The development of a benchmarking and performance improvement resource

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The development of a benchmarking and performance improvement resource

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Keywords Performance measurement, Benchmarking, Internet

Abstract Describes the aims, reasons for development, key features, and uniqueness of an online benchmarking and performance improvement resource. The paper begins by describing the historical context within which the Wcb site has been developed. It describes the growth in the use of business excellence, benchmarking and performance measurement, and how these improvement approaches are related to each other. The Web site's uniqueness stems from how information within the resource is categorised by the Malcolm Baldrige Model and the European Business Excellence Model, the collection and linking of thousands of snippets of information from case studies and articles relating to best practices and benchmarking studies, the provision of a comprehensive list of performance measures and improvement techniques, and the way that the site has been designed based on the concept of benchmarking. An explanation of how the resource might be used to support an organisation's benchmarking process is provided. The paper concludes by presenting the positive feedback obtained from an industry review of the Web site's key features. The Web site aims to be launched by October 2001.

Introduction

Over the last ten years business excellence, performance measurement, and benchmarking have all become important to those organisations pursuing performance improvement. The acceptance of these as valid approaches to business improvement coincides with the global impact that Internet technology is having worldwide on communication and information accessibility.

In 1995, research by Anderson and Camp (1995) indicated that the role of computers and the Internet in benchmarking was expected to grow. Judging by the number of benchmarking Web sites in operation today, this indeed has been the case. In a recent review of Web sites, the Centre for Organisational Excellence Research (COER) identified nearly 200 Web sites serving an interest in benchmarking or a related improvement approach. Details of a selection of these Web sites are provided in Table I.

This paper describes how COER came to decide that there was a need to develop another Web site to serve the performance improvement area. The paper begins by describing the growing importance and relationship between business excellence, benchmarking, and performance measurement. These developments provided the inspiration for the idea of an online benchmarking and performance improvement resource (BPIR). A description of the BPIR's uniqueness and key features is provided. This is followed by an explanation of how the resource will overcome many of the problems commonly associated

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f performance nent related			2	
	URL address	Services or subject areas	Perspective or origin	Access
Benchnet: The Benchmarking Exchange	http:// www.benchnet.com/	Members can participate and access TBE's surveys on a wide-variety of process improvement related topics. Members are encouraged to network with other members from around the world. A regular newsletter plus other information resources are provided	USA origin/ international perspective	Membership and free areas
Industrymetrics.com	http://www.industry metrics.com/	This is the survey part of www.benchnet.com Enables the user to deliver an online survey to organisations around the world, cost varies per survey. Free online brief business excellence self-assessments provided	USA origin/ international perspective	Membership and free areas
Best Practice Club	http://www.bpclub.com/	Case study days, networking events, networking directory and large journal database	UK origin/ primarily UK perspective	Membership and free areas
Asian Benchmarking Clearinghouse	http://www.abc.org.hk	Services in benchmarking and best practices: consortium studies, benchmarking consultancy, research studies, information services, training, conferences and forums, publications and study missions	Hong Kong origin, Asian perspective	Membership and free areas
Best Practices LLC	http://www. best-in-class.com/	Provides consultancy, benchmarking reports, best practice database, networking services and operates the Global Benchmarking Council. Its benchmarking and best practice database addresses a comprehensive range of topics based on original research by the Best Practices LLC team	USA origin and primarily USA perspective	Membership and free areas

	URL address	Services or subject areas	Perspective or origin	Access
The Benchmarking Network	http:// www.benchmarking network.com/	Provides benchmarking studies, training, research and a benchmarking database (containing a list of performance measures, polls and questionnaires, online networking and links to consortium studies and special interest groups)	USA perspective	Membership and free areas
American Productivity and Quality Centre and APQC's International Benchmarking	http://www.apqc.org/	Provides on-site training, information services, multi- client benchmarking, best-practice database, networking, books and case studies	USA origin and primarily USA perspective	Membership and free areas
Best-practice.com	http://www. best-practice.com/	Aims to provide a directory of resources and network of organisations involved in performance improvement. Provides case studies and articles categorised by the Baldrige criteria	NZ origin and international perspective	Free but pay for case studies/ articles
Baldrige Plus.com	http:// www.baldrigeplus.com/	Baldrige criteria for performance excellence explained. Various free articles and information related to Baldrige assessments. Some case studies free. Free Baldrige eZine but a fee is required to subscribe to Leadership eZine	NZ origin and international perspective	Free but subscription required for one eZine
Baldrige National Quality Programme	http:// www.quality.nist.gov/	Home of the Malcolm Baldrige Model. History, training material, library of information related to performance improvement	USA origin and USA perspective	Free (Continued)
			433	Benchmarking and improvement resource

