

## Substantive Incubation for Growth and its ICT Impact on MSME

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**Abstract:** A business incubator is a tool for decreasing high failure rate of startups. In order to accelerate and systemize creation process of successful enterprises, business incubator provides comprehensive support such as clustering opportunities, business support services, networking opportunities and incubator space. A fruitful business incubator is capable of generating steady flow of new business with above mentioned average jobs and wealth construction potential. The main objective of this study is to permit substantive incubation for the development and its impingements on Micro Small and Medium Enterprises (MSME). An ICT incubator provides training to 100 MSME in terms of technical help, consultation and guidance to entrepreneurs. The training process is carried out in two stages such as Pre-Incubation and Post Incubation. The functioning of 100 MSME in pre-incubation stage is compared with post-incubation stage. The comparison shows that training, connectivity, finance, infrastructure and business service in post-incubation stage is efficient than pre-incubation stage.

**Key words:** Business incubator, business service, connectivity, finance, ICT incubator, infrastructure, MSME and training

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### INTRODUCTION

A business incubator is a famous tool that accelerates to create successful entrepreneurial companies. In European Union and US, there are about 900-1400 business incubators. It supports the new venture because it is in hope that it will develop into thriving and self-sustaining company. It provides business report, shared resources, access to networks and office spaces (Barrow, 2001). While serving the clients, a good incubator recognizes belonging and a sense of community along with the best business practices instruction, supplies and facilities they offer. For an effective incubation program, developers should invest money and time to lay foundation. In the success of an incubator, an effective study will be useful in determining whether the proposed project has strong community support and a sound financial base. In local and regional economies, government subsidies for an incubation program of well managed business incubation characterize a strong investment. In 2010, a set of industry guidelines for helping an incubator manager to serve their clients better is developed by NBIA's. Substantial employment is provided by the Micro Small and Medium Enterprises and across the society it distributes the economic wealth uniformly.

The MSME constitutes over 90% of total enterprises in many developing countries like India, Sri Lanka, Brazil

and Pakistan. It accounts for a major share in industrial exports and products and credited with the highest rate of employment rate generation. The strength of 26 million MSMEs play an important role in India in the countries overall industrial economy. The SME sector is calculated to contribute over 70% in employment and 30-40% to GDP in Egypt, Kenya, Africa and South Africa. In India, MSME calculates for about 45% of the manufacturing yield and over 40% of the country's total export. The sector has shown important adaptability and innovativeness for surviving the recent recession and economic downturn with its potential and great flexibility all over the world. Constituting a micro or small enterprise acquires various months to years for gathering information, resources and skills and gain knowledge. A peer survey is applied to achieve this within the same industry to acquire practical advice by talking to other business men. In decision making, taking the independent research is applied to find out demand assessment, availability of raw material, marketing intelligence, identification of supply chain, appropriate technology, demand assessment and forecasting. Comprehensive and the integrated range of support is necessary for a starting entrepreneur through which they acquire finance, technology and marketing assistance, clustering and networking opportunities, spaces and business support. Business incubators provide incubates the required hand holding services and resources such as mentoring, networking with angel

investors, assistance in business plan training. It assists in receiving finance. Incubators also offer shared basic office services, access to equipment and common facilities and company's rental space with flexible leases.

Understanding the entrepreneurship challenges, Research Institutions have accomplished many Business/Technology Incubators with the purpose to foster the start-up small enterprises. Several Governments have also started various schemes and organized incentives to help the entrepreneurs. In any country, enterprise growth leads to local economic growth. Entrepreneurs aim to initiate their business with minimum investment and risks. An incubator renders short and long-term assistances and helps to establish new enterprises. It offers business development services and provides technical assistance, guidance and consultation to entrepreneurs. In ICT incubator, clients access to shared basic services, equipment and appropriate rental space. Some incubators assist only in arranging venture capital funding and developing new ideas.

