

07 Monitoring, Evaluation and Benchmarking



Trainee Manual Part 2



infoDev c/o the World Bank Group 1818 H Street Washington DC 20433 USA

www.idisc.net www.infodev.org/businessincubation

infodev@worldbank.org

Introduction to the Training Program

INTRODUCTION TO THE TRAINING PROGRAM

This is the trainee manual for Module 7 Part 2 – out of 11 modules in total - of *info*Dev's State-of-the-Art Business Incubation Training Program for Business Incubator Managers in Developing Countries.

infoDev (www.infodev.org) is a research, capacity building and advisory services program, coordinated and served by an expert Secretariat hosted by the World Bank Group. It helps developing countries and their international partners use innovation and information and communication technologies (ICT) effectively as tools for poverty reduction and sustainable social and economic development. infoDev is a leader in business incubation of technology-enabled enterprises. infoDev's global business incubation network reaches close to 300 business incubators, more than 20,000 small and medium enterprises, and has helped create over 200,000 jobs across 87 developing countries.¹

infoDev has found that high quality leadership is a key factor determining the probability of success for an incubator. infoDev therefore seeks to increase the capacity of business incubation managers – and their stakeholders – through one-on-one technical assistance, regional and topical peer-topeer networks, the bi-annual Global Forum on Innovation and Entrepreneurship, and its web-based networking and knowledge-sharing tool www.idisc.net. This training program was designed in direct response to repeated requests from infoDev's technology entrepreneurship community for an indepth business incubation training program relevant to the developing country context.

This training program is the first-of-its-kind, drawing from the lessons, models, and examples in business incubation from across Africa, East Asia and the Pacific, Europe and Central Asia, Latin America & the Caribbean, Middle East & North Africa, and South Asia. More than 30 experts contributed directly to the writing of the training modules, and the materials were tested with more than 300 professionals in developing countries all of whom provided inputs to the final design.

This training program is designed for business incubation managers and other business incubation stakeholders wishing to increase their understanding and know-how of the business incubation process. It consists of 11 training modules ranging from basic introductory topics designed for professionals new to business incubation, to specialized topics such as Technology Commercialization and Virtual Business Incubation Services.

¹ Source: *info*Dev activities from 2002 to 2009 - http://www.infodev.org/en/Article.473.html

The modules include:

SUITE 1 – BUSINESS INCUBATION BASICS

Module 1 – Business Incubation Definitions and Principles

This module provides an introduction to business incubation. It introduces key definitions and presents the main principles and good practices of business incubation. It aims to equip current and future incubator managers and policy makers with the knowledge, skills and understanding of the fundamentals of business incubation in order to effectively foster and encourage businesses.

Module 2 - Business Incubator Models, Including Success Factors

This module aims to illustrate various business incubator models based on practical examples of incubators from all over the world. The ultimate goal of this module is to empower current and future incubator managers with a thorough understanding of the various business incubator models and their critical success factors as well as to help them identify the best model to adopt for their own incubator to be successful.

SUITE 2 – BUSINESS INCUBATOR OPERATIONS

Module 3 - Planning an Incubator

This module, which divided in two parts, covers assessing the feasibility and designing the business model for an incubator. The first part is aimed at providing a thorough understanding of developing a feasibility study. This includes the steps to undertake a pre-feasibility study, the components that it should address, as well as how to gauge the market need and decide whether an incubator is the most appropriate solution. The second part of the module focuses on business planning to establish the incubator business model.

Module 4 - Marketing and Stakeholder Management

This module is designed to support efficient and effective communication of the incubator with key customers and other stakeholders based on a good understanding of the market place. This is important since it will help the incubator to establish and increase its reputation as a sustainable organization that fulfils its mission.

The first part of the module focuses on identifying, assessing, and reaching customers/ stakeholders, as well as potential ally organizations providing business support services to enterprises; while the second part is dedicated to defining the incubator's value proposition and engaging marketing channels.

Module 5 – Financing an Incubator

The first part of this module aims to guide current and future business incubator managers through mastering the incubator's financial data (such as costs and revenues) in order to enable them to identify the financing needs of the organization as well as to explore potential sources of financing.

Building on the first part, the second part of the module is dedicated to demonstrating, to current

and future business incubator managers, how to develop a fundraising strategy and to monitor the financial performance of an incubator.

Module 6 - Managing the Incubator

This module provides current and future business incubator managers with an overview of sound management practices for a successful incubator.

The first part addresses the topics of incubator policies and governance and the second part is dedicated to operations and human resources management.

Module 7 - Monitoring, Evaluation and Benchmarking

This module aims to provide incubator managers with the required information, skills and insights to develop their own monitoring and evaluation system and to carry out benchmarking activities.

The first part of the module is dedicated to helping the incubator manager understand the added value of monitoring and evaluating the performances of his/her incubator; defining relevant and adequate performance indicators; and exploring how to monitor and evaluate, notably by studying existing tools and methodologies.

The second part focuses on empowering the business incubator manager to use the data collected through monitoring and evaluation activities to compare the business incubator's performance with those of similar organizations.

SUITE 3 - ADVANCED INCUBATOR MANAGEMENT

Module 8 – Implementing a Mentoring Program

This module provides, in its first part, a conceptual framework for gaining a thorough understanding of the mentoring process and its purposes from three perspectives: that of the business incubator, the mentor, and the mentee.

The second part of the module focuses on how to implement a mentoring program.

Module 9 - Deals and Financing for Incubator Clients

This module aims to provide a thorough understanding of the alternative sources of financing for incubator clients by notably describing programs and processes that will enable the incubator manager to assist his/her clients in accessing financing.

The first part focuses on preparing incubatees to engage in the process of accessing financing while developing the capacity of the incubator to assist incubatees in accessing financing. The second part of the training module explores financing from the perspective of both the incubatees and the incubator.

Module 10 – Technology Commercialization through Incubation

This module describes technology commercialization divided in two parts. The first relating to

challenges and lessons learned associated with this process as well as how to manage expectations regarding the results of technology commercialization. This part also concerns the role of the incubator in facilitating technology commercialization in the pre-incubation phase.

The second part of this module focuses on the role of the incubator in technology commercialization in both the incubation and the growth phases.

Module 11 - Setting Up Virtual Services

The first part of this module provides a conceptual framework for understanding virtual services. It is designed for current and future business incubator managers who are considering virtual incubation either as a stand-alone business model or as part of their overall incubator service portfolio to extend their current service offering.

In its second part, the module aims to guide current and future business incubator managers and help them to decide if virtual incubation is the right solution for their incubator. The module then explores the most common challenges and how to address them.

Figure 1 groups the modules by necessary level of experience and suggested sequence, in order to gain the most out of the training session.

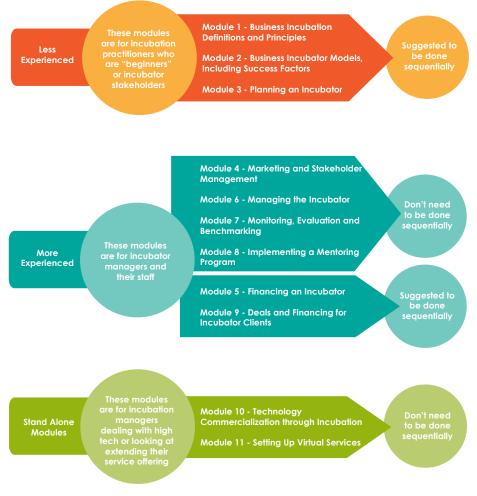


Figure 1 - Module Selection and Sequence



Acknowledgements

ACKNOWLEDGEMENTS

The training curriculum was developed by the following consortium under the direction of *info*Dev:



European Business & Innovation Centre Network

- Robert Sanders, Head of International Projects
- Julia Brethenoux, Project Manager



Babson College

• Mark P. Rice, Frederic C. Hamilton Professor for Free Enterprise



Sociedade Portuguesa de Inovação, S.A.

- Augusto Medina, President
- Mark Spinoglio, Senior Consultant
- Douglas Thompson, Senior Consultant
- Nuno Gonçalves, Consultant

*info*Dev wishes to thank its innovation and entrepreneurship community, including those who provided material for and whose names appear in the case studies. In particular, *info*Dev wishes to thank the following individuals for their contributions to developing this training curriculum:

- Seth Ayers ICT Policy Specialist, *info*Dev
- Michel Botzung Business Edge Manager, International Finance Corporation
- Alistair Brett Cottingham Associates LLC, Consultant Member of the Science Technology Innovation Global Expert Team, The World Bank
- Raimund Broechler Senior Delivery Manager, Intrasoft
- Valerie D'Costa Program Manager, infoDev
- Heinz Fiedler infoDev Regional Facilitator for the Middle East and North Africa
- Han Fraeters Manager, The World Bank
- Steve Giddings *info*Dev Regional Facilitator for the Africa region
- Stephen Hampson Managing Partner, Powerhouse-Ventures
- Jane Hill Venture Partner, Powerhouse-Ventures

- Sheila Jagannathan Senior Education Specialist (E-Learning), The World Bank Institute
- Natasha Kapil Private Sector Development Specialist, The World Bank
- Anthony Lambkin Task Manager, Low-Carbon Innovation Program, infoDev
- Gideon Maas Co-Director of the Institute of Applied Entrepreneurship at Coventry University,
 United Kingdom
- Kiragu Maina Senior Operations Officer, International Finance Corporation
- Siobhan McQuaid Project Director, ABÚ International Project Management
- Mustapha Mezghani infoDev Regional Facilitator for Africa
- Mark Nielsen Senior Advisor, Business Edge Management Training, SME Management Solutions, International Finance Corporation
- Ellen Olafsen Operations Officer, infoDev
- Edward Rubesch Director, Technology Licensing Office National Science and Technology Development Agency, Thailand
- Tania Saba Mazraani Director, Technology & Health, Berytech, Lebanon
- Jill Sawers infoDev Innovation and Business Incubation Consultant
- Stefan Schandera *info*Dev Regional Facilitator the East European and Central Asian region
- Julian Webb infoDev Regional Facilitator for Asia
- Cesar Yammal *info*Dev Regional Facilitator for Latin America and the Caribbean
- Krzysztof Zasiadly infoDev Innovation and Business Incubation Consultant
- Sylvia Zulu SME Toolkit Program Manager, International Finance Corporation

Module Index

INTRODUCTION TO THE TRAINING PROGRAM	3
ACKNOWLEDGEMENTS	11
MODULE INDEX	15
TABLES AND FIGURES	18
MODULE OBJECTIVES	19
INTRODUCTION TO THIS MODULE	23
COMPONENT 4 (PART 2 TRAINING): COMPARING INCUBATORS	27
COMPONENT INDEX	29
COMPONENT OBJECTIVES	29
SECTION 4.1: AN INTRODUCTION TO BENCHMARKING	30
SECTION 4.2: DESIGNING THE BENCHMARKING PROCESS	34
COMPONENT CONCLUSIONS	47
CASE STUDIES	49
THE EUROPEAN BIC NETWORK QUALITY SYSTEM	51
EVALUATION PROCESS OF PERFORMANCES AND CONTINUOUS IMPROVEMENT OF CHILEAN	BUSINESS
INCUBATORS	56
BIBLIOGRAPHY	61
ANNEX 1: BIC QUALITY MARK CRITERIA	67
ANNEX 2: THE EFQM EXECELLENCE MODEL	75
ANNEX 3: DESCRIPTION OF THE EBN QUALITY SYSTEM	79
ANNEX 4: EBN QUESTIONNAIRE	83
ANNEX 5: QUALITY WEBSITE	91
ANNEX 6: TAIWAN CASE STUDY – BEST PRACTICE BENCHMARKING	97
ANNEX 7: INDIA M&E CASE STUDY	105

TABLES AND FIGURES

TABLE 19 - REQUIREMENTS FOR A SUCCESSFUL BENCHMARKING MODEL	36
TABLE 20 - 1 TO 1 BENCHMARKING GUIDELINES	44
EIGLIDE 1 - MODILIE SELECTION AND SECUENCE	۵

Module Objectives

Like any other business-like organization, in order to measure its operations and development, an incubator should carry out monitoring, evaluation and benchmarking activities, be it via a formal and sophisticated process or in an informal and basic way. During the process of establishment, an organization is advised to develop a business plan to clearly define its overall goals and the actions to be implemented towards these goals.² As briefly discussed in Module 6 "Managing an Incubator" from the current Training Program, measuring the results of its operations enables the organization to assess the impact of the actions undertaken. Incubation managers and practitioners need to be able to assess the performance of their services and activities in relation to the territory in which they operate and their overall objectives, in particular satisfying their client businesses in supporting them to grow. Customer satisfaction surveys and other performance evaluation reports aim to help incubators identify the strengths and weaknesses of the systems they implement in order to consider alternative actions to employ when delivering business support to SME clients.

This Module aims to help the incubator manager (1) understand the added value of monitoring and evaluating the performances of their incubator, (2) define relevant and adequate performance indicators, (3) explore how to monitor and evaluate, notably by studying existing tools and methodologies as well as (4) understand how to use the data collected through monitoring and evaluation (M&E) activities to compare one business incubator's performances with the results of similar organizations. Hence the module aims to provide trainees with the required information, skills and insights to develop their own M&E system and to carry out benchmarking activities.

Meeting such objectives will enable incubator managers to introduce or review their monitoring, evaluation and benchmarking policies with the aim of introducing better practices and thus contributing to the continuous improvement of the services offered to their client businesses and overall, the incubator's performance.

