

Report produced for the EC funded project

INNOREGIO: dissemination of innovation management and knowledge techniques

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## 1 DESCRIPTION

# 1.1 What is the technique

Benchmarking is the process of improving performance by continuously identifying, understanding, and adapting outstanding practices and processes found inside and outside an organization (company, public organization, University, College, etc.).

It was pioneered by Xerox Corporation in the 1979s, as part of their response to international competition in the photocopier market, and originated from reverse engineering of competitors' products. Its scope was then enlarged to include business services and processes. Xerox now benchmarks nearly 240 performance elements although, when they started benchmarking several years ago, considerably fewer elements were benchmarked.

Benchmarking of business processes is usually done with top performing companies in other industry sectors. This is feasible because many business processes are essentially the same from sector to sector.

Benchmarking focuses on the improvement of any given business process by exploiting "best practices" rather than merely measuring the best performance. Best practices are the cause of best performance. Companies studying best practices have the greatest opportunity for gaining a strategic, operational, and financial advantage.

The systematic discipline of benchmarking is focused on identifying, studying, analysing, and adapting best practices and implementing the results. To consistently get the most value from the benchmarking process, senior management may discover the need for a significant culture change. That change, however, unleashes benchmarking's full potential to generate large paybacks and strategic advantage.

The benchmarking process involves comparing one's firm performance on a set of measurable parameters of strategic importance against that of firms' known to have achieved best performance on those indicators. Development of benchmarks is an iterative and ongoing process that is likely to involve sharing information with other organizations working with them towards an agreeable metrology.

Benchmarking should be looked upon as a tool for improvement within a wider scope of customer focused improvement activities and should be driven by customer and internal organization needs. Benchmarking is the practice of being humble enough to admit that someone else is better at something and wise enough to learn how to match and even surpass them at it.

# 1.2 Objectives of the Technique

Benchmarking entails gathering information from one organization to beneficially apply it to another organization. The scope is to improve the processes performed at the recipient organization by applying efficient work processes (work done by people, equipment and information systems). It is a valuable Business Engineering Technique and its application not only identifies innovative work processes but also involves discovering the thinking behind innovation.

It is a form of comparative analysis. It is necessary to establish some common ground as the basis for comparison. Usually one identifies one or more functional areas for analysis and selects one or more metrics as a quantitative basis for comparison. These are then compared with agreed benchmarks derived from recognized sources of best practice. Ultimately, two questions need to be answered:

- What are the alternatives to our present process?
- What are the benefits, costs and risks of the alternatives?

Benchmarking essentially works to the extent that benchmarks can be agreed and suitable comparators found for which measurements are also available.

# 1.3 Description of the technique / Methodology / Alternatives

There are five phases for implementation of benchmarking:

#### A. PLANNING

During this phase the organization determines which process to benchmark and against what type of organization.

# B. ANALYSIS

Following data acquisition, an analysis is performed for the performance gap between the source organization and the recipient organization. An indication of best practice is then evident.

#### C. INTEGRATION

It involves the preparation of the recipient for implementation of actions.

#### D. ACTION

This is the phase where the actions are implemented within the recipient organization.

## E. MATURITY

This involves continuous monitoring of the process and enables continuous learning and provides input for continuous improvement within the recipient organization.

There are, in general, four types of benchmarking:

## 1. COMPETITIVE BENCHMARKING

Benchmarking is performed versus competitors and data analysis is done as to what causes the superior performance of the competitor.

It can be, in some respects, easier than other types of benchmarking and in some respects more difficult. It is easier in the sense that many exogenic variables affecting company performance may be the same between the source and the recipient organization, since we are talking about companies of the same sector. On the other hand it is more difficult because, due to the competitive nature, data recuperation will not be straightforward. Difficulties of this type may be overcome if the two organizations have for e.g. different geographical markets.

## 2. INTERNAL BENCHMARKING

This process could be applied in organizations having multiple units (for e.g. multinationals, companies with sale offices around the country, with multiple factory locations within the same country).

#### 3. PROCESS BENCHMARKING

Here we look at processes, which may be similar, but in different organizations, producing different products, for e.g. airline industry & hospital industry looking at the process of catering their 'clients'.

## 4. GENERIC BENCHMARKING

We would look here at the technological aspects, the implementation and deployment of technology. How else other organizations do it? Hence the source organizations may be of same industry or from another industry.

Processes 1, 3 and 4 are all external benchmarking activities. However, locating an external benchmarking partner and setting up a benchmarking arrangement requires a significant investment in time and effort. An alternative to external benchmarking might be intra-company, or **internal** benchmarking which is less costly in terms of time and money. Two additional benefits may result from internal benchmarking:

- (a) the improvement program will receive wide recognition within the company and other divisions may benefit and
- (b) the team performing benchmarking will be better prepared for pursuing external benchmarking partners. If there is a high degree of uniformity within the company or the process in question is already a company wide practice, external benchmarking may be pursued to identify additional improvements.

## 1.4 Expected results / benefits / pitfalls

Benchmarking offers the following benefits to companies and organizations:

- Highlights areas of practice and performance requiring attention and improvement
- Identifies strengths and weaknesses to other respondents
- Establishes company's true position versus the rest, making thus easier for the company to raise the organizational energy for change and develop plans for action
- Helps measure current company performance
- Prevents reinventing the wheel (Why invest the time and costs when someone else may have done it already -and often better, cheaper, and faster?)
- Accelerates change and restructuring by:
  - o using tested and proven practices,
  - o convincing sceptics who can see that it works, and
  - o overcoming inertia and complacency and creating a sense of urgency when gaps are revealed
- Leads to "outside the box" ideas by looking for ways to improve outside of the industry
- Forces organizations to examine present processes, which often leads to improvement in and of itself
- Makes implementation more likely because of involvement of process owners

• Enables the identification of other companies and/or organizations with processes resulting in superior performance, with a view to their adoption.

A 1995 research study conducted by the American Productivity & Quality Center's (APQC) International Benchmarking Clearinghouse demonstrated benchmarking's tremendous leverage. More than 30 organizations reported an average \$76 million first-year payback from their most successful benchmarking project, with 40% ranging between 1 million and 9.9 million US\$. Among the most experienced benchmarkers, the average payback soared to \$189 million. Areas of greatest improvement, as revealed by the same study and as a result of benchmarking projects were: reduced costs, increased productivity and reduced cycled time of operations.

Benchmarking's positive influence extends beyond improving a particular business process. It also promotes the emergence and evolution of a "learning culture" throughout the enterprise - a key to continuous improvement, total quality, and competitiveness over the long term.

By benchmarking their own business units and those of other organizations, companies get the information they need to optimally adjust their performance goals and find ways to achieve them. Ideas are everywhere; the challenge is to habitually seek and adapt them. Experience proves that many ideas originate not just outside one's own company but also outside one's industry.

