100 cities within its ambit. A smart city is a new catchphrase that enables cities to adopt novel services and innovative

approaches to urban problems, frequently involving technological advances. These cities implement cutting-edge policies and initiatives to harness the potential of start-ups in creating solutions for urban issues while also bolstering local entrepreneurship (Kummitha, 2019; van Winden & Carvalho, 2019; Barba-Sánchez et al., 2019; Roundy, 2017). In fact, several studies have identified the crucial role that entrepreneurship can play in regional and local development (Kim & Kim, 2022; Schumpeter, 2000; Isenberg, 2010).

Entrepreneurship is significant for smart cities as it allows local actors to develop novel solutions for urban problems. In general, cities are identified as drivers for entrepreneurship and innovation and are taking active steps to establish spaces for innovation and collaboration (Cohen et al., 2016). Entrepreneurship can also encourage the development of disruptive solutions and knowledge exchange, which may, in turn, shape the smart city process (Ferraris et al., 2020). Despite its relevance, entrepreneurship remains notably understudied in the context of small and medium-sized cities in the Global South. Smart cities create underlying conditions through hard and technological infrastructural assets, services, and human and social capital that create conducive business environments (Appio et al., 2019). With strong institutional backing, such cities may serve as a fertile field for entrepreneurs to find new inspiration and ideas (Scornavacca et al., 2020).

Tel Aviv, Singapore, and San Francisco are world-renowned start-up hubs that use policy mechanisms and institutional manoeuvres to promote entrepreneurship (Lerner, 2014). Although megacities in India such as Bangalore, Mumbai and Hyderabad are reputed startup hubs, the rapidly evolving entrepreneurial ecosystem in small and medium-sized cities of India seems narrowly captured. As per the World Economic Forum, India possesses the world's third-largest entrepreneurial ecosystem. The entrepreneurial measures embedded in the smart cities mission inject further rigour into small and medium-sized cities that have hitherto been overlooked. Building on these aspects, our study aims to capture the burgeoning landscape of entrepreneurship in small and medium-sized cities spurred by smart cities mission in India using Indore (a medium-sized city) and Satna (a smaller city) in the state of Madhya Pradesh, where all seven smart cities have actively promoted entrepreneurship.

A smart city ecosystem consists of actors, stakeholders or collaborators that converge to bring about regional or local innovation (Carvalho, 2017). As highlighted above, smart cities have the potential to give rise to

“entrepreneurship enablers,” such as startup-friendly policies, formal institutions, engagement/events, leadership, etc., which reinforce and expand the opportunity field for entrepreneurship by creating institutional arrangements and support systems to create a flourishing climate for entrepreneurial activity (Haugh, 2020). The emerging insights from our research in Indore and Satna demonstrate that the marriage between the smart city ecosystem and entrepreneurial enablers gives rise to unique conditions for urban and smart city-focused entrepreneurship. Similarly, synthesising smart city and entrepreneurial ecosystem literature can provide insight into what elements influence or contribute to creating a favourable smart city ecosystem for encouraging entrepreneurship.

In this case, to boost entrepreneurship, the two cities have set up smart city incubation centres as a place-based anchor to support entrepreneurship. The incubation centres act as intermediaries, a confluence between splintered actors, stakeholders, and policy actions. At the same time, the smart city’s special-purpose vehicles work in tandem with other national and regional programs. For this reason, applying a scalar lens to the national, regional, and local smart city and entrepreneurial initiatives is useful in identifying how this domain engages with entrepreneurship to create a context-responsive ecosystem.

Building upon the research and fieldwork conducted thus far, the following points have emerged:

- Entrepreneurs in both cities allude to the changing policy landscape at the local, regional, and national level that is favourable towards startups (Start Up India Policy, Madhya Pradesh Start-Up Policy, Smart Code, Open data platforms, City Innovation exchange, hackathons, smart city innovation challenge, state innovation challenge) and tend to benefit from such platforms.
- Small and medium-sized cities such as Indore and Satna can benefit from less competition, lower cost of setting up businesses and a higher quality of life and use it as leverage to attract talent and human capital.
- Although the leadership role in the entrepreneurial ecosystem is relegated to entrepreneurs, the smart city ecosystem extends it to other actors/agents and individuals (Lee et al., 2014). As such, the leadership and entrepreneurship component can offer interesting insights into their role in triggering changes that might lead to effective or ineffective smart

city entrepreneurship (Morisson & Panetti, 2020). In this research context, the role assumed by smart city CEOs and other officials connected to the entrepreneurial domain is decisive for creating a responsive and supportive startup environment.

