

**DEMYSTIFYING THE BLACK BOX OF BUSINESS  
INCUBATION: A LONGITUDINAL STUDY OF  
INCUBATED ENTREPRENEURS**



A Doctoral Dissertation Submitted in Partial Fulfillment of The Requirements

for the

EXECUTIVE FELLOW PROGRAMME IN MANAGEMENT

INDIAN INSTITUTE OF MANAGEMENT INDORE

BY

SONALI GUPTA

JUNE 2021

Thesis Advisory Committee

1. Prof DL Sunder [Co-Chairman]
2. Prof Kamal Jain [Co-Chairman]
3. Prof Swapnil Garg [Member]
4. Prof Prashant Salwan [Member]

## Abstract

### **Demystifying the Black Box of Business Incubation: A Longitudinal Study of Incubated Entrepreneurs**

Business incubators are a prominent policy tool used by governments all over the world to stimulate and support entrepreneurship. Incubators assist early-stage entrepreneurs in converting their ideas into sustainable enterprises by providing them resources like workspace, mentoring, business advice, networks, access to professional services and capital, which might be difficult for them to obtain on their own.

There are varied views about the effectiveness of incubators. The impact of incubation has been studied on factors such as the number of jobs created, revenue generated, patents filed by incubated companies. But given the multiplicity of objectives, sponsors and stakeholders in an incubator, there is little consensus on the key success factors that can be used to assess an incubator's success. Business Incubation (BI) is deemed as complex and multi-faceted, with many gaps in understanding the process. The focus of most BI studies has been primarily the incubation facility – its definition, configuration, typology, offerings, services, self-reported success factors and incubation outcomes. Most research has been focussed on the “what” of BI and the “how” and “why” have been side-lined. The entrepreneur who uses the incubation services has not received adequate attention as a unit of analysis in the studies. What is needed is to develop a rich knowledge base of internal processes at an incubator, to understand – *how an incubator incubates by investigating the experiences of incubated entrepreneurs.*

Any mechanism aimed at enabling entrepreneurial growth must take into account the characteristics of the entrepreneurs and their perceived needs. Hence it makes sense to study incubation from the entrepreneurs' perspective to understand how incubatees develop and what goes inside the “black box of business incubation”.

The research is an inductive, longitudinal study of incubated enterprises to understand

*“How do nascent entrepreneurs perceive incubation to make a difference to their entrepreneurial process”.*

The study investigates the impact of various elements of business incubation on the entrepreneurial process of incubatees to understand how incubation helps them survive and grow through the early stages of their entrepreneurial journey. Qualitative methods and longitudinal studies allow researchers to explore the complexities of the entrepreneurial process, to immerse in the context, and to gain insights into dynamics of change and continuity over time. Conducting multiple, periodic interviews through the incubation period reduced the risk of a biased perspective and permitted a more comprehensive picture of the incubation process. It helped capture the participants' perceptions, experiences, and reactions to incubation inputs as and when those occur and was thus, less susceptible to the problem of retrospective bias.

The study shows that there are different stages in the journey between having an idea and launching the venture. Each stage involves certain venturing activities through which the entrepreneur gains clarity on their true aspirations, the feasibility of building the venture and the process of building the venture. Being incubated provides various tangible and intangible resources. However, the entrepreneurs make use (or do not make use) of the resources as applicable to the stage of their journey. Thus, having a stellar resource portfolio is not a sufficient condition for incubators to help start-ups. Incubation programs aligned with the entrepreneurs' needs will enable them to transition to the next stage and lead to venture creation and growth.

# Table of Contents

Abstract.....	2
Acknowledgments.....	4
List of Tables .....	8
List of Figures .....	8
Chapter 1. Introduction .....	1
1.1. Overview .....	2
1.2. Structure of the Dissertation .....	3
Chapter 2. Literature Review .....	5
2.1. Business Incubator .....	5
2.2. Types of Business Incubators .....	9
2.3. Assessing the Success of Business Incubator .....	14
2.4. Assessing the Usage and Benefits of Incubation Facilities .....	17
2.5. What do we <i>still</i> not know (The Gap)? .....	20
2.6. Business Incubation in India – What we know and what we can explore .....	25
2.7. Research Objective .....	35
Chapter 3. Methodology.....	37
3.1. Research Design .....	37
3.2. Data Collection.....	47
3.3. Data Analysis.....	51
3.3. Reflexivity.....	57
3.4. Ensuring Quality of the Qualitative Study.....	58
Chapter 4. Findings .....	64
4.1. Stages of Nascent Entrepreneurship .....	77
4.2. End of Incubation Period .....	135
4.3. Summary Of Experienced Needs And Resource Usage At Each Stage .....	138
Chapter 5. Discussion.....	140
5.1. Grounded Model of Stages of Nascent Entrepreneurship and Incubation Resource Usage 141	
5.2. Commonalities across stages .....	159
5.3. Shifting Perspectives .....	163
Chapter 6. Conclusion.....	168
6.1. Theoretical Implications.....	172
6.2. Practical Implications .....	178