Among the pitfalls of benchmarking, we may distinguish between analytical and political pitfalls:

- > Analytical
  - Validity of supplied data, soundness of methodology, support of conclusions by data
- Political
  - Confidentiality of the data must be ensured, executive management must support and reassure benchmark participants, support should be ensured for improvement initiatives

Following is a list of common pitfalls associated with benchmarking:

INSUFFICIENT COMMITMENT	Not sufficiently 'high level' or 'sincere'
NOT PLANNING AHEAD	Insufficient planning; 'this is easy, let's just
	do it' attitude
MISUNDERSTANDING	Of iterative, continuous nature of
	benchmarking or conducting intellectual
	(cf. practical) benchmarking
NOT LINKING BENCHMARKING TO	Failure to 'go behind' measures and
PROCESS	understand the 'how'
APPLES vs ORANGES	Comparison with insufficient process
	analysis or partner 'fit'
WHAT GETS MEASURED	Measuring 'easy' factors, not those that will
	make a difference
NOT TEACHING PEOPLE TO FISH	Lack of education and awareness- building
	in those responsible for, or involved in,
	benchmarking

LACK OF COMMUNICATION	Or unclear communication. Benchmarking not linked to other corporate activity / goals so communication and relevance blurred
FAILING TO PRIORITISE	Trying to "change the world" at once and not identifying subjects which are linked to key business processes.

# 1.5 Characteristics of firms / organizations / service providers

Among the firms, we have to distinguish the companies aiming for benchmarking and the companies that are the sources of best practice.

## COMPANIES PERFORMING BENCHMARKING (recipients companies)

Many Fortune 500 (US) companies and other large organizations have embraced benchmarking as an important, systematic methodology for achieving the organization's strategic objectives.

Research performed by Ernst & Young found that benchmarking is being used (in Europe) predominantly by large companies (> 1000 employees). There are many attempts, however, at the highest level of European Commission, to spread the use of benchmarking to SMEs throughout Europe. There is a consensus to the fact that transfer of 'know-how' from large enterprises to SMEs must be considered.

Benchmarking can benefit not only large but also small companies. In principle it is easier to team up with companies of similar size, since companies of different size approach processes in different ways. However, there are elements in some processes that are similar, no matter the size of the company. Hence, it is imperative to know well the processes under study.

It has been reported that the differences that characterize companies implementing benchmarking continuously included senior management's strong support of benchmarking and a culture that generally encouraged company teams to seek out and adapt ideas originating outside the organization.

Senior managers at Xerox, Digital Equipment Corp., Motorola, GTE, AT&T, Chrysler, AMP, Texas Instruments, and other organizations strongly support benchmarking. Many executives vigorously work to ingrain its underlying ethic into their corporate culture. That ethic essentially says, "We continually learn by example."

Guidelines of best practice for companies performing benchmarking are included in the Annex.

## COMPANIES OF BEST PRACTICE

A benchmark organization is one that is widely recognized for achieving standards of performance on key indicators that others agree to and measure themselves against.

In principle companies can be compared with other companies from the same or other sector and from the same or other regions.

Sources of best practice need not to be found in same sector, since non-competing firms can provide valuable information on best practices. Furthermore it is important to understand that companies or industries that are different can have similar core processes or common characteristics. For example an oil company did a benchmarking project with a telephone company on protection of underground cabling, although they did not have underground cables but they did have underground pipelines!

Sometimes it may be worthwhile not to benchmark against the best due to the following reasons:

- Companies with best practices are overwhelmed with requests to benchmark and they may turn down requests for cooperation
- There may be a tremendous gap between your company's practices and those of the best companies, hence it is better to look at incremental changes rather at quantum leap
- You may be overwhelmed by large amount of data involving a great number of variables when benchmarking with the best companies

In other words, you can learn from Olympic athletes but you can also learn from the local tennis professional.

Guidelines of operation for companies of best practice are included in the Annex.

#### SERVICE PROVIDERS

Benchmarking service providers are

- Large enterprises (to subcontractors)
- Benchmarking centers (facilitators and information brokers)
- Consultants
- Some governments
- Business schools

Promoters and practitioners of benchmarking should

- Have their own methodology
- Have their own or access to data of best practice and benchmarks (either regional, sectoral or global, depending on the exercise)
- Obide with a Code of Conduct (example of Code of Conduct is presented in the Annex).

Guidelines of operation for service providers performing benchmarking are included in the Annex.

## 2 APPLICATION

# 2.1 Firms / Organizations where the technique has been applied

Benchmarking has been and is continuously applied to numerous organizations in the world, particularly in the USA, but also has started to being applied in Europe and especially in the United Kingdom. In UK there are also manufacturing databases from Confederation of British Industries (CBI) for on-line assessment of practices and performance of the manufacturing companies.

For Europe, the European Foundation for Quality Management (EFQM), where many European companies are members, provides the business excellence model. EFQM was founded in 1988 by the Presidents of 14 major European companies, with the endorsement of the European Commission. The present membership is in excess of 800 organizations ranging from major multinationals and important national companies to research institutes in prominent European universities (from Germany 149, from UK 124, from Spain 58, from Greece 14, from Portugal 4).

EFQM's mission is to stimulate and assist organizations throughout Europe to participate in improvement activities leading ultimately to excellence in customer satisfaction, employee satisfaction, impact on society and business results; and to support the managers of European organizations in accelerating the process of making Total Quality Management a decisive factor for achieving global competitive advantage.

The EFQM "Model for Business Excellence" is recognized as providing the key strategic framework and criteria for managing an organization and identifying improvement opportunities regardless of the nature or size of that organization. The EFQM is acknowledged as having the lead role related to the development and integrity of this Model.

# 2.2 Types of firms / organizations concerned

Benchmarking can be applied to all areas of any organization's activity, from strategic development to operations, to customer services and satisfaction.

We could distinguish different type of partners when teaming with a partner for benchmarking. These types are presented in the following table along with the advantages and disadvantages.

Type	of	Description	Advantages	Disadvantages
Partner				
INTERNA	AL	Own organisation any location	<ul> <li>Common language/culture/system</li> <li>Access to data</li> <li>Communication channels</li> <li>Low threat</li> <li>Good 'test bed'</li> <li>Relatively quick returns</li> </ul>	<ul> <li>Inhibit external focus</li> <li>Foster complacency</li> <li>Only adequate returns</li> </ul>

EXTERNAL	Other organisations measurably better in key areas	<ul> <li>Similar structure/constraints</li> <li>Relative ease of access to data</li> <li>Relatively low threat</li> </ul>	<ul> <li>Step-change less likely</li> <li>Legal/ethical considerations</li> <li>Industry paradigms may inhibit creativity</li> </ul>
BEST PRACTICE	Organisations selected for "Best" Practice in key areas	<ul> <li>Potential improvement leaps</li> <li>Potential high returns</li> <li>External focus</li> <li>Removes blinkers / N-I-H ("Not Invented Here")</li> </ul>	<ul><li>Continuous/long term commitment</li><li>Potentially difficult</li></ul>

# 2.3 Implementation cost & time frame

Benchmarking comes at a price. The expenses are related to travel (to visit other companies), personnel time, the use of the facilitator / consultant and any fee that may be associated with the participation in on-line access to databases, from the many offered. However, with careful planning costs can be kept at a minimum.