² Note: Module 3 of the current Training Program, titled "Planning an Incubator", studies the ins and outs of incubator business plans.

TRAINEE TRAINING OBJECTIVES

The key objective of this module is to enable business incubator managers to develop and implement an M&E system for their own incubator. At the end of this module, trainees should be able to understand:

- Why to monitor and evaluate their incubators;
- Which elements to monitor (i.e. which data to collect and analyze);
- Which elements to evaluate (i.e. define relevant indicators);
- How to collect data (i.e. which methodology and tools to use); and
- How to benchmark performances, notably comparing performances on a one-to-one incubator basis to leverage better incubation practices.

Introduction to this Module

Monitoring, Evaluation and Benchmarking are sometimes seen as 'a burden' or 'marginal' processes, but they are in fact central to maximizing the performance of an incubator. Moreover, the majority of incubators carry out such activities as part of their daily operations but do not often identify these as M&E tasks as such.

An incubator will often act as a catalyst for the introduction and production of high quality products, processes and services in a community. Therefore, it is important to assess just how significant its role is in the wider business world and how the incubator meets the needs, expectations and satisfaction of its stakeholders and clients. M&E is particularly important if considered in terms of the significant role that it can play in fundraising and marketing activities. The incubator's clients (e.g. incubatees) and stakeholders (e.g. shareholders) influence the incubator's operations and activities and hence need evidence to understand whether their expectations are realistic or not, whether these expectations have been met, or are in the process of being met and whether the resources allocated to the incubator have been allocated appropriately. Furthermore, M&E activities will provide a more "scientific" framework to analyze the performance of the incubator and the level of satisfaction from its stakeholders, providing additional impetus for comparing one organization with another one towards the continuous improvement of the incubator's services and performances.

M&E policies are required to accurately measure to what extent an incubator is reaching its objectives, notably contributing to the overall enhancement of the innovation and entrepreneurship ecosystem, (e.g. in terms of sustainability and quality of jobs created, improvement in turnover and growth rate of businesses and survival rate of businesses). As well as measuring results, M&E should assess whether the process, the methodologies and the tools being used to support start-up and developing businesses are the most appropriate to achieve the incubators objectives. The logic behind M&E can be seen as a virtuous circle in which measuring the outcomes (e.g. business survival and growth) enables the incubator to improve its inputs (e.g. better quality services) as illustrated in Figure 2.



Figure 2 - Monitoring and Evaluation: Measuring Outcomes to Improve Inputs³

Assessing the incubator's performance is fundamental in order to understand what works, what doesn't and why (i.e. what is the key to businesses' growth and the creation of quality jobs?). By identifying better practices, through individual performance assessment activities or by comparing one organizations' performance with another, and applying these in a systematic way, the incubator team is enabled to select the right (and better) clients that will increase the revenues to be re-invested in the incubator, which in turn continuously offers better and higher quality services to meet its clients' expectations and needs. Moreover, by gathering data illustrating the importance of the incubator's actions in its operating area, the incubator secures the continuous support of its stakeholders who see their expectations met and achieve return on investment.

Benchmarking the data gathered aims to measure the incubator's performance and processes in comparison with standards and/or similar organizations, thus identifying business incubation better practices to be transferred from one incubator to another one.

The first part of the training content will provide a detailed conceptual framework for business incubator M&E and describe the key steps involved in setting up and implementing an M&E system. The second part of the training content will explore how to successfully implement an M&E system in order to benchmark an incubator's performances, notably against those of a similar organization, leading to the continuous improvement of the incubation process through the implementation of better practices.

³ Source: Webb, Julian (2009) - Webb Monitoring and Evaluation Methodology, Presentation, Santiago, Chile, November 2009

Component 4 (Part 2 Training):

Comparing Incubators

COMPONENT INDEX

Section 4.1: An Introduction to Benchmarking

Section 4.1.1: Benchmarking, a Tool for Improvement

Section 4.1.2: Types of Benchmarking

Section 4.2: Designing the Benchmarking Process

Section 4.2.1: The Use of Process Models

Section 4.2.2: The Importance of a Consistent Benchmarking Process

Section 4.2.3: A Five-Stage Benchmarking Process

Section 4.2.4: Reporting

COMPONENT OBJECTIVES

At the end of this component, trainees should be able to:

- Understand what benchmarking activities require from an incubator, and
- How to carry out benchmarking activities involving their own incubator.

Section 4.1: An Introduction to Benchmarking

M&E activities are critical for an incubator to assess its clients' as well as its own performances. The data gathered may be used by the incubator to assess its performances on a regular basis, as well as to benchmark these performances against those of a similar organization, revealing additional findings on the incubator's operations, notably better practices that can potentially be transferred from one organization to another one.⁴⁹

What is benchmarking all about?

You can benchmark performance indicators, usually expressed in numbers such as:

- · Profit margins,
- · Return on investment,
- · Cycle times,
- · Percentage defects,
- Sales per employee, and/or
- Cost per unit of product or services.

Or you can benchmark business processes which drive performance indicators, such as:

- · How you develop a new product or service,
- How you manage to meet a customer's order or respond to an enquiry, and
- How you produce your product or service.

Section 4.1.1: Benchmarking, a Tool for Improvement

A benchmark is a measurement or standard that serves as a point of reference against which process performance is measured.

Benchmarking is the process of comparing business processes and performance metrics, such as cost, survival rate, productivity, or quality, to another that is widely considered to be a standard benchmark or good practice. Hence, benchmarking implies a comparison either with statistical benchmarks or, in a more powerful and insightful way, a comparison of incubators on a one to one basis. In this case, the comparison of one incubator's business practices with those of other incubators aims to generate ideas on how to make improvements.

⁴⁹ Source: Benchmarking PLUS – http://www.benchmarkingplus.com.au E-mail: info@benchmarkingplus.com.au

Benchmarking is a powerful tool used by managers to help answer questions such as:

- Does your business achieve the same level of profit as other businesses in your industry?
- Does your business spend too much (or too little) on rent, advertising and wages?
- Is your business performing as well as it should be?

Benchmarking data can help an organization to:

- Calculate financial ratios,
- · Analyze business performance,
- Compare the results achieved by the business with other similar businesses, and
- Conduct a "what if" analysis.

Using a benchmarking approach, an organization will be able to:

- Find out how well the organization is performing by comparing itself to other similar organizations,
- Measure and improve the performance of the business in key areas such as sales, profit and expenses,
- Identify the strengths and weaknesses of the business, and
- Highlight opportunities for making the business more competitive.

Benchmarking activities will support the business incubator management team in:

- Evaluating the incubation activities in the relevant areas,
- Identifying the weaknesses and the areas of improvement,
- Identifying the areas of excellence,
- Comparing an incubator's activities and processes with those of others, and
- Identifying best practices and facilitate their transfer in the incubator.

By comparing practices among incubators which share similar characteristics, through the use of appropriate metrics and comparing wider business practices, business incubators will be able to make quantitative and qualitative observations, forming the basis of recommendations for improvement. The purpose of engaging in benchmarking activities is to understand whether the process which the incubator uses to support the entrepreneurial community in their operating area and the results obtained through this process can be improved. Specifically through the calculation of the aforementioned well-defined indicators, it is possible to produce a snapshot of the entire activities of the incubator and to compare this with those obtained by other similar organizations and/or to existing international standards (although the latter may be less relevant because it is not related to the reality of the territories concerned). For example, a public not-for-profit incubator, with a specific annual turnover and a defined number of staff members working in the IT sector could compare its performance and process indicators, as well as the cost-benefit ratios, with other IT incubators which share similar characteristics, to understand whether it is over or under-performing and where

it can improve and/or it can transfer good practices. It should be noted that the most likely candidate incubator for benchmarking is liable in this example to be situated in the same country, or at least operating in the same market place. Extreme caution is advised with international comparisons as it is often very hard to find similar organizations in two different countries. Although organizations may have similar quantitative indicators, factors like innovation culture and government policy may differ considerably from country to country and this could have a significant impact on incubator processes and performance.

The importance of undertaking benchmarking activities is reflected in the opportunity it provides to correct and improve the entrepreneurial support activity which should in turn lead to an improvement in the performance indicators and in the overall efficiency of the incubator's activities. The benchmarking process is used also to identify good practices which can be transferred to other cases, understanding which are the areas of excellence and the relevant reasons for such transfer.

Section 4.1.2: Types of Benchmarking

There are four basic types of benchmarking:

- 1. Benchmarking against internal operations, called Internal Benchmarking;
- 2. Benchmarking against external direct product competitors, called Competitive Benchmarking;
- 3. Benchmarking against external functional best operations or industry leaders, called Industry or Functional Benchmarking; and
- 4. Benchmarking a process in one or several unlike organizations, called Generic or Process Benchmarking.

1. Benchmarking against internal operations, called Internal Benchmarking

In most large companies there are similar functions in different business units. One of the simplest benchmarking exercises is to compare these internal operations. The objective of internal benchmarking is to identify the internal performance standards of an organization.

The advantages of internal benchmarking are first, that there is often a significant amount of information-sharing accompanying internal benchmarking. Second, many organizations are able to obtain immediate gains by identifying their best internal practices and transferring those to other parts of the organization. This internal knowledge can become the baseline for later investigation and measurement involving external benchmarking partners.

The disadvantage of internal benchmarking is that it fosters an introverted view. It is all too easy to ignore the fact that other firms have the edge on your organization if you are concentrating on outperforming internal rivals.

2. Benchmarking against external direct product competitors, called Competitive Benchmarking

Benchmarking can be done externally against competitors. Direct competitors are the most obvious to benchmark against. The objective is to compare companies in the same markets that have competing products or services or work processes, for example Coca-Cola vs. Pepsi. The advantage of competitive benchmarking is that you can see what your related performance is. The main disadvantage is that information is very hard to obtain, beyond that in the public domain.

3. Benchmarking against external functional best operations or industry leaders, called Industry or Functional Benchmarking.

You can benchmark others in the same industry that may have the same products or services but are not competitors in the same market. Industry benchmarking tends to involve comparisons between firms that share some common technological and market characteristics and to concentrate on specific functions. For example, Telecom Australia might benchmark its billing process against the billing process of British Telecom.

The big advantage of industry benchmarking is that it is easier to identify willing partners, since the information is not going to a direct competitor. The disadvantages are cost and the fact that the most renowned companies are beginning to feel overwhelmed with benchmarking visits and some are even charging a fee for access.

4. Benchmarking a process in one or several unlike organizations, called Generic or Process Benchmarking

This type of benchmarking focuses on excellent work processes rather than on the business practices of a particular organization or industry. Some business functions or processes are the same regardless of dissimilarities of the industries.

Generic benchmarking can be very effective even though it is generally the most difficult. It has the potential of revealing the best of good practices. It requires broad conceptualization but careful understanding of the generic process.

Choosing which type of benchmarking to use depends on what is intended to benchmark.

Section 4.2: Designing the Benchmarking Process



Note: Recommendations on the why-what-how to carry out M&E activities apply very much to benchmarking tasks as benchmarking activities build on the results from M&E activities. Before starting any benchmarking activities, it is essential that the team in charge of these is aware that benchmarking is not a standalone activity, but one that must be used in the context of an integrated change and management improvement program. To this end, benchmarking activities must be part of an overall strategic plan governing the continuous improvement and total quality management of the incubator's operations, involving the development

of a team based culture relying on the involvement of the employees in empowerment programs. Indeed, change is most successfully implemented in organizations where there is broad commitment and ownership of the strategy. The Benchmarking Process must identify what to compare, who to compare to and how to compare.

Critical factors for implementing benchmarking activities:

- Tailor made for each organization.
- Choose the right things to benchmark.
- Involve the right people.
- Have a common understanding of what is involved.
- Gain a thorough understanding of your own situation.
- Choose suitable partners.
- Turn ideas/information from visits into practical improvement projects.
- Manage the improvements.
- Remember that benchmarking is a continuous process.

Benchmarking is usually treated as a structured process and the structure is best provided by the development of a step by step model. However a word of warning here - the structured process should not add complexity to a simple idea, and the structure should not get in the way of the process.

Section 4.2.1: The Use of Process Models

Process models have two basic attributes that make them useful when used appropriately:

- They provide structure to identify where and how we are going to get there, as well as providing a common process in a language understandable to all; and
- A process model provides the basic framework for action. All types of variations are possible within that framework, and the process can be tailored to fit the specific requirements of the individuals, groups and organizations.

Any type of benchmarking process model should provide an adequate framework for the successful planning and execution of a benchmarking exercise. It should be flexible enough to encourage people to modify the process to suit their needs and project requirements.

Models can help interpret any terminology that is required in the benchmarking process. A particular virtue of using a model is that it facilitates the development of a shared vocabulary. Such language models provide a plan of action and behavior that can be understood by anyone in the organization. The various process steps or stages of a model help to reinforce the vocabulary, becoming almost shorthand. For example, the word "recycling" is used at the end of several benchmarking process models to denote the concept of continuous improvement and to encourage the linking of benchmarking activities. The word "recycling" may activate a variety of images to different people. So putting the word in the context of a benchmarking model helps people interpret the intended meaning of the word.

These models, as plans or maps, specify logical sequences of activity to produce the desired result. Anyone could come into a benchmarking exercise at any time and understand the stage or phase.