6.3. Limitations and Suggestions for Future Research .....	181
REFERENCES .....	184

## List of Tables

Table 1. First 25 Business Incubators Set up in India.....	26
Table 2. Respondent Characteristics.....	46
Table 3. Comparison of Assessment Criteria of Research Approach.....	59
Table 4. Strategies to Establish Trustworthiness.....	62
Table 5. Empirical Data with Representative Quotes Underlying the Themes.....	67
Table 6. Experiences of early-stage entrepreneurs with various elements of incubation process.....	139

## List of Figures

Figure 1. Commonly adopted definitions of Business Incubation/Incubator (Adapted from Theodorakopoulos et al., 2014)).....	8
Figure 2. Data Structure.....	66
Figure 3. Stages of Pre-revenue, Pre-Launch Nascent Entrepreneurship.....	78
Figure 4. Processual Model of Stage 1 – Evaluate.....	90
Figure 5. Processual Model of Stage 2 – Actuate.....	109
Figure 6. Processual Model of Stage 3 – Launch.....	134
Figure 7. Grounded Model of the Stages of Nascent Entrepreneurship and Corresponding Resource Usage.....	142

## REFERENCES

- Aaboen, L. (2009). Explaining incubators using firm analogy. *Technovation*, 29(10), 657–670. <https://doi.org/10.1016/j.technovation.2009.04.007>
- Aernoudt, R. (2004). Incubators: Tool for Entrepreneurship? *Small Business Economics*, 23(2), 127–135.
- Ahmad, A. J., & Ingle, S. (2013). Business Incubators and HTSF Development: Setting an Agenda for Further Research. In R. Oakey, A. Groen, G. Cook, & P. Van Der Sijde (Eds.), *New Technology Based Firms in the New Millennium: Vol. X* (pp. 119–140). Emerald Group Publishing Limited. <https://doi.org/10.1108/S1876-0228201511>
- Allen, D., & McCluskey, R. (1990). Structure, Policy, Services, and Performance in the Business Incubator Industry. *Entrepreneurship Theory and Practice*, 15(2), 61–77.
- Allen, D., & Rahman, S. (1985). Small Business Incubators: A Positive Environment for Entrepreneurship. *Journal of Small Business Management*, 12–23.
- Amit, R., & Muller, E. (1995). “Push” and “Pull” Entrepreneurship. *Journal of Small Business & Entrepreneurship*, 12(4), 64–80.  
<https://doi.org/10.1080/08276331.1995.10600505>
- Anderson, A. R., & Warren, L. (2011). The entrepreneur as hero and jester: Enacting the entrepreneurial discourse. *International Small Business Journal*, 29(6), 589–609.  
<https://doi.org/10.1177/0266242611416417>
- AngelList. (n.d.). *Bhive Workspace*. AngelList. <https://angel.co/company/bhive-workspace-1%0D>
- Atal Innovation Mission. (2016). *Guidelines for setting up of Incubation Centres under Atal*

*Innovation Mission - 'Atal Incubation Centres'* (Issue May). <https://aim.gov.in/atal-incubation-centres.php>

Audretsch, D. B. (2004). Sustaining innovation and growth: Public policy support for entrepreneurship. *Industry and Innovation*, 11(3), 167–191.  
<https://doi.org/10.1080/1366271042000265366>

Baraldi, E., & Ingemansson, H. M. (2016). Identifying new dimensions of business incubation: A multi-level analysis of Karolinska Institute's incubation system. *Technovation*, 50–51, 53–68. <https://doi.org/10.1016/j.technovation.2015.08.003>

