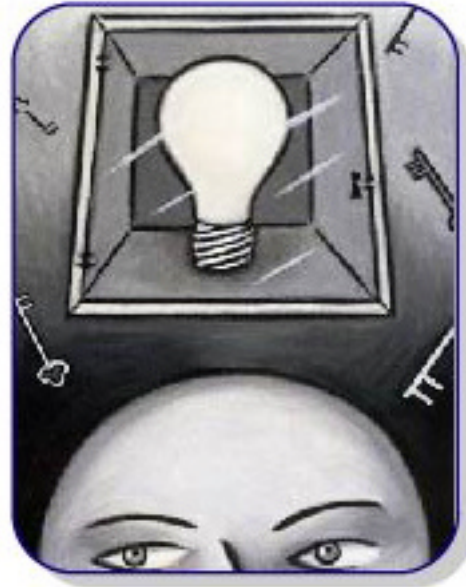


Section – II

Innovation in SMEs: Fostering Innovation in SMEs



Executive Summary

- **SMEs and Innovation**
 - What drives Innovation and What is the process of Innovation?
 - How does IT enable Innovation?
- **Key Suggestions to Foster Innovation in SMEs**
 - Policy and Govt. Level
 - Grass root Level
 - Enterprise Level

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Innovation in SMEs: Fostering Innovation

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1. SMEs and Innovation

Small and Medium scale Enterprises (SMEs) constitute the most vibrant industrial segment in most countries. The SME's are the ones that have the grit and determination to translate their ideas to develop products and services and bring them to the market and create jobs. In India, SME's account for nearly 40% of value added and about 35% of India's exports¹. As India's economic liberalization continues to take hold and expand into various sectors and regions, the importance of the entrepreneur in expanding economic opportunity is also increasing.

While many of the innovative ideas are able to take off, many SME's are unable to reap the full benefits of the innovation, due to:

- Lack of Proper R&D Set-ups to manage innovation to develop the Product/Service
- Lack of Knowledge as to where to find a competent business partner to help develop their ideas
- Lack of means for Commercial production
- Lack of marketing muscle and distribution network
- Lack of funds for any or all of the above

Even in developed countries like USA, the strong link between Innovation and SMEs has been established. Dr. Derrick Leebaert of Georgetown University Professor of Government², had noted that -

"The small-business sector constitutes a large part of the U.S. economy, but its influence transcends its already significant size. As economies prosper more from how they apply knowledge rather than materials, there is an ever-greater premium on innovation, flexibility, large-scale customization, and specialization-whether in serving sandwiches or programming software. While the percentage of Americans employed by Fortune 500 companies steadily drops (from 20 percent of the workforce in 1980 to less than 9 percent today), an average of 9.36 percent of the population could be found over the last decade starting their own businesses."

We would now like to examine how Information Technology can enable the innovation process and bring benefits to the SME's. Creating Innovation Culture with the use of ICT.

Today's Businesses are battling in a highly dynamic and competitive landscape and ability to innovate is one of their key saviors to maintain their turf and expand. Look at companies that are expanding and the common thread will be that innovation is the key differentiator allowing them to be true global players.

Innovation results into breakthrough ideas, new products and services, newer business models, efficient processes, cutting edge technology, which when all combined together results into higher visibility, market share, better margins and higher revenues.

Whereas all companies are striving hard to build a culture where innovation thrives, there is a general lack of awareness of the process, which allows this innovation culture to grow and

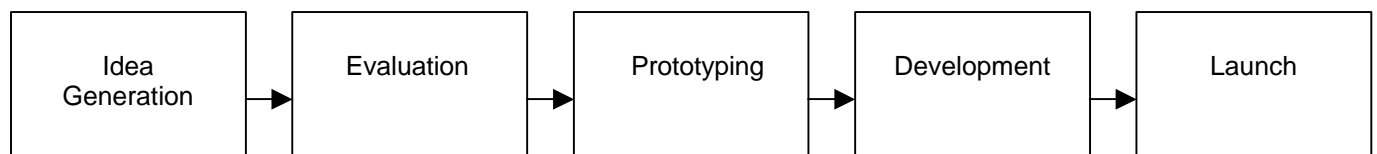
mature. This article proposes the use of IT for building and maintaining the innovation framework in organisations.

1.1 What drives Innovation & what is the process of Innovation?

Innovation is a result of ideas, which are generated by an individual or collectively through a brainstorming session, and the Innovation cycle is complete when the ideas or concepts are converted into products or tangible outcomes resulting into profits and growth for the company.