- Keep the model basic 14 steps are not necessarily better than 6. Make sure it has a logical sequence.
- Keep the model clear Can people describe it to others including being able to explain why each part of the process is important to the user? Can the listener understand the process and translate it into action?
- Emphasize logical planning and organization.
- Develop a clear understanding of the benchmarking 'customer' requirements (customer in this sense is the eventual user of the benchmarking information).
- Identify who will be on the benchmarking team.
- Ensure that there are adequate resources (people, time, funding) for the benchmarking team to achieve its goal.
- Use effective project planning tools and techniques.
- Develop specific information gathering tools prior to actual data collection.
- Establish appropriate benchmarking protocols that define expected behaviors and outcomes toward benchmarking partners.
- Use customer focused benchmarking to provide direction and to create a set of expectations regarding the information, including how it is to be gathered, reported and used to review, adjusting progress against customer requirements usually in the form of a formally agreed contract.

Table 19 - Requirements for a Successful Benchmarking Model

Section 4.2.2: The Importance of a Consistent Benchmarking Process

The benchmarking process should be consistent within an organization. Although there should be flexibility to accommodate some variation, there is no need for a unique benchmarking process for every department, division or location in an organization.

The ability to develop cross-functional or cross-divisional benchmarking teams is hindered by the development of different models. Different models and approaches to benchmarking within an organization indicate the existence of different communications, training programs and possible management cultures in different segments of the company. The result is inefficient use of resources, duplication of effort and confusion among employees confronted by a variety of different models within their own organization.

Multiple processes also create confusion among the organization's benchmarking partners who would expect some level of consistency among the approaches used by the various sub-groups. The lack of coordination among the divisions forces the benchmarking partners, as information providers, to produce multiple reports. Multiple models usually indicate multiple databases. Producing records and results becomes fragmented within an organization. Duplication of effort and lack of coordination probably also represent significant costs.

Thus the challenge is to construct a generic benchmarking model that could be applied to any benchmarking project by any type of organization.

There are many benchmarking models a business incubator might inspire itself from when getting started with benchmarking activities. Most contain many of the same elements. One reason for this is that those creating the models were strongly influenced by early published examples shared through quality networks created by, for example, Alcoa, AT & T, Florida Power and Light, Motorola, Westinghouse and Xerox. Another reason is that the early models worked, and not surprisingly, companies that received the Baldrige National Quality Award and shared their benchmarking process, specifically Motorola, Westinghouse and Xerox became the models for others to benchmark.

Whatever model you choose, there should be consensus by all involved in the benchmarking project and the model used consistently by all benchmarking teams.

Section 4.2.3: A Five-Stage Benchmarking Process

It is important that the benchmarking process be customized to the needs, capabilities and culture of the individual organization. Benchmarking has to be seen as integral to the business strategy, not just an add-on. What is benchmarked must be important to the whole organization. The business area or process chosen must be one that, if improved, will further the strategic objectives of the organization. So what is to be benchmarked is based on some type of critical need. Every organization will approach the benchmarking process from its own perspective and will need to customize the generic benchmarking process accordingly. This can be best done through a five-stage benchmarking process.

Stage 1: Planning the Benchmarking Activities

The first stage in benchmarking is to plan the activities. This plan should fit within the organization's strategic plan. The objective of the planning stage of benchmarking is to determine what to benchmark and against whom to benchmark.

The first step in this stage is to identify the strategic intent of the process being benchmarked. For the purpose of making performance improvements through benchmarking it is important to adopt a view of the organization as a collection of processes (i.e. a sequence of activities that people perform on inputs to produce outputs.)

Usually an organization such as a business incubator has a mission statement that summarizes its major purpose. From the mission statement typical deliverables expected by customers can be derived. For example, typical strategic deliverables of a business incubator might include:

- The number of entrepreneurial training sessions organized,
- The number of participants,
- · The participants' feedback rating, and/or
- The conversion rate to business ideas from the attendees.

The objective is not only to ensure that the logical deliverables of the processes are benchmarked, but also the future problem areas perceived.

The next step is to select the processes to benchmark. Whether something should be benchmarked or not depends very heavily on how important the process is in the internal supplier/customer chain or in satisfying end users or consumer needs. How significant is the problem to be benchmarked in relation to other areas where benchmarking resources could be directed? Will your customers notice the difference if you implement best practice for this business process? Will they change their behavior significantly enough to make a visible impact on the results of the organization? If the answer to any of these questions is no, the subject for benchmarking may be something important but not important enough.

The key to determining what to benchmark is to identify the output or outcomes of the process. In a manufacturing operation the output is almost always a physical, visible, quantifiable product. It can be seen, measured and compared with other competing products. But what is the product of a business unit that provides a service as is the case with most incubators? We need to identify who wants this service. Who is the customer? In this case, it is needed to identify the processes' customers' profiles and set of expectations. The customer is the individual or group with a critical need. The customers' expectations drive the identification of the products, services or processes to be benchmarked, the specific kinds of information required, and the specific companies or types of companies that should be included in the benchmarking investigation. They also establish the time frame.

Finally, Stage 1 is completed by selecting the critical success factors to benchmark. These are the major factors which must be dealt with exceedingly well if the organization is to be really successful. Choose a business process or processes based on these factors. Then once the key issues about the performance of that process are known, choose the few key performance indicators of critical success factors (CSFs) that you believe measure these key aspects of process performance. The integration of benchmarking with other types of total quality tools is one of the greatest opportunities to link CSFs with meaningful business results. The more specific and generic the CSFs, the more likely they will enable the provision of relevant information by the benchmark partners.

There are three levels of critical success factors. If we take again the example of entrepreneurial training:

- Level 1 defines a broad subject area e.g. entrepreneurial training.
- Level 2 defines a more specific investigation e.g. the number of participants.
- Level 3 is the most specific level that can be defined particularly by means of some type of measure or specific process description e.g. the number of female participants.

Stage 2: Form the Benchmarking Team

The objective is to select, train and manage the benchmarking team.

The first task is to select the team members. Benchmarking activities can be conducted by individuals, but most benchmarking exercises are team activities, even in small organizations like most incubators, due to the workload and the knowledge requirements of such activities. A team represents the different perspectives, special skills, variety of business connections the individuals bring to the benchmarking process. The word 'team' has connotations of common purpose or goal, coordination, cooperation, communication, motivation.

The team structure will be influenced by the size and scope of the benchmarking exercise which will depend on a number of factors such as:

- The size of the organization,
- How much the organization is prepared to spend,
- How many business processes it will benchmark, and
- How many locations the organization operates from and wishes to benchmark at one time.

Any benchmarking activity will require:

- A small group of people to outline the scope of the project at the beginning and provide leadership and coordination through to the end;
- Wide involvement from a number of people with varied skills once the scope of the project has been decided; and
- The preparedness to cope with the absence of people involved in the benchmarking exercise from day-to-day business.

There are three types of teams required for a benchmarking exercise: the Lead Team, the Preparation Team and the Visit Team. Of course, the members of these teams can be identical in their composition. In some incubators this will be the case due to the limited size of the incubation staff. The important thing is to recognize the different roles and ensure that they are carried out. In some incubators it might be useful to involve wider stakeholder groups in the benchmarking activities. Although due caution should be exercised, benchmarking may help to further motivate stakeholder support by highlighting the strengths of one incubator versus another and identifying areas of improvement. Stakeholders are often both reassured and motivated by benchmarking visits to other incubators and thus in many ways can contribute as valuable additional members of the benchmarking team.

- **a)** The Lead Team. The lead team is mainly concerned with building and maintaining commitment for the benchmarking process throughout the organization. In practice the lead team:
 - o Provides leadership in decisions on the particular areas of focus facilitating the selection of preparation teams and visit teams;
 - o Manages the process to achieve targets on time and within budget; and
 - o Integrates the benchmarking process with other improvement initiatives being planned or currently in operation.

The composition of the lead team should reflect its key responsibilities and could include:

- o Any consultative committee or some modified version of it already in existence;
- O A cross-section of functional skills to enable a broad view of the organization;
- o Direct workforce representation to represent views, counter any fears, and gain commitment at the earliest stage possible; and
- o People with authority to take the necessary decisions regarding the benchmarking project and its integration with other improvement initiatives.
- **b)** The Preparation Team. The role of the Preparation Team is:
 - o To work within the scope defined by the lead team, on a single business process;
 - o To carry out the detailed analysis and preparation;
 - o To help to identify partners;
 - o To have representation on the benchmarking visits; and
 - o To analyze findings and design improvement plans.

The Preparation Team needs to be able to take an overview of the process they are benchmarking and could include:

- o The "natural work team" of the process in question;
- o The entire work group including people from support functions; and
- o Suppliers and customers (external and internal).
- c) The Visit Team. The role of the Visit Team is:
 - $\color{red}\text{o}$ To carry out the benchmarking visit within the scope defined by the preparation team; and
 - o To deliver the findings to the preparation team to implement.

The Visit Team needs to be a bridge between the preparation team and the benchmarking partner and is generally composed entirely of members of the preparation team. In order to ensure the success of the benchmarking exercise, it may be required to train the team as necessary:

- o In educating team members in the benchmarking process;
- o In the use of analytical tools and techniques;
- o In interpersonal skills such as leadership skills, facilitation skills and basic project management skills;
- o In questioning techniques; and
- o In familiarizing them with the organization's background, systems and so on.

Stage 3: Collect the Necessary Data

The objective is to identify best practice organizations and to gather benchmarking information about the performances and practices of the best practice organizations.

How do you currently perform the process? Self analysis is an essential step to effective benchmarking. One of the fundamental rules of benchmarking is to know your own processes, products and services before you attempt to understand the processes, products and services of another organization. Why is this so important? Because without a thorough inventory of your own internal products and processes you may not realize the extent of opportunities for your improvement. Because without an accurate understanding of yourself, how can you calculate the potential gap that exists between your outcomes or activities and those of the best practice organizations you wish to benchmark? And because without a thorough internal analysis, you may be by-passing some important internal benchmarking opportunities.

To identify how you currently perform the process, collect and review any information already available on the process. This may include:

- Flow charts This involves taking the process to be analyzed and drawing up a diagram to show each step in the process. This is useful to understand the process and its drivers.
- Customer feedback This involves identifying customers and their needs to assess whether the
 process is performing well or not. Customers can be asked direct or by formal customer survey.
 Answers to these questions can give clear indications as to what aspects of the process should
 receive priority.
- Measurements of the process, e.g. unit times, volumes, frequencies.
- Procedure manuals.

How does your benchmark partner perform the process? A benchmark partner is any person or organization that supplies you with information relating to your benchmarking exercise. The term partner implies an ally or one who enters into an association with you. This step can proceed in parallel with the self-analysis step. There are a number of ways to find a benchmark partner:

• In many countries incubator networks are small; incubator managers know each other very well and therefore a personal approach may be most appropriate. In countries where there are a large number of incubators, national incubator networks, where they exist, can also be helpful in

identifying suitable incubators to benchmark against. This is particularly true if national networks (e.g. UKBI, ADI) monitor quality and performance levels across network members.

• For international benchmarking, international incubator networks are a good starting point to identify suitable partners for benchmarking. Again this is particularly true if the network monitors quality and performance levels across network members (e.g. EBN, NBIA). Members of the same incubator networks who are used to completing self-assessment questionnaires will often have similar understandings of the same performance and process indicators which can be useful for international comparisons.

Sources of benchmarking partners in general include:

- Literature sources can be helpful especially if your search is international;
- Trade and professional associations and networks can be useful particularly if you have decided that your potential benchmark partners are likely to come from a particular industry or service sector;
- Consultants may have databases of best practices and best practice organizations. They can also act as a third party; and/or
- Major customers.

The selection of benchmarking partners is critical as it will determine the process comparability and the potential for quantum leap change. The most important part of benchmarking is not the benchmarks, but finding a suitable and comparable partner to work with. It is much more than just the benchmarking metrics.

As far as business incubators are concerned, some well-defined international standards enable static benchmarking against aggregate data benchmarks, which can be useful but arguably not the most important benchmarking mean. Opportunities to network with peers often become a reality when incubators share the same monitoring methodologies and data is collected and gathered centrally. This can be achieved by an incubator network (e.g. European Business and Innovation Centre Network – EBN; www.ebn.eu) or via specific government programs aimed at implementing policies for SME support. Specifically, sharing the same metrics makes it possible to identify incubators with similar characteristics facilitating peer to peer benchmarking practices and, possibly providing partnering opportunities springing from networking practices.

Individual incubator to incubator benchmarking between organizations featuring similar characteristics can be much more effective and powerful since:

- It provides the opportunity for a full peer review, understanding how similar services and activities are delivered elsewhere, and
- It opens the potential for serious networking activities since it creates inter-personal relations which can bring a wide array of development opportunities.

In the case of one-to-one incubator benchmarking, it is necessary first of all to identify an incubator with clearly defined and similar characteristics to your own incubator (e.g. similar number of staff employed, similar turnover, similar endowment of territorial resources, etc.). Following the identification of a suitable benchmark partner, it is then important to have access to a database containing the type of benchmarking indicators required, and assurances about data confidentiality if required. In some regions such as the USA and Europe, a considerable amount of benchmarking information is available in the public domain (e.g. EBN annual Observatory available on the EBN website: www.ebn.eu and NBIA publications) but some of the benchmarked organizations may require that the information is kept confidential.

The Site Visit

Site visits are important to gain an in-depth understanding of the systems and processes of the best practice organizations you have chosen as benchmark partners.