Barbero, J. L., Casillas, J. C., Ramos, A., & Guitar, S. (2012). Revisiting incubation performance How incubator typology affects results. *Technological Forecasting & Social Change*, 79(5), 888–902. <https://doi.org/10.1016/j.techfore.2011.12.003>

Barbour, R. S. (2018). Quality of Data Collection. In U. Flick (Ed.), *The SAGE Handbook of Qualitative Data Collection* (pp. 217–230). SAGE Publications Ltd.  
<https://doi.org/10.4135/9781526416070.n14>

Bergek, A., & Norrman, C. (2008). Incubator best practice: A framework. *Technovation*, 28(1–2), 20–28. <https://doi.org/10.1016/j.technovation.2007.07.008>

Berglund, H. (2007). Researching entrepreneurship as lived experience. In H. Neergaard & J. P. Ulhoi (Eds.), *Handbook of Qualitative Research Methods in Entrepreneurship* (Vol. 3, Issue 2003, pp. 75–96). <https://doi.org/10.4337/9781847204387.00011>

Bhave, M. P. (1994). A process model of entrepreneurial venture creation. *Journal of Business Venturing*, 9(3), 223–242.

Birley, S. (1985). The role of networks in the entrepreneurial process. *Journal of Business*



*Venturing*, 1(1), 107–117. [https://doi.org/10.1016/0883-9026\(85\)90010-2](https://doi.org/10.1016/0883-9026(85)90010-2)

Bøllingtoft, A. (2012). The bottom-up business incubator: Leverage to networking and cooperation practices in a self-generated, entrepreneurial-enabled environment.

*Technovation*, 32(5), 304–315. <https://doi.org/10.1016/j.technovation.2011.11.005>

Bøllingtoft, A., & Ulhøi, J. P. (2005). The networked business incubator - Leveraging entrepreneurial agency? *Journal of Business Venturing*, 20(2), 265–290.

<https://doi.org/10.1016/j.jbusvent.2003.12.005>

Brockhaus, R. H., & Horwitz, P. S. (1986). The art and science of entrepreneurship. *The Psychology of the Entrepreneur*, 25–48.

Bruneel, J., Ratinho, T., Clarysse, B., & Groen, A. (2010). Are They Really Helping? An Assessment of Evolving Business Incubators' Value Proposition. *Frontiers of Entrepreneurship Research*, 30(15).

Bruneel, J., Ratinho, T., Clarysse, B., & Groen, A. (2012). The evolution of Business incubators: Comparing demand and supply of business incubation services across different incubator generations. *Technovation*, 32(2), 110–121.

Business Insider. (2018). India has the fastest growing population of millionaires in the world. *Business Insider*. <https://www.businessinsider.in/india-has-the-fastest-growing-population-of-millionaires-in-the-world-report/articleshow/64662056.cms>

Campbell, C. (1984). Hatching Small Businesses. *Planning*, 50(50), 19–24.

Campbell, C., Kendrick, R. C., & Samuelson, D. S. (1985). Stalking the Latent Entrepreneur: Business Incubators and Economic Development. *Economic Development Review*, 3(2), 43–48.

- Carayannis, E. G., & von Zedtwitz, M. (2005). Architecting gloCal (global-local), real-virtual incubator networks (G-RVINs) as catalysts and accelerators of entrepreneurship in transitioning and developing economies: Lessons learned and best practices from current development and business incubation. *Technovation*, 25(2), 95–110.  
[https://doi.org/10.1016/S0166-4972\(03\)00072-5](https://doi.org/10.1016/S0166-4972(03)00072-5)
- Carter, N. M., Gartner, W. B., & Reynolds, P. D. (1996). Exploring start-up event sequences. *Journal of Business Venturing*, 11(3), 151–166. [https://doi.org/10.1016/0883-9026\(95\)00129-8](https://doi.org/10.1016/0883-9026(95)00129-8)
- Cassar, G., & Craig, J. (2009). An investigation of hindsight bias in nascent venture activity. *Journal of Business Venturing*, 24(2), 149–164.  
<https://doi.org/10.1016/j.jbusvent.2008.02.003>
- Chan, K. F., & Lau, T. (2005). Assessing technology incubator programs in the science park: The good, the bad and the ugly. *Technovation*, 25(10), 1215–1228.  
<https://doi.org/10.1016/j.technovation.2004.03.010>
- Charmaz, K. (2014). *Constructing Grounded Theory*. SAGE Publications.
- Cho, J., & Trent, A. (2006). Validity in qualitative research revisited. *Qualitative Research*, 6(3), 319–340. <https://doi.org/10.1177/1468794106065006>
- Clarysse, B., Wright, M., Lockett, A., Van de Velde, E., & Vohora, A. (2005). Spinning out new ventures: A typology of incubation strategies from European research institutions. *Journal of Business Venturing*, 20(2), 183–216.  
<https://doi.org/10.1016/j.jbusvent.2003.12.004>
- Comer, D. R., & Sekerka, L. E. (2014). Taking time for patience in organizations. *Journal of Management Development*, 33(1), 6–23. <https://doi.org/10.1108/JMD-11-2013-0132>