The cost can be estimated based on the number of days required to implement the technique. Following (Table 2.3) is an estimate of a range of man-days required per step of application, as described in section 3.1, for the personnel days of the organization, the number of people involved and their position in the company, the number of days required by the consultant as well as an estimate of days required to be spent by the benchmarking partner, the source organization.

Of course, the number of actual days really depends on the size of the firm(s), the number of activities to benchmark and the type of process that has been decided to benchmark.

We offer the estimate for up to step #9 which is the development of the action plan. The next two steps, implementation of action plan (step #10) and updating (step #11) are process specific and time estimates cannot really be made.

It can be seen from Table 2.3 that 10 to 29 days are required for company personnel, at the high and intermediate level and 9 to 11 days for the consultant. In addition we estimate that between 4.5 to 7.5 days may be required to be spent by the source organization as well.

Out of pocket expenses for the firms would essentially be the cost of the consultant and the traveling budget. From the above, and for a cost for an experienced consultant, required for benchmarking process, of about 500 euro / day, we estimate a cost of application of about 5000 euro plus the necessary traveling expenses for the site visits to the source company.

Costs can be controlled by tackling benchmarking one step at a time and not examining many processes at once. Careful analysis at home can identify which processes should be benchmarked, and then careful planning of visits by notifying people you are visiting of what you intend to do. In the annex, guidelines are offered for enhancing the

effectiveness of benchmarking process and for reducing the amount of time and money that will be spent.

It is important to stress, as stated in many surveys, that the knowledge gained from benchmarking is worth the investment.

## Time frame for implementation

At this point we should also give an estimate of the total time frame for the implementation of the benchmarking process. For the steps indicated (in Section 3.1) and up to the development of the action plan, we list also in Table 2.3 the time frame for the implementation of each of the steps.

In all, it is estimated that about five months (21 weeks) may be required from the initiation to completion of an action plan for benchmarking. Implementation of the action plan and monitoring of the progress as well as updating benchmarks will require additional and significant time and will depend on many factors, such as type of process, urgency of the situation, etc.

# TABLE 2.3 MAND-DAYS REQUIRED PER STEP

Step #	Description	Team Members	Position	Total mandays -	Mandays, consultant	Mandays, source	Implementation (weeks)
		Wichiocis		company	Consultant	company	(WCCRS)
1	Identify what is to be benchmarked	2 - 4	Executives	1/2	1/2	-	2
2	Create the benchmarking team in the organization	2 – 10	Executives & team	1	-	-	2
3	Identify the organization(s) you want to benchmark against	1 – 2	Executive & team leader	1	1	1/2	2
4	Determine the indicators and the data collection method	1	Team leader	1	1/2		1
5	Collect data	2 – 10	Team leader & team	2 – 10	2	2-5	3
6	Determine current performance levels and identify gaps	1 – 3	Team leader & team	1 – 5	1	-	2
7	Determine future performance levels; forecast the expected improvements	1	Team leader	1/2	3 – 5	2	2
8	Communicate the benchmark findings	2 – 4	Executive & team leader	1	1/2	-	2
9	Develop an action / improvement plan based on the strategy developed	2 - 10	Team leader & team	2 - 10	1/2	-	3
TOTAL				10 - 29	9 - 11	4.5 – 7.5	21

# 2.4 Conditions for implementation

Application of knowledge from one organization to another assumes some degree of homogeneity between the two organizations. The two organizations should resemble each other in certain ways, depending on the type of best practice one is performing. For example, if one applies **generic benchmarking**, the type of technology used should be the same. Hence, identification of type and degree of resemblance is a prerequisite for successful implementation of benchmarking.

In addition, the following dimensions should be considered when implementing benchmarking:

- Application of a broad spectrum of result factors, not looking at a single result measurement
- Acknowledgement of environmental determinants, not all practices can be transferred without some degree of adaptation
- Focusing on the change process, best business processes do not just arrive, but are results of a change process that eventually leads to best practice
- Assessment of factors that influence trasferrability

The following requirements for the companies are essential for effective benchmarking:

- Be honest and provide true data and describe the situation as is
- Clear, consistent and visible involvement by senior executives and managers
- Effective communications with the employees, process owners and customers.

Practical as well as important guidelines for the companies performing benchmarking are provided in the Annex.

# 2.5 European organizations supporting implementation

The Benchmarking Co-Ordination Office was established in 1997 as part of the European Commission's initiative on benchmarking the competitiveness of European industry. It is currently managed by the Irish Productivity Centre (Corporate Headquarters: 42-47, Lower Mount Street, Dublin 2, Ireland, Tel: +353 1 662 32 33, Fax: +353 1 662 33 00, e-mail:benchmarking@ipc.ie).

It's role is to co-ordinate the European Commission's initiative on benchmarking including:

- the establishment of a comprehensive resource database on benchmarking in the European Union which provides information about practitioners, cases and other contact sources on benchmarking in Europe. This database is structured around three levels of analysis, framework conditions for industry, industrial sectors and enterprises.
- the provision of technical assistance and advisory support to the Commission and the member States participating in projects on benchmarking
- the promotion of benchmarking as a tool for improving European competitiveness and increasing the standard of living in Europe

The database, created by the European Commission, DGIII (<a href="http://www.benchmarking-in-europe.com">http://www.benchmarking-in-europe.com</a>), provides a comprehensive list of European Benchmarking resources and practitioners. The search facility allows you to identify resources / practitioners under any of the following headings:

- Benchmarking Level (Company, Sectoral or Framework Conditions)
- Industry Sector (Electronics, Engineering, Financial Services, etc.) or
- Policy Area (Labour Market, Transport Infrastructure, etc.)
- Functional Area (Manufacturing, Finance, Human Resources, R & D, etc.)
- Process Expertise (Budgeting, Training, Order Management, etc.
- Type of Organisation Expertise (Public Sector, SME, etc.)
- Geographic Area (Europe, USA, Japan, etc.)

The Benchmarking Co-Ordination Office has also established a comprehensive set of Cases of European Benchmarking activities. The database of Cases is supported by a comprehensive search and filtering facility, thus allowing interested parties to (a) quickly identify relevant resources in particular benchmarking areas and (b) quickly establish if benchmarking work has already been carried out in a particular area of interest. It also includes a number of relevant studies on competitiveness issues compiled by the Studynet initiative, a common project between DGIII for Industry and the Ministries of Industry of the Member States of the European Commission, which aimed at facilitating exchange of information on industrial competitiveness.