BIJ 8,5	Perspective or origin Access	Research UK origin and Free ase studies on international sconferences, perspective and ciation	nality European origin Membership and ial, good and European free areas publications perspective	nent, USA origin/ Free but pay for training. international services est process perspective processes. Free
	Services or subject areas	Sub-site of Cranfield University Web site. Research centre offering a number of articles and case studies on performance measurement. Also, promotes conferences, books, a performance measurement catalogue and runs the Performance Measurement Association	Home of the European Foundation for Quality Management. History and training material, good practice database, benchmarking studies, publications	Provides Baldrige Criteria-related assessment, application development, consulting, and training. Provides Baldrige application software (best process technology) based on experience of best processes. Free Baldride and information provided
	URL address	http:// www.cranfield.ac.uk/ som/cbp	http://www.efqm.org/	http:// www.Baldrige21.com/
Table I.	Title	Centre for Business Performance	European Foundation for Quality Management	Baldrige Performance Excellence/Best Process Technology

with benchmarking. The paper concludes by providing feedback obtained from an industry review of the BPIR prototype.

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Background

The growth in the importance of business excellence, performance measurement, and benchmarking, and relationship between them, sparked the idea for the BPIR and shaped its eventual design. The discussion that follows, accompanied by Table II, provides an overview of these developments.

Business excellence

The performance improvement culture of today largely stems from the quality movement. This movement has witnessed a culture change from quality control, to quality assurance, to quality management, and then to total quality management (TQM). From TQM business excellence was born as quality award models (providing the first internationally recognised and accepted models of TQM) moved away from using the term TQM towards the term business excellence (otherwise referred to as organisational excellence or performance excellence). As explained by Dale *et al.* (2000), this was in response to the "perceived tarnished image of TQM". The tarnished image probably stemmed from the years prior to the development and wide-scale use of quality award models when there was no common consensus as to the elements of TQM (Mann and Kehoe, 1994).

Business excellence, as described by the European Foundation for Quality Management, refers to "Outstanding practices in managing the organisation and achieving results, all based on a set of eight fundamental concepts", these being, "results orientation; customer focus; leadership and constancy of purpose; management by processes and facts; people development and involvement; continuous learning, innovation and improvement; partnership development; and public responsibility" (European Foundation for Quality Management, 1999). This definition serves as a typical example of those put forward today.

There is now increasing evidence that organisations managed in a "business excellence way" do achieve significant benefits. Evidence of this comes from the following:

- Numerous case studies, research studies and texts that highlight the benefits of an approach involving self-assessments against business excellence models (for example, Zairi, 1994; Total Research, 1996; Blazey, 1999; Hendricks and Singhal, 1999; and Hausner, 1999).
- Performance of the Baldrige Index against the US Standard and Poor's 500. The Baldrige Index consists of publicly traded US companies that have received the US Baldrige National Quality Award during the years 1988 to 2000. For the seventh year in a row the Baldrige Index outperformed the US Standard and Poor's 500, this time by almost four to one (National Institute of Standards and Technology, 2001a).

