



Business incubators

Efficiency evaluation checklist

Vadim Kotelnikov, APCTT

Evaluate services provided by your incubator to its tenants

Facilities

1. Offices
2. Office equipment
3. Telecommunications
4. Laboratory/prototyping/testing equipment
5. Meeting rooms

Sub-total (max=25)

Score:

Business development services

1. Provides coaching/e-coaching on business skill and business model development
2. Provides business extension services (accounting, legal, secretarial support, etc)
3. Provides assistance in preparation of business plans
4. Provides assistance in building the business management team
5. Organizes business development training programmes
6. Provides milestone-based operational guidance and technical assistance
7. Provides market research and product marketing assistance

Sub-total (max=35)

Score:

Assistance in fund raising

1. Has its own seed investment fund
2. Facilitates access to public business development funds
3. Establishes a network of private investors (business angels, venture capitalists)
4. Helps tenants prepare their projects to start-up venture financing
5. Organizes presentations of tenants' projects to prospective investors

Sub-total (max=25)

Score:

Networking and building partnerships

1. Establishes a network of critical business service providers and negotiates special arrangements with them
2. Provides training and advisory services on building strategic business partnerships
3. Organizes regular (e.g. weekly/bi-weekly) networking meetings for tenants and investors/prospective business partners

Sub-total (max=15)

Score:

Total (max=100)

Evaluate your incubator management practices

Mission and operations

1. Has a clearly identified mission and programme goals
2. Has developed strategic plan containing quantifiable objectives to achieve the programme mission
3. Has developed a business plan and continuously monitors its implementation
4. Maintains a management information system and regularly collects statistics on programme activities for evaluation and improvement purposes
5. Incorporates programme changes as the result of regular thorough and systematic evaluation
6. Maintains effective strategic alliances and collaborations with potential partners in all its service areas
7. Subjects its finances to an annual outside audit

Sub-total (max=35)

Score:

Governance and finances

1. Has sponsors and supporters capable of ensuring its continued operation and effectiveness
2. Has a board, sponsoring agency and investors supporting the mission statement of the incubator
3. Has a governance structure that contributes to effective programme operations and tenant services

Sub-total (max=15)

Score:

The team

1. Has management that keeps abreast of incubator industry best practices
2. Sets the staff salaries at a level that is high enough to attract and retain people capable of running efficiently the incubator programmes
3. Is adequately staffed to meet the key needs of and provide efficient services to its clients
4. Has a written job description for staff and evaluates staff annually through formal reviews.
5. Strongly supports staff professional development

Sub-total (max=25)

Score:

Tenant selection, monitoring and graduation procedures

1. Has well-defined tenant selection criteria and selects only applicants that meet these criteria
2. Regularly collects information on client performance results
3. Reviews client financial statements on a quarterly basis at minimum
4. Effectively utilizes new technology and business management software tools in its operations
5. Has a formal benchmark-based graduation policy

Sub-total (max=25)

Score:

Total (max=100)



Business name

Protecting it legally

Tim Berry, Palo Alto Software, Inc., United States

Question

How would I protect my business name?

Answer

I can give you a quick summary, but please understand that I am not an attorney. This is not legal advice; just a friendly answer to an honest question. I'm trying to help but I might be wrong.

What I understand is that you ultimately, really protect your business name only by using it. Corporations are registered by states, and fictitious business names are registered in counties. Registering a name doesn't really protect it though, because the same name could legally exist in many other states, many other counties.

You could be Acme Corporation in Illinois and legally own that corporation in that state, but there could be another Acme Corporation in every other state, and every one of them is legal until you win a lawsuit proving that they are trading on the commercial interests you own. When you really get protection is when you use that name, and therefore when you find somebody else using it you can prove that you had it first, so they are trading on your name. There are lots of McDonald's restaurants around, and McDonald's can't stop them from using that name if they had it early enough, and especially if they aren't pretending to be a fast foods hamburger joint. The attempt to confuse is very important.

One thing I learned the hard way, making my own way with my own business: sometimes you need to ask an attorney. So many of us skimp on legal fees and look for ways around it, but we live in a new age and attorneys are an essential part of the business landscape.

They aren't all like the stereotype. I work with a local attorney who is smart, honest, and very professional. He is expensive but his advice has saved me more money than his bills have cost me.