The European Commission services have been supporting two initiatives: The "Benchmarking for Success" initiative, managed by Forbairt, Ireland and is designed to:

- identify who does what and where in Europe in terms of Company Benchmarking;
- bring the players together to compare services and methodologies;
- create a comprehensive pan-European Network of key players in benchmarking

Under this initiative, a European Benchmarking Network (EBN) has been created composed of about 200 members representing government, industry, companies large and small, academia, benchmarking service providers and consultants, and quality organizations from all Member States. Two network workshops, the first in Dublin in 1997, the second in London, May 1998, were organized. The information is provided through Forbairt site at: (<a href="http://www.forbairt.ie/benchmar/links.html">http://www.enterprise-ireland.com</a>). It has issued a set of an interactive CD-ROM and a book, known as Benchmarking FACTS – a European Perspective. A system of National and local Focal Points has been suggested. Major issue is the adoption of a set of Core Metrics for possible adoption across the European Union.

The second initiative is managed by the Association of European Chambers of Commerce and Industry (Eurochambres, <a href="http://www.eurochambres.be">http://www.eurochambres.be</a>) and has been designed as a start-up and demonstration project for benchmarking implementation amongst SMEs. Training seminars on quality matters and benchmarking have been organized for about 70 quality experts in Chambers of Commerce and Industry (CCI's) from 11 Member States, and benchmarking pilot exercises have been initiated with SME's in Italy, France, Germany and Spain.

The European Foundation for Quality Management (<a href="http://www.efqm.org/">http://www.efqm.org/</a>) offers benchmarking services. Its members include:

COUNTRY	MEMBER ORGANIZATION		
AUSTRIA	OVQ - Austrian Association for Quality		
	AFQM - Austrian Foundation for Quality		
	Management		
SWITZERLAND	SAQ - Swiss Association for Promotion of		
	Quality		
UNITED KINGDOM	Quality Scotland Foundation		
	Wales Quality Centre		
	Í orthern Ireland Quality Centre		
	The British Quality Foundation		
FRANCE	Mouvement Français pour la Quality – IQM		
TURKEY	KalDer - Society for Quality		
GERMANY	DGQ - Deutsche Gesellschaft für Qualität e.V.,		
SPAIN	Club Gestion de Calidad		

The Information Center Benchmarking (IZB) in Germany, founded at the Fraunhofer-Institute IPK-Berlin in 1994, attempts to spread the Benchmarking concept through German industrial companies (http://www-ipk.fhg.de).

The Federation for Enterprise Knowledge Development (FEND) in Spain, is a non profit federation of leading companies and universities of Spain, working in collaboration to research, develop, test and disseminate state of the art in enterprise knowledge management and innovation (<a href="http://www.fend.es">http://www.fend.es</a>).

The Management Today Best Practice Site (<a href="http://www.bestpractice.haynet.com">http://www.bestpractice.haynet.com</a>) is a comprehensive benchmarking site in Europe. It is designed to promote and encourage world class standards and provide unique examples.

The Benchmarking Exchange (TBE) describes itself as being a comprehensive and user friendly electronic communication and information medium, specifically designed for use by individuals and organizations involved in "Benchmarking and Process Improvement". TBE is a private network operating exclusively via the WWW. Access TBE's services and databases is restricted to members paying a fixed membership fee.

According to TBE it has thousands of members from more than 45 countries, and it refers to itself as being the network of choice to organisations belonging to more than 18 of the "world's leading Benchmarking and Business Management associations". It further states that its membership is made up of organisations in all industries, both private and public (over half of the Fortune 100 companies are named as being TBE members, and over three-fourths of the 'Fortune 50'). Employment size among TBE members is claimed to range from a minimum of 15 employees to a maximum of over 750,000.

Current membership spans 59 "industry" sectors, some interesting ones are:

- *Government*: 53 TBE members (24 from Australia, 13 from the US, 11 from the UK, 3 from Canada, 1 from New Zealand, and 1 from Singapore).
- *Education*: 25 TBE members (16 from Australia, 6 from the US, and 1 each from Canada, Singapore and Mexico).
- *Health Care*: 19 TBE members (11 from Australia, 5 from the US, and 1 each from the UK, Canada, Sweden and Venezuela).

# Additional benchmarking sites in Europe are:

In United Kingdom	In Ireland
The Benchmarking Centre Ltd.	Enterprise Ireland – Benchmarking
http://www.benchmarking.co.uk	http://www.forbairt.ie/benchmar/links.html
United Kingdom Benchmarking Index	In Denmark
http://www.businesslink.co.uk/bench/	Danish Institute of Technology
	http://www.teknologisk.dk
Benchmarking Network, UK	In Italy
http://www.quality.co.uk/quality/index.htm	Benchmarking Club Italy
	http://www.business-italy.it/benchclub/index.html
UK Government Information Technology Site	In Austria Austrian Benchmarking Information Center
http://www.isi.gov.uk	http://www.benchmarking-in-austria.at/
In Finland	In Portugal <a href="http://www.tecnet.pt/index.html">http://www.tecnet.pt/index.html</a>
Finnish Benchmarking Association	
http://www.dipoli.hut.fi/org/FBA/project.htm	

## While, **global** sites are:

Financial Benchmarking <a href="http://www.finbenchmarkit.com/page18.html">http://www.finbenchmarkit.com/page18.html</a>

Benchmarking South Africa <a href="http://www.benchmarking.org/bensa/">http://www.benchmarking.org/bensa/</a>

Australia Quality Council Benchmarking Edge <a href="http://www.benchmarking-in-austria.at/">http://www.benchmarking-in-austria.at/</a>

International Benchmarking Clearinghouse (IBC) <a href="http://www.ibc.apqc.org">http://www.ibc.apqc.org</a>

International Benchmarking Clearinghouse <a href="http://www.whatworks.org">http://www.whatworks.org</a>

Benchmarking Case Studies <a href="http://www.dtic.mil/c3i/bprcd/mltc003.htm">http://www.dtic.mil/c3i/bprcd/mltc003.htm</a>

Hackett Group Finance Benchmarking Database <a href="http://www.thig.com">http://www.thig.com</a>

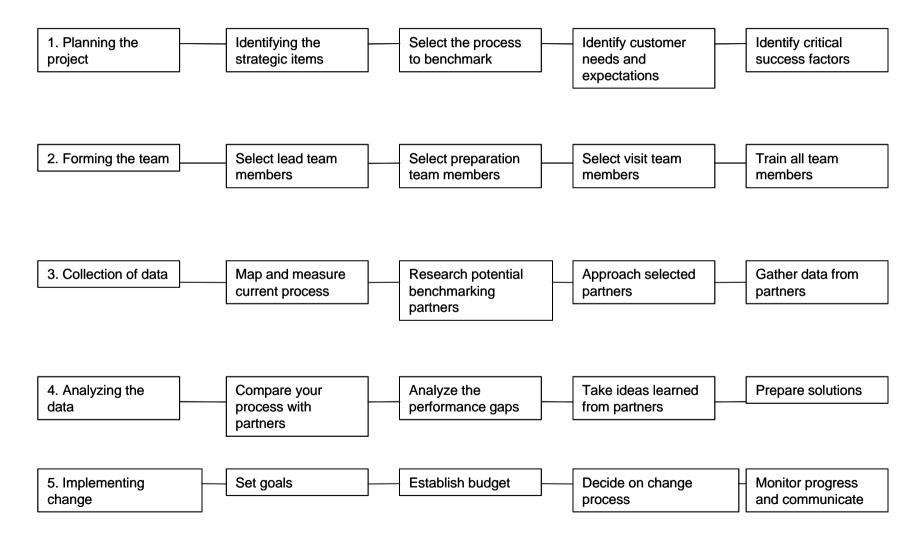
## 3 IMPLEMENTATION PROCEDURE

# 3.1 Steps / Phases

The steps taken for the Benchmarking process are illustrated in the following diagram and described below:

- 1. Identify what is to be benchmarked; it can be a service, process, or practice.
- 2. Create the benchmarking team in the organization
- 3. Identify the organization(s) you want to benchmark against. It can be other operating units within the company, competitors or unrelated companies. However, they should be a leader or "best in class" in the area being benchmarked.
- 4. Determine the indicators and the data collection method
- 5. Collect data
- 6. Determine current performance levels; this includes identifying gaps between your organization and your benchmarking partners.
- 7. Determine future performance levels; forecast the expected improvements of benchmarking partners so that goals set for the improvement program will not become quickly outdated.
- 8. Communicate the benchmark findings and gain acceptance from senior management and employees who will be asked to make improvements; present the methodology, findings and strategy for improvements.
- 9. Develop an action / improvement plan based on the strategy developed
- 10. Implement specific actions and monitor process; this includes collecting data on new levels of performance; using problem-solving teams to investigate problems; and adjusting the improvement process if goals are not being met.
- 11. Recalibrate benchmarks; benchmarks are re-evaluated and updated, based on the most recent performance data.

## SCHEMATIC DIAGRAM OF THE BENCHMARKING PROCESS



# 3.2 Partial techniques and tools per step

1. Identify what is to be benchmarked

It can be a service, process, or practice. This is done with the assistance of the facilitator / consultant on benchmarking. He/She would present and analyse the types of benchmarking available and discuss with the company management their advantages and difficulties. A self-assessment booklet may be available by the consultant to aid on this phase. Benchmarking can cover areas such as:

- a. Manufacturing
  - Total quality
  - Concurrent engineering
  - Lean production
  - Innovation and product development
  - Manufacturing and engineering systems
  - Logistics
  - Company organization and culture
  - Environment, health and safety
- b. Finance
- c. Marketing Customer satisfaction
- d. Plus many others

## 2. Create the benchmarking team in the organization

A team should be formed which will be responsible to carry out the benchmarking process, since significant internal effort would be required. A team leader should be appointed, as well as employees who could significantly contribute to the exercise (other employees would contribute as well). The facilitator could provide characteristics of the team leader as well as the type of employees who would best contribute to the process.

3. Identify the organization(s) you want to benchmark against.

It can be other operating units within the company, competitors or unrelated companies. However, they should be a leader or "best in class" in the area being benchmarked. It may equally be a collection of companies in the same region, in the same sector or in the same country. This will depend on

- Availability of such information locally, regionally, sectorally or globally
- Access of the facilitator to such data (there may be his own data)

Such data are available, even on-line and access to this type of data is provided for a fee. Participating companies contribute continuously such data so that the database is updated often. Some guidelines for contacting target companies for benchmarking are listed in the Annex.

4. Determine the indicators and the data collection method

A number of performance measures should be chosen, which are accepted factors of measuring business excellence. Such factors could include

- Leadership
- Policy and strategy
- People management
- Resource management

- Business processes
- Customer satisfaction
- People satisfaction
- Impact on society
- Business results

Research has identified seven key characteristics of appropriate performance measures:

- Need to be directly related to the company strategy
- Non financial as well as financial measures
- Vary between locations
- Need to change over time
- Need to be simple and easy to use
- Should provide fast feedback to operators and managers
- Intended to teach rather than to monitor

A word of caution. Because the difficulties on establishing correct metrics and the non-universality of them, one should not let measurements get on the way. Many scoreboards are fraught with inconsistencies in data collection and open to interpretation about local causes for differences in performance. Rather than spending time on 'who is the best' and why the measurements are not fair, one should focus on those areas where dramatic differences in performance point to a real underlying process difference and not just an artefact of measurement.

#### 5. Collect data

Measurements must be chosen to provide a meaningful comparison; collection usually involves in-person meetings and site visits of areas being benchmarked. The visits may be performed by the benchmarking team with the assistance of the facilitator. A written document containing the questions to be asked together with explanations on how to collect the data is very useful. A great effort should be exercised so that employees filling the data be honest and objective. The purpose is not to make the company or one's position look better than it actually is, but to record an objective and dispassionate view that could be supported by tangible evidence, if asked for. Inaccurate answers will lead to erroneous results and will limit the value of the benchmarking exercise for the company.

# 6. Determine current performance levels

This includes identifying gaps between your organization and your benchmarking partners. It involves the data analysis and the comparison between company data and the reference organization(s). The comparison may be presented in the form of charts on weighted scale, for each of the performance factors chosen and could show the current performance level of the company, the best in the class performance level as well as average and best of class, if reference data is recovered from a data base.

#### 7. Determine future performance levels

Forecast the expected improvements of benchmarking partners so that goals set for the improvement program will not become quickly outdated. This is a difficult step and may require expert advice depending on the factors chosen. A report could be generated that, after taking into account the external as well as the internal factors, an estimate can be given for the expected future values of the performance factors.

8. Communicate the benchmark findings and gain acceptance from senior management and employees who will be asked to make improvements

Present the methodology, findings and strategy for improvements. Presentations should be made to all personnel involved, preferably by the facilitator who represents a neutral view to the company. Depending on the findings and the size of the company, presentations and discussions could be held in the form of workshops with key people for each / or a mixture of processes, so that the findings can be widely accepted and everyone participates on the strategy development for improvements.

- 9. Develop an action / improvement plan based on the strategy developed Establish objectives; after concurrence on findings and strategy, the team presents final recommendations on goals and how the organization must change to attain them. The principles of project management could very well apply here. Action plans for each objective should be developed; they should be designed to gain the required support within the organization. Estimates should be given for the cost of implementation of the action plan (budget).
- 10. Implement specific actions and monitor process This includes collecting data on new levels of performance; using problemsolving teams to investigate problems; and adjusting the improvement process if goals are not being met.
- 11. Recalibrate benchmarks

  Benchmarks are re-evaluated and updated, based on the most recent performance data.

## 3.3 Related software

The Confederation of British Industry (CBI) has available a suite of three best practice benchmarking tools grouped under the Promoting Business Excellence (PROBE) brand. It is available as a self assessment software, on-line, and the application of the process is assisted by a professional facilitator. It involves two one-day sessions, on the spot analysis provided by a database of benchmarks and a final report. Its cost is 1.200 BP plus traveling expenses.