- Davidsson, P. (2005). Methodological Approaches to Entrepreneurship: Past and Suggestions for the Future. *Small Enterprise Research*, 13, 1–21.  
<https://doi.org/10.1016/j.nuclcard.2007.06.010>
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301–331.  
[https://doi.org/10.1016/S0883-9026\(02\)00097-6](https://doi.org/10.1016/S0883-9026(02)00097-6)
- Delmar, F., & Shane, S. (2004). Legitimizing first: Organizing activities and the survival of new ventures. *Journal of Business Venturing*, 19(3), 385–410.  
[https://doi.org/10.1016/S0883-9026\(03\)00037-5](https://doi.org/10.1016/S0883-9026(03)00037-5)
- Dewson, S., Eccles, J., Tackey, N. D., & Jackson, A. (2000). Guide to measuring soft outcomes and distance travelled. *Brighton, UK: DfEE*.  
[http://employability.clients2.civiccomputing.com/sites/default/files/articles/5594/Guide to Measuring Soft Outcomes & Distance Travelled\\_863\\_1055.pdf](http://employability.clients2.civiccomputing.com/sites/default/files/articles/5594/Guide%20to%20Measuring%20Soft%20Outcomes%20&%20Distance%20Travelled_863_1055.pdf)
- Dimov, D. (2010). Nascent entrepreneurs and venture emergence: Opportunity confidence, human capital, and early planning. *Journal of Management Studies*, 47(6), 1123–1153.  
<https://doi.org/10.1111/j.1467-6486.2009.00874.x>
- Dodd, S. D., & Anderson, A. R. (2007). Mumpsimus and the mything of the individualistic entrepreneur. *International Small Business Journal*, 25(4), 341–360.  
<https://doi.org/10.1177/0266242607078561>
- Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *Academy of Management Review*, 14(4), 532–550. <https://doi.org/10.5465/AMR.1989.4308385>
- Flick, U. (2012). How to Address Research Quality. In *Managing Quality in Qualitative Research* (pp. xvi–10). <https://doi.org/10.4135/9781849209441.n1>

- Flick, U. (2018). Triangulation in Data Collection. In *The SAGE Handbook of Qualitative Data Collection* (pp. 527–544). SAGE Publications.  
<https://doi.org/10.4135/9781849209335.n2>
- Gartner, W. B., & Birley, S. (2002). Introduction to the special issue on qualitative methods in entrepreneurship research. *Journal of Business Venturing*, *17*(5), 387–395.  
[https://doi.org/10.1016/S0883-9026\(01\)00077-5](https://doi.org/10.1016/S0883-9026(01)00077-5)
- Gassmann, O., & Becker, B. (2006). Towards a Resource-Based View of Corporate Incubators. *International Journal of Innovation Management*, *10*(1), 19–45.  
<https://doi.org/10.1142/S1363919606001387>
- Gibbs, G. R. (2013). Using software in qualitative analysis. In U. Flick (Ed.), *The SAGE handbook of qualitative data analysis* (pp. 277–294). SAGE Publications Ltd London.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. *Organizational Research Methods*, *16*(1), 15–31. <https://doi.org/10.1177/1094428112452151>
- Glaser, B. G., & Strauss, A. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*.
- Grimaldi, R., & Grandi, A. (2005). Business incubators and new venture creation: An assessment of incubating models. *Technovation*, *25*(2), 111–121.  
[https://doi.org/10.1016/S0166-4972\(03\)00076-2](https://doi.org/10.1016/S0166-4972(03)00076-2)
- Guadix, J., Carrillo-Castrillo, J., Onieva, L., & Navascués, J. (2016). Success variables in science and technology parks. *Journal of Business Research*, *69*(11), 4870–4875.  
<https://doi.org/10.1016/j.jbusres.2016.04.045>