BIJ 8,5		ing ing rking	ed to the Saldrige porates narking by (2) al arking onduct formed Centers e countries) agement 1 (Continued)
436	Benchmarking	Late 1970s to mid 1980s – competitive benchmarking led by Rank Xerox (Camp, 1989) Mid 1980s onwards – process benchmarking (Watson, 1993) 1989 – first book published on benchmarking written by Robert Camp (Camp, 1989)	1991 – The term "benchmarks" is added to the guidelines for the Baldrige Award 1991 – Rank Xerox win the Malcolm Baldrige Award 1992 – European Quality Award incorporates benchmarking 1992 – first European book on benchmarking by Codling (1992) and guide by Zairi (1992) 1992 – APQC launches the International Benchmarking Clearinghouse, Benchmarking Awards and Benchmarking Network formed (an alliance of leading Benchmarking Code of Conduct 1994 – Global Benchmarking Network formed (an alliance of leading Benchmarking for Quality Management and Technology Journal first published (Continued)
	Performance measurement	Mid 1980s onwards – strong criticism of traditional financially bassed performance measurement systems (Johnson and Kaplan, 1987; Berliner and Brimson, 1988; Drucker, 1990) Late 1980s onwards – new methods of measuring performance are proposed (Maskell, 1989; Dixon et al., 1990; Keegan et al., 1989) 1988 – activity based costing developed by Cooper and Kaplan (1988) to measure the use of resources by activity	1991 – work on economic value added first published (Stewart, 1991) 1992 – first published paper on the the balanced scorecard (Kaplan and Norton, 1992) 1992 – Skandia's navigator model for measuring intellectual capital was first tested (Measuring Business Excellence, 1997) 1993 onwards – RSA's inquiry into Tomorrow's Company advocated the inclusive approach to performance measurement (Centre for Tomorrow's Company, 1998)
Table II. Important events in the development and	Business excellence	1984 – Rehder and Ralston publish one of the first papers using the term TQM 1988 – Malcolm Baldrige National Quality Award first awarded 1989 – TQM Magazine launched – the first journal-style publication on TQM	awarded 1992 – European Quality Award first awarded 1994 – tracking of Baldrige winners against the Standard and Poor's 500 (National Institute of Standards and Technology, 2001b)
acceptance of three performance improvement approaches	Year	980-1989	1990-1994

Year	Business excellence	Performance measurement	Benchmarking
1995-1999	Mid 1990s onwards – abundance of business excellence self-assessment questionnaires designed by consultants In the UK there was ASSESS, Optimus, Probe and the UK Benchmarking Index Mid 1990s onwards – replacement of terms "TQM" and "quality" within awards and business language 1996 – Japan Quality Award first awarded (many similar features to the Baldrige Award) Baldrige Award) Hendricks and Singhal (1999) in the USA and Hausner (1999) in Australia supporting the case that award winners have higher performance	Mid to late 1990s onwards – shareholder value and EVA become popular (Rappaport, 1998) 1996 – workbook approach to performance measurement devised by Cambridge University (Neely et al., 1996) – first edition of the book The Balanced Scorecard (Kaplan and Norton, 1996) 1997 – first publication of Measuring Business Excellence – a journal about non-financial ways to measure business improvement	1995 – European Best Practice Benchmarking Award first awarded 1999 – Benchmarking an International Journal first published (supersedes the Benchmarking for Quality Management and Technology Journal)
2000 onwards	2000 onwards 2000 – paper by Dale and others (Dale et al., 2000) commenting on the name change from TQM to Business Excellence 2001 – for the seventh year in a row Baldrige winners outperform the Standard and Poor's 500. (National Institute of Standards and Technology, 2001b)	2000 – launch of the International Performance Measurement Association (www.performanceportal.org) 2001 – first publication on the "Performance prism" (Neely and Adams, 2001) a new measurement framework	2001 – The Global Benchmarking Network grows to an alliance of 21 benchmarking centres representing 21 countries

Table II.

- Number of companies that use business excellence models throughout the world to guide their improvement efforts. In the USA nearly two million copies of the Malcolm Baldrige Model (MBM) have been distributed since the award's launch in 1988 and this does not include copies that are available in books and from state and local award programs, or those downloaded from the Web (National Institute of Standards and Technology, 2001b). In New Zealand, the location of COER, sales of the New Zealand Business Excellence Foundation's booklets on the MBM criteria were at their highest total in 2000 (over 7,000 sold) since the criteria were brought to New Zealand in 1992 (New Zealand Business Excellence Foundation, 2000). Comparative figures are not available in Europe although it was reported in 1996 that 35 per cent of companies in the UK were found to be using or intending to use the European business excellence model (EBEM) as a guide to self-assessment (Hyde, 1996).
- Number of countries promoting awards based on business excellence models. At present this stands at over 60 countries with the majority being designed around the MBM (National Institute of Standards and Technology, 2001c).

Performance measurement

A performance measurement system is a complete set of performance measures and indicators derived in a consistent manner according to a formal set of rules or guidelines (Brown and Devlin, 1997). If one compared the performance measurement systems used today with those used ten years ago it is likely that they would be significantly different. It is highly probable that the advances in business excellence and benchmarking have had a large impact on this.