A United Kingdom Benchmarking Index is a national benchmarking service designed for small firms and has been developed by Danish Technical Institute. It is a simple, computer-based system that, through a series of questions allows a large range of firms to compare their performance with other companies in their sector or region.

The British Quality Foundation offers ASSESS to measure performance of any organization and compare its performance against others and against an established recognised benchmark, using the Business Excellence Model (BEM). BEM, developed in 1991 by leading European companies (EFQM), is accepted as the most comprehensive and reliable model of business excellence.

American Productivity & Quality Center International Benchmarking Clearinghouse (APQC) has a member fee policy, which includes on-line best practices database, case studies, metrics sources, benchmarking resources. Its membership is 488 members strong.

On-line Surveys for best practice are available, which give an organization the opportunity for providing data on-line and receive an evaluation of their performance and they are compared against data from the organizations database. The data entered by the participating organization also enter into the database. Such on-line surveys are offered by

- a) The Benchmarking Exchange (<a href="http://benchnet.com">http://benchnet.com</a>)
- b) The Best Manufacturing Practices (BMP <a href="http://www.bmpcoe.org">http://www.bmpcoe.org</a>)

## 4 BIBLIOGRAPHIC REFERENCES

There is a wealth of information on benchmarking as well as on best practices, both books and scientific articles. Here below is a non-exhaustive list of such references:

# **On-Line Reports**

'How To Prepare For and Conduct a Benchmark Project'

Robert I. Davis and Roxy A. Davis, US Department of Defense, 7/15/94, <a href="http://www.dtic.mil/c3i/bprcd/0135.htm">http://www.dtic.mil/c3i/bprcd/0135.htm</a>

## **Reports on Benchmarking**

- (1) Benchmarking Papers First report by the High Level Group on Benchmarking, European Commission, DG III Industry, No. 2, 1999
- (2) The 1999 European Benchmarking Study for Technology Companies (up to 250 people), Price WaterHouse Coopers (<a href="http://www.pwcglobal.com/uk/eng/ins-sol/survey-rep/dream.html">http://www.pwcglobal.com/uk/eng/ins-sol/survey-rep/dream.html</a>)
- (3) Benchmarking the Competitiveness of European Industry, European Commission Communication, III.A3.PMS, 9-10-1996.
- (4) Organisation for Economic Co-Operation and Development (OECD) Industrial Competitiveness: Benchmarking Business Environments in the Global Economy, Organisation for Economic Co-Operation and Development (OECD), 1997, United States Department of Veterans Affairs
- (5) Resource: Access Benchmarking Study Final Report, United States Department of Veterans Affairs, Office of Planning and Analysis, 1999, (Microsoft Word, 399 KB)
- (6) Organizing & Managing Benchmarking Final Report, the International Benchmarking Clearinghouse of the American Productivity & Quality Center, Houston, TX, 1995
- (7) Best Practices in Performance Measurement: Benchmarking study Report, National Performance Review, Al Gore, Vice President of US, June 1997

## **Journals on Benchmarking**

Benchmarking for Quality Management & Technology: An International Journal, MCB University Press

## **Books On Benchmarking**

- (1) American Productivity & Quality Center, The Benchmarking Management Guide, Portland, OR: Productivity Press, 1993
- (2) Bogan, Christopher E., and English, Michael, J., Benchmarking for Best Practices, McGrawHill Inc., New York, 1995
- (3) Balm, Gerald J., Benchmarking: A Practitioner's Guide for Becoming and Staying Best of the Best, Schaumberg, IL: Quality and Productivity Management Association, 1992
- (4) Bendell, Tony , Boulter, Louise and Goodstadt, Paul, Benchmarking for Competitive Advantage, London, UK: Pitman Publishing, 1998
- (5) Bendell, Tony, Boulter, Louise and Gatford, Kerry, The Benchmarking Workout, London, UK: Pitman Publishing, 1997
- (6) Bogan, Christopher E., English, Michael J., Benchmarking for Best Practices: Winning through Innovative Adaptation, New York, NY: The McGraw-Hill Companies, Inc., 1996

(7) Boxwell, Robert J., Benchmarking for Competitive Advantage, New York, NY: McGraw-Hill, Inc., 1994

- (8) Karlof, Bengt, Benchmarking Workbook: How to Apply Benchmarking--With Examples and Ready Made Forms, New York, NY: John Wiley & Sons, Inc., 1995
- (9) Mark Czarnecki, Managing by Measuring AMACOM (The American Management Association), 1998

#### **Books on Best Practice**

- (1) Boyson, Sandor, Corsi, Thomas M., Logistics and the Extended Enterprise: Best Practices for the Manufacturing Professional, New York: John Wiley & Sons, Inc., 1999
- (2) Brown, Stanley A., Breakthrough Customer Service: Best Practices of Leaders in Customer Support, New York: John Wiley & Sons, Inc., 1998
- (3) Carr, David K., Johansson, Henry J., Best Practices in Reengineering: What Works and What Doesn't Work in the Reengineering Process, New York, NY: McGraw-Hill, Inc., 1995
- (4) Goldblatt, Joe Jeff, Special Events: Best Practices in Modern Event Management, New York: John Wiley & Sons, Inc., 1997
- (5) Harrington, James S., Harrington, H. James, High Performance Benchmarking: Twenty Steps to Success, New York, NY: The McGraw-Hill Companies, Inc., 1996
- (6) Holzer, Marc, Callahan, Kathe, Government at Work: Best Practices and Model Programs, Thousand Oaks, CA: Sage Publications, Inc., 1997
- (7) International Federation for Information Processing, Benchmarking--Theory and Practice, New York, NY: Chapman & Hall, 1995
- (8) Karlof, Bengt, Benchmarking Workbook: How to Apply Benchmarking--With Examples and Ready Made Forms, New York, NY: John Wiley & Sons, Inc., 1995

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#### Annexes

# **Annex 1: Guidelines for Benchmarking Contacts**

## REQUESTING COMPANIES

Benchmarking target companies require information from requesting companies so that the request can be routed and evaluated properly. This helps facilitate a timely decision concerning partnership.

To enhance the effectiveness of your benchmarking exchange, be prepared to respond to at least the following categories of questions. The more information you provide, the more likely it will be that the target company will respond positively to your request.