- If you do not already know the incubator you have chosen to benchmark against, a letter could be sent—to the Managing Director, Quality Director or the Manager of area you wish to visit and follow up with a phone call to explain the reason for the project and its objectives, and to indicate the business process and issues that are the focus of your project.
- In many countries incubator networks are small and managers know each other very well, so a more personalized approach by phone or meeting may be more appropriate.
- In countries where there are a large number of incubators, national incubator networks can be helpful in making the appropriate introductions. Incubator networking events are a good opportunity to meet and discuss benchmarking opportunities.
- For international benchmarking, international incubator networks can be used to make the appropriate introductions. Again networking events are good platforms for introductions and relationship building.

Once the target incubator has agreed to a benchmarking visit, it is important to:

- Obtain agreement from target partner on the conditions of the project,
- Plan the visit,
- Develop a site visit strategy and questionnaire,
- Conduct the visit in a professional manner. Be sure to stick to the agenda. The objective of the visit is to get answers to your questions it's not a social event,
- Return some value to your host it is usual to exchange information during benchmarking visits, and
- Provide feedback to host company as well as thanking them for the opportunity.

Stage 4: Analyzing the Data for Performance Gaps

The objective is to identify and analyze the gaps between best practice and your own processes. All the collected information is used to identify performance gaps between benchmark partners. When comparing the performance of organizations, adjustments must be made for differences due to:

- · Economies of scale,
- Different management philosophies (virtual incubation, outreach incubation),
- Incubation services and processes to deliver those services, and
- Operating environment (differing cultures, client base, regulatory constraints, government incentives and so on).

Analyze findings from the site visits

You may have to develop a composite picture that reflects the input of many organizations. Synthesize the process information you have gathered in a way that is appropriate for your incubator's culture. This is your opportunity to compare your current performance against the benchmark you have discovered. You can then identify performance gaps and their causes.

Stage 5: Take Action and Recycle the Process

The objective is to develop strategies and action plans to close the gaps.

What needs to be done to match best practice for this process? Identify tasks, responsibilities, resources and time targets for the change process. Prepare a budget and a cost-benefit analysis, and put it into practice. Monitor performance indicators carefully as these should highlight improved efficiencies.

How to implement direct 1 to 1 benchmarking actions

- Select the appropriate incubator you want to benchmark against according to pre-selected criteria such as:
 - o Local socio-economic environment (e.g. size and economic situation of the catching area, stakeholders' profile)
 - o Business model of the incubator (e.g. private/public support, for-profit/not-for-profit...)
 - o Sector of interest (e.g. agribusiness)
 - o Number of operating years (e.g. new incubator or an established incubator that has been operating for more than 5 years)
 - o Profile of client businesses (e.g. technology-based businesses)
 - o Size (e.g. number of staff)
 - o Annual turnover

• Get in contact

- o Through a network if existing, or
- o Directly.
- Exchange documents on what you do, how you do it and what are your future plans, such as:
 - o The business plan,
 - o The description of the activities,
 - o The main performance indicators, and/or
 - o The latest annual report.

• Organize a visit to the selected incubator (envisage at least a full working day):

- Make sure to talk to the managing director and the key staff members to get an overview on:
 - The overall goals of the business incubator,
 - The profile of client businesses supported by the incubator,
 - The processes enacted and the internal organization,
 - The services delivered (which ones and how they are delivered),
 - The tools used, and
 - The promotional and communicational activities carried out.
- o Organize meetings with the relevant stakeholders of the catchment area to get an understanding on how the system for SME support is outlined in the area.
- o Make sure to talk to the supported entrepreneurs to understand whether the services delivered are actually responding to their needs and expectations.

Table 20 - 1 to 1 Benchmarking Guidelines

Section 4.2.4: Reporting

The Benchmarking report identifying the findings of the site visit should not be the end of the benchmarking process. Benchmarking is a continuous process that should generate ongoing deliverables, such as an initial report on the gaps identified and the strategy for addressing those gaps, and then subsequent follow up reports on a regular basis in order to monitor the process of continuous improvement and the results achieved in closing these gaps. Notwithstanding their main purpose of driving improvements in performances and efficiency, business incubators reports can also be used for:

- Communicating information and strategies to staff and stakeholders, informing them about areas of strengths and weaknesses and enlisting their support in the process of continuous improvement. It is important to also manage their expectations about when to expect results to be achieved;
- Promotional purposes, to let the stakeholders and the end-users of the incubator services know about the areas of excellence and to show-case successes; and
- Lobbying purposes, to increase the positioning of the incubator in the territory, as well as asking the incubator's supporting stakeholders to provide the needed resources to enhance the services and contribute to excellence.

Therefore, reports must be adjusted accordingly to the purpose they will serve.

COMPONENT CONCLUSIONS

Comparing one's own incubator practices with those of similar incubators operating in similar environments is a powerful tool used by managers and stakeholders to find out how well their incubator is performing, to identify the strengths and weaknesses of their incubator, as well as to measure and improve the performance of the incubator.

For incubators, one-to-one benchmarking is a particularly powerful tool. Prolonged networking and exchange of experience between incubator staff and management will lead to many benefits: facilitating important insights and learning exchanges on incubator processes and performances as well as providing opportunities for personal development and networking experience.

At the end of this component, the trainee should have gained a thorough understanding of what benchmarking is, enabling them to explore in more detail how to implement benchmarking activities to leverage best practices.



Case Studies

The European BIC Network Quality System

Incubator Name: European BIC Network

Sector: Not-for-profit Association

This Case Study Examines: EBN holistic Monitoring & Benchmarking System (MBS)

Date: February 2010

PART I

SUMMARY

Problem

In January 2002, EBN was awarded a trademark licensing contract to manage the EC-BIC label from Directorate General Enterprise and Industry of the European Commission (see Annex 1). As a mandatory condition, EBN had to develop and implement a Monitoring and Benchmarking System to enable the development of a network of excellence through the integration of a quality approach.

olution

Inspired by the European Foundation for Quality Management's (EFQM) Excellence Model (see Annex 2), EBN has set-up a Monitoring & Benchmarking System which is composed of three main stages (see Annex 3):

- 1. Incubator's Self-Evaluation,
- 2. Independent Analysis of the Data, and
- 3. Due-Diligence Missions (on-site evaluations).

PART II

BACKGROUND

EBN's Monitoring & Benchmarking System (MBS) has been operating since 2004. By 2010, the database contains a vast amount of data which is used fundamentally to evaluate the incubator's performance and to identify possible areas of improvement. Additionally, the MBS also supports the Business and Innovation Centers to perform benchmarking activities.

The regular collection of data has allowed EBN to develop and enforce several initiatives to boost exchanges of "better practices" and to identify high-performing incubators – for further information see link number 3 (below).

When developing the MBS, the main challenges encountered were:

- 1. How to build a holistic and robust system that would address all areas of operation of an incubator;
- 2. How to account for different types of incubator (e.g. generalist incubators, sector-based-incubators, university-base incubators);
- 3. How to guarantee that the system could be applied by incubators in different development stages (i.e. newly created incubators vs. well established incubators);
- 4. How to address the geographical dispersion and specificities of the incubators (e.g. local economical environment specificities);
- 5. How to allow the collection of accurate and consistent data (both qualitative & quantitative) across so many different local realities;
- 6. How to deploy a mechanism which would allow the identification and transfer of good practices;
- 7. How to guarantee that all data would be kept confidential; and
- 8. How to guarantee that the MBS would be continuously improved without jeopardizing the consistency of the data collected.

The planned MBS had to be robust enough to accommodate all the challenges mentioned above and at the same time address one practical criterion: it had to be cost-efficient and manageable by a small team of 2-3 persons.

To address these issues, a "working group" composed of several incubation experts was constituted, including: incubator managers, specialized consultants and entrepreneurs.

The main stages of the MBS development are described hereafter:

Stage 1: Incubator's Self-Evaluation:

The incubator's management team is required to submit annually an extensive online self-assessment questionnaire (see Annex 4), composed of 9 sections (detailed below) and comprising of 150 questions.

- Section 1: Mission & Legal Status
- Section 2: Organizational Development
- Section 3: Financial Assessment
- Section 4: General interest BIC Missions
- Section 5: Services to new entrepreneurs
- Section 6: Services to SMEs
- Section 7: Signposting to partner organizations
- Section 8: Quality

• Section 9: Performance & Efficiency

(The sections displayed in Annex 4 of this Module, namely, Section 1, Section 3 and Section 9 are the most representative ones considering the type and amount of data gathered.)

To facilitate the collection of the incubator's data, a comprehensive online platform was developed, hereafter referred to as the "Quality website". Whenever an incubator decides to initiate Monitoring and Benchmarking activities, the EBN's team creates a profile on the Quality website and provides a "login" and a "password" to the incubator's management team. The login details allow the management team to access their "online incubator profile" and start filling in the questionnaire with the requested data (for further information about the features of the online platform, see Annex 5).

Stage 2: Data Analysis:

The data submitted is manually assessed by the EBN team and, when requested or appropriate, is compared with existing benchmarks. EBN does not disclose any information provided by the incubators without prior consent. Each incubator receives individual feedback about the state-of-art of their operations and performance.

The data collected allows the computation of several indicators and the monitoring of yearly trends (e.g. average enterprise survival rates, average number of jobs created);

Stage 3: Due-Diligence Missions (on-site evaluations).

An average of 15 on-site visits are performed annually, corresponding to the visit of around 10% of the EBN's network of full members. The visits are performed by other incubator managers and are aimed at verifying the accuracy of the data submitted by the incubators. At the same time, this mechanism provides an excellent opportunity for peer-to-peer discussions and exchanges of experience and expertise.

To guarantee that the MBS is always updated and that it still responds to the BICs' needs, EBN performs annual revisions of the system:

- Questionnaire review: deleting/adding questions; and
- Talent Pool review: experienced incubator managers are informed about the new features of the MBS and "newcomers" are trained in the MBS features.

The EBN team responsible to overview the MBS operation is composed of two people.

The annual cost of managing the entire MBS amount to around €20.000, including on-site visits, training of the incubator managers and updating of the system. The initial overall cost incurred by EBN to set-up the MBS amounted to €25.000, including the development of the software and working group activities.

TIMELINE OF EVENTS

2002: Deployment of the Monitoring & Benchmarking System, responding to the request of the European Commission.

2004: Publication of the first Annual Observatory gathering the data collected through the MBS.

2007: The Quality System was transferred and implemented at Asociación de Incubadoras de Empresas Chile Incuba A.G. (see Case Study 3)

2009: Nearly 100% of the BICs have fully complied with the Monitoring & Benchmarking System's requisites.

OUTCOME AND CONCLUSIONS

This case study highlights the value of developing a Monitoring & Benchmarking System which allows an accurate evaluation of incubators' performances. Benchmarking remains one of the best ways to lead to better practices. Incubators on their own are not always capable of obtaining the correct data on which to compare their performance, hence benchmarking against another similar organization, especially in the case of one to one benchmarking, is most helpful.

The EBN Quality System guarantees that the data collected is consistent and uniform thus enabling the yearly monitoring of key trends. The data collected and details of emerging trends are made available to interested incubators in the form of tables, charts and graphs. The EBN Quality team can develop further more detailed reports if specific requests are made by incubators. An MBS should be structured so that the incubator can request additional reports, based on specific characteristics.

PART III

LINKS

EBN website: www.ebn.eu

EBN Quality website: http://quality.ebn.be

EBN Observatory: http://www.ebn.be/DisplayPage.aspx?pid=21

EFQM website: www.efqm.org

REFERENCES

Guide to the European BIC Network available at:

http://ec.europa.eu/regional_policy/innovation/innovating/guidec_en.htm

Annex 1 – The BIC Quality Mark Criteria

Annex 2 - The EFQM Model

Annex 3 – Description of the Quality System

Annex 4 – EBN Self Evaluation questionnaire

Annex 5 – Quality website main features

The material for this case study was contributed by Giordano Dichter, EBN Quality, Membership Development and Technical Assistance Manager and Gonçalo Reis, EBN Quality and Membership Officer. This information is based on firsthand experience and personal involvement in the development of the tools mentioned above.

Contact details:

E-mail: gdi@ebn.be and gre@ebn.be

Telephone: +32 2 772 89 00

Evaluation process of performances and continuous improvement of Chilean business incubators

Incubator Name: Corfo (Chilean Economic Development Agency)

Sector: Multi-sector business incubators (e.g. agribusiness, tourism, ICT, mining...)

This Case Study Examines: The national evaluation system of incubators managed by Innova Chile

CORFO, the Chilean Economic Development Agency.

Date: February 2010

PART I

SUMMARY

Problem

Corfo, the Chilean Economic Development Agency, provides financial support to business incubators in order to enable them to create and promote successful and sustainable innovative enterprises through InnovaChile. In order to achieve a high return on investment, the Agency needs to identify the good practices leading to incubation successes in order to support these and to leverage these as quality standards.

Solution

Drawing inspiration from incubator performance evaluation systems from the United States, New Zealand and the European Union, InnovaChile created its own system dedicated to the performance assessment of Chilean incubators. The Chilean system aims to enable Chilean incubators to identify their strengths and weaknesses in respect to other incubators in their country, to achieve a better positioning and to have standardized parameters on which to measure their performance, all with the end goal of improving the overall quality standards of the Chilean incubation industry.

The information gathered contributes to the decision-making process of the Agency when allocating financial support to incubators.

PART II

BACKGROUND

In order to generate adequate conditions to strengthen the entrepreneurial capacity of Chile and the development of sustainable businesses, business incubators were created in 2001. The overall objective of these incubators is to enable the creation and promotion of successful innovative enterprises to be financially sustainable and independent when graduating from the incubation program. The support process for businesses involves the provision of selected resources and services such as supporting the search for investment, generation of sustainable business models, client searches, improved access to networks and acceleration of internationalization, amongst others. The incubators are financially supported by the InnovaChile division of Corfo.