The performance measurement revolution, as it has been described by Neely (1998), has seen a move away from the problems of past measurement systems. Five common features of out-dated performance measurements systems were, according to a 1995 Renaissance Solutions/Harvard Business School/Business Intelligence survey of over 200 organisations (Kaplan and Norton, 1996):

- (1) dominant financial or other backward-looking indicators;
- (2) failure to measure all the factors that create value;
- (3) little account taken of asset creation and growth;
- (4) poor measurement of innovation, learning and change;
- (5) a concentration on immediate rather than long-term goals.

The focus in performance measurement is now on achieving a balanced framework (Ashton, 1997; Centre for Tomorrow's Company, 1998) that addresses the issues described above. Examples of these new frameworks are Kaplan and Norton's (1996) balanced scorecard, Skandia's navigator model (Measuring Business Excellence, 1997) and the performance prism (Neely and

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Performance measurement is one of the cornerstones of both the MBM and the EBEM. Both models encourage the use of performance measures, but in addition and more importantly, they consider the design of performance measurement systems to ensure that measures are aligned to strategy, and that the system is working effectively in monitoring, communicating, and driving performance.

Benchmarking

Benchmarking, "the most powerful technique for gaining and maintaining competitive advantage" (Codling, 1996), is a key process used widely as an improvement technique within business excellence models. Hinton et al. (2000), when addressing the rapid adoption of business excellence models across Europe, state that organisations striving for business excellence "would be hard pressed to do so effectively without benchmarking".

The relationship between benchmarking, business excellence and performance measurement is acknowledged in Longbottom's (2000) typology of benchmarking authorities:

- Traditionalists, view benchmarking as an invaluable tool with which to facilitate continuous improvement initiatives. This view, based around process understanding, comparison, and adaptation, popularised by authors such as Camp and Codling in the early 1990s. This type of benchmarking, called process benchmarking, uses performance measurement as an integral part. Performance measures are used for identifying the process to benchmark, determining the performance gap between benchmarking partners, and for monitoring the improvement made as a result of implementing an improved practice.
- *Critics*, hold that benchmarking, as a process, is not radical enough to keep pace with rapidly changing technology and the globalisation of markets and is simply playing "catch-up" (Hammer and Champy, 1993; Oblenski, 1994).
- Modernists, view benchmarking as following on from business excellence self-assessments. As the MBM and EBEM are used so widely many organisations now benchmark the results of business excellence self-assessments. These comparisons have been particularly popular in the UK where such data has enabled industry-specific and crossindustry comparisons of self-assessment results. For examples of such industry comparisons see Mann et al. (1999). The appeal of the modernist approach is that through benchmarking business excellence results, organisations that are performing better in a business excellence category can be quickly identified. These can then be targeted for a more specific and in-depth process benchmarking study.

For organisations to reach performance levels judged as "world-class" the various business excellence models indicate clearly, through their scoring systems, the importance of benchmarks and the process of benchmarking. Czarnecki (1998), through considering the Baldrige scoring table, concluded that over half the points available were related to benchmarking activities.

In simple terms, benchmarking is the process of "finding and implementing" best practices that lead to superior performance" (Camp, 1989). Many organisations across the world now recognise that benchmarking is an essential tool to use in order to track and improve performance relative to competitors and best practice performers. It is quoted by separate sources that UK company involvement in benchmarking is 60 per cent, 78 per cent and 85 per cent (Zairi and Ahmed, 1999; Coopers and Lybrand, 1995; CBI, 1997, respectively) and a European study in 1994 suggested that 88 per cent of companies were involved in benchmarking activities (Voss et al., 1997). In the USA a similar level of involvement was recorded by Bain & Company's 1999 Northern American management tools survey with 76 per cent of organisations indicating that they used benchmarking (Bennett, 2000). Evidence from a recent survey (The Benchmarking Exchange, 2001) suggests that most using benchmarking will be involved in comparisons of performance metrics rather than the more rigorous style of process benchmarking. Even when considering this, these figures above provide a clear indication of the popularity of performance measurement and benchmarking in industry today.

The research challenge

The historical overview that has been presented on business excellence, performance measurement, and benchmarking has described not only the growth in use of all these approaches, but also how closely these approaches are related. It was as a result of a similar but far more detailed review that COER recognised that a new resource that linked these approaches together would greatly assist organisations focusing on performance improvement. This realisation prompted COER to develop an online benchmarking and performance improvement resource (BPIR) to assist in the capture, creation, and management of information in the area of performance improvement.