- Guba, E. G. (1981). Criteria for Assessing the Trustworthiness of Naturalistic Inquiries. *Educational Communication and Technology*, 29(4), 75–91.  
[http://www.google.de/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CDIQFjAB&url=http://link.springer.com/chapter/10.1007%252F978-94-009-6669-7\\_18&ei=xc1ZVL\\_AE4i3ONjKgZgI&usg=AFQjCNGrijcV39B\\_brg3m3D7S6dw9zcyhw&bvm=bv.78677474,d.ZWU&cad=rja](http://www.google.de/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CDIQFjAB&url=http://link.springer.com/chapter/10.1007%252F978-94-009-6669-7_18&ei=xc1ZVL_AE4i3ONjKgZgI&usg=AFQjCNGrijcV39B_brg3m3D7S6dw9zcyhw&bvm=bv.78677474,d.ZWU&cad=rja)
- Hackett, S. M., & Dilts, D. (2004a). A Systematic Review of Business Incubation. *The Journal of Technology Transfer*, 29(1), 55–82. <https://doi.org/10.1023/B>
- Hackett, S. M., & Dilts, D. M. (2004b). A real options-driven theory of business incubation research. *Journal of Technology Transfer*, 29, 41–54.
- Hackett, S. M., & Dilts, D. M. (2008). Inside the black box of business incubation: Study B — scale assessment , model refinement , and incubation outcomes. *Journal of Technology Transfer*, 33(5), 439–471. <https://doi.org/10.1007/s10961-007-9056-9>
- Hannon, P. D., & Chaplin, P. (2003). Are incubators good for business? Understanding incubation practice - The challenges for policy. *Environment and Planning C: Government and Policy*, 21(6), 861–881. <https://doi.org/10.1068/c0215>
- Hansen, M. T., Chesbrough, H. W., Nohria, N., & Sull, D. N. (2000). Networked incubators. Hothouses of the new economy. *Harvard Business Review*, 78(5), 74–84.
- Hill, J., & McGowan, P. (1999). Small business and enterprise development: questions about research methodology. *International Journal of Entrepreneurial Behaviour & Research*, 5(1), 5–18. <https://doi.org/10.1108/13552559910259829>
- Honig, B. (2004). Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning. *Academy of Management Learning & Education*, 3(3), 258–273.

<https://doi.org/10.5465/amle.2004.14242112>

Høvig, Ø., Pettersen, I. B., & Aarstad, J. (2017). Entrepreneurial Causation vs. Effectuation in a Business Incubation Context: Implications for Recruiting Policy and Management.

*Entrepreneurship Research Journal*, 8(1). <https://doi.org/10.1515/erj-2017-0065>

Hyrsky, K. (1999). Entrepreneurial Metaphors and Concepts: An Exploratory Study.

*International Small Business Journal*, 18(1), 13–34.

<https://doi.org/10.1177/07399863870092005>

Kilcrease, K. (2012). The Batavia Industrial Center: The Hatching of the World's First

Business Incubator. *New York History*, 93(1), 71–93.

Krefting, L. (1991). Rigor in qualitative research: the assessment of trustworthiness. *The*

*American Journal of Occupational Therapy*, 45(3), 214–222.

<https://doi.org/10.5014/ajot.45.3.214>

Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship and Regional Development*, 5(4), 315–330.

<https://doi.org/10.1080/08985629300000020>

Langley, A. (1999). Strategies for Theorizing from Process Data. *Academy of Management*

*Review*, 24(4), 691–710. <https://doi.org/10.5465/amr.1999.2553248>

Lasrado, V., Sivo, S., Ford, C., O'Neal, T., & Garibay, I. (2016). Do graduated university

incubator firms benefit from their relationship with university incubators? *Journal of*

*Technology Transfer*, 41(2), 205–219. <https://doi.org/10.1007/s10961-015-9412-0>

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Sage Publications, Inc.

Mankins, M., & Steele, R. (2005). Turning great strategy into great performance. *Harvard*

*Business Review*, 83, 64-72,191.