In 2008, to ensure a high return on investment and a performing Chilean incubation industry, Innova Chile decided to set up an instrument to evaluate the performance of Chilean incubators. The Agency studied different international models to define a system enabling the identification of weaknesses and strengths of the incubators. By identifying incubator's weaknesses and strengths, the final objective is to develop strategies aiming at the strengthening of the incubation process in Chile.

The construction of such an instrument was designated to a consultancy company, by means of a public procurement notice, which worked directly or indirectly with 6 incubators during the pilot phase of the development of the system.

The instrument of evaluation of the incubators' performance has been designed in agreement with the best international practices in incubation and adapted to the national reality.

The system consists basically of 11 areas of evaluation, within which a total of 48 questions are established:

- 1. Focus on the creation of high growth potential companies.
- 2. Process of attraction and selection of entrepreneurs.
- 3. Processes and services of the incubation offer.
- 4. Internationalization of incubated companies.
- 5. Networks of mentors, counselors, advisers and links among entrepreneurs.
- 6. Access to sources of finance.
- 7. Corporate governance of the organization.
- 8. Management of the organization.
- 9. Transfer of knowledge and high-level technologies.
- 10. Business Model and sustainability of the organization.
- 11. Link with the national and international environment.

In 2009, InnovaChile launched the implementation of the model of measurement of the Chilean incubator's performance. Since then, the evaluation of business incubator's performance through the Agency's system has become one of the key elements of the application procedure for incubators to receive financial support from the Agency.

The specific objectives relative to the first year of implementation of the model included:

- To check and to propose improvements to the instrument of Evaluation of Performance developed in 2008, taking into consideration the objectives and particular characteristics of the incubators.
- To implement the "Pilot Model of Evaluation of Performance and Continuous Improvement for the Chilean Incubators", applying the Instrument of Evaluation of Performance bearing in mind proposals from consultants and elaborating a plan for improvement for each of the incubators evaluated on the basis of the gaps and weaknesses identified by the evaluation.
- To produce recommendations for the consolidation of the Model of Evaluation, through the systematization of good practices and lessons learned during the implementation.
- To generate and to strengthen aptitudes to implementing in a sustainable way the "Model of Evaluation of Performance and Continuous Improvement for the Chilean Incubators".

The process development included the following stages:

- 1. Pilot evaluation (via e-mail and in person within the incubator's premises) Implementation of the model of evaluation with 3 incubators to validate and fit the instrument of evaluation to the different operating areas and conditions of development of the incubators.
- 2. Adjustment to the Evaluation System Adjustment to the system on the basis of the observations made during the pilot session.
- 3. Interviews (in Santiago) Individual interview with the manager of the incubator completed by an international consultant.
- 4. Seminar (in Santiago) Seminar related to the model of evaluation and continuous improvement. Concerns only the participation of the incubators taking part in the evaluation.
- 5. Sending of Evaluation by the Consultant (via mail) The consultant will send a validated survey which forms a part of the instrument of evaluation.
- 6. Review of Final Version of Instrument and Guideline of Evaluation Incorporation of adjustments to the instrument and guidelines of evaluation on the basis of the observations made during the pilot and review of final version of the system.
- 7. Receipt of Evaluation (via mail) The information provided by the incubator will form an integral part of its evaluation and will be validated during the visit.
- 8. Visits to Incubator (within the incubator's premises) One day visit to the incubator's premises

to validate the evaluation done by the consultant.

- 9. Meeting feedback (within the incubator's premises) Meetings with every incubator for the analysis of its results and the design of its plan for improvement. These meetings will be undertaken by the consultant.
- 10. Seminar of Diffusion of the Results (in Santiago) Seminar for the dissemination of the results of the implementation of the model of evaluation and continuous improvement. It is open to the participation of the evaluated incubators, other incubators and authorities.

TIMELINE OF EVENTS

2001: Creation of the business incubator's program by Corfo.

2005 to 2007: Strengthening and adjustment of the business incubator's program on the basis of other international models, notably the European one.

2008: Designed the performance evaluation model.

2009: Implementation of the Chilean Model for Incubator's Performance Evaluation and continuous improvement, establishing a formal and sustainable result oriented system for monitoring and evaluating.

OUTCOME AND CONCLUSIONS

All incubators supported by InnovaChile Corfo which look for the Agency's support (19 incubators, which make up 100% of Chilean incubator sector operating for more than 2 years), took part in the evaluation process in 2008. During the implementation of the evaluation system, some challenges have been identified, namely:

- To find an independent evaluator from the incubator and the universities or institutions the incubator may belong to.
- To make sure that the incubators acknowledge the evaluators as being capable to implement the evaluation.
- To overcome the precedents of unsuccessful evaluations and the poor clarity with regard to the use of the results of the evaluation.
- To guarantee the sustainability of the evaluation model of performances offering added value to the evaluated incubators.
- To guarantee access to information for all stakeholders and to overcome incubators operational myths.

Taking into account all of the challenges faced, InnovaChile decided to implement the model designed

in 2008, in order to establish a formal and sustainable system, oriented towards the ongoing monitoring and evaluating of Chilean business incubators.

PART III

LINKS

CORFO website: http://www.corfo.cl

REFERENCES

The material for this case study was contributed by Jocelyn Villarroel, World Bank Program Advisor, Development Division Innova Chile CORFO. This information is based on firsthand experience and personal involvement in the development of the system mentioned above.

Contact details:

Jocelyn Villarroel

E-mail: jvillarroel@corfo.cl Telephone: (56-2) 631 8682

Bibliography

CONTENT REFERENCES

BADIR-ICT

http://www.badirict.com.sa/

Benchmarking PLUS

http://www.benchmarkingplus.com.au

Cammarata, Kathleen (2003) - Self-Evaluation Workbook for Business Incubators, NBIA Publications

Drnovsek, M. - Benchmarking of Business Incubators in Slovenia

http://www.erenet.org/papers/download/a10.pdf

European Business and Innovation Centre Network - BIC Observatory 2009 - The BIC Network in 2008: Facts and Figures

http://www.ebn.eu/Observatory/

European Commission, Enterprise Directorate General (2002) - Benchmarking of Business Incubators, Center for Strategy and Evaluation Services, Brussels

Erlewine, M. (2007) - Measuring Your Business Incubator's Economic Impact: A Toolkit, NBIA Publications

incuTrak

http://www.incutrack.com

infoDev activities from 2002 to 2009

http://www.infodev.org/en/Article.473.html

infoDev – Incubator Manager Training Modules

http://www.infodev.org

infoDev - Monitoring Evaluation & Impact Assessment Study

http://www.idisc.net/en/Page.MEIA.Study.Overview.html

International Finance Corporation (IFC), Business Edge:

http://www.businessedge-me.com/cms.php?id=about_be_what_is_business_edge

International Finance Corporation (IFC), SME Toolkit

http://www.smetoolkit.org

International Finance Corporation (IFC), SME Toolkit – Kenya

http://kenya.smetoolkit.org/kenya/en

International Finance Corporation (IFC), SME Toolkit – Kenya – Customer Satisfaction Survey Form

http://kenya.smetoolkit.org/kenya/en/content/en/401/Customer-Satisfaction-Survey-Form

Kassis, Laith (2007) - How to develop and implement simple and effective MEIA Frameworks, 5th MENAinc Workshop Bahrain 21-24 October, 2007

http://www.idisc.net/en/Document.196.pdf

National Business Incubation Association – Incubation Essentials

http://www.nbia.org/store/inc_essentials.php

National Business Incubation Association (2007) - Measuring your business incubator's economic impact: A toolkit

http://www.nbia.org

National Business Incubation Association – Self Assessment Guide

http://www.nbia.org

National Business Incubation Association - Suggested Metrics

http://www.nbia.org/impact/suggested_metrics.php

New Zealand Trade & Enterprise – Join a Business Incubator

http://www.nzte.govt.nz/get-ready-to-export/Starting-a-business/Pages/Join-a-business-incubator.aspx

Palestine Information and Communications Technology Incubator (PICTI)

http://www.picti.ps

OLBS

http://www.qlbs.com

SurveyMonkey

http://www.surveymonkey.com/

Webb, Julian (2009) - Webb Monitoring and Evaluation Methodology, Presentation, Santiago, Chile, November 2009

Wikipedia - Balanced Scorecard

http://en.wikipedia.org/wiki/Balanced_scorecard

Wikipedia – Management Information System

http://en.wikipedia.org/wiki/Management_information_system

Yengibaryan, Bagrat (2007) - Indicators for Managing and Developing Innovation Projects:

http://www.idisc.net/en/Document.197.pdf

Yuan, Benjamin (2002) - Best Practices in Business Incubation: The East Asian Experience, NBIA's 16th International Conference on Business Incubation

http://www.nbia.org/events/conf2002/session_descriptions.html

USEFUL INTERNET LINKS

http://www.nbia.org http://www.ebn.eu http://www.rmi.org.br

SUGGESTED FURTHER READING

Adkins, D. (2001) - Summary of the U.S. Incubator Industry and Prospects for Incubator Model Globalization, NBIA Publications, Athens, Ohio

Anzabi, Paul D. (1997) - Business Incubation in Australia, Best Practice Standards

Gerl, E. (2004) - Encouraging Clients to Plan for Graduation - A Comprehensive Guide to Business Incubation, Completely Revised 2nd Edition, NBIA Publications, Athens, Ohio

Molnar, Lawrence A.; R. Grimes, Donald; Edelstein, Jack; De Pietro, Rocco; Sherman, Hugh; Adkins, Dinah and Tornatzky, Lou (1997) - Business Incubation Works, NBIA Publications, Athens, Ohio

National Business Incubation Association (2002) - State of the Business Incubation Industry, and (2006) State of the Business Incubation Industry.

Rice, Mark P. and Jana B. Mathews (1995) - Growing New Ventures Creating New Jobs, Principles and Practices of Successful Business Incubation, Quorum

UK Business Incubation (2001) - UK Incubators Identifying Best Practices



Annex 1: BIC Quality Mark Criteria

PREAMBLE

The purpose of the EC BIC Quality Mark (http://quality.ebn.be) is to provide an assurance that BICs meet certain standards in terms of their service offering and performance. This assurance is important to stakeholders, BICs themselves (e.g. by helping to identify management priorities) and to clients.

The EC BIC Quality Mark can either be granted to an organisation as a whole or to a specific department or business unit of an existing organisation. In the latter case, the criteria apply to that specific department. It can also be granted to organisations or departments which operate on more than one site; as long as the label is given to the organisation or department responsible for ensuring that the BIC criteria are fully implemented on all sites.

For both organisations as a whole, or departments of an existing organisation, the criteria that must be met to be awarded the BIC label are grouped under six headings: (1) Mission, (2) Organisation, (3) Services to Innovative Individual Entrepreneurs/Start-up Enterprises and SMEs, (4) Activity Measurement and Evaluation, (5) Quality.

1. GLOBAL MISSION: INNOVATION AND INCUBATION

BICs are professional organisations which promote, stimulate and develop innovation in SMEs at all stages of their development, through a comprehensive incubation process. Depending on the characteristics of the territory and the existing business support organisations already present, BICs may focus on fostering the creation of new innovative enterprises and/or developing innovation in existing enterprises, with the goal of contributing ultimately to regional/local economic development, competitiveness and growth.

BICs should identify and subsequently take account of the sectors with innovation potential in their region and the strategic/business plan should focus on developing these sectors. In addition, if the region in which they operate is active in the field of R&D, BICs should aim to exploit this by ensuring that at least a part of their activities are focused on technological innovation (e.g. through academic and University spin-offs etc.).

Where BICs work with non-innovative companies the rationale should be to develop these companies to become innovative through a range of support services including consultancy, SME diagnostics, training, or inclusion in a specific program (internationalization, clustering, enterprise take-over etc.)

2. ORGANISATION

BICs must be able to demonstrate that they:

- Focus on a specific and well-defined catchment area (within a region, province, city etc.). In areas where one or several accredited BICs already exist and operate, any new candidate BICs applying for accreditation should demonstrate there is a clear case for the creation of a new BIC, with convincing arguments such as evidence of market demand; a population and number of SMEs that could justify its creation and sustain its activities in the longer term; the existence of industrial sectors that are not already served by the existing BIC that would be served by the new one, and so on;
- Ensure that their role is acknowledged by the relevant public authorities in their catchment area and is aligned with agreed regional/national economic development priorities and innovation strategies;
- Involve the public sector in the case where they are predominantly private in structure or involve the private sector in the case where they are predominantly public in structure, (by e.g. including an appropriate post on the Board [both types of structure], participating in relevant local publicly funded development programs [predominantly private structures], involving corporates and Business Angels etc.[predominantly public structures]);
- Co-ordinate/integrate their activities with those of other business support organisations to
 ensure the seamless delivery of a complementary and comprehensive range of facilities and
 services in the catchment area;
- Are financially sustainable with an allocated budget and own profit and loss account;
- Have a clear positioning in relation to business support provision in the catchment area, supported by a strategic and action plan aimed at creating new jobs and stimulating economic growth through the creation of innovative companies or the development of existing companies;
- Have identified premises (a BIC may be hosted by a bigger organisation) and a clear identity and branding as a BIC that differentiates them from other business support organisations in the catchment area; and
- Are managed professionally and autonomously, have a dedicated team of at least three full time staff appropriately qualified, experienced and involved in the core activity of business support as e.g. business advisors of which one must be the manager/CEO with overall responsibility for the BIC.