Innovation Cycle goes through the following process

- Idea Generation
- Evaluation
- Prototyping
- Development
- Launch



Brainstorming - Generating many radical and useful ideas

Brainstorming³ is a useful and popular tool that you can use to develop highly creative solutions to a problem. It is particularly helpful when you need to break out of stale, established patterns of thinking, so that you can develop new ways of looking at things. This can be when you need to develop new opportunities, where you want to improve the service that you offer, or when existing approaches just aren't giving you the results you want.

Brainstorming is a lateral thinking process. It asks that people come up with ideas and thoughts that seem at first to be a bit shocking or crazy. You can then change and improve them into ideas that are useful, and often stunningly original.

During brainstorming sessions there should therefore be no criticism of ideas: You are trying to open up possibilities and break down wrong assumptions about the limits of the problem. Judgments and analysis at this stage will stunt idea generation.

Ideas should only be evaluated at the end of the brainstorming session - you can then explore solutions further using conventional approaches.

Brainstorming⁴ can be an effective way to generate lots of ideas on a specific issue and then determine which idea – or ideas – is the best solution. Brainstorming is most effective with groups of 8-12 people and should be performed in a relaxed environment. If participants feel free to relax and joke around, they'll stretch their minds further and therefore produce more creative ideas.

A brainstorming session requires a facilitator, a brainstorming space and something on which to write ideas, such as a white-board a flip chart or software tool. The facilitator's responsibilities include guiding the session, encouraging participation and writing ideas down.

Brainstorming works best with a varied group of people. Participants should come from various departments across the organisation and have different backgrounds. Even in specialist areas, outsiders can bring fresh ideas that can inspire the experts.

Business Incubators

“A Business Incubator may be defined as an organization which offers a range of business development services and access to small space on flexible terms, to meet the need of new start-up companies. The package of services offered by a business incubator is designed to enhance the success and growth rates of the incubating companies”

Business Incubators facilitate the process of idea generation to development of prototype and seeking the necessary funding and creation of a small business entity. This facilitates young entrepreneurs to validate their business ideas, before the formal business setup. The business incubators are generally housed in technology institutes and technology parks. A list of some incubation facilities is enclosed in Table 1 and Annexure I.

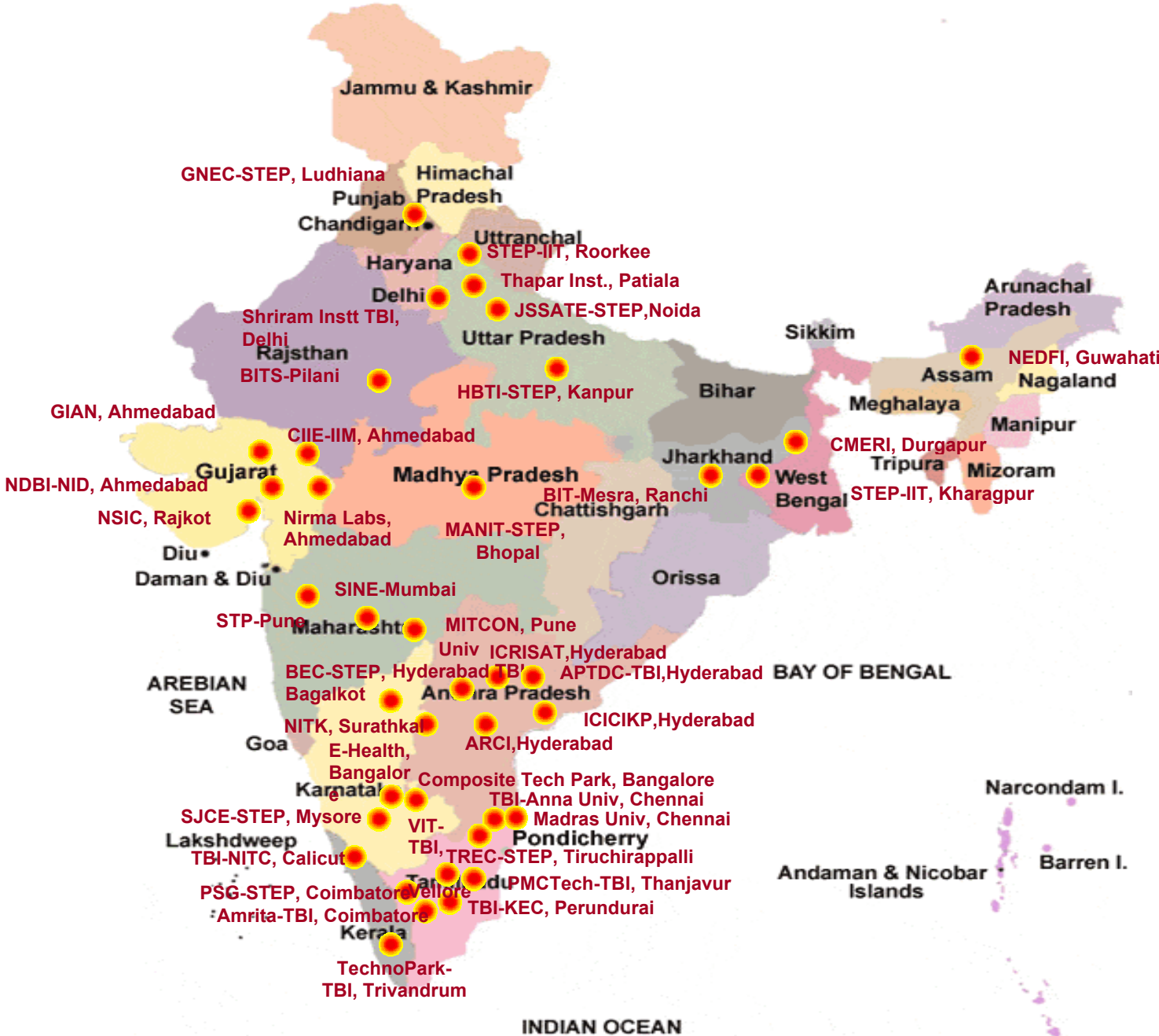
Business incubators offer new innovation architecture between academia and industry as a part of the National Innovation Systems, to enhance Innovation and Quality of life. It is a conscious mechanism for promoting start-up ventures and offers professionalization of SMEs for growth through a rich mixture of Techno Commercial Services