- Mansoori, Y., Karlsson, T., & Lundqvist, M. (2019). The influence of the lean startup methodology on entrepreneur-coach relationships in the context of a startup accelerator. *Technovation*, 84–85(March), 37–47. <https://doi.org/10.1016/j.technovation.2019.03.001>
- McAdam, M., & Marlow, S. (2007). Building futures or stealing secrets? Entrepreneurial cooperation and conflict within business incubators. *International Small Business Journal*, 25(4), 361–382. <https://doi.org/10.1177/0266242607078563>
- McAdam, M., & Marlow, S. (2008). A preliminary investigation into networking activities within the university incubator. *International Journal of Entrepreneurial Behavior & Research*, 14(4), 219–241. <https://doi.org/10.1108/13552550810887390>
- McAdam, M., & McAdam, R. (2008). High tech start-ups in University Science Park incubators: The relationship between the start-up's lifecycle progression and use of the incubator's resources. *Technovation*, 28(5), 277–290. <https://doi.org/10.1016/j.technovation.2007.07.012>
- McKenzie, D., & Sansone, D. (2019). Predicting entrepreneurial success is hard: Evidence from a business plan competition in Nigeria. *Journal of Development Economics*, 141(April 2018), 102369. <https://doi.org/10.1016/j.jdeveco.2019.07.002>
- McMullen, J. S., & Dimov, D. (2013). Time and the entrepreneurial journey: The problems and promise of studying entrepreneurship as a process. *Journal of Management Studies*, 50(8), 1481–1512. <https://doi.org/10.1111/joms.12049>
- McMullen, J. S., & Shepherd, D. A. (2006). Entrepreneurial Action and the Role of Uncertainty in the Theory of the Entrepreneur. *Academy of Management Review*, 31(1), 132–152. <https://doi.org/10.4337/9781783479801.00007>

- Mian, S. (1996). Assessing value-added contributions of university technology business incubators to tenant firms. *Research Policy*, 25(3), 325–335.  
[https://doi.org/10.1016/0048-7333\(95\)00828-4](https://doi.org/10.1016/0048-7333(95)00828-4)
- Mian, S. (1997). Assessing and managing the university technology business incubator: An integrative framework. *Journal of Business Venturing*, 12(4), 251–285.  
[https://doi.org/10.1016/S0883-9026\(96\)00063-8](https://doi.org/10.1016/S0883-9026(96)00063-8)
- Mian, S. (2011). University’s involvement in technology business incubation: What theory and practice tell us? *International Journal of Entrepreneurship and Innovation Management*, 13(2), 113–121. <https://doi.org/10.1504/IJEIM.2011.038854>
- Mian, S., Lamine, W., & Fayolle, A. (2016). Technology Business Incubation : An overview of the state of knowledge. *Technovation*, 50–51, 1–12.  
<https://doi.org/10.1016/j.technovation.2016.02.005>
- Minniti, M. (2008). The role of government policy on entrepreneurial activity: Productive, unproductive, or destructive? *Entrepreneurship: Theory and Practice*, 32(5), 779–790.  
<https://doi.org/10.1111/j.1540-6520.2008.00255.x>
- Monsson, C. K., & Jørgensen, S. B. (2016). How do entrepreneurs’ characteristics influence the benefits from the various elements of a business incubator? *Journal of Small Business and Enterprise Development*, 23(1), 224–239. <https://doi.org/10.1108/JSBED-10-2013-0158>
- NASSCOM. (2020). *Start-up Catalysts - Incubators and Accelerators*.
- Nesta. (2016). *Good Incubation in India - Strategies for supporting social enterprise in challenging contexts*.  
[https://www.nesta.org.uk/sites/default/files/good\\_incubation\\_in\\_india\\_-](https://www.nesta.org.uk/sites/default/files/good_incubation_in_india_-)