- 1. Description of requesting company (lines of business, sales area, etc.)
- 2. Description of the process/function/area to be benchmarked
- 3. Goals and purpose of this particular benchmarking project
- 4. Intended use for the information requested via this project
- 5. Reasons the targeted company has been selected for this particular project
- 6. Other targeted companies and/or industries to be included in this benchmarking project
- 7. Current status of the requester's benchmarking project (e.g., where you are in the process)
- 8. Current status of the requester's internal analysis (e.g., collection of data per the data collection plan)
- 9. How the requester's process has been documented (e.g., the process flow diagram)
- 10. Key performance measures associated with this benchmarking project
- 11. Status and nature of questionnaire development
- 12. Desired time frame and/or the project schedule
- 13. Suggested formats for information exchange (questionnaire, phone interview, site visits, sharing of process documentation, etc.)
- 14. Limits or restrictions on information exchange; suggested terms for confidentiality (use of nondisclosure agreements, etc.)
- 15. Have all participants signed, or are they willing to sign, a collaborative agreement such as a Code of Conduct?
- 16. Do you have a consultant to assist you in the benchmarking process?
- 17. What are the benefits/outcomes to the targeted company for participating? (For example, will a copy of the final report be shared with all participating organizations? Is there an opportunity for a reciprocal exchange?)

#### SERVICE PROVIDERS

- Know and abide by a Code of Conduct.
- Have basic knowledge of benchmarking and follow a benchmarking process.
- Prior to initiating contact with potential Benchmarking partners, have determined what to benchmark, identified key performance variables to study, recognized superior performing companies, and completed a rigorous self-assessment.
- Have a questionnaire and interview guide developed, and share these in advance if requested.

• Possess the authority to share and are willing to share information with benchmarking partners.

• Work through a specified host and mutually agreed upon scheduling and meeting arrangements.

When the benchmarking process proceeds to a face-to-face site visit, the following behaviours are encouraged:

- Provide meeting agenda in advance
- Be professional, honest, courteous, and prompt
- Introduce all attendees and explain why they are present
- Adhere to the agenda
- Use language that is universal, not one's own jargon
- Be sure that neither party is sharing proprietary information unless both parties, from the proper authority, have obtained prior approval
- Share information about your own process, and, if asked, consider sharing study results
- Offer to facilitate a future reciprocal visit
- Conclude meetings and visits on schedule
- Thank your benchmarking partner for sharing their process

## REQUESTING AND TARGETED COMPANIES

The following guidelines apply to both partners in a benchmarking encounter with competitors or potential competitors:

- In benchmarking with competitors, establish specific ground rules up-front
- Benchmarkers should check with legal advisor if any information gathering
  procedure is in doubt, e.g., before contacting a direct competitor. If
  uncomfortable, do not proceed, or sign a security/non-disclosure agreement.
  Negotiated a specific non-disclosure agreement that will satisfy the attorneys
  from both companies.
- Do not ask competitors for sensitive data or cause the benchmarking partner to feel they must provide data to keep the process going.
- Use an ethical third party to assemble and "blind" competitive data, with inputs from legal advisor in direct competitor sharing.
- Any information obtained from a benchmarking partner should be treated as internal, privileged communications. If "confidential" or proprietary material is to be exchanged, then a specific agreement should be executed to indicate the content of the material that needs to be protected, the duration of the period of protection, the conditions for permitting access to the material, and the specific handling requirements that are necessary for that material.

## **Annex 2: Code of Conduct**

## Legality

• If there is any potential question on the legality of an activity, consult with your legal advisor.

- Avoid discussions or actions that could lead to or imply an interest in restraint of trade, market and/or customer allocation schemes, price fixing, dealing arrangements, bid rigging, or bribery. Don't discuss costs with competitors if costs are an element of pricing.
- Refrain from the acquisition of trade secrets from another by any means that could be
  interpreted as improper. Do not disclose or use any trade secret that may have been
  obtained through improper means or that was disclosed by another in violation of
  duty to maintain its secrecy or limit its use.
- Do not, as a consultant or client, extend benchmarking study findings to another company without first ensuring that the data is appropriately blinded and anonymous so that the participants' identities are protected

## Exchange

- Be willing to provide the same type and level of information that you request from your benchmarking partner to your benchmarking partner.
- Communicate fully and early in the relationship to clarify expectations, avoid misunderstanding, and establish mutual interest in the benchmarking exchange.
- Be honest and complete.

#### Confidentiality

- Treat benchmarking interchange as confidential to the individuals and companies involved. Information must not be communicated outside the partnering organizations without the prior consent of the partner who shared the information.
- A company's participation in a study is confidential and should not be communicated externally without their prior permission.

## Use of Information

- Use information obtained through benchmarking only for purposes stated to the benchmarking partner.
- The use or communication of a benchmarking partner's name with the data obtained or practices observed requires the prior permission of that partner.

### Contact

- Respect the culture of partner companies and work within mutually agreed procedures.
- Obtain mutual agreement with the designated benchmarking contact on any hand-off of communication or responsibility to other parties.
- Obtain an individual's permission before providing his or her name in response to a contact request.
- Avoid communicating a contact's name in an open forum without the contact's prior permission.

#### Preparation

• Demonstrate commitment to the efficiency and effectiveness of benchmarking by being prepared prior to making an initial benchmarking contact.

• Make the most of your benchmarking partner's time by being fully prepared for each exchange.

• Help your benchmarking partners prepare by providing them with a questionnaire and agenda prior to benchmarking visits.

#### Completion

- Follow through with each commitment made to your benchmarking partner in a timely manner.
- Complete each benchmarking study to the satisfaction of all benchmarking partners as mutually agreed.

## Understanding and Action

- Understand how your benchmarking partner would like to be treated.
- Treat your benchmarking partner in the way that your benchmarking partner would want to be treated.
- Understand how your benchmarking partner would like to have the information he or she handled and used, and handle and use it in that manner.

# **Annex 3: Benchmarking Terms**

# Activity

A series of transactions that translates inputs into outputs using resources in response to a business requirement; sequences of activities in logical combinations form processes.

## **Advance planning**

That part of the planning process in which organizational leaders—together with the strategic planning staff—define the planning process; establish membership, roles, and responsibilities for the process; clarify expectations for process outputs and outcomes; and provide the necessary resources to ensure its success.

## **Balanced scorecard**

A management instrument that translates an organization's mission and strategy into a comprehensive set of performance measures to provide a framework for strategic measures and management. The scorecard measures organizational performance across several perspectives: financial, customers, internal business processes, and learning and growth.

#### Raseline data

Initial collection of data to establish a basis for comparison.

#### **Benchmark**

A measured, "best-in-class" achievement; a reference or measurement standard for comparison; this performance level is recognized as the standard of excellence for a specific business process.

## **Benchmarking**

The process of identifying, learning, and adapting outstanding practices and processes from any organization, anywhere in the world, to help an organization improve its performance. Benchmarking gathers the tacit knowledge--the know-how, judgments, and enablers--that explicit knowledge often misses.

## Benchmarking gap

The difference in performance between the benchmark for a particular activity and other companies in the comparison; the measured leadership advantage of the benchmark organization over other organizations.

#### **Best-in-class**

Outstanding process performance within an industry; words used as synonyms are best practice and best-of-breed.