With a lot of the questions we get on the ask-the-expert service, we could give you our amateur guesswork on handling legal problems, but it would be doing you no favour. We don't have an attorney as one of the experts, so we don't answer legal questions.

To find an attorney, insist on good recommendations from formal clients. You need to take the time to find someone with small business experience. Check the recommendations well.

For additional help, if you don't get an attorney, you might turn to the software offered by Intuit and some of its competitors, or websites like <http://www.excite.com/guide/business/law/> and the Yahoo! small business site. We really make it a rule not to answer legal questions, because it would be doing you a disservice. □

Asian most-admired knowledge enterprises (MAKE) study

For the second year in a row, Toyota Motor has captured the top position in the Asian MAKE study. Toyota Motor is recognized for its enterprise knowledge-driven culture, developing knowledge workers through senior management leadership, organizational learning and creating enterprise value, based on customer knowledge. Seven organizations repeated their success as Asian MAKE winners: Fuji Xerox, Infosys Technologies, Kao, Samsung SDS, Sony, Taiwan Semiconductor Manufacturing Company and Toyota Motor. Newcomers to the Asian MAKE winner's circle are: BHP Billiton, Canon, Eisai, Honda Motor, LG Electronics, Nissan Motor, Samsung Electronics, Singapore Airlines, Tata Steel, Toshiba and Wipro Technologies.

The Asian most admired knowledge enterprises (MAKE) study is part of Teleos' MAKE research programme. The Asian MAKE study was established in 2002 to recognize organizations founded in Asia for their ability to leverage new as well as existing enterprise knowledge to deliver superior performance in the areas of innovation and product development, operational effectiveness and excellence in products and services.

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Investment analysis summary

Venture capital check list

Indiaco, www.indiaco.com

1. General

- Company
- Product or service
- Technology
- Market
- Channels/Distribution
- Unique contribution
- Management team
- Sales potential
- Risks

2. Investment criteria/summary

- Qualified entrepreneurs
- Sound business fundamentals
- Market leadership potential
- Innovative technology
- Fit with our fund's investment
- Criteria

3. Products

Name	Stage of development	Description	Cost of goods sold	Risks

4. Marketing/Distribution

Market/Segments	Competitors	Distribution	Customer applications

5. Marketing team

	Name	Prior affiliation	Age	Degree	Track record
President, CEO					
VP Marketing					
VP Engineering					
Chief Financial Officer					
Other					

6. Financial

Year	1	2	3	4	5
Projected sales					
Projected gross profit %					
Projected profit before taxes					

7. Investment amount needed

Amount	
Purposes	
Possible other investors	

9. Stage of deal

- [] Seed [] 1st round
 [] 2nd round [] _____

8. Risks

Technical/Product	
Marketing/Competitors	
Financing	
Other	

10. Recommendations

- Proceed to negotiate terms and conditions of investment
- Decline to invest
- Do further due diligence in the following areas



Private placements

A means of accessing the venture capital market

Venture Planning Associates, United States

Typically used to restructure short term notes by longer term debt instruments and to raise additional capital, private placements provide an alternate means of accessing a widely-used segment of the capital markets when the public market may not be appropriate or available. These transactions involve institutional investors with an appetite for fixed rate long-term obligations. Private placement issues can be structured with less restrictive covenants than public issues and can carry significantly lower transactional costs. Such issues can be structured at various points along the debt ladder, to meet specific requirements of the issuer as well as that of the investors with maturities ranging between two to 30 years.

Equity transactions and hybrids are also common. A private placement candidate company typically has a net worth of at least \$ 15 million, with annual sales of \$ 30 million. This may not always be the case, however, because private placements can be used in smaller start-up or seed capital rounds.

Private placements are the issuances of securities in transactions that do not occur on a public exchange. A company does not have to be public in order to complete a private placement; private companies do them all the time. In fact, by definition, all stock issuances by privately held companies are privately placed. But it is not widely known that a public company can issue shares from its treasury in the form of a private placement as well. Why, you ask, would a public company issue its shares in a private placement rather than offer them directly to the market on an exchange? There are several important reasons that are outlined below.

- Ease of raising cash.
- Private placements are the number one method in Vancouver of raising funds for public companies.
- The required documentation is considerably less for a private placement (when an exemption to the prospectus requirements is available) that means that it is less expensive and simpler to complete.