As incubators accelerate start-ups by providing support, resources and quick knowledge it is sometimes called as Business Accelerator. In developing their business, incubators helps in rising ventures by giving assistance and services. Business incubators are mapped into Corporate Private Incubators (CPIs), Business Innovation Centres (BICs), Independent Private Incubators (IPIs) and University Business Incubators (UBIs) (Rosa Grimald, 2005). Depending up on common facility equipment and leasing out infrastructure to entrepreneurs, incubation program was modeled before some years. New incubators have been set up in the food processing, ICT, Health care technologies, product design, knowledge management, arts and crafts, ceramics technologies and light engineering areas. It provides chance to first generation entrepreneurs for acquiring skills to build enterprise and incubates them to become successful small business owner. It gives exposure in all business operation areas like identification of appropriate technology, project/product selection, opportunity guidance including commercial aspects of business, hands on experience on working projects and business skills development.

This study proposes the substantive incubation for the development of MSME by training of ICT incubators. ICT incubator training includes:

- Finance, connectivity, infrastructure, training and business services are provided by ICT incubators to 100 MSME in pre and post incubation stages
- The comparison of the above factors shows that post-incubation stage of MSME is efficient than pre-incubation stage

**Related works:** Dee *et al.* (2011) presented an overview of current knowledge on the role and effectiveness of business incubation. It supports new firms development and reviewed the quantitative and qualitative literature which was published by the practitioner and academic communities and it concludes that in relation to business incubators, there is a widespread definitional and conceptual ambiguity in the academic and the practitioner publications and gives variety of stakeholders, business models and incubator strategies. The comparability, generalisability and the validity of published findings of the performance of the incubator should be considered carefully (Dee *et al.*, 2011). Rwanda analyzed that in Rwanda, Technology and Business Incubation considered as a potential to promote technology innovation and entrepreneurship. In this study, the empirical analysis of technology business incubation is advanced to create sustainable business in Rwanda and concluded that the whole community business incubation gives more benefits and helps in reducing poverty (Aggarwal *et al.*, 2012).

Meru and Struwig (2011) reviewed that for a new and the entrant Small and Medium Enterprises, the essential service network was provided by the business incubators in Kenya. They took 124 entrepreneurs to get the comparison to confirm the process of the business incubation and the ways the receiver comprehend the services (Meru and Struwig, 2011). Lesakova (2012) described that local phenomenon affects entrepreneurs and gets best support by the initiatives and implemented locally. Business incubators foster entrepreneurship. It speeds up the entrepreneurial company's development. In this study, the role of the incubators to support the small and the medium entrepreneurs was described. It has three parts, the first part represents the incubator types, core of the incubators and goals, the second part represents the business incubator role in fostering entrepreneurship local dimensions and the third part describes the business incubator building in Slovakia and helps them to start entrepreneurship (Lesakova, 2012).

Dey (2012) presented that Micro and Small Enterprises (MSEs) are essential to all developing economies in the world. It have challenges, major employment and import dependency. In the first year of inception, majority of start-up fails. An institution with special incubation programmes that gives a handholding support can decrease these failures. Incubators have the potential to strengthen local and national economies, commercialize new technologies and import substitution. The major challenges for establishment and any enterprise survival are organization sales, distribution channels, technology, Marketplaces, infrastructure, finance and

sourcing of raw material (Dey, 2012). Barbero *et al.* (2012) reviewed the comparison of functioning of incubator and the non incubator firm. The individual assessment is not carried out. There are various types of incubators. The features and the execution of the incubators are compared to know the growth received by the incubators (Barbero *et al.*, 2012).