### **Best practice**

There is no single "best practice" because best is not best for everyone. Every organization is different in some way--different missions, cultures, environments, and technologies. What is meant by "best" are those practices that have been shown to produce superior results; selected by a systematic process; and judged as exemplary, good, or successfully demonstrated. Best practices are then adapted to fit a particular organization.

## **Capability mapping**

The analysis of the business infrastructure of an organization to determine unique abilities and potential.

#### **Code of conduct**

A behavioural convention that describes the protocol of behaviours--the set of conventions prescribing correct etiquette and procedures to be used in a common activity.

## **Competitive analysis**

Analysing the magnitude and rationale for the gap between one's own organizational performance measures and the performance measures of competing organizations.

#### Competitive

A measure of organizational performance compared against benchmarking competing organizations.

## **Core competencies**

Strategic business capabilities that provide a company with a marketplace advantage.

#### **Critical success factors**

Quantitative measures for effectiveness, economy, and efficiency; those few areas where satisfactory performance is essential in order for a business to succeed; characteristics, conditions, or variables that have a direct influence on a customer's satisfaction with a specific business process; the set of things that must be done right if a vision is to be achieved.

#### Customer

The person or group that establishes the requirement of a process and receives or uses the outputs of that process, or the person or entity directly served by the organization.

### **Customer analysis**

The evaluation of a customer's conditions and trends relative to a particular product or service of a business--tools include customer focus groups, field trial testing, customer satisfaction measurement, customer feedback systems, and the use of various types of questionnaires and survey instruments.

#### **Enabler**

Those processes, practices, or methods that facilitate the implementation of a best practice and help to meet a critical success factor; enablers help to explain the reasons behind the performance indicated by a benchmark.

#### **Environment**

Circumstances and conditions that interact with and affect an organization. These can include economic, political, cultural, and physical conditions inside or outside of the organization.

#### **External customer**

An individual or group outside the boundaries of the producing organization that receives or uses the output of the process.

#### **Functional benchmarking**

Process benchmarking that compares a particular business benchmarking function at two or more companies.

#### **Generic benchmarking**

Process benchmarking that compares a particular business function or process at two or more companies independent of their industries.

## Global benchmarking

The extension of strategic benchmarking to a global scale.

## **Implementation**

Specific tasks that will make a strategy into a reality.

## **Internal benchmarking**

Process benchmarking that is performed within an organization by comparing similar business units or business processes.

#### **Internal customer**

An individual or group inside the boundaries of the producing organization that uses the output of the results on the efficiency with which resources are transformed into goods and services (outputs), the quality of those outputs (how well they are delivered to clients and the extent to which clients are satisfied) and outcomes (the results of a program activity compared to its intended purpose to program objectives).

## **Key performance indicator**

Measurable factor of extreme importance to the organization in achieving its strategic goals, objectives, vision, and values that, if not implemented properly, would likely result in a significant decrease in customer satisfaction, employee morale, and effective financial management.

## **Key business process**

Those processes that influence the customer's perception of your business.

#### Measure

One of several measurable values that contribute to the understanding and quantification of a key performance indicator.

## Metrics

The elements of a measurement system consisting of key performance indicators, measures, and measurement methodologies.

#### Mission

An enduring statement of purpose; the organization's reason for existence. The mission describes what the organization does, who it does it for, and how it does it.

#### Milestone

A mark of a significant point in development.

## Model

A description, representation, or analogy that is used to help visualize something that cannot be directly understood.

## **Objective**

The set of results to be achieved that will deploy a vision into reality.

#### Outcome measure

An assessment of the results of a program activity as compared to its intended purpose

## **Output measure**

Tabulation, calculation, or recording of activity or effort.

#### **Performance**

Measurement of the performance of one company's product benchmarking against that of another company.

## Performance goal

A target level of an activity expressed as a tangible measurable objective, against which actual achievement can be compared.

#### **Performance management**

The use of performance measurement information to help set agreed-upon performance goals, allocate and prioritize resources, inform managers to either confirm or change current policy or program directions to meet those goals, and report on the success in meeting those goals.

#### Performance measure

A quantitative or qualitative characterization of performance.

## **Performance measurement**

A process of assessing progress toward achieving predetermined goals.

#### **Process**

A series of interrelated activities that convert inputs into results (outputs); processes consume resources and require standards for repeatable performance; processes respond to control systems that direct the quality, rate, and cost of performance.

#### **Process benchmarking**

The measurement of discrete process performance and functionality against organizations that are excellent in those processes.

#### **Process owner**

The individual who exercises the possession or control over a process.

#### Process stakeholder

An individual who has an interest in the conduct of a particular process.

## **Project facilitator**

The individual who focuses on the process of benchmarking and makes that process easier for the team.

#### **Project sponsor**

The individual who provides the financial support for a benchmarking project; an individual who plans and carries out a project or activity; one who assumes the responsibility for a project.

#### **Protocol**

A set of conventions governing the actions of individuals, organizations, or nations as specified by a written agreement; a code prescribing adherence to correct etiquette.

### **Ouestionnaire**

A set of questions for obtaining statistically useful process or personal information.

## Reengineering

The radical redesign of business processes, organizational structures, management systems, and values of an organization to achieve breakthroughs in business performance.

## **Reverse engineering**

A comparison of the product characteristics, functionality, and performance with similar products made by competitors.

#### Stakeholder

Any person, group, or organization that can place a claim on, or influence, the organization's resources or outputs; is affected by those outputs; or has an interest in or expectation of the organization.

#### Strategy

The plans and means to achieve the goal for a particular objective.

#### Strategic alliance

A strategic bond or connection between organizations with common interests; an association to further the common interests of its participants.

#### **Strategic benchmarking**

A systematic business process for evaluating alternatives, implementing strategies, and improving performance by understanding and adapting successful strategies from external partners who participate in an ongoing strategic alliance.

# Strategic direction

The organization's goals, objectives, and strategies by which it plans to achieve its vision, mission, and values.

## Strategic goal

A long-range change target that guides an organization's efforts in moving toward a

desired future state.

# Strategic objective

A broad time-phased measurable accomplishment required to realize the successful completion of a strategic goal.

## Strategic planning

A continuous and systematic process whereby guiding members of an organization make decisions about its future, develop the necessary procedures and operations to achieve that future, and determine how success is to be measured. A road map to gain competitive advantage by achieving goals that define business objectives for critical success factors.

#### Survey

To query individuals in order to collect data for the purpose of analyzing some group or sample of a population.

## **Target**

A mark to shoot for; a goal to be achieved.

#### Team leader

An individual who participates on a team and takes on the leadership role for that team.

#### Team member

An individual who participates on a team and may take on one or more roles with respect to that team.

## **Total quality**

A customer-focused management philosophy and strategy management that seeks continuous improvement in business processes using analytical tools and teamwork that encompasses the participation of all employees.

## Vision

The achievable dream of what an organization wants to do and where it wants to go. An idealized view of a desirable and potentially achievable future state—where or what an organization would like to be in the future.

#### World-class

Leading performance in a process independent of industry, function, or location.

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