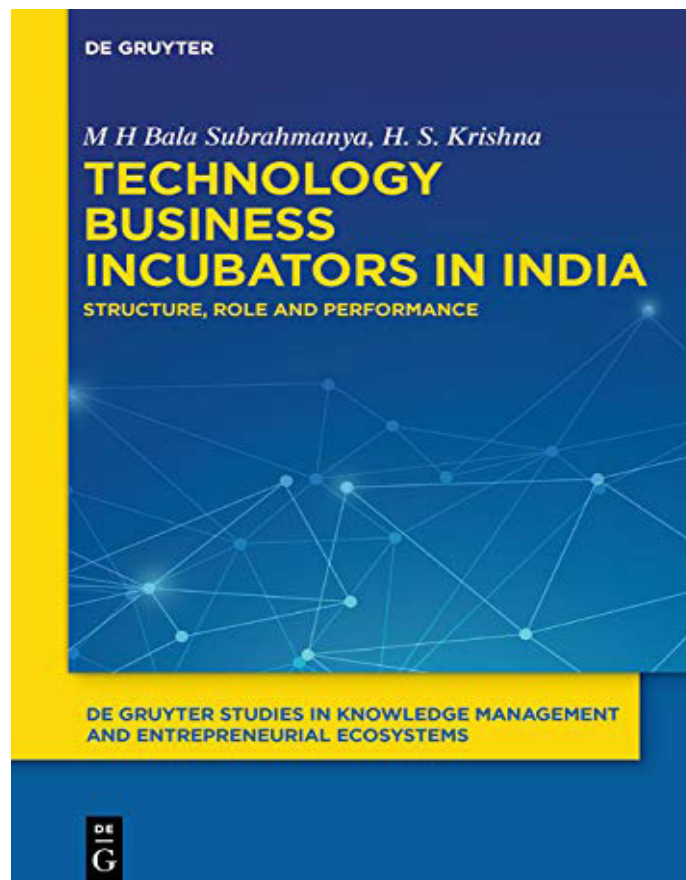


# Book Review: Technology Business Incubator Process and Performance



**Technology Business Incubators in India: Structure, Role and Performance**, by M H Bala Subrahmanya and H S Krishna, De Gruyter Studies in Knowledge Management and Entrepreneurial Ecosystems. 2021, 154 Pages, ISBN: 9783110705058, Price: 86,95 €

## Overview

Innovation ecosystems support the evolution of technology startups besides nurturing their growth.<sup>[1]</sup> Most of the available literature on this phenomenon focuses on the developed economies, and there is a void in studying emerging economies. This book on “Technology Business Incubators in India Structure, Role and Performance” addresses the same. The focus on the various constituents of TBIs in the form of Accelerators, Business incubators, and Co-working spaces and their structure, role, and performance are examined.

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The book explains the umbilical cord connectivity between the technology business incubators (TBI) and the startups. TBIs enable technology commercialization and bring innovation to the forefront in building a knowledge-driven economy. TBIs bridge the knowledge gap and enables startups to develop viable businesses while bringing out the distinct success rate of incubated startups. The book focuses on three major cities with a higher concentration of TBIs in India. The TBI evolution is sponsored by three major players such as economic development agencies, governments, and academic institutions, subtly explored. The chronology of events, the growth of the TBI movement across the globe, and details on the current policy support available to nurture TBIs in India are enumerated.

## Literature Analysis and Research Problem

The literature review provides the typology of TBIs is portrayed from multiple perspectives, bringing nuanced classifications possible, including profit/non-profit, sponsorship, location, method of selection, the focus of support, and period of evolution. The goals and objectives of TBIs are enumerated to provide a macro-level view of how to drive economic rejuvenation. The operationalization of the goals and objectives of TBIs needs micro-level functions and services.

Firstly, the pre-incubation involves the matchmaking process of demand and supply. The selection of prospective startup founders from the supply side is based on education, founding experience, industry experience, innovative ideas, domain expertise, and own network resources. The demand side fulfillment involves sponsors, networks, typology, infrastructure, monitoring, and sector focus. The judicious blend of supply-demand culminates in the selection of startups for incubation. Secondly, the startups that are selected for incubation get access to reliable infrastructure, business services, and professional network access. This enables the startups to transform their ideas into repeatable product/service delivery while providing them with a battery of support services in mentoring, access to funding sources, and human resources. Thirdly, the post-incubation process characterization provides a detailed overview of measuring the success of the incubation process.

The pre-incubation resulting in the selection of startups, incubation leading to the emergence of startups, and post-incubation culminating in the graduation and exit of startups are explained with a conceptual framework. The research methodology and objectives were crafted, and the samples were drawn from Bangalore, Chennai, and Hyderabad, India's three major TBI hubs. At the top of the funnel were accelerators, Business incubators, and Co-working spaces (ABCs) with 239 samples. The first filter of two years of ABC aging reduced samples to 189. The second filter of structured questionnaire brought down the samples to 114. The third filter of primary data collection method deployment to understand the research problem resulted in 65 samples. The three-stage filter ensured the availability of both quantitative and qualitative information for analysis.

## Content Analysis

The demographics of TBIs in India under study in terms of their age, sponsorship, sector focus, and startup lifecycle stage they support are presented. The analysis throws light on the

educational qualifications and prior industry/startup experience of CEOs of TBIs. They have sufficient infrastructure capacity in terms of space, seats and are sufficiently staffed to attract and support startups. While the TBIs have various services to offer to startups, they have to market their efforts and adapt to multiple means to attract them. The above information is relevant to policymakers and stakeholders of TBIs to plan their actions. While distinguishing the instituted promoted TBIs versus industry-promoted TBIs, stage-focus TBIs and sector-focus TBIs were also emphasized. The TBIs focus on multiple objectives and provide multiple support services to benefit the startups.

The application process<sup>[2]</sup> of prospective startup founders is probed by studying the number of applications received and the application-to-seat ratio. First, in the pre-incubation step, the selection of startups by TBIs is studied using TBIs' occupancy ratios besides throwing light on the selection criteria applied. Second, in the incubation step, the support extended to TBIs on the following counts are discussed, mentoring services, financial support services, and market enablement activities. Third, in the post-incubation step, the criteria for graduation are elaborated, and the number of startups graduated.

The effectiveness measures of TBIs in the form of input and output-based metrics are explored.<sup>[3]</sup> On the input side, R&D investment and R&D personnel were explored before identifying the determinants. On the output side, the number of new products/services introduced, the revenue generated from the same, and the number of patents submitted were explored before identifying the determinants.

The authors have uniquely presented inferences and policy recommendations on attracting, admitting, and graduating startups in a TBI. The significant contributions, limitations, and scope for future work were also highlighted. In a nutshell, the book on TBI provides a comprehensive view of the TBIs operating out of India and sheds light on the incubation process besides providing an econometric measurement of the effectiveness.

The book opens also the scope for future study on how incubated startups performed after exiting the TBIs. Some sophisticated analysis such as the survival of the TBIs using Cox regression and other approaches would be very useful in diving deep into this aspect.

Overall this book will be very useful for students cutting across disciplinary boundaries, scholars, industry, and policy makers. It also provides a useful window for international audience

audiences involved in understanding the Indian innovation and entrepreneurship ecosystem.

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DOI: 10.5530/jscires.11.3.51