- Skills, awareness, and training programs for the smart city officials and incubation centres will play an important role in the longevity of these programs and in enhancing skills to create a context-responsive smart city entrepreneurial ecosystem.

Conclusion

City-level innovation can give rise to new technology, institutional arrangements, business models, and novel principles to accelerate the development of smart cities, giving local-level innovators like technology firms, startups, research institutes, and others a "window of opportunity" to support smart city transitions. (Mora et al., 2021). Due to a lack of mentorship, finance, human and social capital, a mature ecosystem, and technological infrastructure, small and medium-sized cities lose talent. As a result, smart city policies rooted in the ecosystem and sensitive to the place-based context can develop frameworks and enablers; small and medium-sized cities can harness the arising 'window of opportunity' to boost their entrepreneurial ecosystem.

References

Appio, F. P., Lima, M., & Paroutis, S. (2019). Understanding Smart Cities: Innovation ecosystems, technological advancements, and societal challenges. Technological Forecasting and Social Change, 142, 1–14.

Barba-Sánchez, V., Arias-Antúnez, E., & Orozco-Barbosa, L. (2019). Smart cities as a source for entrepreneurial opportunities: Evidence for Spain. Technological Forecasting and Social Change, 148, 119713.

Carvalho, L. (2017). Handbook of research on entrepreneurial development and innovation within smart cities.

Cohen, B., Almirall, E., & Chesbrough, H. (2016). The City as a Lab: Open Innovation Meets the Collaborative Economy. California Management Review, 59(1), 5–13.

Ferraris, A., Belyaeva, Z., & Bresciani, S. (2020). The role of universities in the Smart City innovation: Multistakeholder integration and engagement

perspectives. Journal of Business Research, 119, 163–171.

Haugh, H. (2020). Call the midwife! Business incubators as entrepreneurial enablers in developing economies. Entrepreneurship & Regional Development, 32(1–2), 156–175.

Isenberg, D. (2010, Juni 1). The Big Idea: How to Start an Entrepreneurial Revolution. Harvard Business Review.

Kim, S., & Kim, A. (2022). Going Viral or Growing Like an Oak Tree? Towards Sustainable Local Development Through Entrepreneurship. Academy of Management Journal, 65(5), 1709–1746.

Kummitha, R. K. R. (2019). Smart cities and entrepreneurship: An agenda for future research. Technological Forecasting and Social Change, 149, 119763.

Lee, J. H., Hancock, M. G., & Hu, M.-C. (2014). Towards an effective framework for building smart cities: Lessons from Seoul and San Francisco. Technological Forecasting and Social Change, 89, 80–99.

Lerner, J. (2014). Entrepreneurship, Public Policy, and Cities (SSRN Scholarly Paper 2439701).

Ministry of Housing and Urban Affairs, Government of India (MOHUA) (2021), Making a City Smart: Learnings from the Smart Cities Mission. New Delhi: Smart Cities Motoyama, Y., Knowlton, K., (2017). Examining the Connections within the Startup Ecosystem: A Case Study of St. Louis. Entrepreneurship Research Journal, 7(1).

Mora, L., Deakin, M., Zhang, X., Batty, M., de Jong, M., Santi, P., & Appio, F. P. (2021). Assembling Sustainable Smart City Transitions: An Interdisciplinary Theoretical Perspective. Journal of Urban Technology, 28(1–2), 1–27.

Morisson, A., & Panetti, E. (2020). Institutional entrepreneurs and socio-institutional changes in Medellín, Colombia. Regional Studies, Regional Science, 7(1), 35–51.

OECD (2020), Smart Cities & Inclusive Growth.

Radu, L.-D. & Voda, A. I. (2022). The Role of Smart Cities in Stimulating and

Developing Entrepreneurship. In A. Visvizi & O. Troisi (Hrsg.), Managing Smart Cities: Sustainability and Resilience Through Effective Management (S. 139–157). Springer International Publishing.

Roundy, P. T. (2017). “Small town” entrepreneurial ecosystems: Implications for developed and emerging economies. Journal of Entrepreneurship in Emerging Economies, 9(3), 238–262.

Schumpeter, J. A. (2000). Entrepreneurship as Innovation (SSRN Scholarly Paper Nr. 1512266).

Scornavacca, E., Paolone, F., Za, S., & Martiniello, L. (2020). Investigating the entrepreneurial perspective in smart city studies. International Entrepreneurship and Management Journal, 16(4), 1197–1223.

van Winden,W., & Carvalho, L. (2019). Intermediation in public procurement of innovation: How Amsterdam’s startup-in-residence programme connects startups to urban challenges. Research Policy, 48(9), 103789.