3. SERVICES TO INNOVATIVE INDIVIDUAL ENTREPRENEURS/START-UP ENTERPRISES AND SMES

BICs should be active in terms of incubation (creation of innovative enterprises) and/or fostering innovation in existing SMEs. The balance between these two activities should be determined in the light of an assessment of the development needs of the catchment area. In order to achieve this, BICs must:

- Actively promote innovative entrepreneurship (4.1.1) and/or the development of innovation in existing SMEs; and
- Use a number of methods to detect and promote new innovative projects (4.1.2).

Both of the above should be achieved through a number of activities e.g.:

- Events,
- · Competitions and awards,
- Project building, through European, national and regional programs,
- · Partnerships and networking,
- Provide adequate resources, and/or
- Periodically review their performance against the EC-BIC Quality Mark benchmarks, taking action if necessary to address shortcomings (8.1.8).

3.1. Incubation (new individual entrepreneurs/start-up enterprises and start-ups) (5.1.1)

BICs should be clear about what kind of clients they need to target for the provision of services (5.1.2).

Once the diagnostic phase is complete, BICs should implement an agreed policy and procedure(s) to govern the relationship such as an agreement with individual entrepreneurs/start-up enterprises which should set out the services that have been discussed and agreed and that will be provided over a pre-determined (estimated and flexible) time period (5.1.11).

In the provision of services to new individual entrepreneurs/start-up enterprises, BICs should (as a minimum):

- Undertake risk analysis in the pre-incubation phase (technology, marketing, human resources etc.), using a structured and consistent method designed to give reliable results (5.1.3);
- Provide guidance and support in the business planning process (5.1.9), using a structured and consistent method that addresses all the necessary elements of starting up a successful business (5.1.7);
- Help the individual entrepreneur/start-up enterprise to define their/its business model (5.1.8);
- Support the individual entrepreneur/start-up enterprise with the financial planning for their enterprise and help him/her to access finance (5.1.13) through e.g. public measures (tax incentives/relief, subsidies), alternatives to bank loans (business angels, seed capital, venture capital), EU

programs (Framework Programs, sector-oriented programs etc.)And appropriate private initiatives [competitions etc.];

- Provide access to general or thematic training as appropriate to the individual entrepreneur/ start-up enterprise and the BIC mission, either directly or through appropriate co-operation agreements (5.3.) BICs should also undertake the initial and ongoing analysis of the needs of individual entrepreneurs/start-up enterprises;
- Provide mentoring and coaching primarily by the BIC's own staff or through the use of outsourced professional consultants;
- Provide networking opportunities (entrepreneurs' clubs, associations);
- Provide premises with appropriate services in the incubator or signpost to suitable premises if not available on site (5.2.1); and
- Provide other innovation support services (e.g. help with technology transfer, proof of concept funding/seed finance, Intellectual Property Rights and other legal aspects, access to equipment etc.).

BICs that want to make a bigger impact in the innovative SME market and want to demonstrate this over the longer term will also:

• Follow-up and animate individual entrepreneurs and start-up enterprises in the incubation and (if required) post-incubation phase for three to five years after creation (continued access to financing, benchmarking against business plan to ensure realization and proposals for corrective actions if necessary. Follow-up may be partially sub-contracted but BICs should be proactive in the prevention of business failure. Follow-up helps to ensure that BIC activities achieve sustainable outcomes benefiting the region where they are located.

3.2. For existing SMEs, BICs should carry out a number of activities, tailor-made for the individual company

BICs should know how innovation is likely to be improved in SMEs and should ensure that these activities are supported adequately by either the BIC services or the availability of appropriate services through co-operation agreements and signposting (6.1.2).

Once the diagnostic phase is complete, BICs should implement an agreed policy and procedure(s) to govern the relationship such as an agreement with SMEs which should set out the services that have been discussed and agreed and that will be provided over a pre-determined (estimated and flexible) time period (6.1.6). NB: Some ad hoc services may not require a specific agreement.

In the provision of services to SMEs BICs should (as a minimum):

- Undertake general diagnosis of any innovation gaps: SWOT analysis; recommendations and action plan, using a structured and consistent method designed to give reliable results (6.1.4);
- Provide SME support aimed at increasing the innovation profile (marketing, financing, and so on);

- Provide access to SME training (e.g. internationalization, management, Intellectual Property etc.) either directly by the BIC itself or by outsourcing; and
- Include SMEs in specific projects (clustering, enterprise take over, technology transfer, women in management, renewable energy, and so on).

3.3. Signposting is a Key Service of a BIC

BICs must act as an interface between the innovative individual entrepreneur/start-up enterprise and local public and private bodies: BICs must identify a local "talent pool", the members of which are selected according to the needs of the innovative individual entrepreneur/start-up enterprise, for example: Enterprise Europe Network for technology transfer and EU programs, patent officers, marketing advisers, lawyers, professional organisations, clubs/associations of entrepreneurs, development agencies, Chambers of Commerce, banks, venture capitalists, Business Angels etc. Access to this selected talent pool provides added value to both individual entrepreneurs/start-up enterprises and existing SMEs. BICs comply with the B2Europe charter.

In order to achieve this role as an interface, BICs should:

- Establish co-operation agreements with appropriate partner agencies and service providers (2.1.1);
- Ensure that tools are available in the BIC to signpost individual entrepreneurs/start-up enterprises and SMEs to the right service providers e.g. databases (Section 7); and
- Ensure that BIC staff, particularly those advising individual entrepreneurs/start-up enterprises and SMEs, have up to date knowledge of other service providers in the relevant sector and/or catchment area.

4. ACTIVITY MEASUREMENT AND EVALUATION OF PERFORMANCE

The EC-BIC accreditation and ongoing evaluation process involves a comprehensive review of BIC activities and performance. An important input to this is self-evaluation information provided by BICs. In order to provide adequate data for the annual evaluation of compliance against the criteria for the EC-BIC label BICs must use the common indicators identified in the self-evaluation questionnaire to assess their activities. The provision of this data is also vital to reinforce the reputation of the network, through the Annual Observatory and for benchmarking purposes and the calculation of key statistics, charts and other performance reports. As well as those specific data indicated above by their reference number, which relates to the evaluation questionnaire, BICs must also record (for Section 9 of the questionnaire):

- The number of academic spin-offs created with the support of the BIC (if any),
- The annual number of enterprise creation projects prior to feasibility study,
- The annual number of enterprise creation projects implemented after feasibility study,
- The percentage of projects based on technology,

- The annual number of business plans produced,
- The annual number of start-ups created with the support of the BIC,
- The annual number of jobs created by enterprises,
- The survival rate (percentage) of enterprises three years after creation,
- The number of tenants in the incubator (if a physical incubator is located in the BIC),
- The annual number of people employed by tenants in the incubator,
- The annual number of SMEs supported with their innovative projects,
- The annual number of SMEs supported with innovation diagnostics,
- The annual number of SMEs participating in programs aimed at improving competitiveness, and
- The annual number of client SMEs closing down.

5. QUALITY

The BIC Quality System is based on a TQM approach (EFQM model) using self assessment, benchmarking reports, and on site visits. BICs must comply with the BIC Quality System. In particular they must:

- 1. Complete and submit their on-line self-evaluation questionnaire on an annual basis, by the given deadline;
- 2. Facilitate on-site evaluation visits by EBN experts and provide all the information requested; and
- 3. Implement the decisions of the BIC Quality Mark Committee.

BICs should also:

- Define any other performance indicators as appropriate and as required to meet the needs of stakeholders and clients;
- Implement a management information system for the collection of key information, including performance indicators, contact details, other agency and service provider details, project information, and so on; and
- Regularly monitor client satisfaction through, for example:
 - o Paper or on-line surveys, and
 - o Telephone surveys.

The BIC QUALITY MARK CRITERIA form the basis for the whole quality process. They provide the foundation for EBN's operational terms of reference for technical assistance and on site evaluation procedures, in particular for the evaluation of new candidate BICs.

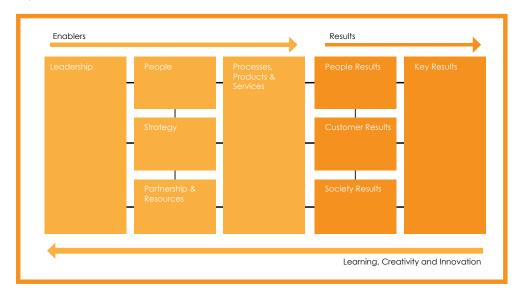
Annex 2: The EFQM Execellence Model

The EFQM Excellence Model (http://www.efqm.org/en/) is a non-prescriptive framework based on 9 criteria [sections]. Five of these are 'Enablers' and four are 'Results'. The 'Enabler' criteria cover what an organization does and how it does it. The 'Results' criteria cover what an organization achieves. 'Results' are caused by 'Enablers' and 'Enablers' are improved using feedback from 'Results'.

The Model, which recognizes there are many approaches to achieving sustainability, is based on the premise that:

Excellent Key Results, Customer Results, People Results and Society Results are achieved through Leadership driving the Strategy that is delivered through People, Partnerships and Resources, and Processes, Products and Services.

The EFQM Model is presented in diagram form below. The arrows emphasize the dynamic nature of the Model. They show innovation and learning helping to improve enablers that in turn lead to improved results.





Annex 3: Description of the EBN Quality System

1. THE IMPORTANCE OF THE QUALITY PROCESS

The EBN quality process http://quality.ebn.be/ underpins the value of the trademark and of the organizations that have received the license (professionalism, performance, consistency and positioning). BICs are becoming more and more dependent on financing from local bodies and their own ability to generate their own resources. To adopt client oriented behavior is becoming increasingly important.

Within the same context a large number of BICs have developed advanced skills in the engineering and management of national and international programs. In addition to the contribution to the financing of the BICs these programs have a strong impact on the reputation of the BIC, on its credibility with local actors and on the budgets and missions that they are allocated.

This impact also contributes to the image of the network in terms of its capacity to implement national policies. The information gathered in the framework of the quality initiative will lead to a better understanding of the network's activities. It will also enable the publication of the Annual BIC Observatory, a document which explains the achievements of the network and helps to raise its profile and standing. It is obvious that this reputation is directly linked to the network's positioning in terms of national, local and regional authorities as well as towards clients, partners and competitors.

The third and last pillar of the quality process is "benchmarking", which is achieved through the tools for analysis and comparison of results, approaches and methods.

2. THE QUALITY PROCESS OF THE NETWORK IN DETAIL

2.1. The self-evaluation questionnaire

This is the cornerstone of the initiative, the tool that enables the collection of qualitative and quantitative data and adds credibility to the network's quality process. Each year, the BICs must submit a completed questionnaire to EBN.

This questionnaire allows EBN to:

- Assess the degree of conformity to the label criteria and implement any further necessary steps (audits, technical assistance, corrective measures etc.);
- Maintain a database for the purpose of benchmarking, allowing BICs to compare their results with those of other BICs having similar profiles (or not);
- More effectively answer the targeted requests of members such as searches for information or for partners within the framework of technical assistance or setting-up of a consortium for international programs;
- Publish examples of best practice across the network to members; and

• Write, publish and disseminate the annual activity report of the network namely the "BIC Observatory", for members. This report is also a useful tool for marketing and lobbying at international, national or regional levels, for the promotion of one BIC, a group of BICs or the entire network.

2.2. On-site visits

EBN systematically assesses on-site any new candidate for the BIC label; these evaluation missions are carried out by selected experts trained by EBN. Concerning the visits to existing full members of EBN (that is to say organizations that are already labeled as a BIC); at least 10% are audited each year. The selection of the BICs to be visited is proposed by EBN based on information collected and analyzed from the questionnaire. For organizations which are interested in the BIC quality mark but do not want to become a member of EBN (exceptional cases), the audit visit is compulsory. EBN carries out an audit visit to these organizations every two years, but provides no other services.

3. CONCLUSIONS

The quality process aims to provide the BICs with added value. It is a tool for benchmarking, marketing and networking. Thanks to the annual questionnaire, EBN can – amongst other things - publish and disseminate the annual report (BIC Observatory), identify the competencies developed within the network and be aware of European projects in which BICs are participating.

The quality process thus enables EBN to improve its services to its incubators: more effective lobbying, updated quality information and databases, a better knowledge of the network, improved networking and better-targeted International programs.

In the medium term, it is the value and the strength of the BIC label, of each BIC and of each BIC's market, which will be reinforced and boosted by a stronger network, stemming from the EBN BIC Quality System.