With the lower required documentation, private placements can be completed very quickly. Private placements allow firms to raise equity capital in smaller increments than might otherwise be practical with a public offering. Another key benefit is that stock of a publicly traded company can be issued in a private placement at a discount to the current market price. This provides the potential for a built-in capital gain to those investors buying the stock.

Balancing the benefits of lower documentation and the pricing discount is the requirement that the stock be held for up to a year (longer in other jurisdictions) before it becomes freely tradable on the exchange. This hold period protects the new investor as well as other existing shareholders from a flood of discount shares hitting the market.

Private placements provide an excellent way for management and other insiders associated with the company to maintain a high degree of ownership in the listed company when they are the investors purchasing the stock. It is also a frequently used method to compensate executives (by allowing them to purchase discounted stock) and at the same time inject funds into the coffers of the company. □

VCPro Database 2004

VCPro Database 2004 is a downloadable venture capital database with 3,300+ venture financing sources worldwide. VCPro Database 2004, in its SEVENTH edition, is the most reliable, up-to-date and affordable electronic venture capital directory of its kind. The VCPro Database is available in both Windows and Macintosh versions. Each firm listing in this searchable database includes the following data fields:

- Contact information: Company name; Address1; Address2; City; State; Zip/Postal; Country; Phone; Fax; E-mail; Website; Type of firm; Capital managed; Year founded; Name, Title and E-mail of key executives; Firm description; and Branch offices.
- Investment criteria: Minimum investment size; Maximum investment size; Types of financing; Stage preferences; Industry preferences; Geographic preferences.

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Innovation metrics

The basis for timely decisions

Vadim Kotelnikov, APCTT

Why innovation metrics?

You cannot manage what you don't measure. Innovation metrics motivates managers and leaders across your organization to embrace innovation broadly and give it ongoing priority. The adage "that which gets measured gets done" is no less true of the innovation process than any other. Once innovation goals are broadly communicated and rewards for achieving milestones are established, the pace of ideas to implementation accelerates. Sustainable growth is the result.

Innovation metrics should be applied to the three dimensions of your innovation system - strategic planning, process, and people. "Surprisingly, with all the effort human resource professionals have put into performance appraisal, there are few systemic approaches for defining capabilities a firm needs to win and comparing them to what it has on hand."¹

Pitfalls of the five classic result measures

The five classic result measures - performance, quality, timing, financials, and development costs - tell you **what** happened, but don't tell you **why**. "For example, an 8 per cent drop in quarterly profits accompanied by a 10 per cent rise in service costs does not tell a customer service team what its service technicians should do differently on their next call."¹

The power of predictive measures

Predictive measures examine the actions and capabilities that contributed to the situation. "Knowing that several new technician hires dropped the average skill level such that the average time spent per service call rose 15 per cent - and that, as a result, the number of late calls rose 10 per cent - would explain why service costs had gone up and customer satisfaction and profits had gone down."¹

Return on invested capital (ROIC)

ROIC is a measure of how effectively you create shareholder value to your cost of capital. ROIC helps allow you to identify your best-performing businesses and those that aren't delivering the performance they should.⁴

Return on innovation investment (R2I)

Since innovation by its very definition is intangible and easily measured at the front end (especially at the outset of a new product/service development programme), "the logical

place to begin is at the end - at the Return on innovation investment (R2I). Measuring R2I makes the intangible tangible, thus providing managers, employees and the investment community with valuable information that can be used in a number of ways."³

"Like ROI - return on investment - R2I also shows return on investment, but only from new product **innovation investments**, not all investments. It looks at the firm's total profits from new products (cumulative new profits generated from new products launched) divided by its total expenditures for new products. This long-term ratio shows the firm's total return from new products over a three to five-year period. This number has two uses:

- **Descriptive:** To demonstrate the overall effective contribution of new products.
- **Predictive:** To forecast or set goals for the organization."³

Don't ignore the other measures and focus on R2I alone though. R2I is driven by all the other metrics, since all have an impact on the bottom line. Remember also, that for R2I measurement to work, the process must be applied consistently to all new products and services.

Case in point: Skandia

Scandia of Sweden have started to measure their firm's knowledge base as a business asset. The objective is to start making a real-time gap analysis between competitive intellectual capital requirements and current intellectual capital.

Case in point: Quantum

Due to the pivotal role cross-functional teams play in the company, Quantum measures their performance from a business perspective. It uses a combination of peer review, executive sponsor, and external assessment for the purpose.