\_strategies\_report.pdf

- Newbert, S. L., Tornikoski, E. T., & Quigley, N. R. (2013). Exploring the evolution of supporter networks in the creation of new organizations. *Journal of Business Venturing*, 28(2), 281–298. <https://doi.org/10.1016/j.jbusvent.2012.09.003>
- NITI Aayog. (2015). *Report of the Expert Committee on Innovation and Entrepreneurship*. <http://niti.gov.in/content/report-expert-committee-innovation-and-entrepreneurship>
- Parker, S. C., & Belghitar, Y. (2006). What happens to nascent entrepreneurs? An econometric analysis of the PSED. *Small Business Economics*, 27(1), 81–101. <https://doi.org/10.1007/s11187-006-9003-4>
- Patton, D., Warren, L., & Bream, D. (2009). Elements that underpin high-tech business incubation processes. *Journal of Technology Transfer*, 34(6), 621–636. <https://doi.org/10.1007/s10961-009-9105-7>
- Pauwels, C., Clarysse, B., Wright, M., & Van Hove, J. (2016). Understanding a new generation incubation model: The accelerator. *Technovation*, 50–51, 13–24. <https://doi.org/10.1016/j.technovation.2015.09.003>
- Peters, L., Rice, M., & Sundararajan, M. (2004). The Role of Incubators in the Entrepreneurial Process. *The Journal of Technology Transfer*, 29(1), 83–91. <https://doi.org/10.1023/B:JOTT.0000011182.82350.df>
- Pettigrew, A. M. (1990). Longitudinal Field Research on Change: Theory and Practice. *Organization Science*, 1(3), 267–292. <https://doi.org/10.1287/orsc.1.3.267>
- Phan, P. H., Siegel, D. S., & Wright, M. (2005). Science parks and incubators: observations, synthesis and future research. *Journal of Business Venturing*, 20(2), 165–182.

<https://doi.org/10.1016/j.jbusvent.2003.12.001>

Planning Commission. (2012). *Creating a Vibrant Entrepreneurial Ecosystem in India:*

*Report of the Committee on Angel Investment and Early Stage Venture Capital.*

[http://planningcommission.nic.in/reports/genrep/rep\\_eco2708.pdf](http://planningcommission.nic.in/reports/genrep/rep_eco2708.pdf)

Ragins, B. R., Cotton, J. L., & Miller, J. S. (2000). MARGINAL MENTORING : THE

EFFECTS OF TYPE OF MENTOR , QUALITY OF RELATIONSHIP , AND

PROGRAM DESIGN ON WORK AND CAREER ATTITUDES. *Academy of*

*Management Journal*, 43(6), 1177–1194.

Ratinho, T., Harms, R., & Groen, A. (2013). *Business Incubators: (How) Do They Help Their*

*Tenants?* 161–182. [https://doi.org/10.1108/S1876-0228\(2013\)0000010011](https://doi.org/10.1108/S1876-0228(2013)0000010011)

Ratinho, T., & Henriques, E. (2010). The role of science parks and business incubators in

converging countries: Evidence from Portugal. *Technovation*, 30(4), 278–290.

<https://doi.org/10.1016/j.technovation.2009.09.002>

Reynolds, P., Bosma, N., Autio, E., Hunt, S., De Bono, N., Servais, I., Lopez-Garcia, P., &

Chin, N. (2005). Global entrepreneurship monitor: Data collection design and

implementation 1998-2003. *Small Business Economics*, 24(3), 205–231.

<https://doi.org/10.1007/s11187-005-1980-1>

Rice, M. P. (2002). Co-production of business assistance in business incubators: An

exploratory study. *Journal of Business Venturing*, 17(2), 163–187.

[https://doi.org/10.1016/S0883-9026\(00\)00055-0](https://doi.org/10.1016/S0883-9026(00)00055-0)

Roulston, K. (2014). Analysing Interviews. In *The SAGE Handbook of Qualitative Data*

*Analysis* (pp. 297–312). SAGE Publications Ltd.