Annex 4: EBN Questionnaire

SECTION 1: MISSION AND LEGAL STATUS

Contac	t Information	
Gener	ral contact	
Name		Email address
Sectio	on 1 contact (if different from general	contact)
Name		Email address
Section	1.1: Creation of the BIC	
1.1.1 W	Vas your BIC created as a complete ne	w entity?
?	O Yes O No	
If YES -	enter the date of creation and go directly	to section 1.2
1.1.2 D	ate on which the BIC unit was set-up	n an existing organisation?
?		
1.1.3 A	re the BIC department & premises cle	arly and separately identified?
?	○ Yes ○ No	
1.1.4 ls	the separation from the hosting orga	nization:
?	☐ Physical (premises)	
	☐ Finantial (budget)	
	☐ Organizational (management)	

1.1.5 Has the BIC inside the hosting organisation a legal status?

?	○ Yes ○ No
1.1.6 W	hat is the nature of the organisation hosting the BIC:
?	O A regional development agency
	O A Science and Technology Park (Technopole)
	O A Chamber of Commerce and Industry
	O A Business Angel Network
	O A technology Centre
	O A University or Research organisation
	O An industrial or sectorial association
	O A local authority
	OOther
	1.2: Legal status of the BIC and/or the hosting organisation BIC r 1.2.1 - 1.2.3 if answered "Yes" to 1.1.1)
1.2.1 Ho	ow would you characterize the BIC? Is it a
?	O Public body
	O Public equivalent body
	O Private hody

O A mix of public and private

SECTION 3: FINANTIAL ASSESSMENT (INCOME AND EXPENDITURE)

Total of Private Sector Income

Total

Sanar	ral contact		
sener Jame	ai contact	Email address	
		2	
ectio	n 3 contact (if different from general conta	ct)	
lame		Email address	
	3.1: Income for the year in Question		
1.1 ?	Public sector Income - Subsidies	euros	%
	From national, regional, local bodies		
	Eu structural funds (e.g. ERDF, ESF)		
	Other public subsidies		
	Public sector Income - Subsidies	euros	%
	Public income through National & Regional		
	programmes		
	Income from EU Programmes (Framework		
	Programme, Interreg, etc.)		
	Other public income		
	Total of Public Sector Income		
	Private sector Income	euros	%
	Income from housing + incubator services		
	(rent, reception, copying, etc.)		
	Income from client - SMEs/ Entrepreneurs		
	Other private income		

Section 3.2: Expenditure for Year in Question (BIC or BIC cost centre inside hosting organisation)

1	2	1

.2.1			
?		euros	%
	Payroll		
	Consultants and external experts		
	Subsidies to entrepreneurs		
	Overheads (furniture, travel, energy, IT facilities etc.)		
	Cost of incubator building(s)		
	Finantial costs (from loans etc.)		
	Other costs		
	Total		

SECTION 9: PERFORMANCE AND EFFICIENCY	
Contact Information	
General contact	
Name Email address	
Section 9 contact (if different from general contact)	
Name Email address	
Section 9.1: Enterprise creation	
Data in year in question	
9.1.1 This question has been deleted from the questionnaire	
9.1.2 How many projects prior to feasibility study and evaluation did y question?	ou select in the year in
(3)	
9.1.3 How many enterprise creation projects did you select after feasibi for implementation in the year in question?	lity study and evaluation,
9.1.4 Among these projects (question 9.1.3), what percentage were:	
Give percentage breakdown	%
Technological based projects i.e. "Technology push"	
New non-technological activities (marketing, financing, quality,	
internationalization) considered as "innovative" for the catchment are i.e. "Market Pull"	
Others (non innovative)	
Total (must be 100%)	

Among evaluated projects (from the year in question and previous years), how many new

Business Plans were produced in the year in question?

9.1.5

?

9.1.5.1	For now many new, non-tenant entrepreneurs did you provide coac	hing/virtual incubation.
?	In addition to the enterprise creation projects reported above?	
9.1.6	Estimated average time (in months) from the first contact with to creation of the company:	he entrepreneur to the
9.1.7	How many start-ups were created with the support of your Blc in th	e year in question?
	Give percentage breakdown	%
	% Individual entrepreneurs	
	% Industrial spin-offs	
	% Academic spin-offs	
	Total (must be 100%)	
9.1.8	How many enterprises have been created with your support since t	the start of the BIC?

Annex 5: Quality Website

LOGIN PAGE

The incubator managers can login with their login details in the upper-right corner of the website to accede to the functionalities of the online platform.

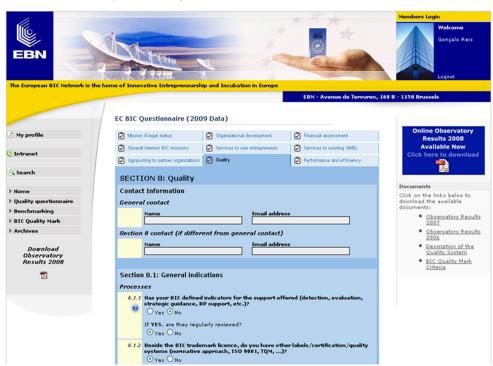


FILLING-IN THE QUESTIONNAIRE

By selecting the option "questionnaire" on the left-side of the screen, incubator managers are able to see the 9 sections which compose the questionnaire.

Each of the sections must then be completed with the appropriate data and submitted.

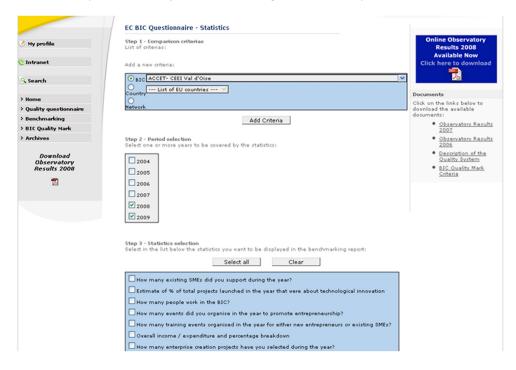
Incubator managers are requested to do this annually, however, the frequency of questionnaire submission can be adapted according to the needs.

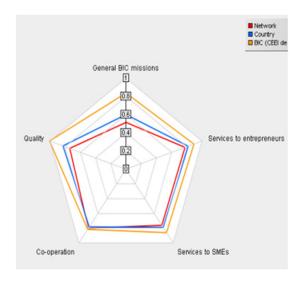


STATISTICS

By selecting the option "benchmarking" on the left-side of the screen, incubator managers are able to withdraw graphs, charts and tables displaying information about their incubator.

The Quality website also allows the comparison with the Network average. Comparisons against other incubators are possible, but subject to a disclosure agreement from all parts involved.







Annex 6: Taiwan Case Study – Best Practice Benchmarking

Monitoring and evaluation, as with benchmarks, are linked to the assessment of good (or best) practices and associated performance indicators. Varying methodologies are used to monitor, evaluate and benchmark business incubator's performances, in order to answer the concern of "how can you make your incubator better"?

Note: This annex draws upon work and presentations made by Dr Benjamin Yuan, School of Management, National Chiao-Tung University, Taiwan, one of the main leaders of the Taiwanese Incubation Industry.⁵¹



How do you know whether your incubator is good, bad, and indifferent or at the top of the league in the results that matter in your sector of industry?

The answer to both questions lies in Best Practice Benchmarking (BPB). Although we us this well known term throughout this component, it should be noted that 'Good Practice' is a better term than 'Best Practice', because practices can always improve and therefore are never best and because what is a good practice in one location may not be in another.

Best Practice Benchmarking (BPB) is a technique used by successful companies around the world - in all sectors of business, both manufacturing and service - to help them become as good as or better than the best in the world in the most important aspects of their operations. It recognizes that profitability and growth come from a clear understanding of how the business is doing, not just against its own performance last year, but against the best they can measure.

How to implement Best Practice Benchmarking?

- 1. Establishing what makes the difference, in your clients' eyes, between an ordinary incubator and an excellent incubator.
- 2. Setting standards in each of those things, according to the best practice you can find.
- 3. Finding out how the best incubator meets those challenging standards.
- 4. Applying both other people's experience and your own ideas to meet the new standards and, if possible, to exceed them.

Source: Yuan, Benjamin (2002) - Best Practices in Business Incubation: The East Asian Experience, NBIA's 16th International Conference on Business Incubation: http://www.nbia.org/events/conf2002/session_descriptions.html

What are the gains to be made from BPB?

- Better understanding of your clients and other incubators,
- · Fewer complaints and more satisfied clients,
- · More satisfied staff,
- · Reduction in waste, quality problems and reworking,
- Faster awareness of important innovations and how they can be applied,
- A stronger reputation within your market place, and
- As a result of all these, increased performance, profits and sales turnover.

What does best practice benchmarking demand of your incubator?

BPB is to be taken into consideration as an everyday activity that must be part of the normal routine of effective management of the business incubator.

A continuous improvement approach must be inculcated amongst all staff of the business incubator so that it becomes the norm in the framework of their daily activities. This way, every manager has a responsibility to continually seek to improve the operations he/she controls. What frequently stops him/her is a simple lack of knowledge - not knowing how much better he/she could be doing or is doing.

Without something to measure up against, it is human nature to assume that current performance is near enough as good as you can get. BPB leaves no room for such complacency.

The main requirements of BPB include:

- A strong commitment from top management to act on any major opportunities for improvement that are revealed;
- A small amount of training and guidance for employees who will have to gather the information needed to identify and analyze best practice; and
- Authorization for employees to spend some of their time on benchmarking activities.

Making best practice benchmarking work for your incubator

There are five key steps to the BPB process:

- 1. What are we going to benchmark?
- 2. Who are we going to benchmark against?
- 3. How will we get the information?
- 4. How will we analyze the information?
- 5. How will we use the information?

While large incubators will tend to want to gather greater quantities of information and will be more concerned with issues of competition, small incubators will tend to focus on a few critical areas and be more concerned with operational improvements. In both cases, incubators need to be sure why they are benchmarking and have a clear strategy for carrying it out.

1. What are we going to benchmark?

Two key questions need to be asked

- 1. What would make the most significant improvement in our relationship with our clients?
- 2. What would make the most significant improvements to our bottom line?

Some common benchmarks can be used. They refer to 2 areas, i.e. incubator data and client data (i.e. quantitative indicators relating to inputs and outputs).

As far as incubator data is concerned, the following elements can be benchmarked:

- Physical space gross floor area, available space, occupancy rate (available/let %);
- Number of graduates and graduation rate per annum;
- Number of incubatees and new incubatees per annum; and/or
- Number of applicants and ratio of enquiries to acceptance as an incubatee.

In terms of client data, the following data could be considered:

- Total growth/change of incubatees regarding:
 - o Employees,
 - o Revenue,
 - o Space leased,
 - o Product lines, and/or
 - o Investment.

- Number of competition winners, and so on.
- Survival rate five years after graduation and while under incubation.
 - Remember that the most important issues may change with time a changing world.
 - Don't try to benchmark too many things to begin with.
 - Don't waste time benchmarking things that are 'just nice to know'.
 - The more precisely you define what you want to measure, the more useful the information you gather will be.
 - Before you start comparing with other incubators, test the benchmarks within your own organization, to make sure they really work.

2. Who are we going to benchmark against?

Ways to identify which peers to compare your incubator against include asking clients who they think is "best in class", asking industry observers, such as journalists, academics and so on, asking Industry associations and Networks, who may be able to put you in contact with other incubators.

When choosing incubators with whom to compare, it is important to question:

- Do they know your incubator?
- Is their experience really relevant to your incubator?
- Are they still good at the activity you want to measure? An incubator can live off its reputation for a long time!!
- Are you legally able to exchange this kind of information with these incubators? Most incubators are very happy to share but trade secrets may exist, especially with private incubators.
- As mentioned previously, cross national benchmarking does have weaknesses that a business incubator needs to be aware of. With cross national benchmarking the scope for comparison may be limited by wide variations in local environments and cultures; business models; services and types of incubator.

There are 3 different types of organization an incubator can benchmark against: other incubators, parallel Industries (e.g. Venture Capital Institutions, SME Support Services) and totally different industries (e.g. real estate developers).

3. How will we get the information?

The information can be gathered through the following means:

- Magazines, newspapers, association reports and specialist databases,
- From clients, affiliates, suppliers and other observers,
- Personal contacts and visits an important part of the process, and
- Incubators who are not directly competing for the same tenants.

4. How will we analyze the information?

The information gathered needs to be quantified, as closely as possible; it needs to enable the comparison of similar points and to reflect other managers' opinions on the lessons you can learn from the other incubator's experience. The key question here is: 'how much of this is genuinely applicable to your incubator?'

5. How will we use the information?

The information from BSB should be used to set new standards for the performance you expect and communicate them to everyone concerned, along with an explanation of why standards have been raised (or, perhaps, why you have instituted them for the first time). In order to ensure the full impact of BSB it is recommended to make someone in authority responsible for devising an action plan to reach the new standards; to provide the resources for managers to carry out additional research, if necessary and to monitor progress so that the plan really does get put into effect.

6. How long does benchmarking take?

The length of the research process will vary greatly depending on what and who you are benchmarking against.

To be really effective, benchmarking is an on-going process, and once you have built links with benchmarking partners, up-dating is relatively simple. But short visits to other incubators can also prove useful. Small incubators as well as large have much to gain by benchmarking.

Troubleshooting

While implementing Best Practice Benchmarking, an incubator may face problems. The following Table indicates the common problems an incubator may face while carrying out BPB as well as the most likely causes and the corresponding solution to solve the problem.