Project aims and uniqueness of Web site

The aims and unique features of COER's Web site are described below.

Project aim

The aim of the project was to develop a resource that provides relevant and comprehensive performance improvement information to organisations around the world that apply business excellence, performance measurement, benchmarking, and improvement practices. This information would be presented in a unique way that reduces the search time to find relevant information, and facilitates the concept of transforming information into

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COER's vision is that the BPIR will become the first port of call for organisations interested in using an online resource for supporting improvement projects. This is to be achieved through providing a significant amount of information within the resource and then linking this to other related sources of information external to the resource that are of value to the user. In this way the resource would in addition provide a comprehensive directory of performance improvement information.

The BPIR's uniqueness

The BPIR provides a self-assessment service, comprehensive collections of benchmarking information, case studies (the majority illustrating some use of best practice), performance measures and performance improvement activities. Each of these is uniquely interlinked with the criteria of the business excellence models.

A review of over 600 Web site resources that provide books, case studies, consulting services, and database resources, identified nearly 200 that had some features similar to those of the BPIR. An extensive review of these (some resources were membership only and therefore a full assessment of these sites could not be made) indicated that the following features of the BPIR were unique:

- The categorisation of data and information using the MBM and EBEM.
 While a few other Web sites may categorise information by the seven
 main categories of the MBM or nine categories of the EBEM none have
 categorised information to the level of detail presented within the BPIR
 (to area/sub criteria). In addition, no other resource has given the user
 the option of selecting the business excellence model that they wish to
 use for navigating a Web site.
- The creation of a database of snippets of performance improvement information. These snippets are unique as they describe the relevant information from a case study or article that is directly related to the user's search purpose (this is achieved through the Web site's categorisation method). These snippets are not abstracts or summaries of articles and therefore differ from the way that information providers usually present information.
- The resource offers the most comprehensive list of performance measures and formulas available.
- The resource offers the only online comprehensive list of improvement techniques/practices with supporting implementation suggestions.
- The resource offers the only "one-stop" concept in benchmarking. It is
 the first resource that combines performance measures, benchmarking
 data, improvement techniques/practices, and best practice case studies.
 Through using the BPIR a basic benchmarking process cycle can

theoretically be undertaken. This enables users to learn and apply the essential steps of benchmarking.

Plan of the Web site

This section describes the unique plan of the BPIR Web site. It shows how the design is based on a theoretical benchmarking process, and discusses the functionality of the Web site design. An explanation is also provided on how the BPIR can support an organisation's real life benchmarking process so that some common problems associated with benchmarking can be overcome.

The BPIR benchmarking process

The user entering the BPIR has the choice to follow the benchmarking process represented in Figure 1, or enter the BPIR database at any stage in the process. If the intent is for an organisation to follow the benchmarking process, the user would:

- select a key area within the organisation to assess (identified with the help of a business excellence self-assessment service if required);
- match this to an area within the selected model (using the MBM or EBEM);

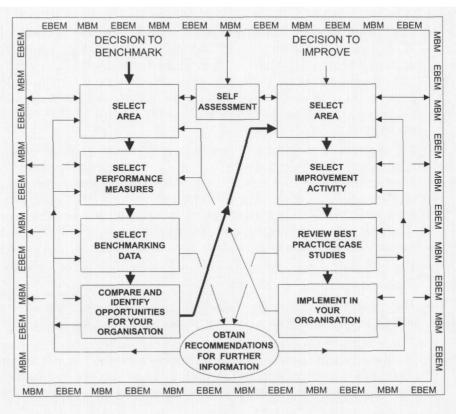


Figure 1. A member's theoretical route through the BPIR using a basic process for benchmarking

- · choose appropriate performance measures from those linked to this chosen area;
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- compare performance of user organisation to benchmarks and against the practices used by other organisations;

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• if the result is favourable, the user could, if desired, choose another area to assess:

- if the comparison is less than favourable the user could choose to review a selection of improvement techniques/practices. Again these would be categorised by the MBM and EBEM;
- the user would review these improvement techniques/practices through studying case studies that describe the experiences of organisations that have used them. These case studies either provide information on how to implement the technique/practice or present the outcome of their implementation;
- if confident of this choice, the user could then implement the technique/ practice within their own organisation:
- · the resulting performance change could then be monitored using the same measures used earlier in the process.