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2. "Driving Growth Through Innovation", Robert B. Tucker, 2002
3. "Managing New Products", Thomas D. Kuczmariski, 2002
4. "Direct from Dell", Michael Dell with Catherine Fredman, 1999. □



Innovation strategy

Choosing the right innovation projects

Vadim Kotelnikov, APCTT

Why innovation strategy?

The cost and time required to create a new product or service are so large that lack of a perfectly aligned and executed innovation strategy can be extremely wasteful. "You must create an innovation strategy that is aligned with not only your firm's core mission and values, but with your future technology, supplier, and manufacturing strategies. Lack of alignment between product and process architectures rapidly increases cost and risk. If your development process and organization structure are not matched to each other and your firm's strategy, you're in even deeper trouble."¹

Working on your business

"Most business people are so busy working for their business or in their business that they never find time to work **on** their business. Thus they fail to anticipate what might happen or what they might be able to make happen."²

Roadmapping

The goal of roadmapping is to develop innovation strategy - to choose and do the right things. The goal of innovation management is to implement this strategy well.

Roadmapping leads to effective project portfolio development and management. It provides for company-wide technological strategy development and technology assessment, as well as division-level project evaluation and strategic aligning. Roadmapping tools also provide a common language for innovation and building bridges between technologists and business managers within the corporation, and with major suppliers and customers.

Innovation portfolio

There are four reasons why you should use the portfolio approach to manage innovation.¹

- **Risk management.** The portfolio is a risk management tool. If you have more innovation initiatives under way than traditional firms, and you are prone to stretch farther within each initiative, without an overall view of your innovation efforts, you could easily wind up taking too much or too little risk.
- **Visibility.** The portfolio provides visibility that allows your firm pace the introduction of new products and services. You should balance the introduction of revolutionary products with incremental improvements in others so as to maintain a steady flow. By having a comprehensive view of your initiatives over time, you can avoid either overwhelming or underwhelming the marketplace.
- **Timing of new initiatives.** The innovation portfolio will help you time when you should begin a new initiative or transfer a completed one into manufacturing or the marketplace.

- **Discovering synergies.** The portfolio illuminates potential leverage opportunities among technologies, processes, products, and markets. This capability will enable your firm to get more for each innovation dollar, while reducing development cost and risk, reducing complexity, and giving people time to work on tasks that generate greater customer value.

Portfolio is much more than just a list of initiatives. You should also create charts that compare these initiatives across dimensions such as stretch, strategic fit, risk, potential return and resource requirements. By using different charts as lenses to compare initiatives, you can mix and match alternatives until you come up with the portfolio that's right for you.

Three primary criteria to assess your innovation portfolio¹

Besides assessing each initiative individually for risk, investment, return, and timing, assess your total portfolio to ensure that you have the right initiatives in it.

- **Stretch and strategic fit.** How much does your portfolio push the industry frontiers, and how well does it fit with your business goals and strategy?
- **Capabilities and capacity.** Do you have the required capabilities to execute the portfolio and do you have enough of them?
- **Leverage and risk.** Have you leveraged your investments so that you have a productivity advantage, while keeping risk within acceptable bounds?

Case in point: Intel

Intel uses the innovation portfolio approach to adjust the rate at which they introduce new microprocessors based on the margins they can get for the existing products. "Their portfolio provides visibility across products and product generations, enabling them to maximize the profits they reap from each other."¹

Case in point: Silicon Valley

Just as start-ups begin with an idea for a product or service rather than a comprehensive enterprise strategy, in the Silicon Valley, innovation strategy development is an outgrowth of their product and service plans, not the reverse.¹

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1. "Relentless Growth", Christopher Meyer, 1998
2. "It's Not the Big that Eat the Small... It's the Fast that Eat the Slow", Jason Jennings and Laurence Haughton, 2000. □



Negotiating techniques

Negotiating technology transfer

UNIDO, www.unido.org

It is often difficult to distinguish between negotiating techniques and negotiating tactics. One way is to think of negotiating techniques as positive methods designed to resolve issues fairly and negotiating tactics as clever negative maneuvers to create false impressions and obtain agreement through deceit.