PROBLEM	LIKELY CAUSES	SOLUTION		
BENCHMARKING THE WRONG MEASURE	Inadequate knowledge of own organization and operations	Further research to find significant measure		
BENCHMARKING THE WRONG ORGANIZATION	Inadequate desk research	More detailed initial research		
BENCHMARKING NOT LEADING TO ACTION	Senior management not involved	Ensure that management supports the process		
FAILURE TO SELL IDEA TO SENIOR MANAGEMENT	Lack of information, poor presentation	Tie BPB firmly to the existing business plan; show how other incubators have benefited		
LACK OF RESOURCES FOR BENCHMARKING	Lack of management support; exclusive ownership by the BPB team	Lobby and promote BPB as a incubator-wide approach		
DATA NOT MEANINGFUL	Too much/too little data; data not comparable	Tighter focus to measures; test the assumption about your processes that generated the measures		
INACCURATE/FALSE DATA	Over-reliance on public or competitor sources	Double-check sources through personal checks		
FAILURE TO SELL IDEA TO TARGET ORGANIZATIONS	Skepticism and protective instincts	Make clear the benefit of shared information; reassess criteria for selection of partners		
OVER-RELIANCE ON SUPERFICIAL SIMILARITY WITH PARTNER	Lack of rigorous criteria for assessing partners	Re-define search to find closer matches		
BENCHMARK PARTNER UNWILLING TO SHARE USEFUL DATA	Benchmark partner too alike	Define search by process not industry		
BENCHMARK TOO MANY MEASURES	Unclear priorities	Relate BPB to business plan		

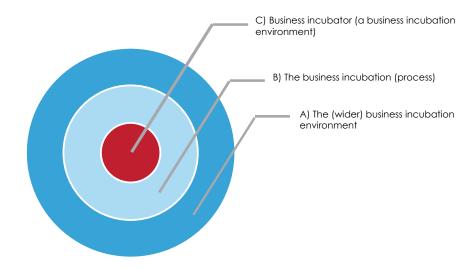
Monitoring, evaluation and benchmarking are all about making your incubator better. Best Practice Benchmarking is one technique that enables the incubator's team to define the activities with which benchmarking can be integrated (e.g. strategic planning), the key performance areas for benchmarking, as well as the incubators and parallel organizations that may be relevant for benchmarking.

Annex 7: India M&E Case Study

India has one of the most developed M&E systems in developing countries. The information reproduced below was prepared by RMP Jawahar from TREC-STEP one of India's oldest and most successful incubators.

Background for Measurement of Business Incubators

It is true that a thing cannot be improved, if it is not measured. Efficient metrics of Business Incubation is required today in order to measure the performance of business incubators and to improve it further. In order to develop some relevant metrics, which clearly studies the impact of Business Incubators, it is, therefore, necessary to define business incubators and its components to start with. The global summit of business incubators rightfully identifies a simple business incubator model as follows:

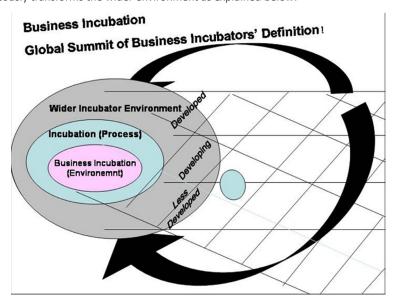


The performance of any business incubator is dependent on these three components of the model: the Business Incubator Environment, Business Incubation Process and the wider Business Incubation Environment. The dynamic equilibrium and the functional harmony resulting out of it is the effective reach of business incubators in our society. Typically in each of these components many differences exist between incubators to incubator. An incubator attached to a university/research institution/industrial consultancy organization or stand alone business incubators have different business environments. India and in some developed and developing countries, specific technology facilities (as in Indian TBIs) and connectivity (as in Software Technology Parks of India) is exclusively provided to incubators for its incubate tenants. This provides them with new exclusive environment in addition to their organic linkages with host institutions, if they are present.

Similarly different Business Incubation process may be in place depending upon the organizational capabilities and its conscious choices. For example some of the incubators have innovation development programs, incubation programs, business plan contests, a rigorous model of attracting potential tenants etc. Some other incubators may have a less rigorous incubation program. For example, the model at Chalmer's Innovation at Gotenberg, Sweden has a very rigorous model, where

the project mentor assumes the role of the chief executive of incubatee ventures for a limited period of time, if required. In TREC-STEP India, the role is limited, to the extent of playing the role of coach or a mentor. Some models in the UK and Germany have much more hands-off model in venture development. This again is directed by the business incubator organizations' policy or resources or both. Similarly the wider venture environment differences markedly from incubator to incubator. We have both rural incubators on the one hand to incubators in down-town environments in almost all countries, including the developed countries. We have incubators attached to research intensive institutions and premier education institutions in Bangalore, Delhi and Chennai as well as rural hinter lands. So, according to their environment, business incubators may also identify the value additions they contribute to the wider environment. So, typically a business incubator falls within a matrix of such clarification of incubation environment, incubation processes and wider environment. Typically this is what the incubator inherits. Now, the business incubator sets an objective for its functioning, which is explained in its charter and sets a strategic path for itself to achieve this objective.

Depending upon the objective and capabilities it reaches and its organizational maturity it simultaneously transforms the wider environment as explained below:



As the wider environment changes because of the incubator's interventions it affects the incubation process and incubator environment both consciously and unconsciously. This changes also the agenda of the incubator and its charter. That brings in more changes to the wider environment setting in dynamic equilibriums between the business incubator and its wider environment. This ideally brings up development of the wider environment and also the development of the incubators. But this is in ideal condition and reality is made up of many other numerous factors that affect the wider environment and therefore the business incubator also. However, any business incubator promoter or manager should take note of this under-current in business incubation – wider environment dynamic equilibrium in order to manage their business incubators in the long run efficiently.

Simple Business Incubation Metrics

An incubator's overall performance has to be measured more holistically, in terms of its impact on wider environment over a long period of time. For example, some of the parameters of the impact the business incubator can be listed as follows:

- Number of new ventures created over period of time
- Size of the new ventures created
- Profitability of the new ventures created
- Number of jobs it has created in these ventures
- The exit value of the ventures at the time of IPO, if there is one

Easier-to-measure factors include:

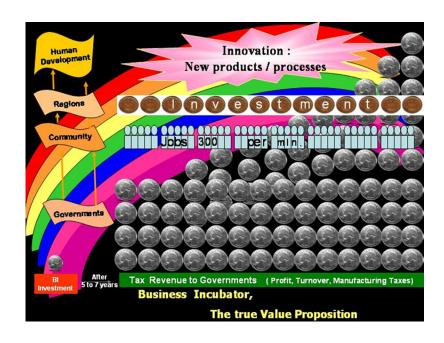
Tax Revenues from these ventures: Business Ventures pay many taxes such as turnover taxes, profit taxes, manufacturing taxes etc. These taxes not only indicate the amount of revenue to the governments but also indicate the ventures quality such as size of the venture (which again indicates wider market acceptance of the innovative idea), profitability of the venture (indicating the innovative content)

Number of jobs created: One of the main qualities of business incubation in many situations is its ability to actively bring out social exchanges within the community. New jobs created improves quality of life to that extent it impacts the job scenario. More ventures promoting more jobs, improve the quality of life, indirectly and directly. In many situations number of jobs created becomes an important criterion.

New Investments Created: Even if all the ventures do not go IPO routes, those who do not create adequate profits which far exceed their plough back requirements. So, these new investments created, trigger again more often new ventures setting in motion reinvestment opportunities, further cascading individual growth and prosperity. So, investments created also contribute to the impact of business incubators.

Innovation Bench Marks: Some of the products or technology ideas may be so innovative that it sets an industry benchmark. These innovative benchmarks are one of the valuable contributions normally expected from Technology Business Incubators, since it sets new inflexion points for the industry as a whole. They also set newer targets for other new entry ventures for innovative performance. So, this is one of the dimensions which need to be monitored while evaluating the performance of the incubator.

All these parameters and their impact can be easily summarized to demonstrate the performance of incubator by 1\$ analysis. The 1\$ analysis graph below clearly indicates for each \$ invested in the business incubator returns of tax revenues, jobs, new investments and setting new bench marks.



Monitoring the Metrics

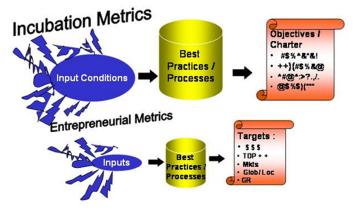
When monitoring and evaluating business incubators these are the two levels which need to be considered:

- · Adequacy Level, and
- · Compliance Level.

In the adequacy level, we need to make the choice of right policies and objectives, not only with regard to the environment, but also duly taking into consideration the past and similar experiences of the incubators. The adequacy documents such as charter, MOAs etc describe the organizations ability to vision itself into the future. It also indicates clearly what types of resources need to be established. At the compliance level, we need to monitor and evaluate various incubation process and facilities, with respect to the objectives and actual performance.

Good Business Incubation Practices: Are they really good?

Towards a Metrics for Incubation : Good and Bad If a thing can not be measured it can not be improved. Improvement needs defined Processes and Process Capabilities



Incubators and its initiatives are subset of the overall business incubation environment. Changes in the overall business incubation environment bring in new changes to the business incubators and greatly influence their performance. So, it is necessary that the metrics we develop should also constantly recheck business incubator's critical interfaces with wider business incubator environment and how these affect the performance of business incubators itself. Changes in tax structures, purchasing policies of major government organizations, emerging trends in educational institutions, Science and Technology Policy, Innovation and IPR policy are some for the areas where Business Incubators performance have a direct bearing. So, changes in these domains shall necessarily affect the business incubator performance. The metrics should be able to identify these and bring it to the notice of business incubator managers and policy makers, in order to help them develop proactive policies and measures, at both the industry level and at the incubator level. Recent examples of service tax exemption for business incubators in India, which is on the anvil, can be one of the examples for these kinds of proactive initiatives.

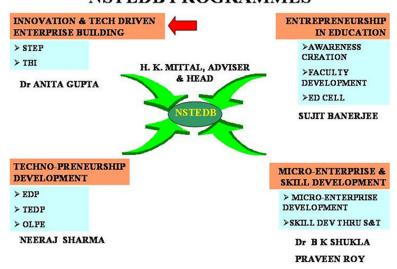
Lastly, the evaluation and monitoring systems need to be a proactive exercises rather than post-mortem analysis of the situation. Though rear view mirrors are very important for driving ahead, they alone would be insufficient to avoid accidents and increase the pace of performance. So, the monitoring and evaluation systems of the next generation need to be proactive systems instead of being post active systems. Real time information will enable Business Incubator Managers to move to preventive actions rather than looking at corrective actions. It is also important to recognize that incubators normally work in an innovative environment, which is very different from standardization as seen in established management organizations. Standardization of processes to a great extent also creates mindsets which are often not very conducive to innovation ambience. The monitoring and evaluation systems for business incubators should provide sufficient flexibilities for enabling innovation, making mistakes and learning from them and institutionalize these learning in the business incubators. These are some of the requirements a monitoring and evaluation systems needs addressed. Now, let us briefly look at the monitoring and evaluation system that is being installed recently for project management of Indian business incubators by Government of India.

Web Based Project Monitoring System (PROMOSYS)

The web based Project Monitoring System PROMOSYS is being installed by National Science and Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology (DST), Government of India for real time integration of all the Technology Business Incubators, Science and Technology Entrepreneurs Parks, other pre incubation centers and the program based initiatives spread through India. Typically, these project sites are spread across thousands of miles and real time information has been the major challenge in the past. In addition to Technology Business Incubators and Science and Technology Entrepreneurs Parks, which are fully-fledged incubators, Department of Science and Technology, National Science and Technology Entrepreneurship Board (NSTEDB) has also established many pre-incubator units (Entrepreneurship Development Cells) in education institutions as well as micro venture virtual incubators (Science and Technology Entrepreneurship Development) Projects. These are feeder institutions to Indian Business Incubators.

In order to enable these institutional arrangements such as STEPs, TBIs, EDCs and STEDs to actively engage in incubation of technology ventures, the NSTEDB also promotes a number of enabling programs such as Entrepreneurship Awareness Camps(EAC), Entrepreneurship Development Programs(EDP), Faculty Development Program (FDP), Open Learning Program in Entrepreneurship (OLPE) etc. Other support programs such Technology Skills Development Program for both providing technology inputs for micro venture creation and manpower in new innovative technology areas are also in place. This spectrum of incubation institutions and incubation enabling program contribute the core intervention strategy of Department of Science and Technology. In addition the Department of Science and Technology constantly brings in new innovative programs jointly with global players such as *info*Dev, World Bank, European Commission, Intel and so on.

NSTEDB PROGRAMMES



In order to constantly monitor all its interventions both on institutional mode and program mode,

the Department of Science and Technology (DST) has developed an effective system called Project Monitoring System PROMOSYS. PROMOSYS is a nation-wide monitoring System with following dimensions:

- Distributed system for project monitoring
- Location and time independent
- Web-centric and easy to access both for DST and project staff
- Automatic report generation
- Detects defaulters and sends reminders

The Levels of access, PROMOSYS addresses are:

- System administrator (SA)
- Program wise administrator (PWA)
- Head of institution (HOI)
- Data entry level user (DEL)

The roles and responsibilities of the main actors of the system are as follows:

System administrator (SA)

- Creates institutions
- Allocates program to institution
- Allocates the program to PWA
- Can overview each program/project of NSTEDB
- Can generate report in suitable format (bar chart, pie chart etc)

Program wise administrator (PWA)

- Exclusive rights to administer a program
- Enters sanction data
- Sanction release
- Tracks Utilization Certificate and audited statement
- Generates reports pertaining to his program/project

Head of institution (HOI)

- Head of grantee institution
- Controls the program of his institution
- Creates data entry level user
- Tracks the program / projects sanctioned to his institution
- Monitors the progress of project
- Generates report for each project

Data entry level user (DEL)

- Enters data pertaining to the program
- Feeds the data regarding progress of the project
- Can generate report for his program
- Reports to hoi



*info*Dev

c/o the World Bank Group 1818 H Street Washington DC 20433 USA

www.idisc.net

www.infodev.org/businessincubation

infodev@worldbank.org