Obaji *et al.* (2012) reviewed that implementation of the incubation model of SME has not been especially successful by the Nigerian government. The disputes in Nigeria give the ways of the models obtained from anywhere have to be adjusted to local contexts for good success opportunities (Obaji *et al.*, 2012). Stephens and Onofrei (2012) described the business incubation impact on incubates. The abstract outline of the evaluation calculates that the incubation of the business is increased by this research. Thus the performance of the business incubation is enhanced (Stephens and Onofrei, 2012). Hsu (2013) described the investigation whether the timing of the Venture Capital (VCs) is affected by the technological changes in the industry. The incubation period was affected by the venture capital (Hsu, 2013). Chandraiah and Vani (2014) described that India's Industrial sector includes the Micro, Small and Medium Enterprises. It has the MSMEs of rural/village enterprises and khadi. Wen-Hsiang reviewed that the incubators of business acquires assistance for decreasing the high negative rate. It provides the exact help for getting over the difficulties in the post-entrepreneurial stage (Lai and Lin, 2015).

## MATERIALS AND METHODS

An ICT Incubator which develops current scheme and organize is used. Innovation is incubated and carried out by a process which provides resources, advice and support in each stages of the development of the rising business. To assure the correct growth of a revolutionary business idea, we acquire our methodology in two different stages; pre-incubation and post incubation of 100 MSME from Chennai City of India. The performance of the MSME is monitored and evaluated to know the progress in both pre- incubation and post-incubation stage.

**Pre-incubation stage:** At pre-incubation stage, an incubator establishes the bases for converting an innovative idea into productive entrepreneurship. In this stage, the project sustainability is analyzed and market investigation is developed to determine the way to follow. Then, it develops the business strategy plan and

interested to invest in original ideas. The guidance and the business tutor support are provided for Medium Small Micro Enterprises in the pre-incubation stages, backed by special consultant's network, for the growth of technologically-innovative business ideas. It gives aspiring entrepreneurs with skills and has the knowledge on transforming their business ideas into business plans and next into participating business with high-growth potential by supporting them with training. In the recent scenario of Medium Small Micro Entrepreneurs, there are group of entrepreneurs who are not comfortably provided to go to the incubation process straightly. The performance of the incubation stages is enhanced by providing pre-incubation services.

Figure 1 show that ICT incubators provide short and long term assistance to provide guidance, offer business development services, consulting to entrepreneurs and technical assistance. A pre-incubation stage includes appointment, training, orientation, innovation assessments and business plan. In appointment, the formulation of ideas, assessment of ideas and the marketing validation of ideas is done. Training is carried on the managerial skills, presentation skills and on more specialized topics (legal and administration). The business idea and the business model are defined in the orientation. Innovation assessment is carried out through internal and external competencies. The competition of the business plan with the financial forecasts occurs in the business model.

**Post-incubation stage:** In post incubation stage, enterprises are permitted to use their criteria regarding the growth of new business objectives and strategies which strengthen their opportunities areas and strengthen them in the long run. Either as a provider or technological partner, advice and support will always focus on accomplishing established objectives for each one of them. Training is included on corporate and debt restructuring, acquisition and managers.

It supports linkages to local and international strategies partners and allows access to loans and investments. It provides the enterprises with good infrastructure and facilities. Growth training is carried out to address expansion, leadership and international growth. It includes research and development, professional support in feasibility studies, preparation of business plan and preparation for acceleration and internationalization.

**Monitoring and evaluation:** The Ministry of MSME monitors and guides the project. Emphasis needs to be afforded to assure continuation of the scheme by