Negotiating techniques

- *Defer difficult issues/create a momentum of agreement.* Probably the most useful technique for advancing the process of reaching agreement is to defer those issues that appear most difficult to resolve and tackle those that can be settled quickly. Experience has shown that a series of agreements on lesser issues creates a momentum that induces negotiators to reach agreement on the difficult issues. The agenda for the negotiations should therefore be set so that less difficult issues are discussed first.
- *Take up general propositions before specific ones, agree on the principle before the specific language.* The rationale for this technique is the same as for the preceding technique. It is frequently far easier to agree on a general proposition than on a specific one whose impact is more transparent. Similarly, agreement on a principle is often more easily obtainable than agreement on the specific language that applies to a principle facet of the transaction, postponing the more difficult phase of the negotiation.
- *Use committees to resolve difficult issues.* Initial discussions on certain issues may reveal that they will be difficult to resolve and might require alternative means of resolution. Formal negotiating sessions may not be the best setting for exploring possible solutions. It may be more effective to set up a special committee in which members familiar with the problem explore the different solutions and report back to the negotiating team.
- *Keep score of concessions/quid pro quo's/proposed package deals.* Keep a summary record of all concessions made. They prove your willingness to compromise and may help obtain concessions from the other party later in the negotiations. They may also be useful for obtaining a package deal at some point in the discussions. Another simple and frequently used technique is to offer a quid pro pro, one concession for another, or a package deal, one set of concessions for another set. Each technique is designed to break impasses by balancing the concessions on each side.
- *Use the two-way street argument.* Proposals are often advanced which may be difficult to oppose because they appear reasonable on face value, although they may have objectionable long-term implications. One technique to counter or accommodate such proposals is to agree to the proposal, provided the proposing party agrees to accept the equivalent conditions. If the proposal does, in fact, have objectionable long-term implications, the proposing party will very likely withdraw it. Occasions for use of the two-way street technique come up often. Keep it in mind as its reciprocal logic makes it very compelling.
- *Apply the "most favoured nations" solution.* If there is more than one licensee for the same technology, the "favoured nations" argument is frequently raised. The new licensee wants this in the licence to assure the terms and conditions of its agreement will be comparable to that of other licensees. It is raised mostly in connection with royalties, but may come up elsewhere in the agreement. The best way to handle the argument is to offer to include the favoured nation provision but have it apply to all terms and conditions of the agreement. This is fair and precludes giving a concession to the new licensee on just monetary provisions, without including other provisions that may be unfavourable for the new licensee.
- *Spread the concessions out.* Negotiators occasionally face issues whose resolution requires a concession by the other party that is so large there is little chance of obtaining it. A technique that experienced negotiators often use in such cases is to break the issue down into its various components and then spread concessions on the relatively minor components throughout the various negotiating sessions. This is known colloquially as "slicing the salami" so that it becomes easier to swallow. In contrast to negotiating tactics or gambits, there is nothing underhanded about this technique. In many instances its use is announced by a phrase such as "let me try to break this issue down and see if we can agree". Such phrases may signal the need for countering the technique.
- *Structure the negotiations.* Quite often, usually in the first session, when the initial draft of the agreement is to be reviewed paragraph-by-paragraph, one party will want to negotiate and settle issues as they arise. This procedure is strongly discouraged. It is far better to list all concerns and issues before negotiating any one of them. This would preclude conceding a point early in the session and then regretting it later, when a fresh issue is raised. While this precaution is most important for the initial session, it should be followed throughout the negotiations. □



R&D Services

Contract research and export of R&D services

Virendra Kumar, Bharat Heavy Electricals Ltd., India

Global R&D service market

The R&D services is part of the Business Services and has three components, namely:

- Research and experimental development services on natural sciences and engineering;
- Research and experimental development services on social sciences and humanities; and
- Interdisciplinary research and experimental development services.

60 per cent of the world's GDP is earned through services (World Development Report 2001). This is not only a rich country phenomenon: 119 of the 132 countries listed in the World Development Report have a service share of GDP that exceeds their industry share. In India, services currently constitute about 50 per cent of GDP.