TABLE 1

National Institutions	State Institutions	Other Institutions Organisations, Resource Persons
EDI - Ahmedabad	CED Gujarat	ED programme sponsors - IDBI, SIDBI, NABARD, DST, KVIC, SBI, DCSSI, State Govts.
NIESBUD - Delhi	CED Maharashtra	NGOs (200)
IIE - Guwahati	CED Madhya Pradesh	Trainers 2000
NISIET - Hyderabad	IED Orissa	Teachers (1000)
	CED Tamilnadu	OLPE counselling centres (60)
	IED Bihar	Bankers (250)
	IED Uttar Pradesh	ED cells (24)
	EMI Rajasthan	STEPs (17)
	EDI J&K	Promoters:IDBI, IFCI, ICICI, Govts, SBI, Lead Banks
	CED Himachal Pradesh	
	CED Andhra Pradesh	
	EDI West Bengal	

Annexure I

Business Incubators



1.2 How does IT enable Innovation?

IT can provide a perfect framework to take through the process from idea generation to its execution.

With the IT tools, companies will be able to build a good organizing structure in a way where great ideas don't get lost, but are taken forward. Companies thus will have the key component to not only forward innovation, but also repeat the same process over and over again, thus significantly increasing their capacity to innovate.

IT allows easy way to gather and assimilate all the ideas generated within the organisation, and also sometimes by business partners and associates. Virtual Brainstorming tools are now available for utilizing the talent and increase participation from distributed team across the globe. All ideas generated can be captured in a central application and then a voting application can be utilized to rate the ideas; and ideas, which have maximum faith within the company, can be forwarded to the execution.

Once ideas have been crystallized, project management tools can be used to define the various tasks to be performed by individual members of the team, internal departments and external partners. Creating Task Lists, Setting Milestones and a centralized communication system facilitated by IT significantly adds focus and productivity of the team involved.

The critical phase in innovation is the prototyping of the concept, and IT offers fantastic design tools for rapid planning and prototyping of the end product. This drastically brings down the time to collect feedback for the product and the time to market.

To summarize, effective use of IT will result into the following key benefits to organisations

- Increase the capacity to innovate
- Facilitate Collaboration with Internal Team and External Partners
- Reduce the time cycle from idea to outcome
- Effective project management
- Faster prototyping
- Stay Focused

IT with its ability to integrate people and processes with ideas and business offers unmatched advantage to companies to consistently create a innovative culture within organisations.

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