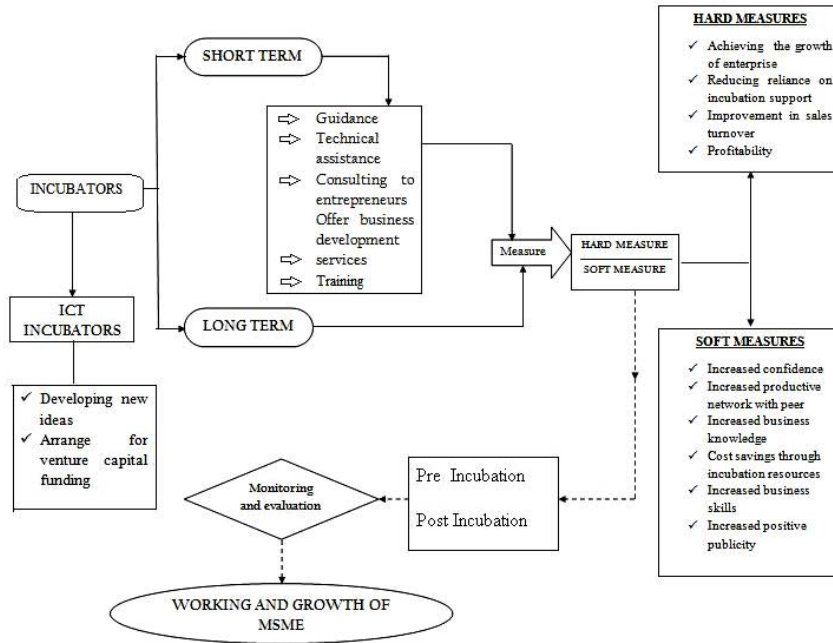


Fig. 1: The framework of ICT incubator

documentation. An advisory and monitoring committee moves in the direction by Development Commissioner (MSME) consisting of NMCC representatives and Additional Secretary, Representatives of Assessment Council (TIFAC) and the forecasting of the technological information and Lead Bank of the State representatives where the incubator is established. It consists of Industries Association representatives below the MSME Act, 2006. Representatives would be established to guide and review the programme

**RESULTS AND DISCUSSION**

Training is provided for Micro Small and Medium Enterprises. An ICT incubator gives guidance to 100 MSME and it is conducted in two stages; pre-incubation and post incubation.

Figure 2 show that an incubation stage includes training, connectivity, finance, infrastructure and business service in pre-incubation and post-incubation stage. The functioning of 100 MSME in pre and post-incubation stage is equated to know the progress which would assist in the growth of the enterprises.

For business management skills, training is very efficient in the post-incubation stage than the pre-incubation stage. For Linkages to local and international strategic partners through maintaining events and conferences, post- incubation provides high connectivity compared to the pre-incubation stage. For

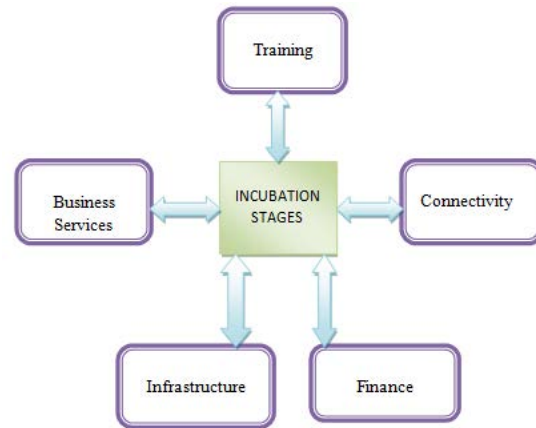


Fig. 2: Incubation stages

access to financing including grants, commercial loans and equity, finance is very efficient in the post-incubation stage than the pre-incubation stage. For Business Development plan assistance, post incubation stage provides effective Business service than pre-incubation stage. For access to training, conference room, library and hot desks, infrastructure is efficient in the post-incubation stage than the pre-incubation stage.

**CONCLUSION**

A business incubator is a company which assists new and start-up companies to grow by supplying

services such as office space or management training. Business Incubator varies from technology parks and research in their commitment to start up and early stage companies. An ICT incubator provides training to the Micro Small and Medium Entrepreneurs (MSME). It includes pre-incubation and post-incubation stages. It assists MSME by providing guidance, technical assistance and consultation to entrepreneurs. The performance of 100 trained Micro Small and Medium Enterprises (MSME) in pre-incubation and post-incubation stage is compared. The comparison depicts that the execution of MSME in training, connectivity, finance, business service and infrastructure is effective in the post-incubation stage than the pre-incubation stage.

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