The above is a simplification of the process of benchmarking within an organisation which, if taken seriously, would in reality include other activities such as, selection and contact of partners, projection of future performance, establishment of goals, and the development of action and implementation plans. This online process can provide a real basis for improvement on its own. Codling (1996), one of Europe's first exponents of benchmarking pointed out while commenting on benchmarking-based databases, "their contents are invaluable to organisations seeking the 'tip of the iceberg indicators'", and that as such "they are extremely useful for gaining a baseline" as a valuable precursor to the real job of benchmarking.

BPIR's usability

The extensive Internet research carried out by COER during the development of the BPIR uncovered a cross-cutting theme running through almost all the Web sites visited. This theme was the high degree of difficulty that seemed to surface when using the Web sites for periods of concentrated research. The navigation, functionality, and use of graphics in most sites often created frustration and an expenditure of unnecessary time in order to find relevant information. Because of this the ultimate design of the BPIR carries a strong influence from various renowned researchers into Web site usability such as Nielsen (2000), and Spool et al. (1999).

Spool et al. (1999) define Web site usability simply, they state that "the more a site helps people find the information they are looking for, the more usable it is". The BPIR is almost graphic-free in order to allow more effective navigation 443

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through large volumes of information. The simple architecture and structural concepts behind the site make a significant difference in the efficiency with which the site can be used, and information located.

BPIR's role in supporting benchmarking projects

The "real job" of benchmarking can prove costly in terms of resources and is not an area to be entered into lightly. Figure 2 shows a diagram by Codling presenting the main stages of benchmarking. The process of benchmarking shown in this diagram is comprehensive and covers the essential theory of benchmarking but at the same time retains a very practical nature (Zairi and Leonard, 1994). It has therefore been chosen to illustrate the areas of the "real" benchmarking process in which the BPIR can offer support. This illustration is shown in Figure 3 in which the core of Codling's diagram is retained, and the outer shell now represents the features on the BPIR that can help in the adjacent stage. Exactly how each of these stages can be assisted by the BPIR is explained below:

(1) Selecting the subject area to benchmark. To help identify areas of weakness that are at the same time, critical, actionable, and able to be leveraged in terms of improvement, a self-assessment using the BPIR's

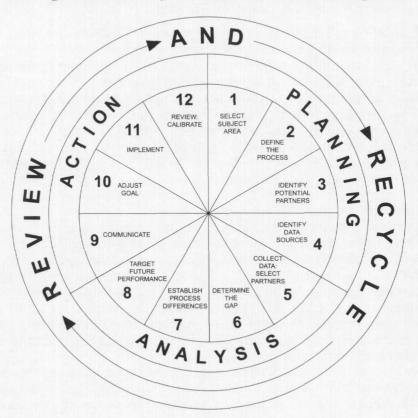
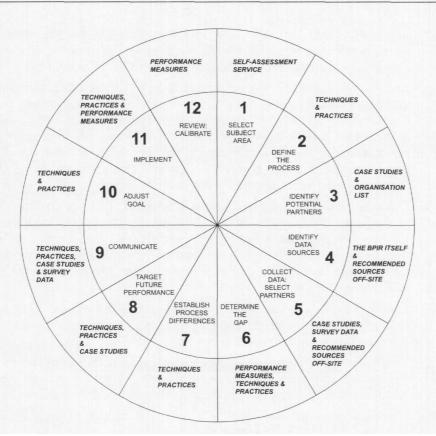


Figure 2.
Codling's diagram showing a comprehensive coverage of the stages involved in a benchmarking project



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Figure 3.
Codling's diagram
adapted to show the
stages supported by the
BPIR

questionnaire can be used. The BPIR questionnaire incorporates the best features of over 15 BMB and EBEM questionnaires and is used on an annual basis by members of the New Zealand Benchmarking Club (a club directed by COER).