<https://doi.org/10.4135/9781446282243>

- Rowley, J. (2002). Using case studies in research. *Management Research News*, 25(1), 16–27. <https://doi.org/10.1108/01409170210782990>
- Ruddin, L. P. (2006). You can generalize stupid! Social scientists, Bent Flyvbjerg, and case study methodology. *Qualitative Inquiry*, 12(4), 797–812. <https://doi.org/10.1177/1077800406288622>
- Rymer, J. (2002). “*Only Connect*”: 39(3), 342–363.
- Singh, S., Corner, P. D., & Pavlovich, K. (2015). Failed, not finished: A narrative approach to understanding venture failure stigmatization. *Journal of Business Venturing*, 30(1), 150–166. <https://doi.org/10.1016/j.jbusvent.2014.07.005>
- Soetanto, D., & Jack, S. (2013). Business incubators and the networks of technology-based firms. *Journal of Technology Transfer*, 38(4), 432–453.
- Soetanto, D., & Jack, S. (2016). The impact of university-based incubation support on the innovation strategy of academic spin-offs. *Technovation*, 50–51, 25–40.
- Stinchcombe, A. L. (1965). Social Structure and Organizations. In J. G. March (Ed.), *Handbook of Organizations* (pp. 142–193). Rand McNally.
- Storey, D. J. (1994). *Understanding the small business sector*. Routledge.
- The Economic Times. (2017). Two Bengaluru incubators among 6 chosen for NITI Aayog funding. *The Economic Times*. <https://economictimes.indiatimes.com/small-biz/startups/two-bengaluru-incubators-among-6-chosen-for-niti-aayog-funding/articleshow/56943412.cms>
- The News Minute. (2020). *WeWork India is betting on being more than just a co-working space*. The News Minute. <https://www.thenewsminute.com/article/wework-india->

betting-being-more-just-co-working-space-119082

- Theodorakopoulos, N., Kakabadse, N. K., & McGowan, C. (2014). What matters in business incubation? A literature review and a suggestion for situated theorising. *Journal of Small Business and Enterprise Development*, 21(4), 602–622. <https://doi.org/10.1108/JSBED-09-2014-0152>
- Vanderstraeten, J., Witteloostuijn, A. Van, & Matthyssens, P. (2016). Being flexible through customization - The impact of incubator focus and customization strategies on incubatee survival and growth. *Journal of Engineering and Technology Management*, 41, 45–64. <https://doi.org/10.1016/j.jengtecman.2016.06.003>
- Venkataraman, S., Sarasvathy, S. D., Dew, N., & Forster, W. R. (2012). Reflections on the 2010 AMR decade award: Whither the promise? Moving forward with entrepreneurship as a science of the artificial. *Academy of Management Review*, 37(1), 21–33. <https://doi.org/10.5465/amr.2011.0079>
- Voisey, P., Gornall, L., Jones, P., & Thomas, B. (2006). The measurement of success in a business incubation project. *Journal of Small Business and Enterprise Development*, 13(3), 454–468. <https://doi.org/10.1108/14626000610680307>
- von Zedtwitz, M. (2003). Classification and management of incubators: aligning strategic objectives and competitive scope for new business facilitation. *International Journal of Entrepreneurship and Innovation Management*, 3(1–2), 176–196. <https://doi.org/10.1504/ijeim.2003.002227>
- Wallendorf, M., & Belk, R. W. (1989). Assessing Trustworthiness in Naturalistic Consumer Research. *ACR Special Volumes*, 69–84.
- Walton, K. W. (2016). Entrepreneurial behaviour: the role of values. *International Journal of*

*Entrepreneurial Behavior & Research*, 22(3), 290–328.

<https://doi.org/10.1108/IJEBR-02-2015-0042>

Watson, K., McGowan, P., & Cunningham, J. A. (2018). An exploration of the Business Plan Competition as a methodology for effective nascent entrepreneurial learning.

*International Journal of Entrepreneurial Behaviour and Research*, 24(1), 121–146.

<https://doi.org/10.1108/IJEBR-05-2017-0158>

Weele, M. Van, Rijnsoever, F. J. Van, & Nauta, F. (2017). You can't always get what you want: How entrepreneur's perceived resource needs affect the incubator's assertiveness.

*Technovation*, 59, 18–33. <https://doi.org/10.1016/j.technovation.2016.08.004>

Welter, F., & Smallbone, D. (2011). Institutional Perspectives on Entrepreneurial Behavior in Challenging Environments. *Journal of Small Business Management*, 49(1), 107–125.

<https://doi.org/10.1111/j.1540-627X.2010.00317.x>

Yin, R. K. (1981). The case study as a serious research strategy. *Knowledge: Creation,*

*Diffusion, Utilization*, 3(1), 97–114. <https://doi.org/10.1177/107554708100300106>

Yin, R. K. (1994). *Case Study Research: Design and methods* (Second). Sage publications.

Yin, R. K. (2011). *Qualitative Research from Start to Finish*. The Guilford Press.

Zedtwitz, M., & Grimaldi, R. (2006). Are service profiles incubator-specific? Results from an empirical investigation in Italy. *Journal of Technology Transfer*, 31(4), 459–468.

<https://doi.org/10.1007/s10961-006-0007-7>