Recommendations

Some of the suggestions on strategy for exporting R&D services are listed below:

- Since basic sciences form the bedrock of engineering, it is essential to ensure a vibrant scientific research environment in the country. Although a strong network of academic and research institutions had been created after independence, there has been an erosion in the quality of their manpower owing to the migration of gifted students to other professions. A well thought out system of incentives to attract the right people and to create more jobs in basic R&D is essential if India wants to be a major player in R&D services.
- Designating certain Indian Institutions/Research Laboratories as Centres of Excellence in their respective engineering fields and providing necessary infrastructure and funding for raising their capabilities to world standards.
- Evaluating the R&D strengths of Indian engineering companies through a proper survey, consolidation of the same, and posting this information on appropriate websites. This work may be taken up by organizations like IIFT, DST/ DSIR in cooperation with the apex industry bodies like CII, FICCI, etc.
- Conducting an international market survey among the GATS signatory countries to ascertain their specific requirements with respect to R&D services in the engineering sector.
- Consortia approach among Indian engineering companies, R&D labs like that of DSIR, Academic Institutions, etc., which have good individual R&D strengths in their own areas, so that an integrated approach can be made to potential foreign customers.
- More attention to matters related to Intellectual Property Rights (IPR).
- More aggressive approach in setting up/buying research laboratories, etc., abroad, so that proximity to important customers is ensured.

- Marketing function to be recognized as a separate but integral activity of R&D and accorded a budget head by respective engineering organizations.
- Focus on improving the quality and productivity of R&D personnel.
- Evolving institutional and other mechanisms to manage R&D personnel in line with Western practices. A suitable environment must be created for them to grow professionally, with a minimum of bureaucratic interference.
- Focus on quick response to opportunities arising out of rapidly changing market conditions.
- Establish broadband communication facilities, and other IT enabling mechanisms for instant access and connectivity with foreign clients.
- Technology forecasting and taking up indigenous R&D on cutting edge technologies, by increasing R&D budget thereof. India spends only US\$ three billion annually on R&D, which is spread across a wide array of sectors. A company like General Motors spends US\$ eight billion, and this is related mainly to the automotive sector alone.

Contract research

Contract research has the following benefits:

- Joint ownership of IPR;
- Motivation of specialists to excel in their fields;
- Greater recognition of Indian companies and their personnel in the international scene;
- Possibility for future R&D related business; and
- Spin-off in terms of export of goods and other services.

Traditional domestic market shares of products with outdated technologies in protected markets are shrinking, due to opening up of the economy. Own R&D is assuming a greater role for survival, as foreign firms are reluctant to part with technology. In the market economy, the following key drivers have been gaining in importance:

- Focus on improving the productivity of knowledge and service workers, with productivity programmes shifting from cost cutting to improving organizational performance and effectiveness;
- Much greater attention along with appropriate funding for R&D activities;
- Focus on quality in both products and service, with quality programmes moving from manufacturing operations to knowledge and service operations;
- Speed of response to rapidly changing market conditions, competition and customer demands; and
- Partnering by establishing alliances and joint ventures with other key players in similar markets. □



Cleaner production

Case study: Shwee Shwian Food Co., Thailand

Dr. Suporn Koottatep and Dr. Wanpen Wirojanagud

About the company

A cleaner production programme was implemented in the Shwee Shwian Food Co., a medium-sized ginger factory in northern Thailand. The factory produces preserved ginger for export. Ginger was taken fresh from farms and washed by machine.

The problem to be solved

The major problem at the factory was that raw ginger has a high soil content, which required large amounts of washing water and therefore generated high volumes of wastewater. It was estimated that about 12 per cent of the weight of the raw ginger was actually soil coating the outside of the ginger.

The solution: Greening the supply chain

It was concluded that a supply chain greening programme should be introduced to reduce soil content and thereby decrease the amount of water used for washing.

The implementation

The company set new specifications for incoming raw ginger that required a lower soil content. However, convincing the suppliers to deliver raw ginger with less soil content was not simple. The factory divided the suppliers into three groups:

1. Those who were neither given any awareness nor incentive programmes;
2. Those who were given a series of awareness programmes; and
3. Those who were offered with an incentive programme.

The results

The results showed that the incentive programme linked to benefits gained by the company through better control of ginger quality led to better results than the awareness programmes. The farmers could benefit from improving the quality of their ginger, lower their operating costs, and improve their productivity as well.