- (2) Define the process to benchmark. To properly identify and understand the process to benchmark, work is required to analyse and break down the processes belonging to the area under focus. The BPIR offers information on techniques/practices that may be useful here, as an example, process mapping.
- (3) *Identify potential benchmarking partners*. The BPIR has a searchable database of case studies that most often illustrate the use of some best practice and can be used to identify potential partners. In addition, a separate list of organisations that are recognised in industry by awards or are generally held to be outstanding performers in particular disciplines is also available to users. Both of these facilities can help if it is best practice benchmarking that is to be attempted.
- (4) Identify data sources and select appropriate method of collection. The BPIR has been designed to provide a practical source of data and

- information that can help ease and speed up the process of data searching. Furthermore it also offers recommended sources off-site to help pursue various topics or areas that may not be covered on-site.
- (5) Collecting data and selecting partners. The BPIR database of case studies and survey and benchmarking data is categorised in such a way that organisations that are high performing in terms of benchmark data and/ or practices can be quickly isolated. In addition, all organisations represented by a case study are detailed so that size, industry and geographic location can be used to sort and arrange them. Again the recommended sources for other services can help here.
- (6) Determine the gap compared to the benchmark. A large database of performance measures is offered to assist in the task of comparing performance. In addition, examples of techniques/practices that can be used to assist in the analysis of data and performance gaps are provided; for example, competitor analysis system, gap analysis, force field analysis and bar chart.
- (7) Establish differences in process. Partner processes can be analysed through using the same techniques/practices that are used in point (2). "to map and understand internal processes".
- (8) *Target future performance*. The BPIR offers techniques/practice information on setting and communicating targets and provides examples of these in application through the supplied case studies.
- (9) Communicate benchmark findings. Once again various communication strategies are shown through particular focuses on certain techniques/ practices, or through examples of application in case studies. Survey data can also show the popularity of some of these techniques.
- (10) Adjust goals and develop corrective improvement plan. This area can be assisted by the use of techniques/practices that assist in development of this sort of plan; for example, action plan formation.
- (11) *Implement corrective improvement plan*. Techniques/practices (for example, Pert or bar charts, process decision programme chart) and performance measures can be used to help in the areas of project planning and tracking. Communication strategies can help maintain the support and therefore momentum of the project.
- (12) *Review progress and calibrate*. Performance measures can be chosen from the database to assist in measuring performance to objectives, and to re-measure partner performance to enable re-calibration.

BPIR addresses benchmarking problems

The BPIR has been developed to provide help in the main issues that inhibit organisations actively involved in benchmarking and those that prevent others from attempting active involvement. In a survey of 559 UK respondent

organisations (Hinton *et al.*, 2000) findings indicated that among some of those involved in benchmarking there were difficulties encountered during the process. These difficulties included; finding suitable partners, difficulties in comparing data (50 per cent of involved organisations found this), resource constraints (time, finance and expertise), and staff resistance. The main reasons given by respondents for not being involved in benchmarking at all were:

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- ignorance (5 per cent);
- resource constraints (25 per cent);
- data comparability (29 per cent);
- too small to gain (15 per cent);
- not appropriate (26 per cent).

Of these inhibitors the BPIR can assist in the areas of finding suitable partners, data comparability, resource constraints, and to some extent the perception of being too small to gain from the process. This is accomplished by the number of case studies that can aid in identifying suitable partners, and the range of performance measures that can aid in collecting comparable data. As information on the Web site represents the views and/or experiences of a diverse range of organisations of all sizes, and from many different sectors and geographical locations, it is intended that all users of the Web site will find relevant information that is pertinent to their own circumstances.

From Web site development to launch

The final part of the paper describes the current status of the BPIR project and how it has been achieved. This includes a summary of the results obtained from a customer review of the prototype design.

Developing the BPIR

The COER team began the project by undertaking a comprehensive review of literature and opinion on the whole performance improvement area. Armed with this snapshot of today's business needs development commenced by using a diagram to represent the main stages of benchmarking (Figure 1 is an adaptation of this original diagram). Around this diagram all ideas were then built, and progress was made through adopting the use of flip charts, open discussions, regular brainstorming, individual schedules of objectives, and a systematic recording of research sources. Opinions were sought from industrial contacts on both the preliminary design concepts and the ongoing direction of development.

As part of the project more than 600 Web sites were visited and systematically analysed according to a methodology developed by the team. These sites are periodically revisited and reviewed in detail. Details of the type of information/services available on many of these Web sites are provided within the BPIR, and serve as a useful resource for users that wish to source specific services that fall outside the scope of the BPIR but do serve an

organisation's business improvement efforts. In providing this service and by offering many other unique features the BPIR complements those resources provided by other related Web sites.

To enable this valuable and in many ways unique Web site to be developed, and in the spirit of engendering a common goal of improved performance by organisations worldwide, various international strategic alliances and partnerships have been formed[1]. Through alliances and the development of appropriate linkages between Web sites, information can be presented more effectively and so help business focused Internet users find relevant information more quickly. As the proliferation of Web sites continues, and the recognition of the importance of information access grows, such time saving strategies are expected to increase in significance.

Industry review of the Web site

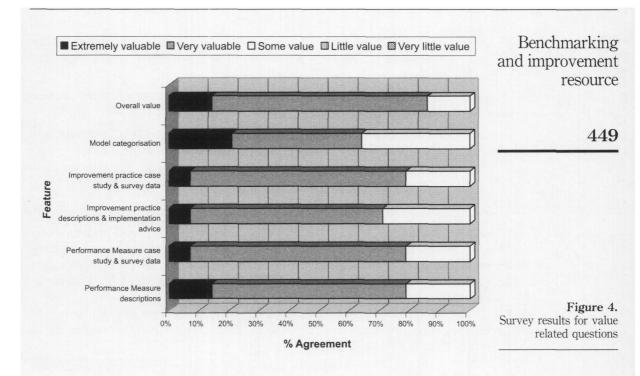
The design and content type of the Web site has been exposed to a number of opinions during development and has been continually refined. However, to more thoroughly assess the likely success of the BPIR in addressing user needs and in achieving effectiveness of design, an exposure to potential users was necessary. This was accomplished prior to release through a presentation of slides and prototype Web pages to the 16 member organisations of the New Zealand Benchmarking Club. The Club's members represent a broad selection of industry types and sizes (Mann and Welch, 2000). This collection of improvement-committed managers was seen as the ideal test audience. During the presentation club members were asked to complete a survey that asked their opinion of the resource over a number of criteria. Key results from the survey can be seen in Figure 4.

Figure 4 shows survey results relating to club members' rating of the value of the BPIR. The chart shows that the majority of respondents rated all the resource features as either "very valuable" or "extremely valuable" and when asked to rate the "overall value" of the Web site over 80 per cent rated it as at least "very valuable". It is significant that among the important indicators shown in Figure 4 that no response fell in the "lower" two perception ratings. These findings reflected the positive feedback obtained throughout the survey.

Current status

As a result of the industry review a few minor refinements to the BPIR were made. However, the prime feedback obtained was a request to ensure that the information on the Web site is continually updated. This feedback was expected and new information is being added on a daily basis and will continue to be added throughout the whole lifecycle of the Web site.

To date, database tables developed by the team have been populated with well over 1,000 individual information-sets written in a predetermined standard format that is simple and easy to understand. This comprehensive collection represents the initial launch volume only. The BPIR was planned for launch in September 2001.



Conclusions

This paper has provided an insight into the development of a new resource that has been designed to meet the particular needs of organisations that are striving for improvement in today's global marketplace. The idea for the BPIR stems from the growing importance placed on improvement approaches that focus on business excellence, performance measurement, benchmarking and the use of the Internet.

The key resource features available on the BPIR have already been discussed. The list below represents a summary of its main benefits:

- Comprehensive collection of performance measures, supporting case studies and survey findings categorised by a choice of business excellence models.
- Comprehensive collection of performance improvement techniques/ practices, suggested implementation advice, supporting case studies and survey findings categorised by a choice of business excellence models.
- Recommended sources for detailed learning on a range of topics and for individual techniques/practices. These include books, Web sites, consultancies, groups, and institutions.
- Large collection of addresses of active Web sites operating in the general business improvement area, complete with content and perspective analysis.

- Large collection of current business journal names whose content relates to the general business improvement area, complete with perspective analysis.
- Self-assessment questionnaire refined over a number of years after an analysis of over 15 others in use worldwide.
- List of organisations recognised in industry by awards or generally held to be outstanding performers in particular disciplines.
- World directory of research business and academic.
- User-driven further development and a continually growing database.

The content of the BPIR at launch represents the beginning of a partnership between the Centre for Organisational Excellence Research and organisations world-wide travelling the road to business excellence and world-class performance. It is envisaged that the BPIR can take the part of a "companion toolkit" for this difficult journey, not unlike the bag upon which the famous cat Felix relied in so many different situations.

The Benchmarking and Performance Improvement Resource can be visited at http://www.thebpir.com from October 2001. Alternatively, e-mail enquires can be sent to info@thebpir.com

Note

1. One of the key partnerships formed is with MCB UP. More information regarding this partnership can be found on their new Web site at http://www.emeraldinsight.com

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