Environmental and economic results achieved

- Washing water: reduced by 20%
- Electricity consumption: reduced by 7.8%
- Operating cost: reduced by 55%
- Investment in the awareness and incentive programmes: US\$ 4,835
- Savings for the year 2000: US\$ 76,522
- Return on investment (ROI) for the year 2000: 1,483%

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Sustainable Alternatives Network

The Sustainable Alternatives Network (SANet) helps business experts overcome technology transfer challenges. SANet offers online resources and financial incentives, thereby enabling local experts to strengthen their advisory capacity and effectively market their services. Business experts can use SANet to find up-to-date information and tools that have practical value in assessing investment feasibility. Using SANet, specialized and experienced expertise can also be found. SANet acts as a broker of information and expertise for business experts in companies, consulting firms and financing institutions.

SANet is available to business experts working in emerging markets. The network is unique in its focus on exchange of know-how that helps secure financing of cleaner technologies. As a broker, SANet concentrates on helping business experts to identify, validate and establish the viability of cleaner technology.

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Eco-effectiveness

Strategies for sustainable business development

Vadim Kotelnikov, APCTT

International trends

International trends are demonstrating that concepts and tools such as cleaner production, life-cycle assessment (LCA), design for environment (DfE) and extended producer responsibility (EPR) are rapidly becoming key tools for forward-thinking corporations. Furthermore, a growing body of evidence suggests that such approaches are exceptionally well placed to deliver a range of benefits over and above environmental benefits and mere compliance. These 'new millennium' tools will revolutionize how business creates new products and services and how consumers and government will compare, assess, regulate and purchase everyday goods.

Staying competitive

Environmental issues are increasingly reflected in business decisions. No business that strives to remain competitive, open to new markets and new opportunities can afford to ignore the global demands for environmental quality. The corporate world looks now at cleaner production (CP) - the concept of preventing waste generation at source - as an opportunity for improvement and long-term sustainable growth. Adopting CP can greatly reduce pollution control costs, and, at the same, time, increase profit and efficiency.¹

Environmental regulations - a new stimulus for innovation

Internationally, governments and industry are paying more attention to the relationship between regulations and innovation. Regulations and policies to increase environmental protection appear to have become a new stimulus for innovation and to have led companies to identify new business opportunities.

Extended producer responsibility (ERP)

One of the most influential areas of government environmental policy has been the development and gradual implementation of extended producer responsibility (ERP). The objective of ERP is to promote the conservation of resources, reduce the use and generation of toxic and hazardous materials and energy, and reduce the quantity of wastes for final disposal.

"ERP is a logical extension of the "polluter-pays principle. It rests on an argument that the environmental impacts of resource depletion, waste and pollution are a function of the system of production and consumption of goods and services. Those impacts are substantially determined at the point of production, which is when key choices are made - on materials, on processing and finishing technology, on product function and durability, on systems of distribution and marketing and so on. If that system is to evolve in a way that reduces environmental impacts, then there is a need for policies that create appropriate feedback mechanisms for producers that will direct producers' investment towards continuous environmental improvement."¹

In many countries, ERP is considered an effective policy mechanism to promote the integration of the life-cycle environmental costs associated with products with the market price for the product. Various approaches to ERP policy are being watched specifically because they appear to stimulate innovation and business success as well as reduce overall life-cycle environmental impacts.

Green procurement

Many multinational companies have launched comprehensive and innovative environmental programmes on their own, not just for themselves but for their suppliers as well, most of whom are SMEs. This initiative, known as "Green Procurement" or "Greening the Supply Chain", means that the large corporations are using their purchasing power to ensure that their suppliers, which could be anywhere in the world, meet certain environmental requirements. Assistance may be extended to them where necessary as many SMEs lack the technical expertise to meet the new requirements.

Life-cycle assessment (LCA)

LCA is a technique for assessing the environmental impacts associated with a product or service. The internationally agreed standard for LCA has been developed by the International Organization for Standardization (ISO), and this is documented in four environmental management system standards (the ISO 14000 series).

Cleaner production strategy

Cleaner production (CP) is a business strategy for enhancing productivity and environmental performance for overall socio-economic development. CP processes are those that produce less waste, whether in terms of liquid wastes discharged to waterways, solid wastes going to landfill or gaseous wastes discharged to the air. Many companies have achieved environmental and economic benefits by implementing cleaner production programmes.

Design for environment (DfE)

Design for Environment (DfE), also known as eco-design, recognizes that environmental impacts must be considered during the new product design process, along with all of the usual design criteria. It is defined as systemic consideration of design performance with respect to environmental, health, and safety objectives over the full product life cycle.

Bibliography

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2. "Building Tomorrow's Company, Philip Sadler, 2002. □